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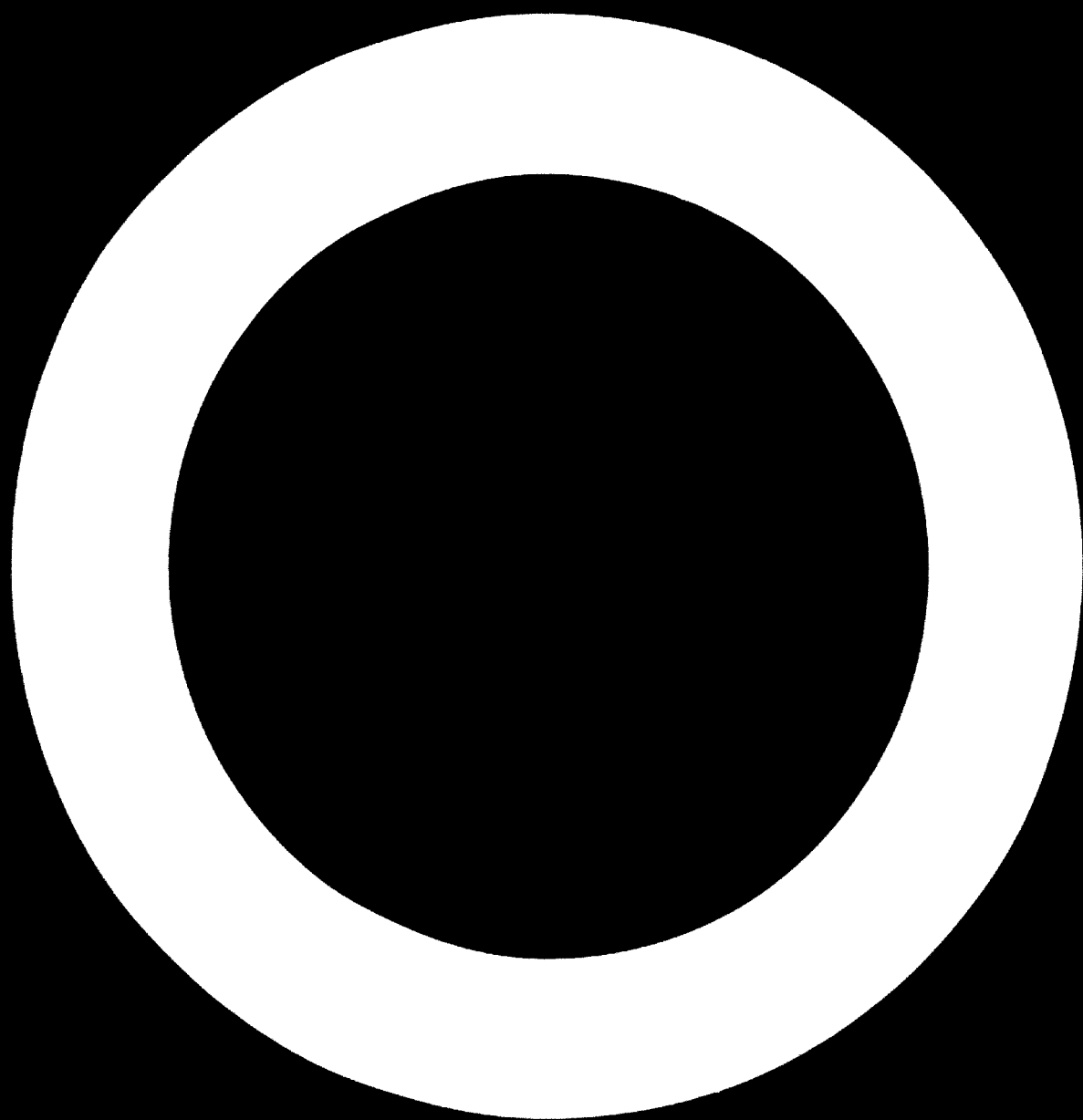


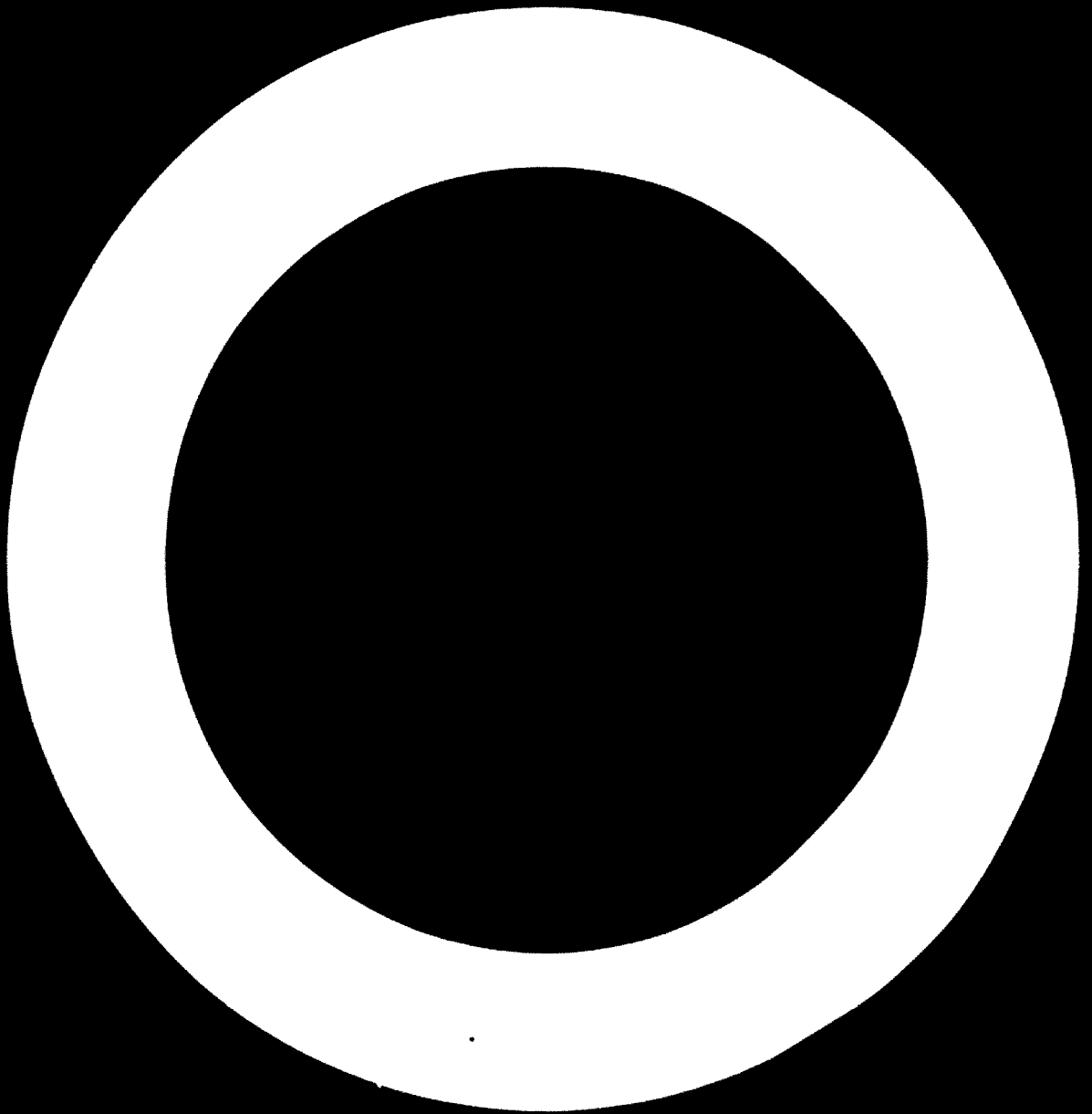
UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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**SUMMARIES
OF
INDUSTRIAL
DEVELOPMENT
PLANS**

VOLUME IV







UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna

**SUMMARIES OF
INDUSTRIAL DEVELOPMENT
PLANS**

VOLUME IV

Explanatory notes

Use of a hyphen (-) between dates representing years signifies the full period involved, including the beginning and end years, e.g. 1971-1973.

A slash (/) between dates representing years indicates a crop year or financial year, e.g. 1971/72.

Reference to "tons" indicates metric tons, unless otherwise stated.

Reference to "dollars" (\$) indicates United States dollars, unless otherwise stated.

The term "million" is used to signify a thousand million.

Details and percentages in tables do not necessarily add to totals, because of rounding.

The following forms are used in tables:

Three dots (...) indicate that data are not available or are not separately reported.

A dash (-) indicates that the amount is nil or negligible.

A blank indicates that the item is not applicable.

A minus sign (-) indicates a deficit or decrease, except as otherwise indicated.

A full stop (.) is used to indicate decimals.

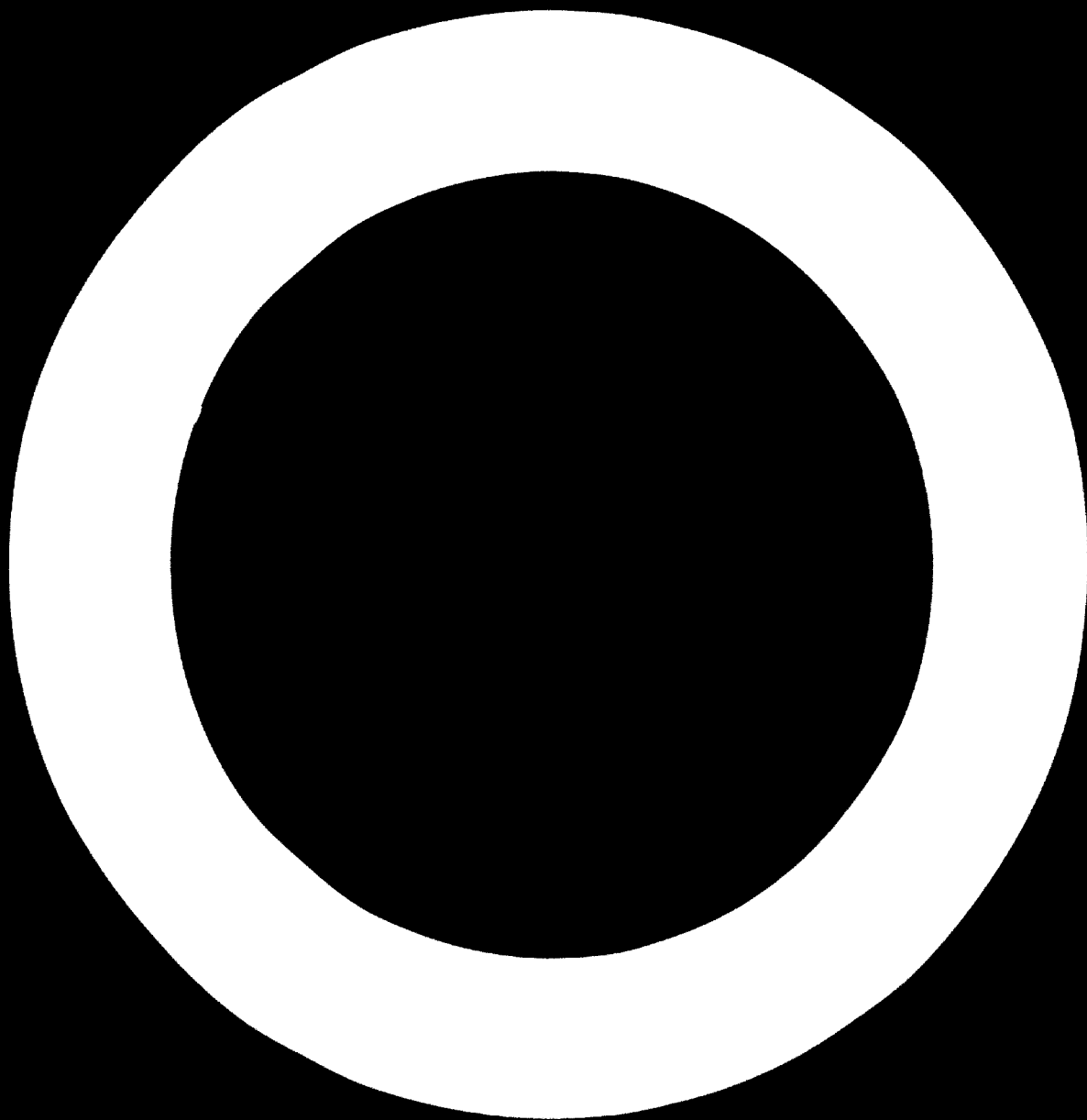
A comma (,) is used to separate the thousands.

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ID/150
August 1975

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INTRODUCTION

The first volume in this series (UNIDO/IPPD/11), issued in April 1970, contained 30 summaries of industrial development plans; the second volume (UNIDO/IPPD/54), issued in November 1971, contained 7 summaries; the third volume (ID/10) containing 10 summaries, was published in June 1973; the present volume contains 5 summaries. As in the case of previous volumes, this document has been reproduced without formal editing.

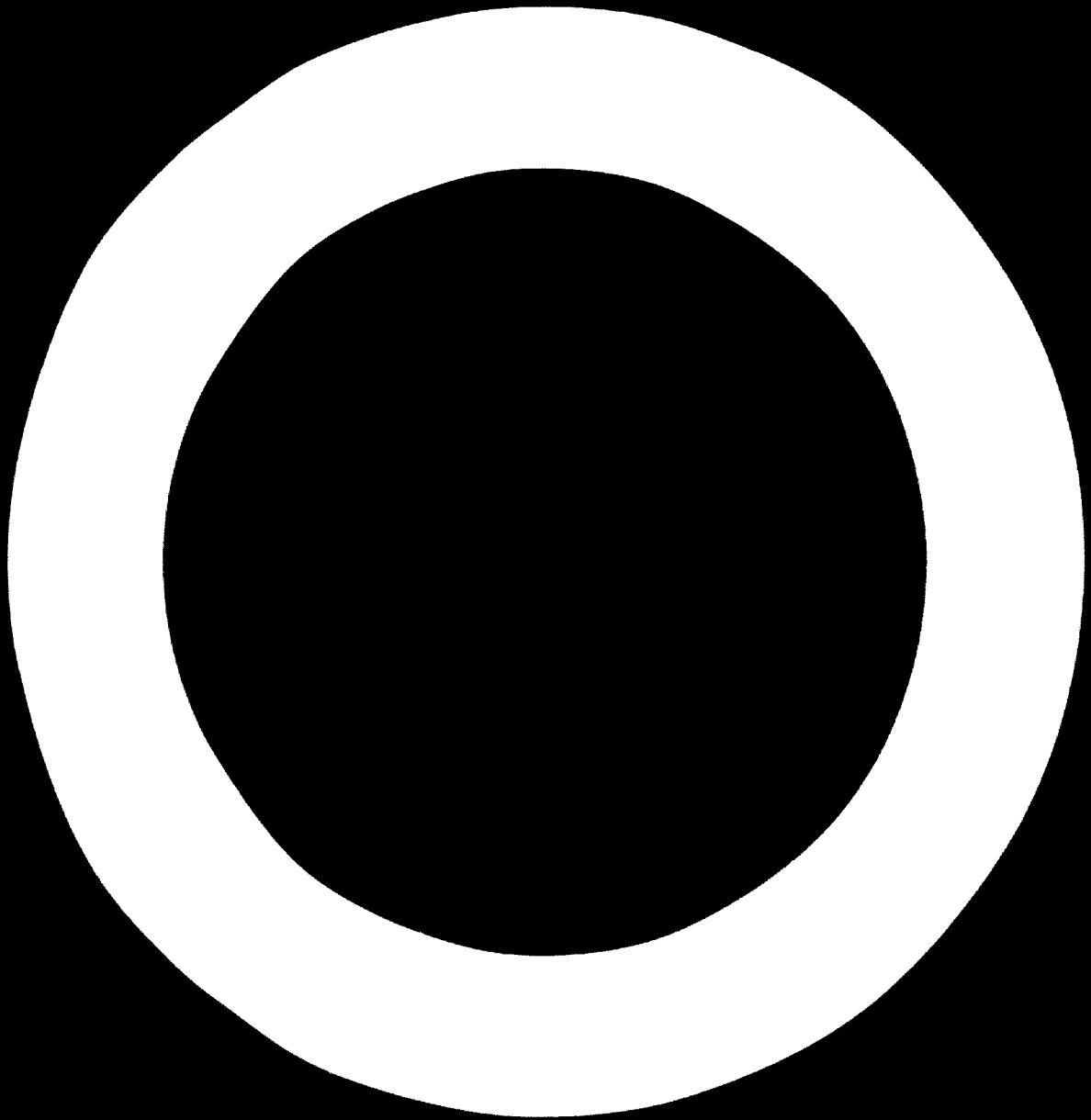
The contents of each summary

Each summary is self-contained and consists of approximately 30 pages, divided into two main sections. The exchange rates used to convert the local currency in the source plans into United States dollars in the summaries are indicated in section A-1 of each summary. The coverage and completeness of the summaries vary widely, owing to a similar variation in the original plans from which they were prepared.

It should be noted that in some of the summaries gross domestic product (GDP) figures are at factor cost while in others they are at market prices. In many cases, however, the source plans did not specify which of these bases of calculation was used. For this reason, the basis used for the calculation of the GDP is not shown in the summaries.

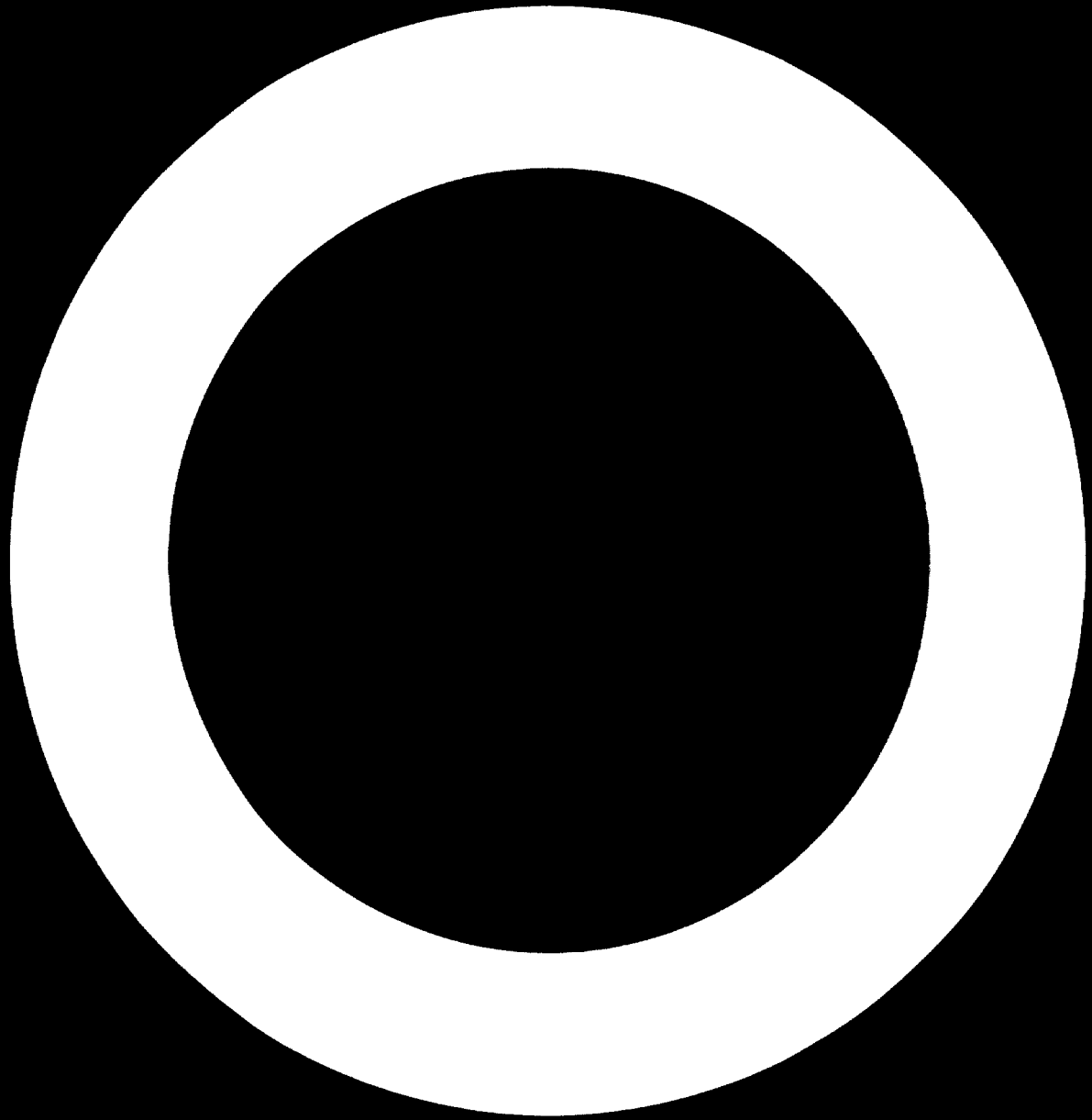
The summaries for most of the countries show planned growth in terms of manufacturing GDP. In several summaries, however, growth is shown in terms of industrial GDP, inasmuch as the country's plan did not show manufacturing separately. In these cases, industrial GDP usually includes mining and quarrying, water, gas and electricity, in addition to manufacturing. The data for both the beginning year and the ending year of most of the plans are, naturally, estimates. This explains the sometimes considerable difference in a country's actual reported GDP and the GDP it used in its plans.

Part A "General Background Information" was compiled from all sources of information available at UNIDO, whereas part B "Summary of the Industrial Development Plan" is based solely on the published economic development plan of the respective country.



Sub-divisions within these sections are as follows:

- A. GENERAL INFORMATION compiled from all sources of information available at IIA
 1. Basic statistics
 - Population
 2. GDP
 3. Macro-economic indicators
 4. Industrial projects and technology - main manufacturing industries
 5. Industry - related resources and sectors
 6. Over-all economic development strategy and policy
 7. Regional co-operation and international trade
 8. Systems for planning and plan implementation
 9. Problems encountered through the previous period of the plan
- B. SUMMARY OF THE INDUSTRIAL DEVELOPMENT PLAN (compiled solely from the published economic development plan)
 1. General goals and objectives
 - (i) Planned growth
 - (ii) Other objectives
 2. Strategy and policy
 - (i) General
 - (ii) Manpower and productivity
 - (iii) Investment and capacity utilization
 - (iv) Interconnexions between growth factors
 3. Data bases and projections
 4. Planned growth of the industrial sector
 - (i) Planned growth of manufacturing sector
 - (ii) Planned growth of electricity
 - (iii) Planned growth of mining
 - (iv) Priority of sectors
 - (v) Infrastructure connected with industry
 - (vi) Relationships with non-industry sectors of the economy
 5. Planned industrial projects
 6. Organisational and institutional changes required for industrial plan implementation
 7. Problem areas particular to the industrial sector



COMPARATIVE TABLES

Approximate GDI, 1970
(At market prices)

Country	GDP (billions of national currency)	Exchange rate national currency per dollar	GDI (million dollars)	Population (thousands)	GDI per capita (dollars)	Share of manufacturing (%)	Manufacturing GDI per capita (dollars)
Guyana	0.5	2.0	232	714	325	18.0 ^a	39 ^a
Ivory Coast	353.9	256.3	1,381 ^b	5,100	271	16.7 ^a	45 ^b
Korea	2,571.5 ^b	373.0	6,894 ^b	31,378	220 ^b	1.4	47 ^c
Malaysia	11.5	2.9	3,978	10,945	363	...	...
Sri Lanka	11.8	6.7	1,755	12,571	139	13.0 ^a	18 ^b
Thailand	118.9	21.0	5,662	36,738	154	18.2	28
Uganda	5	7.1	711	9,855	72	18.4	9
Yugoslavia	157.2	17.0	9,247	20,370	456 ^a	37.2	172 ^b

^a/ Industrial GDI.

^b/ GDP.

^c/ Industrial GDI.

Approximate GDP, 1975 and 1976
(At market prices)

	<u>GDP</u> (million dollars)	<u>Population</u> (thousands)	<u>GDP</u> per capita (dollars)	<u>Share of</u> manufacturing in GDP (%)	<u>Manufacturing</u> % per capita (dollars)
Ceylon (1976)	379	820	462	13.6	63
Ivory Coast (1975)	2,005	6,000	334	22.1 ^a	74 ^a
Korea (1976)	11,622 ^b	34,345	338 ^b	27.9	94 ^c
Malaysia (1975)	5,520 ^b	12,500	442	...	...
Sri Lanka (1976)	510	15,758	159	16.0 ^a	26 ^a
Thailand (1976)	8,486	44,028	193	17.6	34
Uganda (1976)	984	12,000	82	14.2	12
Yugoslavia (1975)	13,222	21,389	618	51.0 ^a	115 ^a

^a/ Industrial GDP.

^b/ GDP.

^c/ Industrial GDP.

Average annual rates of growth between 1970-1976
(Percentage)

	Rate of growth of GDP	Rate of growth of GDP/capita	Rate of growth of industria. GDP	Rate of growth of industria. GDP/capita
Guyana	6.5	6.0	10.0 ^{a/}	6.3 ^{b/}
Ivory Coast	7.7	4.2	13.9	10.4
Korea	9.6	7.0	13.0 ^{b/}	11.5 ^{b/}
Malaysia	6.8	4.1	...	...
Sri Lanka	6.1	2.2	10.0	6.3
Thailand	7.1	3.9	6.3 ^{a/}	5.0 ^{b/}
Uganda	5.5	2.2	7.9 ^{a/}	6.3 ^{b/}
Yugoslavia	7.5	6.3	8.0	13.0

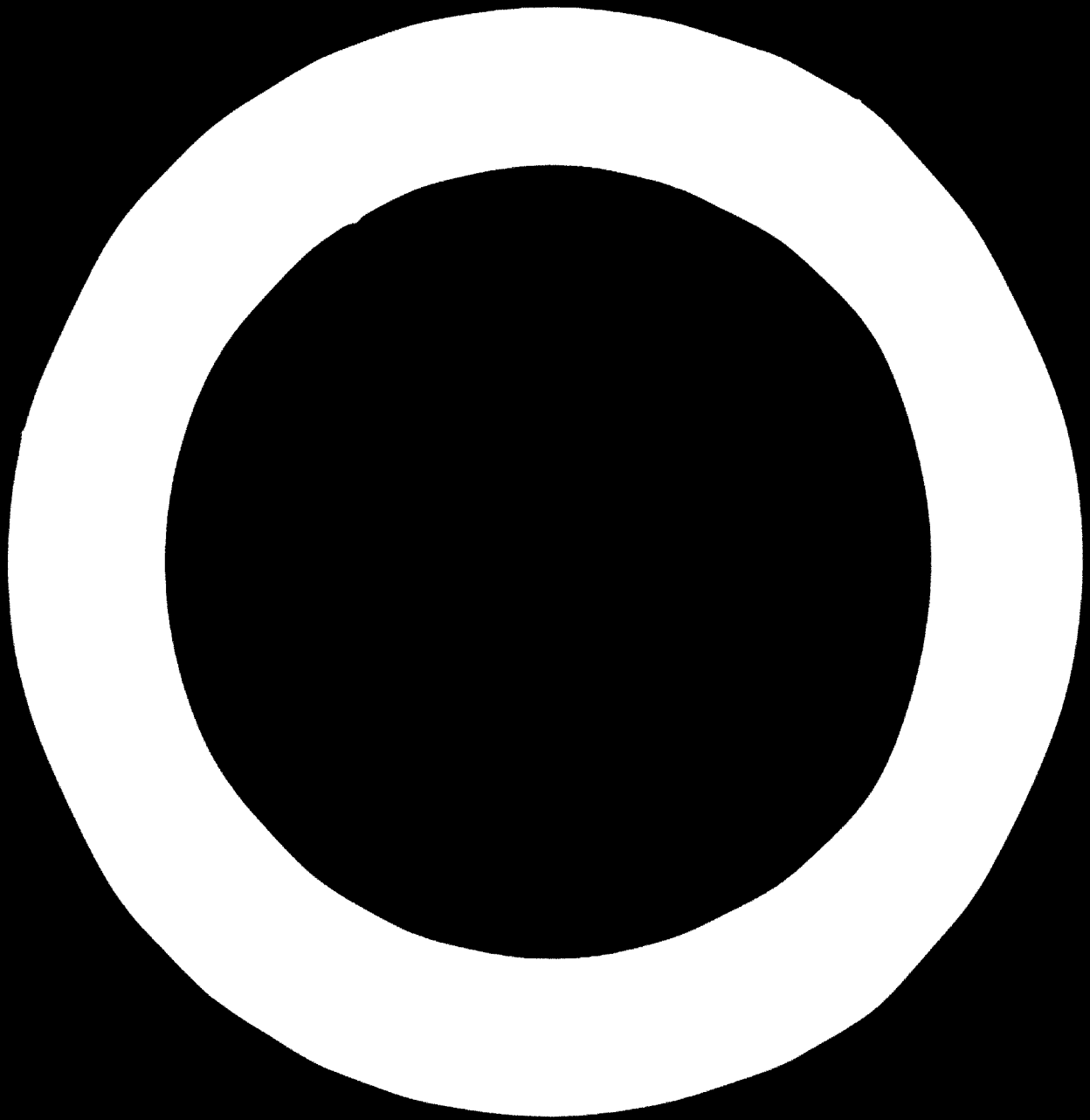
^{a/} Manufacturing

^{b/} of GNP

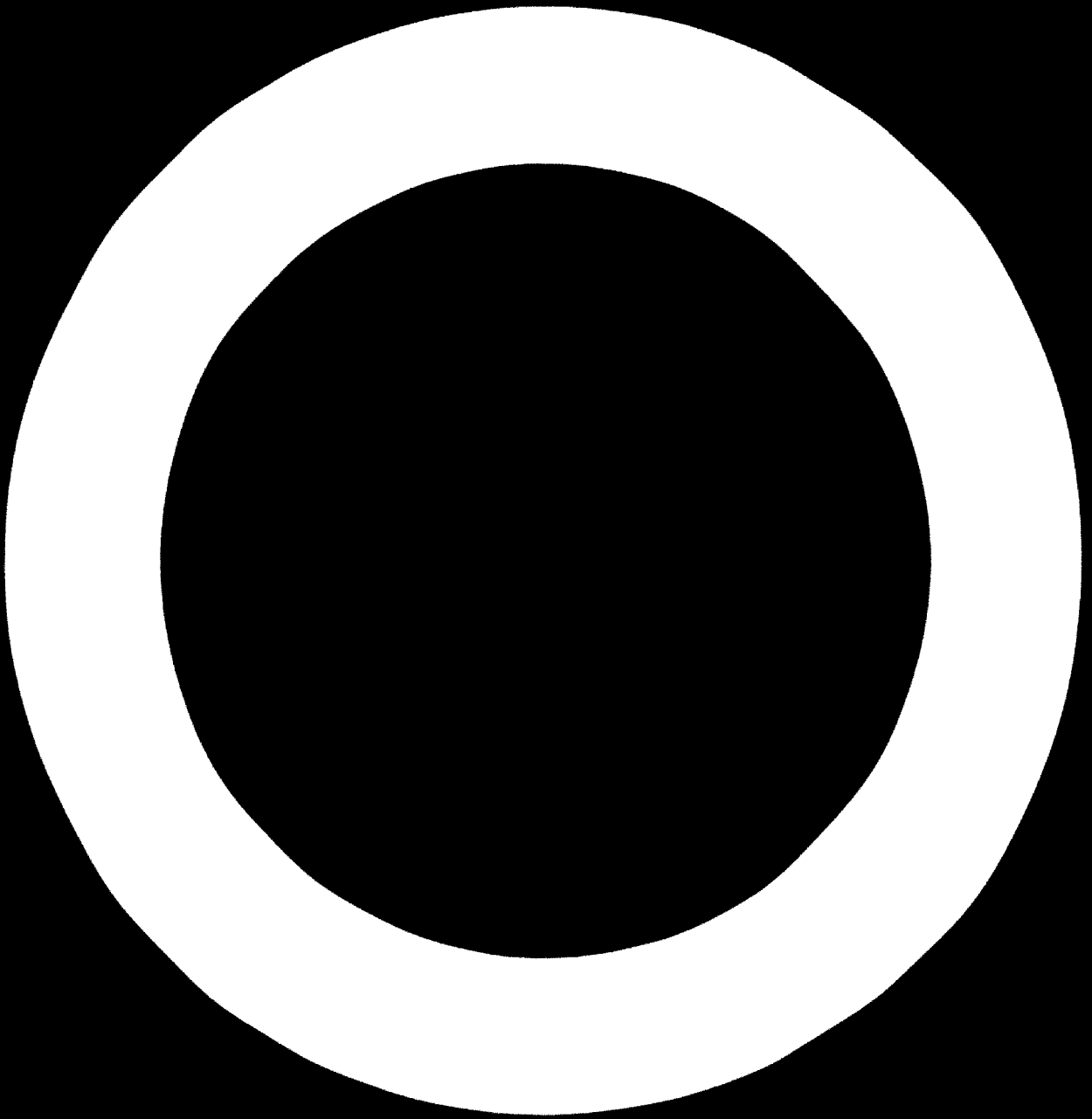
Export figures for the last years of the development plans

	Export of manufactured goods (billion dollars)	Manufactured exports as a percentage of total exports	Rate of growth of exports (%)	Export/import ratio
Guyana (1976)	8.5	3.8	6.3	0.79
Ivory Coast (1975)	251.4 ^{a/}	35.3	6.8	1.24
Korea (1976)	3,173.0	82.6	19.4	0.09
Malaysia (1975)	357.2	14.7	4.6	1.10
Sri Lanka (1976)	...	...	5.1	...
Thailand (1976)	130.0	11.9	7.3	0.76
Uganda (1976)	174.5	50.2	6.6	0.93
Yugoslavia (1975)	...	...	12.0	0.64

^{a/} Industrial exports



THE UNIVERSITY OF CHICAGO



Year	1960	1970
Population	1,000,000	1,200,000
Employment	100,000	170,000
Unemployment	100,000	100,000
Unemployment rate	100%	58.8%

Year	1960	1970	Unemployment rate
Population	1,000,000	1,200,000	
Employment	100,000	170,000	
Unemployment	100,000	100,000	
Unemployment rate	100%	58.8%	

Attribution of employment by sector, 1960 and 1970

Sector	1960	1970	1960	1970
Agriculture, forestry and fishing	50,772	34.2	1,274	27.8
Mining and quarrying	1,110	3.5	22,250	12.9
Manufacturing	26,900	15.0	44,164	24.8
Government	78,518	47.3	60,342	33.4
Total	166,000	100.0%	178,000	100.0%

Education

During the period 1960-1970 enrolment in primary schools increased by 20 per cent and in secondary schools by 105 per cent.

Government expenditure on state-aided secondary schools rose from \$125,000 in 1960 to about \$300,000 in 1971.

1. Second Development Plan, 1972-1976, Government of the Republic of Guyana, Georgetown, 172 pp.

Table 1: Summary of financial data for the period 1960-1971

Category	1960	1971	Average ann. growth rate (%)
Assets	22.1	26.1	2.4
Liabilities	10.4	11.1	1.1
Equity	11.7	15.0	4.2
Income	1.4	1.7	2.2
Expenses	1.4	1.7	2.2
Net Income	0.0	0.0	0.0
Capital Gains	0.0	0.0	0.0
Total	22.1	26.1	2.4

Table 2: Detailed financial data

Category	1960		1971	
	Value (Million \$)	Share in Total (%)	Value (Million \$)	Share in Total (%)
Assets	22.1	100	26.1	100
Liabilities	10.4	47	11.1	43
Equity	11.7	53	15.0	57
Income	1.4	6	1.7	6
Expenses	1.4	6	1.7	6
Net Income	0.0	0	0.0	0
Capital Gains	0.0	0	0.0	0
Total	22.1	100	26.1	100

Table 3: Summary of financial data

Category	1960	1971	Average ann. growth rate (%)
Assets	\$ 23.3 million	\$ 33.45 million	7.4%
Liabilities	105.10	119.3	1.1%
Equity	\$ 173.50 million	\$ 251.50 million	7.7%

Balance of payments, 1968 and 1970

(Million dollars)

	<u>1968</u>	<u>1970</u>
Current account balance	-21.1	-17.1
Capital account balance	21.1	17.2
Exports and commissions	-2.7	-6.0
Change in reserves	7.1	4.7

Public sector finance, 1968 and 1970

(Million dollars)

	<u>1968</u>	<u>1970</u>
Current revenue	9.8	20.0
Current expenditures	-51.2	-32.9
Current account surplus	8.6	17.1
Capital revenue	4.8	2.0
Capital expenditures	-20.0	-14.0
Overall deficit	-7.8	-14.8
Financing	7.2	14.8
Net external borrowings	(5.1)	(1.0)
Net borrowings from banking system	(-4.0)	(4.1)
Other	(2.0)	(1.0)

Manufacture products and technology - main manufacturing industries

Selected manufactured goods: production and annual growth rate, 1970

	<u>Production</u>	<u>Annual growth rate (%)</u>
Commonly		
Beer (thousand gallons)	1,433	-6.2
Stout (thousand gallons)	31	33.8
Rum (thousand gallons)	3,363	5.0
Margarine (thousand pounds)	1,975	-12.0
Edible oil (thousand gallons)	695	28.0
Cigarettes (thousand pounds)	909	5.3
Matches (thousand boxes)	213	21.0
Soap (thousand pounds)	4,985	3.3
Stock feed (thousand pounds)	48,063	18.5
Clothing (thousand dozens)	315	24.0

In 1969 the manufacturing sector contributed 12 per cent to the GDP. Of this total, sugar and rice milling accounted for about 41 per cent. Most of the produced goods were destined for the local market.

... in manufacturing rose from 21.6 million t

... tax exemption, favorable depreciation ... investment ...

... ..

... ..

... of the total area is under cultivation. Although almost ... employed in this sector; the share in GP fell ...

... agricultural products as at 1973 for nearly ... of the agricultural area about one third of the agricultural output ...

... .. per cent a year.

... has expanded very rapidly during the period 1961- ... agricultural infrastructure and agricultural ... private sector has been exceeding high in relation ...

Average annual agricultural investments, 1961-1970
Million dollars

Average annual capital expenditure by the Central Government on infrastructure	3.0
Average annual capital expenditure by the Central Government and public corporations on other major works	2.0
Average annual amount of agricultural machinery and equipment by private enterprise	1.3
Other average annual capital expenditure by private enterprises	1.5
Total	<u>7.8</u>

Land is often cultivated with crops which are not best suited for its soil capability.

In 1971 the livestock industry contributed 2 per cent of the GDP.

Improved techniques have contributed to a rapid growth of the poultry, eggs and pork production.

Forestry

Forestry production accounted for about 7 per cent of the output of the agricultural sector, for 21 per cent of the total agricultural exports and for about 11 per cent of the total exports in 1971.

Between 1965 and 1971 the value of imported forest products was on the average about twice the value of exported forest products. Exports dropped from 1.1 million cubic feet whereas imports grew to \$4.2 million of which \$1.3 million were spent on pulp and paper products.

The main forest conversion industry in Guyana is the saw milling industry, but this industry is inefficient.

In connexion with the existing mill equipment it is practically impossible to produce timber for the export market.

At the moment there are 11 saw mills employing 1,000 loggers.

The technological innovations of timber drying and of the chemical treatment of woods have not yet significantly affected production methods and costs.

Fishing

For the development of the fishing and shrimps industry, Guyana is well situated. The domestic production of fish and shrimps grew from 21.6 million pounds in 1967 to 47.8 million pounds in 1971. The number of shrimp trawlers increased from 96 in 1965 to 170 in 1971. However, only 8 per cent of the shrimp trawlers are owned by the Guyanese, the main foreign owners are USA citizens followed by Japanese. The overseas market for shrimps grew rapidly as the demand of the biggest consumer of shrimps, namely the USA, grew significantly. The same applies to the world's second largest consumer, Japan.

About 1,200 vessels which vary considerably in quality, standard and equipment are engaged in fishing.

Transport

During the period 1965-1971 the Government capital expenditures on transport amounted to \$42.4 million of which \$ 2.9 million were used for 360 miles of road construction and/or improvement. The rest was mainly used for the improvement of the airways rather than for the railways. The aim of the road programme was to facilitate transport to and from already heavily populated areas.

Between 1965 and 1971 the number of motor-cars increased from 10,400 to 18,900.

Between 1963 and 1970 air passenger traffic increased at 8 per cent per annum. The air services of the Guyana Airways Corporation extended their operation of freight services to CARIFTA countries.

Mining

In 1969 this sector contributed to 25 per cent of GDP, 25 per cent of gross domestic investment and to half of commodity exports which show that the mining sector has been the most important source of output growth for the economy as a whole. However, in contrast with the agricultural sector it employs only 6 per cent of the active population.

... of the export of sugar for the second quarter of 1955 million tons increased ... value of exports which had exceeded 1000000 ... responsible for an increase in export earnings ...

	<u>1966</u>	<u>1976</u>
Export of sugar (thousand dried long tons)	3,200	4,400
Export of other products	4,000	6,000

Power

The Costa Rica Electric Corporation, a public corporation, has been the largest employer of electrical power in the country. Operating four systems, one in Teneraria, ... the Corporation ... generating capacity and by extending the transmission lines to the rural areas. In 1970, this system's installed capacity amounted to 40 MW operating at a frequency of 60 cps. with transmission voltage of 132 KV.

The demand for power grew at an average annual rate of 14 per cent during the period 1955-1970.

1. General economic development strategy and policy

The plan for 1966-1970 was set up in such a way that national income would grow at a rate of 7 per cent to 8 per cent annually. In reality national income grew at 8 per cent.

The strategy of the plan was to raise the living standard as rapidly as possible and to extend and improve public services.

In the agricultural sector the diversification of output had first priority since the two most important agricultural crops such as sugar-cane and rice were not expected to contribute much to the planned output. Import substitution was pushed vigorously.

Milk and other dairy products, fish, vegetable oils, fruit, textiles, foot-wear and timber products were chosen as further priority industries.

The beef, banana, aluminium, mining and forestry industries were chosen as promising export industries.

The plan encouraged especially the productivity of the existing industries, rather than the establishment of new ones.

In general much emphasis was placed on self-help schemes for which money was allocated in various parts of the development plan. For example, for small farmers funds would become available through the new agricultural credit system and for small entrepreneurs through the credit corporation for small industrial projects.

During the period of this plan new areas were opened for cultivation by improving the road system and flood control.

More emphasis was placed on trained manpower. Progress has been made in providing scientific, vocational and technical training.

Between 1965 and 1970 the average annual growth rate in employment was 1.6 per cent. The possibilities for opening up new land, import substitution, development of new export industries and the expansion of services reduced unemployment. Labour-intensive projects also contributed to a reduction of unemployment, while helping to improve the country's infrastructure.

This development plan has been financed largely by loans and grants from friendly governments and international agencies as the Government had a deficit on its current account. The main reason for this deficit were the losses sustained by government enterprises.

6. Regional co-operation and international trade

Imports, 1965 and 1966

(Million dollars)

	<u>1965</u>	<u>1966</u>
Consumer goods	15.6	15.6
Food	9.0	8.8
Beverages and tobacco	0.6	0.5
Manufactures	5.1	5.2
Private motor-cars	0.9	1.1
Raw materials and intermediate goods	23.8	24.6
Crude materials	0.4	0.4
Animal, vegetable oils and fats	0.8	0.6
Fuels and lubricants	4.7	5.2
Chemicals	5.4	5.3
Manufactures	12.5	13.3
Machinery and transport equipment	13.4	14.3
Miscellaneous	-	0.3
Total	<u>52.8</u>	<u>55.0</u>

Exports, 1965 and 1969

(Million dollars)

	<u>1965</u>	<u>1969</u>
Agricultural products	26.0	30.2
Sugar and by-products	17.0	22.2
Rice	6.0	4.0
Shrimps	1.6	1.9
Timber	0.9	0.8
Beef	0.3	-
Mining products	23.0	30.8
Manganese	1.4	-
Diamonds	1.7	1.0
Alumina	8.9	10.4
Bauxite	11.0	19.4
Other	2.5	3.0
Total	<u>52.1</u>	<u>64.0</u>

Trade with other countries or areas, 1966 and 1968

(Percentage)

	<u>1966</u>	<u>1968</u>
United Kingdom of Great Britain and Northern Ireland	22.0	21.4
Canada	21.5	19.9
United States of America	21.8	25.7
The Caribbean	11.2	13.3
CEEC countries	7.7	11.7
Rest of the world	15.8	8.0
Total	<u>100.0</u>	<u>100.0</u>

2. Systems for planning and plan implementation

10. Problems encountered during the period of the plan

In the forestry sector many of the saw mills contain old and inefficient machinery.

The absence of an effective marketing organization has also prevented the development of the forest industry.

Marketing of fresh, processed and canned food was inadequate.

Land was often cultivated with crops not suitable for the soil.

Further reasons for the low output of the agricultural sector were the lack of fertilizers and unscientific rotation of crops.

One of the most important problems was the inefficient control of water required for the effective utilization of mechanized drainage systems and extensive levelling of fields.

The disappointing development in the agricultural and forest industries unfavorably influenced the development of the manufacturing sector.

A high rate of unemployment was associated with an unequal distribution of income.

The country's economic growth was highly dependent on the development of the two main industrial sectors, bauxite and sugar.

Sufficient investment capital was not available.

10. SUMMARY OF THE NATIONAL DEVELOPMENT PLAN, 1972-1976

i. General goals and objectives

(i) Planned growth

	1972	1976	Average annual increase (%)
Manufacturing GDP per capita (dollars)	42.2	62.5	7.3
Total GDP per capita (dollars)	344.5	462.1	6.0
Population (thousands)	730.0	800.0	2.3
Manufacturing GDP (million dollars)	30.8	51.5	10.8
Total GDP (million dollars) ^a	2 11.5	379.0	7.5
Manufacturing as percentage of total GDP	12.3	13.6	
Total consumption (million dollars)	183.0	252.7	6.6
Gross domestic savings (million dollars)	52.5	102.5	14.3
Total investment (million dollars)	56.5	142.0	20.2
Exports (million dollars)	163.3	222.5	6.3
Imports (million dollars)	167.3	282.5	11.1

^a At factor cost at 1972 prices.

(ii) Other objectives

1. To establish a foundation for the attainment of a self-sustained economic growth.
2. To attain an equitable geographical distribution of economic activities.
3. To create employment opportunities for all Guyanese.

ii. Strategy and policy

1. General

Out of the total investment of \$377.5 million over the period of the plan, the public sector will spend about \$303 million and other sectors about \$212.5 million. As a result of this, the gross domestic product is expected to increase at an average of 7.5 per cent annually, the per capita income at 6 per cent per annum.

The forestry, fishing and manufacturing sectors will show the highest rates of growth. In spite of that their rapid growth will not noticeably increase their importance for the whole economy; nevertheless, the basis for the diversification of the economy will be laid.

Modern technologies will be utilised in export-oriented industrial sectors such as bauxite mining, alumina manufacture and sugar processing.

Industrial sectors utilizing raw materials locally produced will be chosen for expansion.

Programmes will be set up which possess high forward and backward linkage indices.

More emphasis will be placed on the key sectors of the economy, i.e. agricultural production and light manufacturing activities which at the same time solve to a large extent the problem of unemployment.

Technical and professional skills of local manpower will be promoted.

Local ownership and control will be assured through public, co-operative and private ownership.

The public sector's participation in the economy will be increased. Co-operative development will be needed for a more equitable distribution of income.

The Guyana State Corporation (GUYSIAC) will be established to assure the effective implementation of the State's policy of majority participation in industries.

Private investment will be encouraged and welcomed, but industrial growth will not mainly depend on this sector, since the public sector and the co-operatives will play an important role.

In order to implement the development programme successfully, an increase in domestic savings will be necessary. The public sector will have to make the greatest contribution.

Trade with the Third World in general and with the partners of the Caribbean Free Trade Area (CARIFTA) in particular will be encouraged. For that reason the regional harmonization of fiscal, financial, monetary and trade policies will be promoted to maximize the country's share of returns accruing from world trade.

(ii) Manpower and productivity

Expected manpower balance

	1970	1976	Average annual increase (%)
Labour force (thousands)	210	246	2.6
Employed (thousands)	178	234	4.6
Unemployed (thousands)	32	12	-17.8
Unemployment rate (%)	15	5	

	1972 (thousand)	1976	1972-1976 annual average
Agriculture, forestry and fisheries	1.2	1.1	1.15
Mining and manufacturing	1.1	46.5	23.8
Other sectors	1.1	14.5	7.8
Total	3.4	62.1	22.75

Special Requirements for Trained Manpower

	Available in 1976	Expected requirements in 1976	To be trained during the period of the plan 1972-1976
Professionals	1,400	1,900	500
Administrative, executive and supervisory staff	10,000	15,000	5,000
Craftsmen and technicians	37,400	60,400	23,000

Education

The total capital expenditure on educational and training facilities will be \$25.0 million of which the Government will spend \$24.4 million distributed as follows:

	Million dollars
Pre-school education	0.5
Primary education	4.0
Secondary education	10.5
Technical and industrial education	2.0
University of Guyana	2.0
Teachers' training	1.2
Guyana School of Agriculture	1.5
School furniture and equipment	2.0
Teachers' housing	0.25
Research and development	0.4
Total	24.4

(iii) Investment and capacity utilization

During the 1972-1976 period the total fixed investment is expected to be \$575.5 million of which \$363.0 million will be invested by the public sector. The investments of the private sector (co-operatives and private enterprises) are expected to amount to \$212.5 million.

Investment in Fixed Capital by Sector, 1970-1971

	1970	1971
Agriculture	1.0	1.4
Fishing	0.1	2.7
Forestry	1.2	1.6
Mining and quarrying	1.0	1.4
Manufacturing	13.1	16.2
Engineering and construction	1.1	1.1
Distribution	1.1	1.7
Transport and communications	11.8	17.2
Housing	125.1	88.7
Buildings, etc. for financial institutions	1.0	1.1
Public buildings and equipment	1.5	11.3
Other investments	2.1	1.4
Total	177.0	100.0

The total fixed investment of \$57.5 million will be financed by gross domestic savings of \$44.0 million and a capital inflow of \$13.5 million.

(iv) International Balance of Trade Policy

	1971	1972
Export/Import ratio	0.92	0.77
Import/GDP ratio	0.66	0.80
Investment/GDP ratio	0.22	0.41

(v) Regional Industrial Planning

The country has been divided into 20 regions. In each region a regional development office was providing technical assistance to the local authorities, co-ordinating all activities in the regions and developing the central government offices in the regions.

The regional development offices will be centrally co-ordinated by a regional development bureau located in one of the ministries.

Within the framework of regional development authorities, existing institutions will be strengthened. The task of the regional authorities will be:

- To identify the resources more accurately than at the central level
- To use these resources as efficient as possible
- To distribute the development process geographically
- To guide and assist co-operatives and local authorities

The occupancy of the country's lands will be achieved in two ways, namely by a population movement and a production and transport policy which will meet the needs of the hinterland settlers.

The Government should continue to support the private sector in its efforts to expand production and employment. The Government should also continue to support the private sector in its efforts to expand production and employment.

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- The expansion of export-oriented industries and the utilization of domestic raw materials for the manufacturing sector
- A greater integration and diversification of the industrial base of production
- The regional location of industries on an equitable basis
- The encouragement of export orientation in the manufacturing sector
- The import substitution of food and other selected items of intermediate and capital goods

Estimated Investment Needs, 1974-1976
MANUFACTURING AND MINING SECTORS

(Million dollars)

Participation in industries	25.0
Development of industrial estates and buildings	4.0
Areas of start-ups	0.8
Export promotion	1.2
Total	31.0

The total capital investment is estimated at \$30.0 million. About 60 per cent of this amount will be used for electric power, rice and food processing as shown below.

Fixed Investment, 1974-1976

(Million dollars)

Electricity	40.5
Rice processing	1.4
Food processing and other manufacturing	16.0
Total	57.9

The co-operatives and the private sector will invest \$35.6 million in the branches mentioned above. The basic structural weakness of the sector will be strengthened through food, beverage and tobacco processing, and other manufacturing industries. The Government will introduce a new system of fiscal and non-fiscal incentives within DANIPA.

These incentives will be selective with varying benefits. To take advantage of the benefits the enterprises will have to use domestic raw materials, have high employment of labour, reinvest their profits, interests, management charges and other income, be located in the new development regions or possess a share in the export sector.

OUTPAC will provide facilities for a more systematic programming of industrial activities and for the identification, preparation and implementation of projects to meet the needs of the manufacturing sector.

	Amount in millions of dollars
Food and kindred products	100
Bakery products	15
Canned fruits and vegetables	10
Canned meats and fish	15
Canned vegetables and fruits	10
Dairy products	15
Ice cream	10
Meats and fish	15
Sausages and luncheon meats	10
Soft drinks and beverages	10
Sweets and confectionery	15
Textile millinery and leather-wear products	40
Apparel	30
Hats	10
Chemical and allied products	100
Aluminum and alloys	10
Coke and blast-furnace gas	10
Fertilizers and other chemicals	10
Glass and glassware	10
Inorganic chemicals	10
Organic chemicals	10
Plastics	10
Rubber, gutta-percha, and synthetic materials	10
Sulfur and sulfur products	10
Tanned skins	10
Waxes	10
Nonmetallic mineral products	100
Asbestos	10
Clay and ceramic products	10
Lime and lime products	10
Marble, granite, and other stone	10
Sand and gravel	10
Soda ash and other sodium compounds	10
Sulfur	10
Talc and other mineral products	10
Zinc and zinc products	10
Metals and metal products	100
Aluminum and aluminum products	10
Copper and copper products	10
Iron and steel	10
Lead and lead products	10
Nickel and nickel products	10
Other nonferrous metals and metal products	10
Tin and tin products	10
Zinc and zinc products	10
Transportation equipment	100
Aircraft and aircraft parts	10
Automobiles and trucks	10
Bicycles	10
Boats and other watercraft	10
Cavalry equipment	10
Electric, electronic, and optical instruments	10
Engines, turbines, and turbo-propellers	10
Farm tractors and other tractors	10
Gas turbines	10
Harbors, locks, and canals	10
Lift trucks and other material-handling equipment	10
Locomotives and other rail equipment	10
Motorcycles	10
Other transportation equipment	10
Parts and accessories	10
Refrigerators	10
Trucks and truck parts	10
Capital goods	100
Agricultural machinery and equipment	10
Automobiles and trucks	10
Cement	10
Construction equipment	10
Electric, electronic, and optical instruments	10
Engines, turbines, and turbo-propellers	10
Farm tractors and other tractors	10
Gas turbines	10
Harbors, locks, and canals	10
Lift trucks and other material-handling equipment	10
Locomotives and other rail equipment	10
Motorcycles	10
Other capital goods	10
Parts and accessories	10
Refrigerators	10
Trucks and truck parts	10
Machinery, electrical, electronic, and optical instruments	100
Agricultural machinery and equipment	10
Automobiles and trucks	10
Cement	10
Construction equipment	10
Electric, electronic, and optical instruments	10
Engines, turbines, and turbo-propellers	10
Farm tractors and other tractors	10
Gas turbines	10
Harbors, locks, and canals	10
Lift trucks and other material-handling equipment	10
Locomotives and other rail equipment	10
Motorcycles	10
Other machinery, electrical, electronic, and optical instruments	10
Parts and accessories	10
Refrigerators	10
Trucks and truck parts	10
Miscellaneous manufacturing	100
Agricultural machinery and equipment	10
Automobiles and trucks	10
Cement	10
Construction equipment	10
Electric, electronic, and optical instruments	10
Engines, turbines, and turbo-propellers	10
Farm tractors and other tractors	10
Gas turbines	10
Harbors, locks, and canals	10
Lift trucks and other material-handling equipment	10
Locomotives and other rail equipment	10
Motorcycles	10
Other miscellaneous manufacturing	10
Parts and accessories	10
Refrigerators	10
Trucks and truck parts	10
Total	4,863

Projected exports in 1976

GUYANA

<u>Product</u>	<u>Value (million dollars)</u>	<u>Share of total (%)</u>
Sugar	72.7	32.7
Molasses	2.8	1.3
Rum	4.5	2.0
Rice	20.0	9.0
Shrimps	2.3	1.0
Other agricultural exports	2.8	1.3
Timber	7.0	3.1
Other forest products	1.3	0.6
Marble, bauxite products and kaolin	50.0	40.0
Manufactured products	1.5	3.0
Diamonds	(1.3)	(0.6)
Clothing	2.0	(0.9)
Drugs	(2.0)	(1.7)
Miscellaneous	(2.7)	(1.2)
Other domestic exports	5.0	2.3
Re-exports	6.3	2.9
Total	222.5	100.0

New trade links will be established with countries from which imports at competitive prices will be obtainable and to which exports will be marketable.

Furthermore, imports of non-essential goods will be curtailed.

The External Trade Bureau will be expanded and will also be in charge of export transactions. It will be the main Government machinery responsible for the implementation of bilateral trade agreements negotiated by the Government.

The Government will co-ordinate its policies with those of the other CARIFTA member territories, particularly through the introduction of a common external tariff.

(11) Planned growth of electricity

Projected expenditure on electricity, 1972-1976

(Million dollars)

	<u>Public</u>	<u>Private</u>
Total fixed investment	40.5 ^{g/}	0.5
Expansion of the corporation's system	35.0	-
Expansion of the Tumatumari hydro-system	0.5	-
Hydropower (preliminary works)	5.0	-

^{g/} Expansion of existing public plants and construction of new plants.

The high cost of power in some areas have limited the construction of new power stations. Rates will be stabilized to encourage investment in the period of the plan. Ais power lines to the north and south of the main power station are available at lower rates.

The power supply to the main industrial plants will be increased and the supply of further electrical services will be extended.

Development will be granted to non-private generating plants to operate in the period of the plan. Wherever possible, will be located. However, there will be no plan for standardization.

The capacity of the main power plant, for which the construction is planned to commence in 1974, will be ready in 1978. In 1979 a new power station will be established to handle all arrangements and transmission created with the implementation of this project.

Basic growth finding

The development of the sector is very important as the development of the basic industries forms the basis of the growth in national output during the period of the plan.

Malaya is located within the Precambrian Shield, an area well known for its mineral wealth. Many of these mineral resources are still unexplored. They can be divided into three categories:

The minerals which are mined at present, e.g. bauxite, gold and diamonds.

The minerals which have an economic potential for development during the period of the plan such as kaolin and other ceramic materials, kyanite, graphite, molybdenum, silica sand for glass manufacture, semi-precious and ornamental stones, soapstone, manganese and petroleum.

The minerals for which either the potential for development has been unassessed or for which development is not expected to take place in the period of the plan such as nickel, copper, chromium, tungsten, radioactive minerals, tin, mica, columbite and tantalite, lead and fluorite.

Bauxite mining operation will be expanded.

Dried alumina hydrate is being produced for latex backing of carpets.

Fused alumina and mullite are possible extensions of the refractory bauxite industry and of kaolin extraction. Anti-skid bauxite is being increasingly required for the use of highways and airports. The capacity for producing calcined bauxite will be increased, and a basis for the establishment of an aluminium shelter will be laid down. In total \$30 million will be invested in the bauxite industry.

Quarrying operations will be increased in order to meet the requirements of road building, sea defence and housing programmes. \$0.5 million will be invested in the provision of barges and tugs and in the construction of terminal facilities.

Concerning the development of raw industries in the mining sector, a plant for processing the kaolin deposits will be established on a joint venture basis. The prime product of this plant will be coating grade kaolin with filter grade and ceramic grade as by-products. At the initial stages, all the coating grade kaolin will be exported. The filter grade kaolin will be used for the production of porcelain and the ceramic grade material for the production of ceramic tiles.

The kaolin plant will cost \$2.8 million and will start operation in 1974.

The ceramic plant will be commissioned in 1975 and will cost \$3.0 million.

The porcelain plant will start its production in 1976, the total cost will amount to \$1.5 million.

The deposit of kyanite will be developed for commercial use.

As Guyana has vast resources of pure white sand with over 2,000 square miles of its coastal belt, a glass industry will be established which will produce sheet glass and table glass.

During the period of the plan also local industries based on the deposits of soapstone will be developed.

(iv) Priority of sectors

The mining and quarrying sector is the most important sector for the growth of national output over the period of the plan. Further it will be the basis for planned settlement all over the country and not only along the coastland.

(v) Infrastructure connected with industry

Planned fixed investment, 1972-1976

	Public		Private	
	Value (million dollars)	Share in total (%)	Value (million dollars)	Share in total (%)
Road transport	48.5	53.0	8.5	69.2
Roads	47.5	51.9	-	-
Road transport vehicles	1.0	1.1	8.5	69.2
Water transport	21.5	23.5	1.5	12.2
Off-shore platform	15.0	16.4	-	-
Dredging	1.0	1.1	-	-
Rehabilitation and construction of wharves	1.5	1.6	0.5	4.1
Vessels	4.0	4.4	1.0	8.1
Air transport	4.3	4.7	1.0	8.1
Airfields and aerodromes	1.0	1.1	-	-
Navigational aids	1.2	1.3	-	-
Domestic airline operations	1.1	1.2	1.0	8.1
International airport	1.0	1.1	-	-
Postal services	0.3	0.3	-	-
Telecommunications	14.9	16.3	1.0	8.1
Other information services	2.0	2.2	0.3	2.4
Total	91.5	100.0	12.3	100.0

During the period of the plan, total fixed investment is expected to amount to \$103.8 million.

The main transport and communication network will be improved and extended; a feeder system will link the new and existing settlement areas with the main network; existing machinery, equipment and vehicles will be improved and replaced.

The Transport Planning Unit will be in charge of elaborating national plans for this sector.

The Planning and Programming Unit of the Ministry of Works and Communications will prepare transport projects and will work in close collaboration with the Transport Planning Unit.

During the period of the plan, a ferry service between Guyana and Surinam will be introduced.

iv) Relationships with non-industry sectors of the economy

Agriculture

	<u>Value (million dollars)</u>	
	<u>1972</u>	<u>1976</u>
Total crop	52.1	100.6
Total livestock	8.8	13.4
Total	<u>60.9</u>	<u>114.0</u>

Agricultural development will provide a basis for the development of agro-based industries and rural communities.

The Rice Marketing Board and the Guyana Marketing Corporation will take measures in order to provide guaranteed markets for farmers at guaranteed prices. Both corporations will constitute a trading link for agricultural products between the CARIFTA countries and other territories.

During the period of the plan, the Government will establish an Agricultural Development Bank.

Investment in agricultural machinery will amount to \$23.0 million. Investment in the construction of minor canals by local and regional authorities, co-operatives and private farmers will be \$3.5 million. Processing and marketing equipment will require another \$3.5 million in the investment programme.

Fisheries

Planned fixed investment, 1972-1976

(Million dollars)

	<u>Public</u>	<u>Private co-operatives</u>
Fleet	3.8	4.0
On-shore facilities	3.9	1.6
Research and training	0.3	-
Total	8.0	5.6

Until 1976 the Government will increase its fishing fleet to 35 vessels capable of supplying 3 million pounds of shrimps and 3.5 million pounds of fish per annum.

During the period of the plan the expenditure on co-operative fishing is estimated at \$1.0 million. The private sector will be encouraged through the provision of loan facilities which are expected to be \$1.5 million.

Further the Government will establish a joint on-shore enterprise which will provide storage and processing facilities for shrimps. The new plant will have a freezing capacity of 120,000 pounds of shrimps per day and an average storage capacity of 1,500 tons. The estimated expenditure is \$3.3 million. The plant was expected to become operational in 1974. The Government will also establish facilities for the development, berthing and servicing of a local fishing fleet which will cost \$1.8 million. The Guyana Marketing Corporation will expand storage facilities and establish processing equipment to supply salted, canned and bottled fish at an investment cost of \$50,000.

In collaboration with the Central Government the New Amsterdam Town Council will expand its fish centre. The total capital expenditure will be \$150,000.

Forestry

During the period of the plan the production and employment in the forestry sector will be rapidly increased.

New overseas markets were discovered for many wood species which were not required until now by the traditional American and European importers.

The forestry industry is labour-intensive, and the capital/labour ratio is much lower than the national average of capital required to employ a single person.

The state-owned company, the Guyana Timbers Ltd., will spend \$3.0 million to replace obsolete extraction and transport equipment, improve its saw mill, purchase preservation equipment and establish a gang mill capable of sawing long logs.

A new corporation, the Forest Industries Corporation, will be established which will purchase three more portable saw mills to be placed at strategic points in forest areas.

The capital expenditure of the Siyama Forest Industries Corporation will be \$1.2 million during the period of the plan. A forest industries complex owned jointly by the Government and a private overseas company will also be established on the left bank of the Demerara river. The total project investment will amount to \$6.3 million.

Another mill also owned jointly by the Government and foreign investors will be set up for the production of bleached craft pulp during the period of the plan. The investment will amount to \$15.0 million.

Local private forest industrialists have indicated that they will invest \$3.5 million in the expansion and improvement of existing forest industries. The Government intends to grant loans through the Co-operative Agricultural Development Bank for logging and extraction to co-operatives and societies. The estimated capital expenditure will be \$1.5 million.

Further, the Government will establish a Timber Export Board which will be the only export agency for Guyanese timber. The output of this sector at market prices is expected to rise from about \$6.0 million in 1972 to about \$13.0 million in 1976.

Planned fixed investment, 1972-1976

(Million dollars)

	<u>Public</u>	<u>Private</u>
Rehabilitation and expansion	3.0	5.3
Kisumu/Great Falls complex	6.3	-
Bakerono/Kokomoko complex	7.7	7.4
Timber Export Board	0.3	-
Reforestation	0.8	-
Forest Industries Corporation	1.8	-
Total	<u>19.9</u>	<u>12.7</u>

5. Planned industrial projectsPlanned industrial investment, 1972-1976

<u>Industry groups</u>	<u>Million dollars</u>
Food processing	
Fish processing and canning	1.0
Milk condensation	0.8
Fruit and vegetable processing	2.5
Solvent extraction	0.8
Clothing manufacture	
Textile plant	5.0
Hosiery	0.2
Raincoats	0.05
Wooden and bone buttons	0.1
Hats and handbags	0.3
Leather tannery and leather wear products	0.3
Building materials manufacture	
Clay, bricks and blocks	3.8
Bolts, nuts and washers	0.05
Glass	2.5
Sanitary ware (ceramic)	3.0
Wall and floor tiles (ceramic)	1.5
Paints, lacquers and varnishes	0.15
Aluminium and wooden windows	0.1
Emery-grain	0.2
Sanitary fittings	0.15
Hinges and tower bolts	0.15
Cement	3.0
Consumer durables	
Refrigerators	0.4
Radios	0.1
Aluminium and stainless steel utensils	0.15
Table porcelain	0.6
Diamond cutting and polishing	0.15
Wooden and metal furniture	0.2
Electric fans	0.15
Pottery products	0.25
Electrical accessories	0.1
Brooms, brushes and mops	0.15
Handicrafts and ornaments	0.5
Bicycles	0.15
Capital goods	
Metal and other containers	2.0
Agricultural implements	0.1
Automobile components	0.25
Miscellaneous manufacture	
Safety-pins, clips and fasteners	0.2
Towels and household linen	0.25
Wooden toys	0.4
Greeting cards	0.1
Total	31.85

6. Organisational and institutional changes required for industrial plan implementation

Emphasis will be placed on the following aspects:

Involvement of all relevant agencies in establishing targets

Efficient co-ordination of public, co-operative and private sector agencies through a reorganized public administration

Regular assessment of performance in relation to targets

A National Export Council will be established in order to promote exports. An Export Intelligence Unit will also be set up in the Ministry of Trade.

The staff of the Central Planning Agency will be strengthened. Planning units in national ministries will be established in order to facilitate over-all programming in the Development Secretariat.

For the effective co-ordination of information on plans from the various sectors of the economy, a macro-economic framework will be established with the objective of formulating a development plan of the economy of Guyana. A project preparation section will be formed within the Central Planning Unit as experience has shown that the inefficient utilization of resources has very often been due to an absence of adequate and sufficient pre-feasibility studies. The project preparation section will be working with local authorities, co-operatives and the private sector. The services of the statistical bureau will be levelled, and an interdisciplinary team will be formed within the Central Planning Unit will be created to involve the various departments in plan formulation. Furthermore, the national administration will be reorganized to make sure that formulated regional plans will be implemented.

The macro-economic model will identify interrelationships of the economy. Within this macro-economic framework sector analyses will be undertaken, mainly at the level of the planning units.

The Project Preparation section will not only service the Central Government but also local authorities, co-operatives and the private sector.

The activities of the Ministry of Economic Development will be supplemented by reinforcing existing staff, recruiting appropriate experts, introducing relevant courses in the Co-operative Centre at Koro-Koro and other co-operative training centres, establishing a management centre at the University of Guyana, developing project management techniques at UNCTAD and at UNRWA, setting up a productivity centre and by using existing private sector management training institutions.

Regional development offices will also be founded. The planned decentralization of the national administration will ensure that plans formulated for the regions have a greater chance of being implemented.

The regional development offices will be centrally co-ordinated by a regional development bureau located in one of the ministries of the Central Government. A Commission of Enquiry will be appointed to make recommendations on the introduction of a new system of collective bargaining and other aspects of industrial practices.

An Intersectoral Committee under the chairmanship of the Minister of Economic Development will be established as well in order to identify and suggest solutions to development problems.

The major private sector organisations such as the Consultative Association of Guyanese Industries (CAGI), the Guyana Manufacturers Association (GMA) and the

Chamber of Commerce will be the main sources of constructive advice in achieving the planned goals and objectives for the sectors.

As part of the implementation process, the Government's annual budget will be used as an instrument for reviewing and assessing the progress of the development plan.

7. Problem areas particular to the industrial sector

The development plan 1972-1976 does not indicate any problem area particular to the industrial sector. Difficulties will, however, result from those problems already encountered through the previous period of the plan.

11. IVORY COAST: 1971-1975^{1/}

A. GENERAL BACKGROUND INFORMATION, 1965-1970

1. Basic statistics

<u>Area</u>		<u>Square kilometres</u>
Total		322,463
Arable land		77,391
Permanent crops		10,316
Permanent meadows and pastures		79,770
Forestry		11,998
<u>Major cities</u>	(1970)	<u>Population</u>
Abidjan		550,000
Bonaks		140,000
Korhoyo		75,000
Daloa		51,000
Grand Bassam		47,000
<u>Other data</u>	(1969)	
Literacy rate		20%
Roads		30,000 km
Number of cars		92,420
Number of ports		4
Electricity production (1971)		586 million kwh
<u>Exchange rates</u>	(1972)	<u>CFA franc (CPAF) equivalent</u>
<u>Currency unit</u>		
US dollar		256.25
Pound sterling		601.67
Swiss franc		67.90
French franc		50.00
German mark		80.03
Italian lira (100)		44.00

2. Population

	<u>1965</u>	<u>1970</u>	<u>Annual rate of growth (%)</u>
Total population (thousands)	4,300	5,100	3.5
Employed (thousands)	...	1,700	...
Unemployed (thousands)	...	100	...
Unemployment rate (%)	...	5.9	

Distribution of population, by age group, 1970
(Percentage)

Less than 5 years	19.6
5-14 years	23.1
15-39 years	53.7
40-59 years	3.6
60 years and over	-
Total	<u>100.0</u>

^{1/} Plan quinquennal de développement économique, social et culturel, 1971-1975, République de Côte d'Ivoire, Ministère du Plan, Paris, December 1971, 465 p.

Distribution of population by sector in 1970

(Thousands)

Agriculture, forestry and fishing	1,989
Mining, industry and power	230
Construction	663
Transport, communication and utilities	408
Trade and finance	357
Other	<u>1,153</u>
Total	5,100

EDUCATION

In 1965 enrolments in public primary schools amounted to 330,550 and in public and private secondary schools to 28,540. The university of Abidjan had 1,938 students in the same year.

In 1970, 855.1 million were spent on education which represents 13.6 per cent of the total expenditure.

3. GDP

	<u>1965</u>	<u>1970</u>	<u>Average annual increase (%)</u>
Industrial GDP per capita (dollars)	26	45	11.6
Total GDP per capita (dollars)	216	271	4.6
Population (thousands)	4,300	5,100	3.5
Industrial GDP (million dollars)	112	231	15.5
Total GDP (million dollars) ^{a/}	931	1,381	8.2
Industrial GDP as percentage of total GDP	12.3	16.7	

^{a/} At 1968 prices.

1965-1970

	1965		1970		Average annual increase (%)
	Value in million dollars	Share in total (%)	Value in million dollars	Share in total (%)	
<u>Sector</u>					
Agriculture, forestry, and fishing	337	14.2	417	14.2	4.4
Manufacturing	112	4.8	131	4.7	15.1
Construction	127	5.4	137	4.9	14.0
Transportation	142	6.0	154	5.4	14.1
Commerce	275	11.8	410	14.5	17.2
<u>Total</u>	<u>2353</u>	<u>100</u>	<u>2911</u>	<u>100</u>	<u>14.7</u>

4. Non-economic indicators

Money stock

1967 - 8,192 million

1970 - 8,347 million

Average annual increase 1.8%

Official price index (1965 = 100)

1967 - 111

1970 - 114

1967

1967 - 8,192 million

1970 - 8,347 million

Average annual increase 1.7%

Balance of payments in 1970

(Million dollars)

Balance on goods and services	-22.3
Trade balance	36.0
Total services	-73.7
Inrequired transfers	-41.6
Private	-42.6
Government	30.6
Capital flows	69.2
Non-monetary sectors	71.9
Monetary sectors	-2.7
Allocation of SDRs ²	3.2
Official reserves and related items	-31.3
Liabilities	2.2
Assets	-33.5
Errors and omissions	-7.0

² Special drawing rights.

Central Government Accounts in 1970

Million dollars)

Revenue	324.4
Domestic revenue	324.4
Foreign grants	-
Expenditure	405.2
Current	259.7
Defense	19.1
Agriculture	12.5
Education	51.1
Health	24.2
Public works	24.6
Interest payments	9.7
Other	118.5
Capital	145.5
Deficit	-80.8
Financing the deficit	+80.8
Domestic sources	31.6
Foreign borrowings	49.2

Industrial products and technology - main manufacturing industries

The Ivory Coast's economy is mainly based on agriculture and is little industrialised. The manufacturing sector's contribution to the total GDP increased from 12.7 per cent in 1965 to 16.7 per cent in 1970. This development was due to the processing of agricultural products and the creation of import substitution industries. Almost 40 per cent of the industrial production of the country were made up by 15 large enterprises. These are the big mills of Abidjan, the cocoa butter factory, the pineapple canning plant, the refinery, two cement works, two saw mills, an automobile assembly plant, a metal container factory, three textile factories, the oil and soap works and the banana packaging plant.

Annual production of the pineapple canning plant amounted to 70,000 tons.

In 1965, at a capacity of 700,000 tons of crude oil, the refinery started production with an investment of \$15.2 million.

The most important activity of the metal processing industry was the assembly and repair of motor vehicles. In 1968 sales exceeded \$30.0 million. Manufacture of metal containers for the canning industry and the packaging of various products were also developed. One large shoe factory supplied three quarters of the domestic market.

The textile industry consisted of 6 cotton ginning plants, producing 13,000 tons of cotton fibre in 1968 and two dyeing and printing plants, one working on unbleached imported materials. Three enterprises were manufacturing knitted goods, and three other textile enterprises were making twine, sisal and jute bags.

Chemical industries were mainly engaged in the handling and packaging of pesticides, but also in the production of oxygen, acetylene and matches.

Sales and value added of major non-facilitating sectors, 1965 and 1969

	Value (million dollars)		Average annual increase (%)
	1965	1969	
Wood industry			
Sales	44.1	76.5	11.6
Value added	27.7	28.6	17.5
Trade oil			
Sales	-	18.0	-
Value added	-	6.1	-
Metal processing industry			
Sales	35.3	50.4	12.7
Value added	12.9	17.9	11.6
Textiles and footwear industry			
Sales	20.9	42.7	26.5
Value added	7.9	16.2	22.1

1. Industry - related resources and sectors

Agricultural sector

The agricultural sector is still of great importance for the country's economy. In 1970 it contributed about 26 per cent of GDP, and more than 80 per cent of the population were engaged in agriculture. The growth rate of this sector was significantly lower than of all other sectors. Exports of agricultural products and of semi-processed agricultural products form over 90 per cent of the country's exports.

Coffee is the largest export earner, although it was occasionally displaced by timber in 1969.

The two main agricultural products were coffee and cacao. Coffee and cacao are mainly cultivated by small farmers, growing about five hectares of coffee or cacao each. For that reason, price fluctuations of coffee and cocoa have a negative impact on a large number of people. In 1969 a diversification of the agricultural production was started through the growing of rice, cotton and palm-oil. In 1970 the palm-oil area amounted to 70,000 ha in comparison with a 780,000 ha coffee area. In the same year, the first big palm-oil exports were made. In the south-west of the country rubber projects are under investigation.

The cotton development programme was a burden on the Government's financial resources. At an output level of 50,000 tons, the net cost of the programme paid by the Government was about \$1 million.

Forestry

The total wood production grew from 1 million m³ to 4.3 million m³ in 1969. During the same period, exports decreased from 85 per cent to 78 per cent of the total production, whereas the domestic use increased from 9 per cent to 14 per cent.

Although reforestation programmes were carried out, reserves have been seriously depleted in recent years.

Fisheries

In 1970, the total fish production was 75,000 tons. During the years 1965-1970, the annual average growth rate amounted to 4.0 per cent. A refrigeration plant started operation. The existing marine fishing fleet consists of some 80 trawlers, most of which are obsolete or obsolescent.

Minerals

Mineral production played a relatively small role in the country's economy by contributing less than 1 per cent to the gross domestic product in 1969. Diamond mining production hardly changed during the past decade. The annual production amounted to 200,000 carats.

In 1970, the manganese extraction was abandoned owing to a sharp decline in the world market price for this mineral.

Power

Electric power production increased in line with the rapidly expanding demand which rose at an average annual rate of 15.0 per cent during the last five years. 82.0 per cent of the total consumption was concentrated in Abidjan. The industrial sector accounted for about half of the total consumption. In Kossou a hydroelectric dam is being constructed which will double the country's present generating capacity. The rural electrification programme was continued during the period of the plan.

Transport and communication

The existing road network of 30,000 km and the only railway line linking Abidjan with Ouagadougou in Upper Volta were maintained.

The Ivory Coast operates its own national airline. Airports are in Abidjan and Yamoussoukro.

A new deep water port has been built in San Pedro.

7. Over-all economic development strategy and policy

The aim of the plan was the expansion and promotion of the industrial sector's development based on the process of a diversified agricultural production and on the increased exploitation of forestry. The structural change experienced in the industrial sector during the period of the plan was due to import substitution and the utilisation of the country's natural resources.

The largest part of the exports of the Ivory Coast consisted of agricultural products which doubled during the period 1965-1970. Imports were mainly industrial products.

Foreign and domestic private investment was promoted. The development of private entrepreneurship was strengthened and was a basic part of the industrial policy carried out. Newly established enterprises were granted certain tax exemptions during the first five years. Taxable profits could be reduced by a percentage of the investment made. Market protection was granted in the form of import tariffs on industrial products from the European Economic Community. In addition, raw materials used for

Industrial production were exempted from import duties over a period of 10 years.

Regional co-operation and international trade

In 1964 an authority for the south-west area of the country, l'Autorité pour l'Aménagement de la Région du Sud-Ouest (ARSO), had been created to check the implementation and co-ordination of different kinds of projects. In this region, the harbour San Pedro had also been created to form a second development pole. As this region is surrounded by the sea, all development projects will be placed at the coast in order to benefit from cheap transport costs.

In 1964 another authority, l'Autorité pour l'Aménagement de la Vallée du Bandama (AVB), was created to organise the establishment of plantations near new towns. In addition, this authority is in charge of reclamation, the settling down of immigrants and the local road development.

Exports in 1965
(Million dollars)

Agricultural, fishery, forestry sectors	280.5
Industrial sector	68.2
Services sector	12.3
Total	<u>361.0</u>

In 1970, the total exports amounted to \$512.0 million.

Principal destinations of exports in 1969
(Million dollars)

France	150.2
United States of America	66.8
Italy	51.8
Federal Republic of Germany	46.1
Netherlands	44.1
United Kingdom of Great Britain and Northern Ireland	19.4
Total	<u>378.4</u>

Imports in 1965
(Million dollars)

Agricultural, forestry, fishery sector	63.0
Industrial sector	196.4
Services sector	<u>36.6</u>
Total	296.0

In 1970, the total imports amounted to \$416.0 million.

Principal sources of imports in 1969
(Million dollars)

France	161.9
Federal Republic of Germany	30.3
United States of America	25.9
Italy	18.6
Netherlands	16.1
Algeria	<u>12.1</u>
Total	264.9

9. Systems for planning and plan implementation

10. Problems encountered through the previous period of the plan

During the period 1965-1970, the main problems encountered were:

The structural weakness of the engineering industry

The lack of funds to stimulate the shipbuilding and engineering works

The marketing difficulties of agricultural products

The country's dependence on foreign investment

The lack of managerial and technical skills

B. SUMMARY OF THE INDUSTRIAL DEVELOPMENT PLAN, 1971-1975

I. General goals and objectives

(i) Planned growth

	<u>1970</u>	<u>1975</u>	<u>Average annual increase (%)</u>
Industrial GDP per capita (dollars)	45	74	10.4
Total GDP per capita (dollars)	271	334	4.2
Population (thousands)	5,100	6,000	3.4
Industrial GDP (million dollars)	231	443	13.9
Total GDP (million dollars)	1,381	2,005	7.7
Industrial GDP as percentage of total GDP	16.7	22.1	
Total consumption (million dollars)	738	1,109	8.5
Gross domestic savings (million dollars)	349	516	8.2
Total investment (million dollars)	297	449	8.6
Exports (million dollars)	512	713	6.8
Imports (million dollars)	416	575	6.7

(ii) Other objectives

- To stimulate the development of the agricultural and industrial sector.
- To emphasize regional development.
- To promote economic co-operation with the surrounding countries.
- To modernize the agricultural sector.
- To increase the number of indigenous managers.
- To intensify the population's participation in the development objectives.
- To improve the sanitary conditions.
- To extend the electricity and water supply.
- To improve the school system and housing conditions.

2. Strategy and policy

(i) General

During the period of the plan, 1971-1975, a growth rate of GDP of 7.7 per cent per year is expected. In order to reach this target, the industrial sector will have to play the main role in the development process.

The policy of promoting free, private enterprises and of directing industrial activities towards the export field will be continued. The objectives concerning the industrial sector are a growth rate of 13.9 per cent per year and the increased participation of the Ivoirians at all enterprise levels. Furthermore, import substituting and export-oriented industries processing imported materials will be stimulated. It is also planned to

modernize especially those industrial branches which possess certain advantages compared to those of neighbouring countries. In this respect, measures will be taken to reach regional co-operation between the neighbouring countries.

(ii) Manpower and productivity

Expected manpower demand, 1971-1975

	<u>Number of persons</u>
Agriculture, forestry, hunting	9,300
Manufacturing	63,600
Mining and quarrying	
Electricity, gas, water, transportation, wholesale and retail trade, banking, etc.	37,200
Public administration services	16,660
Total	<u>126,760</u>

Education

For primary education school television will be used very much. Through the application of the audio-visual method it is hoped that all children at the age of 6-11 years will enjoy school. 385,050 children attended primary schools in 1970. In 1975, the number of pupils is expected to reach 472,990 of which 209,880 will follow school television.

Expected number of pupils, 1971 and 1975

	<u>1971</u>	<u>1975</u>	<u>Average annual increase (%)</u>
Secondary education	47,085	54,270	3.6
Ivorians	44,185	50,770	3.6
From abroad	2,900	3,500	4.9
Vocational training	950	2,360	25.5
Technical and commercial education	780	1,915	25.0
Agricultural education	103	245	24.2
University education	3,450	8,300	24.5
Ivorians	1,200	4,500	39.1
From abroad	2,250	3,800	13.7
Total	<u>52,368</u>	<u>67,090</u>	6.4

Expected expenditures on education, 1970 and 1975

	Value (million dollars)		Average annual increase (%)
	1970	1975	
Primary education	25.6	37.5	7.9
Secondary education	23.9	36.4	8.7
University education	2.8	8.7	25.4
Cultural activities	0.3	0.7	18.4
Pedagogical research	1.0	1.8	12.5
Administration	1.4	1.4	-
Total expenditure of the Ministry of National Education	55.0	86.5	9.4
Off-school training	-	3.9	-
Technical and vocational training	7.4	17.8	24.1
Agricultural education	1.6	4.4	22.4
Total	64.0	112.6	12.0

During the period of the plan, 1971-1975, the total planned investment necessary to realize the educational objectives will amount to \$66.4 billion.

Planned investment, 1971-1975

(Million dollars)

Primary education	13.3
Secondary education	11.7
University education	10.1
Cultural activities	4.7
Total investment of the Ministry of National Education	39.8
Off-school training	0.8
Technical and vocational training	20.3
Agricultural education	5.5
Total	66.4

(iii) Investment and capacity utilisation

During the period 1971-1975 the total investment is planned to amount to \$1,969.5 million of which 41.6 per cent will be spent by the public sector and 58.4 per cent by the private sector.

Planned public and private investment, 1971-1975

	Value (million dollars)			Share in total (%)
	Public	Private	Total	
Agriculture, forestry and fisheries	175.5	39.0	214.5	10.9
Manufacturing	113.1	471.9	585.0	29.7
Construction and services sector	105.3	382.2	487.5	24.7
Total productive investment	393.9	893.1	1,287.0	65.3
Public non-productive investment	425.1	257.4	682.5	34.7
Total investment	819.0	1,150.5	1,969.5	100.0

Planned public investment by sector of activity, 1971-1975

(Million dollars)

Administrative infrastructure	78.0
Public health	35.1
Social infrastructure	7.8
Cultural development	66.3
Road, bridges, etc.	117.0
Water supply	19.5
Agriculture, fisheries, etc.	3.9
Buildings	97.5
Agricultural government enterprises	175.5
Public enterprises	
Harbour	31.2
Airport	7.8
Electricity	113.1
Postal services	31.2
Railway services	35.1
Total	819.0

(iv) Interrelations between growth factors

	1970	1975
Export/import ratio	1.23	1.24
Import/GDP ratio	0.30	0.29
Investment/GDP ratio	0.21	0.22

(v) Regional industrial planning

The regional development of the north and south-west region and the valley of Bandama will be mainly emphasized. In the south-west region around San Pedro a development area will be created. Five villages will be established for

immigrants from Kossou. Furthermore, plantations of oil-palms, cocos, rubber, cacao, coffee and rice will be started. The development of paper, iron, wood, oil, electric energy and agricultural industries will be stimulated. It is expected that these industries will give employment to 7,400 persons.

In the valley of Bandama, better communications will be provided, and the immigrants settling there will help to plant rice, maize and vegetables and to develop cattle breeding. Plantations of cacao, cotton, tobacco, peanuts and cashews will also be promoted.

At the Kossou lake fisheries will be stimulated. As hydroelectric resources are available industries can be attracted. It is expected that these industries will create employment for 9,200 persons.

Agro-industries, especially rice, cotton and cashew industries, will be developed in the northern part of the country. In the western region, especially rice, coffee and cashew nuts will be grown. Cattle breeding will be emphasized. 13,500 ha will be planted with cacao.

3. Data bases and projections

4. Planned growth of the industrial sector

(1) Planned growth of manufacturing sector ^{2/}

For the period 1970-1975, the development programme of the manufacturing sector envisages the following targets:

An increase in value added from \$231 million in 1970 to \$441 million in 1975 at an average annual growth rate of 13.9 per cent.

An increase in exports from \$103.8 million in 1970 to \$251.4 million in 1975 at an average annual growth rate of 19.3 per cent.

An investment of \$583.4 million during the period of the plan.

A number of 28,300 ports created during the same period.

^{2/} Energy and water sector included in data of original development plan.

Value added, 1970 and 1975

<u>Sector</u>	<u>Value</u> <u>(million dollars)</u>		<u>Average</u> <u>annual</u> <u>growth</u> <u>rate (%)</u>
	<u>1970</u>	<u>1975</u>	
Cereals and flour industry	10.9	21.7	18.8
Preserved food, coffee, cacao industry	7.8	14.4	13.0
Beverages, ice cream industry	6.2	9.8	9.6
Other food industries and tobacco	9.9	20.7	15.8
Energy, water supply	74.3	113.7	8.9
Mining and quarrying	2.5	10.3	32.7
Metal industries	2.5	6.4	20.7
Construction materials industry	6.3	10.8	11.3
Fertiliser industry	0.4	1.6	32.0
Chemical industry	5.8	11.5	14.6
Wood processing industry	17.8	30.9	11.6
Automobile industry	15.6	27.2	11.7
Other mechanical and electric industries	10.1	24.9	19.7
Leather and shoe industry	4.7	7.9	10.9
Textile industry	35.9	71.6	14.7
Soap industry	10.2	28.5	22.7
Rubber and plastic industry	2.1	10.6	38.0
Other industrial products	8.4	20.9	19.9
Total	<u>231.4</u>	<u>443.4</u>	<u>13.9</u>

The most important branches regarding value added are the electricity, water supply and textile branches. The development of electricity and water sectors will be the basis for the development of industry. For the textile sector great export possibilities are expected.

Exports, 1970 and 1975

Sector	Value (million dollars)		Average annual increase (%)
	1970	1975	
Cereals and flour industry	0.6	1.4	18.4
Preserved food, coffee, cacao industry	35.8	63.9	12.2
Beverages, ice cream industry	0.4	1.1	22.3
Other food industries and tobacco	0.6	3.0	38.0
Energy, water supply	6.4	8.2	5.1
Mining and quarrying	3.9	14.9	30.7
Metal industries	1.6	2.5	9.5
Construction materials industry	0.6	1.3	16.7
Fertilizer industry	-	-	-
Chemical industry	7.1	12.7	12.2
Wood processing industry	18.5	34.3	13.1
Automobile industry	1.1	3.5	26.0
Other mechanical and electric industries	0.5	3.5	47.6
Leather and shoe industry	0.8	1.7	16.2
Textile industry	16.0	39.8	20.0
Soap industry	9.6	45.2	36.3
Rubber and plastic industry	0.2	4.6	18.1
Other industrial products	0.1	9.8	57.0
Total	103.8	251.4	19.3

Total exports by sector, 1970 and 1975

Sector	1970		1975	
	Value (million dollars)	Share in total (%)	Value (million dollars)	Share in total (%)
Agriculture, forestry, fisheries	385.3	75.2	428.1	60.0
Industrial sector	103.8	20.3	251.4	35.2
Transport and services sector	23.1	4.5	33.5	4.7
Total	512.2	100.0	713.0	100.0

The main export products will be cacao, coffee, fish and bananas; furthermore minerals, diamonds and petrol, textile products and shoe articles, paper, rubber, palm-oil and other oil products.

During the period 1971-1975, an investment of 8995.7 million is envisaged for the manufacturing sector.

Imports, 1970 and 1975

	1970		1975		Average annual increase (%)
	Value (million dollars)	Share in total (%)	Value (million dollars)	Share in total (%)	
Agriculture, cattle breeding	39.8	9.5	46.1	8.4	3.9
Fisheries and forestry					
Food industry	51.9	12.5	54.3	9.4	1.0
Energy	13.8	3.3	17.8	3.1	5.2
Mining and quarrying					
Construction material, fertiliser industry	27.3	6.6	41.7	7.3	8.9
Chemical industry, rubber	22.9	5.5	41.2	7.2	12.5
Cars	54.1	13.0	71.1	12.4	5.5
Other mechanical industries	88.5	21.3	141.8	24.5	9.9
Textile industry, leather industry	62.1	15.0	86.7	15.1	7.0
Other industries	30.7	7.4	36.9	6.4	3.7
Transport services	24.4	5.9	35.9	6.2	8.0
Total	415.5	100.0	575.5	100.0	6.7

Planned investment for new projects and expansions, 1971-1975

(Million dollars)

Cereals and flour industry	4.1
Preserved food, coffee, cacao industry	8.0
Beverages, ice cream industry	2.2
Other food industries and tobacco	17.9
Energy, water supply	139.0
Mining and quarrying	90.8
Metal industries	2.0
Construction materials industry	6.0
Fertilizer industry	2.3
Chemical industry	18.6
Wood processing industry	6.3
Automobile industry	9.7
Other mechanical and electric industries	59.7
Leather and shoe industry	20.4
Textile industry	2.1
Soap industry	12.5
Rubber and plastic industry	12.5
Other industrial products	56.0
	<hr/>
New investment	470.1
Expansions	125.6
	<hr/>
Total	595.7

Estimated number of new employment
establishments by the industrial sector, 1971-1975

Cereals and flour industry	1,200
Preserved food, coffee, cacao industry	1,350
Beverages, ice cream industry	190
Other food industries and tobacco	590
Energy, water supply	510
Mining and quarrying	1,560
Metal industriss	290
Construction materials industry	400
Fertiliser industry	30
Chemical industry	500
Wood processing industry	3,880
Automobile industry	4,030
Other mechanical and electric industries	1,920
Leather and shoe industry	440
Textile industry	7,520
Soap industry	1,230
Rubber and plastic industry	940
Other industrial products	1,720
Total	28,300

As the figures indicate, the wood, car and textile industries offer most of the created employment possibilities.

Planned growth of electricityInvestment, 1971 and 1975

	Value (million dollars)		Average annual growth rate (%)
	1971	1975	
Expansion of existing generating stations	0.5	0.5	-
Completion of dam in Kossou	21.3	-	-
New generating station for an iron mill	-	15.6	-
New generating station for a paper factory	-	4.2	-
Transmission lines	0.1	1.8	-23.1
Extension of network	1.1	1.5	6.2
Rural electrification	1.1	1.6	7.7
New electrification	0.7	0.4	-14.9
Real property	0.2	0.2	-
Current investments			
Mars	0.2	0.3	8.4
Other materials	0.8	0.8	-
Total	39.1	30.9	-5.5

In Kossou the construction of a dam was started in 1970 which was supposed to be ready in 1973. However, the produced energy can only cover the national demand for a short time. Two new generating stations will be built to cover the demand for an iron mill and a paper factory.

The total production will increase from 440 kWh in 1970 to 1,020 kWh in 1975 or in terms of value from \$21.3 million to \$44.3 million respectively at an average growth rate of 15.7 per cent.

The total investment for the period 1971-1975 is planned at \$114.7 million. 270 new posts will be created within this sector.

(iii) Planned growth of mining

The total value of production is expected to increase from \$3.9 million in 1970 to \$16.0 million in 1975. The total investment during this period will be \$30.6 million of which \$29.7 million will be invested in iron mining.

The production of diamonds at the size of 200,000 carat, representing a value of \$3.9 million, will remain the same during the period 1970-1975.

It is planned to exploit the iron mines of Bangolo. The yearly production is estimated at 5 million tons. Production will probably start after 1975. The viability of the project will depend on the situation of the world market.

In the region of Monogaga an iron mine of 100 million tons exists. At the moment, the possibility of extracting briquets usable for an integrated iron and steel factory is being studied. A study on the mine of Klahoyo is also

under preparation. The yearly production of this mine will be 10 million tons. The expected required investment will amount to \$500 million. Installations started in 1972.

Exports will increase from \$3.9 million in 1970 to \$14.9 million in 1975. 1,560 new jobs will be created within this sector.

(iv) Priority of sectors

On the basis of the expected growth rates of production, top priority will be given to rubber and plastic industries, fertiliser industries and mining and quarrying activities.

(v) Infrastructure connected with industry

Planned investment in public road transport, 1970 and 1975

	Value (million dollars)		Average annual increase (%)
	1970	1975	
Private investment			
Cars	18.3	22.6	4.2
Offices	0.3	0.7	18.6
Public investment	-	0.3	-

As a result of the opening of the harbour of San Pedro, goods traffic by road will diminish.

During the period 1971-1975, the total investment in road development will be \$117.0 million of which \$35.1 million will be used for the maintenance of roads and \$81.9 million for new investments.

The total investment in the railway sector will amount to \$35.1 million. Passenger traffic will increase from 2.6 million persons in 1970 to 3.5 million persons in 1975 at an average annual growth rate of 7.0 per cent. The goods traffic is expected to rise from 739,000 tons to 940,000 tons at an average annual growth rate of 4.9 per cent during the same period.

Through the creation of the harbour of San Pedro, the traffic at the port of Abidjan was reduced. During the period of the plan the port of Abidjan will be improved whereas the harbour of San Pedro will be further constructed as the following table shows.

Planned investment, 1971-1975

(Million dollars)

Port of Abidjan	
Merchandise harbour	26.6
Fishing harbour	<u>2.2</u>
Total	28.8
Port of San Pedro	
Merchandise harbour	3.1
Fishing harbour	<u>0.8</u>
Total	3.9
Grand total	<u>32.7</u>

An investment of \$0.3 million will be necessary for the modernisation of the three sea-ships possessed by the Ivory Coast during the period 1971-1975.

Planned investment in air transport, 1971-1975

(Million dollars)

Airport of Abidjan	2.0
Airport of Yamoussoukro	1.6
Other airports	2.3
Equipment	<u>2.0</u>
Total	7.9
Equipment for Air Côte d'Ivoire	0.8
Equipment for Air Afrique	<u>9.4</u>
Grand total	18.1

Investment in postal services and telecommunication, 1971-1975

(Million dollars)

Postal services	1.6
Telephone services (urban, inter-urban, inter-African, international)	25.4
Telegraph services, etc.	<u>6.2</u>
Total	33.2

(vi) Relationships with non-industry sectors of the economyAgriculture

During the period of the plan 1971-1975, the agricultural sector will play an important role in economic development as a large part of the population earns its livelihood from this sector. This sector will also supply raw materials for food industries such as fruit, sugar, corn and seeds. Furthermore exports of agricultural products will bring foreign exchange earnings. The value of agricultural production will increase from \$400.5 million in 1970 to

\$501.8 million in 1975. The expected growth rate of 4.6 per cent will be realised through a diversification programme which started in 1965 with rice, cotton, palm-oil, ananas and coconut plantations.

The sector's share in the total GDP is expected to decrease from 26.3 per cent in 1970 to 22.2 per cent in 1975.

For the period 1971-1975, the total public expenditure is planned to amount to \$277.5 million of which \$230.0 million will account for agriculture, \$11.8 million for forestry, \$5.2 million for fisheries and \$32.5 million for other expenditures. The expenditure for the rice programme will amount to \$31.0 million, for the cacao programme to \$23.4 million, the palm-oil and coconut programme to \$62.6 million, and for the cotton, sugar and kenaf programme to \$19.5 million each.

Forestry

During the years 1971-1975 the total public expenditure will be \$11.8 million. The total production will grow from 3,500,000 m³ in 1970 to 3,950,000 m³ in 1975. The value added will grow from \$91.7 million in 1970 to \$93.6 million in 1975.

The Ivory Coast is the world's most important exporter of timber. Exports of timber are expected to decrease from 2,500,000 m³ in 1970 to 2,200,000 m³ in 1975. Since 1968, 2,500 ha are afforested per year which are financed by an afforestation tax of 3 per cent levied on the export value of wood. The aim is to be able to cut 750,000 m³ yearly.

Fisheries

Planned public expenditure, 1971-1975

(Million dollars)

Sea and lagoon fisheries	1.1
Sea research	0.5
Experimental lagoon fisheries	0.1
Facilities	0.5
Continental fisheries	4.1
Koesou programme	4.0
Facilities	0.1
Total	5.2

In the sea and lagoon fisheries \$0.5 million will be spent for cardine fishing. Further a fishery centre will be set up in San Pedro.

The programme of Koesou will include expenditures of \$2.1 million for fish research, of \$0.9 million on equipment, infrastructure and unloading and processing installations.

It is expected that total seafood production will grow from 66,000 tons in 1970 to 100,000 tons in 1975. Lagoon fish production will grow from 9,000 tons in 1970 to 15,000 tons in 1975. Fish production from the rivers will grow from 4,000 tons to 8,000 tons in 1975. Fish consumption per head will grow from 20 kg per head to 23 kg per head.

6. Planned industrial projects

A rolling mill will be established and a galvanization process for iron sheet covers introduced. New manufacture and assembly units will be set up.

furthermore, a palm-oil and a oil-seed factory will be established.

In the rubber and plastic industry a factory producing plastic articles and another one for tyre production will be set up.

A pulp and paper factory will be founded for export purposes.

The establishment of a ginning, spinning and weaving factory is planned for the period of the plan.

Planned investment for new projects and expansions, 1971-1975

(Million dollars)

Cereals and flour industry	4.1
Preserved food, coffee, cacao industry	8.0
Beverages, ice cream industry	2.2
Other food industries and tobacco	17.9
Energy, water supply	139.0
Mining and quarrying	90.8
Metal industries	2.0
Construction materials industry	6.0
Fertilizer industry	2.3
Chemical industry	18.6
Wood processing industry	6.3
Automobile industry	9.7
Other mechanical and electric industries	59.7
Leather and shoe industry	20.4
Textile industry	2.1
Soap industry	12.5
Rubber and plastic industry	12.5
Other industrial products	56.0
New investment	470.1
Expansions	125.6
Total	595.7

6. Organizational and institutional changes required for industrial plan implementation

Marketing and productivity incentives must be created in order to support and encourage business.

Further the Office de Promotion de l'Entreprise Ivoirienne de Développement Industriel, set up in 1968, will probably start its work during the years 1971-1975.

A regional industrialisation commission will also be set up.

7. Problem areas particular to the industrial sector

The original plan does not indicate special problems encountered within the industrial sector.

III. REPUBLIC OF KOREA: 1972-1976^{1/}

A. GENERAL BACKGROUND INFORMATION, 1966-1971

1. Basic statistics

<u>Area</u>		<u>Square kilometres</u>
	Total	98,438
	Agricultural area	32,812
	Forestry	67,430
<u>Major cities</u>	(1971)	<u>Population</u>
	Seoul	4,000,000
	Pusan	1,500,000
<u>Other data</u>	(1968)	
	Number of cars	80,900
	Railways	3,160 km
<u>Exchange rates</u>	(1971)	<u>Won (W)</u>
	<u>Currency unit</u>	<u>equivalent</u>
	US dollar	373.0
	Pound sterling	932.5
	Swiss franc	95.6
	French franc	71.7
	German mark	113.0
	Italian lira (100)	63.2

2. Population

	<u>1966</u>	<u>1971</u>	<u>Average annual increase (%)</u>
Total population (thousands)	29,160	31,849	1.7
Labour force (thousands)	9,360	10,720	2.3
Employed (thousands)	9,261 ^{g/}	10,240	3.3
Unemployed (thousands)	496 ^{g/}	461	-2.4
Unemployment rate (%)	5.1 ^{g/}	4.5	

^{g/} For 1968.

^{1/} The Third Five-Year Economic Development Plan, 1972-1976, Government of the Republic of Korea, February 1971, 197 pp.

Distribution of employment by sector, 1971

<u>Sector</u>	<u>Employed persons (thousands)</u>	<u>Share in total (%)</u>
Agriculture, forestry and fishery	4,704	45.9
Mining and manufacturing	1,717	16.8
Other	3,819	37.3
Total	10,240	100.0

For 1970, labour force was estimated at 10.651 and unemployment rate at 5 per cent. The reason for the decrease in unemployment was the expansion of labour-intensive export industries, the rapid growth of import substitution industries, and the rise in employment associated with the expansion of infrastructure.

Number of pupils, 1964 and 1970

(Thousands)

	<u>1964</u>	<u>1970</u>
Primary schools	4,726	5,749
Secondary schools	666	1,319
High schools	399	590

In 1964 about 94 per cent of children at school age attended primary schools, and in 1970 the percentage increased to 97.

In the field of technical education, there were shortcomings in the available facilities. Technical schools failed to be a source of skilled manpower due to lack of co-operation between technical schools and industry.

3. GNP

	<u>1967^a</u>	<u>1971</u>	<u>Average annual growth rate (%)</u>
Industrial GNP per capita (dollars) ^b	98	95	16.3
Total GNP per capita (dollars)	167	242	9.7
Population (thousands)	29,156	31,849	1.7
Industrial GNP (million dollars)	827	1,754	20.6
Total GNP (million dollars)	4,964	7,694	11.6
Industrial GNP as percentage of total GNP	16.7	22.8	

^a GNP data for 1966 not available.

^b Due to fluctuations of the exchange rate, all calculations were based on an average rate of 1 US dollar, being equivalent to 366.3 won in order to avoid exaggerated annual growth rates.

GNP structure, 1967 and 1971

<u>Sector</u>	<u>1967</u>		<u>1971</u>	
	<u>Value (million dollars)</u>	<u>Share in total (%)</u>	<u>Value (million dollars)</u>	<u>Share in total (%)</u>
Agriculture, forestry and fishery	1,707	36.0	2,093	27.2
Mining and manufacturing	827	16.7	1,754	22.8
Social overhead capital and other sectors	2,350	47.3	3,847	50.0
Total	4,964	100.0	7,694	100.0

4. Macro-economic indicatorsMoney supply

1966 - 8 315 million
1971 - 8 958 million

Average annual increase 24.9%

Consumer price index

1966 = 162.8
1971 = 279.7

Average annual increase 11.5%

GNP

1967 - 84,964 million
1971 - 87,694 million

Average annual increase 11.6%

^{2/} GDP not available.

Balance of payments, 1965 and 1971
(Million dollars)

	<u>1965^{a/}</u>	<u>1971</u>
Goods and services	-192.5	-858.0
Transfers	198.9	160.0
Balance on current account	6.4	-698.0
Capital account	-0.4	668.0
Errors and omissions	-6.0	-
Changes in foreign exchange holdings	-	-30.0

^{a/} Data for 1967 not available.

Total available resources and their disposition, 1971
(Million dollars)

Gross national product	7,694
Foreign savings	697
Export	1,414
Import	2,111
Total available resources	8,391
Consumption	6,383
Gross investment	2,008
Domestic savings	1,311
Government	584
Private	727

5. Industrial products and technology - main manufacturing industries

During the second five-year plan, the structure of the manufacturing industry changed from consumer to capital goods. In 1964, the output ratio of light to heavy and chemical industries amounted to 66.5:33.5 and improved to 64.1:35.9 in 1970.

Imports have been largely replaced by domestic products after the construction of textile, paper, fertiliser, cement plants and oil refineries. Exports of manufactured goods, such as textiles and plywood, also increased rapidly. The number of items exported increased from 69 in 1962 to 822 in 1969.

Steel industry

In 1969, an integrated iron and steel plant was constructed. This plant has an initial production capacity of 1,032,000 tons of crude steel per annum. The mill was set up to offer semi-finished steel products at low prices to existing, privately-owned, non-integrated mills.

The Korean Aluminium Company started aluminium and pig-iron production with a capacity of 15,000 metric tons in 1969.

Non-ferrous metal industry

During the second five-year plan, the non-ferrous metal industries have expanded their capacities in order to be able to satisfy the increasing demand.

General machinery industry

The demand for heavy construction equipment has increased significantly. The Government strongly supported the machine industry resulting in a rapid growth in the years 1967 to 1970.

Expansion of machine industries, 1966 and 1968

	Value (million dollars)		Average annual increase (%)
	1966	1968	
Non-electrical industry	36	53	21.2
Electrical industry	46	105	47.6
Transport equipment	71	164	42.1
Total	153	322	39.6

Electrical industry

The expansion of electrical machinery production was mainly due to the development of domestic industries and power plants.

Most parts, however, were imported, such as power machine tools, electric tools and power generating, transmitting and distributing equipment.

In 1968 annual production of electric motors increased to 401,000 units, electric transformers to 620,000 units and wire ropes and cables to 11,679 metric tons.

Non-electrical industry

The annual production of sewing machines increased to 180,000 units in 1968, 75 per cent of which were made in the country itself.

In the same year, production of sprayers increased to 62,240 units.

Transport equipment

In 1968 and 1969 assembly plants were set up by the Hyundai Automobile Company and by the Asian Automobile Company.

50 per cent of the capacity was used for the production of cars, trucks, buses and parts used for machine units in 1970.

Shipbuilding industry

The capacity of this industry increased from 54,000 gross tons in 1964 to 190,000 gross tons in 1970.

Electronic industry

Exports of electronic products increased from \$41,000 in 1964 to \$47 million in 1970. Between 1964 and 1970, the annual average rate of growth of the electronic production was 10.2 per cent.

The electronic industry's share in total exports was 6.9 per cent in 1964 and rose to 8 per cent in 1970.

Petroleum and other chemical industries

During the period 1966-1972, the construction of a naphta cracking plant with an annual production capacity of 100,000 tons of ethylene and nine allied plants was started. In addition, the construction of a utility and maintenance centre for the supply of power, water and steam was initiated.

Fertilizer industry

Eight fertilizer plants were built. In 1970 the annual production capacity amounted to 505,000 tons which is sufficient to meet the domestic and export demand.

Rubber industry

The production of industrial rubber products such as tires was started recently. The tire demand which increased from 251,000 tires in 1964 to 902,000 in 1970 was entirely met by domestic production.

Oil refining:

In 1964 the Ulsan oil refinery was constructed. In 1969 and 1970 two other oil refineries were built. The country's total crude oil processing capacity amounted to 215,000 barrels per steam day in 1970.

Plywood industry

Plywood production rose quickly from 501 million square feet in 1964 to 2,840 million square feet in 1970. In 1970, 79 per cent of the total plywood production was exported at a value of \$104 million.

Food industry

In 1970 the production of canned agricultural and marine products reached 36.7 million cans of which exports amounted to \$3.7 million.

Textile industry

This industry is of great importance to the economy of the country. During the period 1964-1970, the annual growth rate of production was 20.7 per cent. The application of advanced technologies and facilities in the field of synthetic fibres resulted in an increase of textile exports. In 1970 textile exports amounted to \$340 million accounting for 38.5 per cent of the country's total annual exports.

Cement industry

The annual cement production capacity grew from 1.7 million tons in 1964 to 6.8 million tons in 1970, which is sufficient to satisfy the domestic demand.

Flat glass industry

The flat glass production capacity rose from 60,000 units in 1964 to 1,18,000 units in 1970.

Ceramic industry

The ceramic industry is characterized by the availability of domestic high quality raw materials, a low standard of technology and lack of facilities.

Pulp and paper industries

The production capacity of the paper industry increased from 12,100 tons in 1964 to 40,400 tons in 1970. The domestic demand for pulp was mostly covered by imports.

Industry - related resources and sectors

Agricultural sector

Due to changes in the economic structure, the share of the agricultural, forestry and fisheries sector in the gross national product fell from 36.9 per cent in 1960 to 27.2 per cent in 1970. The average annual growth of the three sectors together was 4.8 per cent from 1960 to 1969. The growth was attributed to the increased production of food crops, the development of cash crops and livestock and to the success in sericulture. This improvement resulted from a sufficient supply of fertilizers, insecticides and pesticides, the application of new farming techniques, improved irrigation facilities, etc.

In spite of the increased food production, the supply of food grains did not meet the demand. Imports of food grains rose from 600,000 tons in the early 1960s to about 2 million tons in 1970.

Demand and production of major food grains in 1970

(Thousand tons)

	<u>Demand</u>	<u>Production</u>
Rice	4,400	3,939
Barley	1,800	1,974
Wheat	1,559	357
Corn	335	68
Total	8,094	6,338

Between 1964 and 1970, beef consumption increased from 32,000 tons to 37,300 tons, milk consumption from 7,000 tons to 41,500 tons and egg consumption from 943 million to 2,560 million.

Production of major livestock products in 1970

<u>Livestock products</u>	<u>Unit</u>	<u>Quantity</u>
Beef	Thousand tons	37,300
Pork	Thousand tons	79,200
Milk	Thousand tons	40,100
Eggs	Million pieces	2,560

The total area of mulberry farms expanded from 60,000 hectares in 1966 to 100,000 hectares in 1970. Cocoon production increased from 9,600 tons to 21,500 tons during the same period. Annual silk exports grew up to \$40.3 million.

Forestry

Forests account for 67 per cent of the country's total area. 93 per cent of the total afforestable area of 5.8 million hectares were afforested in 1971.

Investment 1967-1971

(Million dollars)

Reafforestation	27.6
Erosion control	12.2
Seedling production	9.7
Forest protection	6.3
Total	55.8

The fishing industry gradually changed from coastal to deep-sea fishing. The fishing vessel tonnage increased from 49,000 vessels or 167,000 gross tons in 1964 to 67,000 vessels or 376,000 gross tons in 1970. During the same period, total fishing grew by 60 per cent from 600,000 tons to 935,000 tons per year.

The value of marine exports increased from \$24.0 million in 1964 to \$72 million in 1970.

Mining

The mining industry has grown at an annual average rate of 7.3 per cent during the period 1964 to 1970. Its share in total GNP, however, has gradually decreased from 1.8 per cent in 1964 to 1.2 per cent in 1970.

The annual coal production amounted to 12.4 million tons in 1967 and decreased during the years 1968 and 1969 due to various difficulties. In 1970 the coal production level of 1967 was reached through intensive Government support.

The annual production of copper ore increased from 12,000 tons in 1964 to 27,000 tons in 1970 and that of lead and zinc ores from 12,000 tons to 80,000 tons.

... decreased from 1,000,000 tons in 1964 to 57,000 tons in 1970. The decrease was due to inefficient export possibilities and lack of domestic demand.

... increased from a production of 11,000 tons in 1964 to 145,000 tons in 1970.

... have contributed considerably to the development of mineral resources.

Transportation and communication

From 1964 to 1970, freight transportation increased from 5,241 million ton kilometres to 10,000 million ton kilometres. During the same period, passenger traffic increased from 1,100 million passenger kilometres to 31,062 million passenger kilometres. Road and air traffic increased proportionally, while railway traffic decreased. The amount of air and the total passenger transportation amounted to 11.5 per cent and 10.1 per cent of total passenger kilometres.

The considerable economic growth achieved during the period of the second plan stimulated the demand for telecommunication facilities. Interurban telephone facilities were increased from 20,000 lines in 1964 to 100,000 lines in 1970. The demand for overseas telephone facilities was met through the adoption of a joint system between the Republic of Korea and Japan and the construction of the Korean Earth Satellite Relay Station in 1970.

Overall economic development strategy and policy

The major goals of the second development plan were the improvement of the industrial structure, expansion of exports, increase of domestic savings, development of agriculture, extension of infrastructure, and the establishment of economic stability.

All policies were directed to achieve a self-supporting economy based on the following elements of development:

- Export promotion
- Increased capital mobilization
- Efficient manpower utilization
- Maintenance of monetary equilibrium

8. Regional co-operation and international trade

Close economic ties have been maintained with the World Bank, the Asian Development Bank and related organizations. Economic co-operation with the member countries of the International Economic Consultative Group for Korea was strengthened.

For the development of overseas markets, continuous research was done concerning the demand and supply conditions of the world market and the trade policies of other countries. Exporters' activities, publicity campaigns, and the expansion of the overseas network of marketing channels were also supported.

The Export Promotion Subcommittee co-ordinated the export programme by guiding the Government agencies, industrial trade associations and individual private entrepreneurs.

Expansion of commodity exports, 1959 and 1969

	Value (million dollars)		Average annual increase (%)
	1959	1969	
Primary goods	16.9	147.8	24.0
Manufactured goods	3.5	555.0	4.0
Total	20.4	702.8	13.1

The number of export items rose from 170 in 1961 to 522 in 1969, whereas the number of foreign countries buying Korean goods increased from 25 to 98 during the same period.

9. Systems for planning and plan implementation

The second plan was set up in three stages, i.e. an aggregate, a sectoral and a project plan.

The aggregate plan was drafted by taking into account the results of the previous period.

The project proposals prepared by the ministries and private organizations concerned were evaluated by the Economic Planning Board and re-examined by the industrial subcommittees.

The estimation of the Government's revenue and expenditures, for example, was reviewed by a fiscal subcommittee. Private savings were reviewed by a finance subcommittee.

Representatives of the ministries, related agencies, the Food and Agriculture Organisation (FAO), and of the Korean Reconstruction Bank studied the proposals in the light of sectoral projections.

The sectoral plans were developed on the basis of input-output techniques. The projected demand of the private sector was estimated on a household income survey. Government consumption was based on a relative composition of general expenses, defence expenditures, special account expenditures and local Government expenditures. The export-import subcommittee and ad hoc working groups calculated exports and imports.

Productive capacity was estimated on the basis of surveys of capacity and actual sectoral outputs divided by the sectoral rates of utilization of capacity. Capital coefficients were worked out from industrial profiles. For the calculation of import substitution effects, price and technological changes were taken into account. For interindustry demand coefficients an inverse matrix form was used to estimate the gap between the present sectoral productive capacity and the projected output.

10. Problems encountered through the previous period of the plan

The development of infrastructure was not always in line with the rapid expansion of industrial production.

Lack of skilled manpower caused difficulties in the manufacturing sector. Scientists and engineers were not sufficiently trained for the requirements of advanced technologies and equipment.

Production of raw materials for the machine industry remained at a submarginal level.

The technical standard of the machine industry needs improvement. The targets of the shipbuilding industry could not be reached due to worn-out facilities, low technical standard, under-development of related industries and financial shortages.

Research and development programmes conducted by the Government have been less effective than desired.

Further problems were caused by an inefficient utilization of savings and foreign capital, shortages in the balance of payments and lack of competitive product quality on the world market.

B. SUMMARY OF THE INDUSTRIAL DEVELOPMENT PLAN, 1972-1976

i. General goals and objectives(i) Planned growth

	<u>1971</u>	<u>1976</u>	<u>Average annual increase (%)</u>
Industrial GNP per capita (dollars)	55	94	11.3
Total GNP per capita (dollars)	242	338	7.0
Population (thousands)	31,849	34,345	1.5
Industrial GNP (million dollars)	1,754	3,239	13.0
Total GNP (million dollars)	7,694	11,622	8.6
Industrial GNP as percentage of total GNP	22.8	27.9	
Total consumption (million dollars)	6,382	9,128	7.4
Gross domestic savings (million dollars)	1,311	2,494	13.7
Total investment (million dollars)	2,008	2,896	7.6
Exports (million dollars)	1,414	3,441	19.4
Imports (million dollars)	2,111	3,843	12.7

(ii) Other objectives

- To achieve a stable and balanced economic growth.
- To realize a self-sustaining economic structure.
- To improve the international balance of payments.
- To maximize employment possibilities.
- To attain self-sufficiency in major food grains.
- To improve agricultural and farmers' income.
- To improve the country's infrastructure.
- To promote regional development.
- To improve health and cultural facilities in farm and fishing villages in rural areas.
- To promote housing programmes, sanitary facilities, social security programmes.
- To improve working conditions.

Strategy and policya. General

During the 1972-1976 period of the third plan, a growth rate of 8.6 per cent in GNP is expected to achieve a stable sectoral and geographical expansion. Policy measures will be directed towards:

The mobilization of savings

The improvement of entrepreneurial management and the modernization of the marketing system

The maintenance of balance among industrial sectors and the strengthening of industrial competition

Since more attention will be paid to intersectoral balance, the development of low productivity sectors such as agriculture, fishing, small and medium-scale industries will be emphasized.

Rationalization of management, improvement of technology and adequate technical manpower will contribute to the balanced development of relatively backward industries.

The achievement of the projected growth rate will depend mainly on two factors: improvement of the balance of payments and increase in domestic savings.

The small domestic market and insufficient domestic resources will require a policy of export-oriented production. Export promotion will be given to heavy and chemical industries; priority will be given to the electronic appliances sector, machine industry and shipbuilding. Tariff protection will be granted for a certain period of time.

Efforts will be made to expand and modernize the production facilities of export industries and to develop their technology. Medium and long-term funds will be provided to finance the rationalization and modernization of enterprises.

(11) Manpower and productivityExpected manpower balance

	<u>1971</u>	<u>1976</u>	<u>Average annual increase (%)</u>
Total population (thousands)	31,849	34,345	1.5
Labour force (thousands)	10,720	12,290	2.8
Employed (thousands)	10,240	11,792	2.8
Unemployment rate (%)	4.5	4.0	

Employment structure will change due to a gradual shift from the agricultural to the non-agricultural sectors. This trend will be encouraged to through more vocational and technical training programmes.

Expected employment by economic sector

<u>Sector</u>	<u>1971</u>		<u>1976</u>		<u>Average annual increase (%)</u>
	<u>Employed (thousands)</u>	<u>Share in total (%)</u>	<u>Employed (thousands)</u>	<u>Share in total (%)</u>	
Agriculture, forestry and fishery	4,704	45.9	4,442	37.7	-1.2
Mining and manufacturing	1,717	16.8	2,413	20.5	7.1
Other	3,819	37.3	4,937	41.8	5.2
Total	10,240	100.0	11,792	100.0	2.8

Education

The number of primary school children is expected to drop from 5,749,000 in 1970 to 5,615,000 in 1976. This trend will be used to improve the quality of educational facilities and courses. Particular emphasis will be placed on improving the facilities of secondary and high schools.

Number of pupils and schools, 1970 and 1976

	<u>1970</u>		<u>1976</u>	
	<u>Number of schools</u>	<u>Enrolment (thousands)</u>	<u>Number of schools</u>	<u>Enrolment (thousands)</u>
Primary schools	5,960	5,749	6,890	5,615
Secondary schools	1,610	1,319	2,040	2,094
High schools	890	590	1,230	1,034
Total	8,460	7,658	10,160	8,743

To secure skilled manpower needed for industrial progress, technical schools of all levels will be improved and expanded.

Estimatee of manpower demand and supply, 1972-1976

(Number of persons)

	<u>Demand</u>	<u>Supply</u>
Scientists and engineers	14,000	14,000
Technicians	33,000	33,000
Craftsmen	329,000	350,000
Total	<u>376,000</u>	<u>397,000</u>

The ratio of technicians and skilled workers to total employment will be raised from 4.8 per cent in 1970 to 7.8 per cent in 1976 by increasing specialized occupational training courses. High priority will also be given to training programme for craftsmen. Rural Vocational Training Centre will be established, and at the same time the Central Vocational Training Institute will be expanded.

The Government will also help individual enterprises to develop training programme designed to meet their specific requirements.

In order to increase the productivity of local industries, the Korea Institute of Science and Technology, the Korea Scientific and Technological Information Centre, the Korea Advanced Institute of Science, the Agency for Defense Development, and other research agencies will be supported to develop new systems for the effective appliance of advanced technologies.

Investment in manpower development and technological research programmes, 1972-1976

(Million dollars)

	<u>Government</u>	<u>Private</u>	<u>Total</u>
Education and manpower development programme	554.2	142.0	696.2
Science and technology development programme	90.1	57.3	147.4
Total investment	<u>644.3</u>	<u>199.3</u>	<u>843.6</u>

(iii) Investment and capacity utilisation

Planned investments by sector, 1972-1976

<u>Sector</u>	<u>Value (million dollars)</u>	<u>Share in total (%)</u>
Agriculture, forestry and fishery	1,463.6	11.8
Mining and manufacturing	3,554.2	28.8
Mining	181.8	1.5
Manufacturing	3,372.4	27.3
Other	7,334.1	59.4
Total investment	12,351.9	100.0

During the period of the third plan, the Government will support only those industries for which private investment will not be available, such as integrated iron mills, machinery and petrochemicals.

Planned expenditures by sector for investments, 1972-1976

(Million dollars)

<u>Sector</u>	<u>Total</u>	<u>Government</u>		<u>Private</u>
		<u>Central</u>	<u>Local</u>	
Agriculture	1,356.8	895.4	188.4	273.0
Forestry	122.8	65.5	2.7	54.6
Fishery	292.1	122.9	8.1	161.1
Manufacturing	3,401.6	319.4	35.5	3,046.7
Mining	182.9	84.6	-	98.3
Electricity	688.0	62.8	-	625.2
Communication	406.8	406.8	-	-
Transportation	2,937.5	958.2	384.9	1,594.4
Public works and other construction	606.1	155.6	289.4	161.1
Education	488.7	316.7	122.8	49.2
Manpower development	207.5	87.4	27.3	92.8
Health	109.2	49.1	24.6	35.5
Housing	1,045.6	30.0	90.1	925.5
Science and technology	147.4	90.1	-	57.3
Other	1,090.7	65.5	207.5	777.7
Total	13,043.7	3,710.0	1,381.3	7,952.4

Financing of investments, 1971 and 1976

	Value (million dollars)		Average annual increase (%)	Total plan period (million dollars)	Share in total (%)
	1971	1976			
Domestic savings	1,311	2,496	13.7	9,769	79.0
Private savings	727	1,623	18.1	6,024	48.7
Government savings	584	873	8.3	3,745	30.3
Foreign savings	697	402	-11.6	2,593	21.0
Gross investment	2,008	2,898	2.7	12,362	100.0

(iv) Interconnexions between growth factors

	1971	1976
Export/import ratio	0.67	0.89
Import/GNP ratio	0.27	0.33
Investment/GNP ratio	0.26	0.25

(v) Regional industrial planning3. Data bases and projections

During the period of the plan, statistics will be further developed through a periodic census. Existing statistics such as those for agriculture will be improved.

In order to promote the Government's research activities, the Korea Development Institute was established to deal mainly with long and medium-term economic forecasts and analyses of various statistical data.

4. Planned growth of the industrial sector(i) Planned growth of manufacturing sector

During the period of the plan, the manufacturing GNP is to increase from \$1,671 million in 1971 to \$3,113 million in 1976. The average annual rate of increase will be 13.2 per cent. The share of manufacturing GNP in the total GNP is expected to increase from 21.7 per cent in 1971 to 26.8 per cent in 1976.

Employment will increase due to the planned expansion of exports, infrastructure, construction and increases in the production of heavy and chemical industries.

In order to promote the shift from light to heavy industries, the protection granted to the light and consumer goods industries will be drastically reduced. The ratio between light and heavy industries will change from 64:36 in 1970 to 59:41 in 1976 in terms of output.

Level of output by sector, 1970 and 1976

	<u>1970</u>		<u>1976</u>		<u>Average annual increase (%)</u>
	<u>Value (million dollars)</u>	<u>Share in total (%)</u>	<u>Value (million dollars)</u>	<u>Share in total (%)</u>	
Agriculture, forestry and fishery	2,543	20.8	3,425	15.3	5.1
Agriculture and forestry	2,344	19.2	3,137	14.0	5.0
Fishery	199	1.6	288	1.3	6.4
Mining and manufacturing	4,721	38.6	10,883	48.7	14.9
Mining	163	1.3	252	1.1	7.7
Manufacturing	4,558	37.3	10,631	47.6	15.1
Metal	301	2.5	964	4.3	21.4
Machinery	494	4.0	1,500	6.7	20.4
Chemicals	316	2.6	748	3.3	15.4
Petroleum and coal	301	2.5	609	2.7	12.4
Textiles	1,139	9.3	2,883	12.9	16.7
Miscellaneous	2,007	16.4	3,927	17.7	11.9
Construction, electricity, transport and other sectors	4,965	40.6	8,041	36.0	8.4
Construction	1,173	9.6	1,967	8.8	10.1
Electricity, water and sanitary services	194	1.6	424	1.9	13.9
Transportation, storage and communication	651	5.3	1,355	6.1	13.0
Other	2,947	24.1	4,295	19.2	6.5
Total output	12,229	100.0	22,349	100.0	10.6

Planned expenditures by manufacturing sector, 1972-1976

(Million dollars)

	<u>Public</u>	<u>Private</u>	<u>Total</u>
Metal industry	126.4	359.2	485.6
Machine industry	47.4	523.1	570.5
Chemical industry	3.5	423.9	427.4
Petroleum and coal producing industry	-	163.5	163.5
Textile industry	-	560.5	560.5
Other manufacturing industries	177.6	1,016.5	1,194.1
Total	354.9	3,046.7	3,401.6

Metal industryDemand for major metal products, 1970 and 1976

	Demand (thousand tons)		Average annual increase (%)	Production capacity, 1970 (thousand tons)
	1970	1976		
Steel products	1,500.0	4,019.0	17.9	1,412.0
Pig-iron	56.0	1,240.0	14.1	203.0
Foundry pig-iron	121.0	266.0	14.0	-
Special steel (bar)	32.0	103.0	21.5	20.0
Aluminium ingot	19.9	45.0	14.6	15.5
Zinc ingot	11.6	26.0	14.6	14.0
Electrolytic copper	9.9	24.0	15.9	7.4
Total	1,750.4	5,723.0	21.8	1,671.9

The total investment requirements for the metal industry are estimated at \$486 million of which \$355 million will be made available from foreign sources and \$131 million from domestic sources.

Machine industry

The total investment expenditure planned for the development of the machine industry is \$571 million of which \$226 million will be financed from domestic capital and \$345 million from foreign capital. In order to develop the machine industry the supply of raw materials will be increased and the scope of tax incentives expanded. Funds will be provided to speed up the development of technology such as the building of machine prototypes.

Demand for major machine products, 1970 and 1976

	Unit	Demand		Average annual increase (%)	Production capacity in 1970
		1970	1976		
Machine tools	Sets	6,013	14,745	16.1	3,300
Heavy construction equipment	Sets	1,305	2,015	7.5	-
Power tillers	Sets	3,700	10,000	18.0	18,000
Roll bearings	Thousand pieces	3,437	3,941	26.4	3,300

Machine tools and heavy equipment being imported will be replaced by domestic production during the second period of the plan, and the development of mechanical parts industries will be promoted.

Electrical machinery industryDemand for major electrical machinery, 1970 and 1976

	Unit	Demand		Average annual increase(%)	Production capacity in 1970
		1970	1976		
Circuit breakers and switches	Sets	2,750	7,520	18.2	2,250
Electric welders	Megawatts	36.8	90.5	16.2	32.0
Electric machine tools	Thousand sets	35.4	88.6	16.5	15.0

In order to satisfy the increasing demand for heavy electrical machinery and apparatuses, the construction of plants producing circuit breakers and switches will be accelerated.

Automobile industryDemand for major products, 1970 and 1976

	Unit	Demand		Average annual increase(%)	Production capacity in 1970
		1970	1976		
Motor vehicles	Thousand vehicles	35.6	82.5	15.1	63.1
Vessels	Thousand tons	171.0	1,172.0	38.3	190.0
Gasoline engines	Thousand pieces	30.1	79.5	17.6	-
Diesel engines	Thousand pieces	12.4	28.4	14.8	-

Plants for the manufacture of automobile parts will be established.

Shipbuilding

Various supporting policy measures are planned to develop the shipbuilding industry as an export industry.

Electronic industryDemand for major electronic products, 1970 and 1976

	Unit	Demand		Average annual increase(%)	Production capacity in 1970
		1970	1976		
Radio sets	Thousand sets	1,447.0	11,080.0	8.5	2,358.0
Television sets	Thousand sets	121.0	652.0	19.1	347.0
Transistors	Million pieces	535.0	1,673.0	21.0	442.0
Integrated circuits	Million pieces	70.2	173.1	8.4	113.4

In terms of value, total demand for electronic products in 1976 is estimated at \$534 million; this represents an increase of 4.5 times the value of 1970.

To meet increasing demand, various measures are planned such as the improvement of the stockpiling of raw materials, the co-operative utilisation of supporting facilities, the expansion of standardisation and quality control and the supply of foreign capital and technology.

The establishment of organisations promoting the electronic industry will be encouraged in order to stimulate the development of new products and to improve technological standards.

Petrochemical and other chemical industries

Total investment in the basic chemical industries, including the petrochemical and rubber industries, is estimated at \$428 million of which \$86 million will be financed by domestic sources of capital and \$342 million by foreign exchange.

Demand for major petrochemical products, 1970^{a/} and 1976

	Demand (thousand tons)		Average annual increase (%)
	1970	1976	
Caprolactam	24.8	60.3	15.9
Polyethylene	29.0	87.0	20.1
Polypropylene	6.2	30.1	29.9
Alkylbenzene	2.8	15.5	32.9
Methanol	36.8	84.4	14.7
Styrene monomer	11.3	31.5	18.6
Ethylene glycol	2.6	23.5	44.2

^{a/} Production capacity is not available.

Fertiliser industry

Demand for major chemical products, 1970 and 1976

	Unit	Demand		Average annual increase (%)	Production capacity in 1970
		1970	1976		
Fertiliser	Thousand tons	630.0	916.0	6.4	585.0
Tyres	Thousand pieces	902.0	2,878.0	21.3	1,250.0
Soda ash	Thousand tons	59.9	128.5	13.5	65.0

Oil refining

Demand for major petroleum products, 1970^{a/} and 1976

(Thousand kilolitres)

	Demand		Average annual increase (%)
	1970	1976	
Gasoline	865	2,564	19.8
Kerosene	479	1,029	13.5
Diesel	1,777	4,036	14.6
Bunker	5,789	14,424	16.4
Other	1,718	4,475	17.3
Total	10,628	26,528	16.5

^{a/} Production capacity is not available.

Textile industryDemand for major textiles, 1970 and 1976

	Demand (thousand tons)		Average annual increase(%)	Production capacity, 1970 (thousand tons)
	1970	1976		
Cotton yarn	104.0	184.0	10.0	120.0
Nylon yarn	34.2	53.5	7.7	19.8
Acryl fibres	25.6	42.1	8.6	24.9
Polysster fibres	17.8	128.9	38.5	17.5
Total	181.6	408.5	14.6	182.2

Total investment in the textile industry will amount to \$560 million of which \$80 million will be financed by domestic capital and \$480 million by foreign capital.

Other manufacturing industriesDemand for other manufacturing products, 1970 and 1976

		Demand		Average annual increase(%)	Production capacity in 1970
		1970	1976		
Cement	Thousand tons	5,560	12,966	15.1	6,800
Flat glass	Thousand pieces	1,470	3,800	17.1	2,700
Ceramics	Thousand tons	80	326	22.3	125
Chemical pulp	Thousand tons	176	386	13.9	18
Newsprint	Thousand tons	110	204	10.8	126
Paper board	Thousand tons	91	308	22.5	128
Plywood	Million square feet	2,840	3,978	5.8	4,000

Total investment for the other manufacturing industries is expected to amount to \$1,195 million of which \$637 million will be in domestic capital and \$558 million in foreign capital.

Plywood industry

During the period of the plan efforts will be made to ensure a long-range supply of wood.

Production of quality products will be encouraged.

Food industry

As a result of the improvement of the standard of living and of a change in the consumption pattern, sharp increases in the demand for food are expected.

As most food processing enterprises are producing inferior products because of substandard facilities and inefficient techniques, more efforts will be made to develop the processing technology and to improve facilities.

Exports by industry sector, 1970 and 1976

	Value (million dollars)		Average annual increase (%)
	1970	1976	
Heavy industry	105	1,057	47.6
Light industry	632	2,116	22.3
Total exports of manufactured goods	737	3,173	27.5

^{g/} Production capacity is not available.

Total exports will rise from \$882 million in 1970 to \$3,441 million in 1976. The share of manufactured goods in total exports will increase from 83.6 per cent in 1970 to 92.2 per cent in 1976. The share of heavy and chemical industrial goods, including vessels and electronic goods in manufactured exports, will rise from 14.3 per cent in 1970 to 33.3 per cent in 1976. Annual exports of electronic products will increase from \$55 million in 1970 to \$452 million in 1976 and will satisfy 71 per cent of the projected total demand. The expected average annual rate of growth will amount to 41.4 per cent. In 1976 exports of electronic products will account for 13.1 per cent of total exports.

Imports by kind of goods, 1970 and 1976

	Value (million dollars)		Average annual increase (%)
	1970	1976	
Capital goods	590	1,011	9.3
Raw materials for exports	386	1,266	21.9
Raw materials for domestic use and other	1,006	1,566	7.7
Total	1,982	3,843	11.7

(ii) Planned growth of electricityPlanned investment expenditures, 1972-1976

(Million dollars)

	<u>Government</u>	<u>Private</u>	<u>Total</u>
Power generating facilities	24.9	283.5	308.4
Power distributing facilities	37.9	324.6	362.5
Other facilities	-	17.1	17.1
Electrification of rural areas	(69.9)	(48.6)	(118.6)
Total	62.8	625.2	688.0
	(132.7)	(673.8)	(806.6)

Power demand, 1970 and 1976

	<u>Demand (GWh)</u>		<u>Average annual increase (%)</u>
	<u>1970</u>	<u>1976</u>	
Lighting	1,009	2,808	18.6
Small-scale industry	1,824	4,788	17.4
Large-scale industry	4,870	14,827	20.2
Agricultural purpose	37	47	4.1
Total	7,740	22,470	19.4

The increasing demand for electric power will be met by the construction of power plants with a total capacity of 3,247,000 kW. Of this total, 2,342,000 kW will be provided by thermal electric power plants, 328,000 kW by hydroelectric power plants and 595,000 kW by an atomic power plant.

(iii) Planned growth of mining

In the mining sector measures will be taken to expand the supply of energy by developing coal and electricity production and petroleum products to meet the increasing demand for energy. Efforts will be made to develop the mining of minerals such as iron, copper, lead and zinc ores, etc.

Planned investment expenditures, 1972-1976

(Million dollars)

	<u>Government</u>	<u>Private</u>	<u>Total</u>
Coal	55.4	75.9	131.3
General mining	17.7	18.8	36.5
Exploration projects	11.5	3.6	15.1
Total	84.6	98.3	182.9

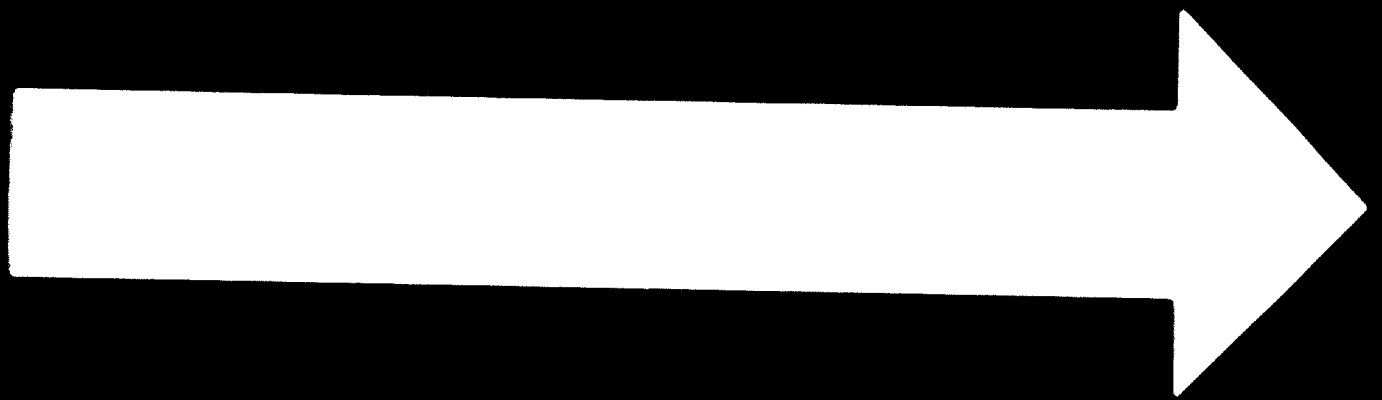
Demand, 1970 and 1976

	<u>Demand</u> <u>(thousand tons)</u>		<u>Average</u> <u>annual</u> <u>increase (%)</u>
	<u>1970</u>	<u>1976</u>	
Coal	11,864.0	17,810.0	7.0
Iron-ore	571.0	2,410.0	27.1
Copper ore	41.7	226.0	32.8
Lead and zinc ores	79.9	188.2	15.4
Tungsten concentration	3.7	4.6	4.4
Talc	83.9	200.0	15.6
Kaolin	194.6	300.0	7.5

In order to increase the mining of minerals, the development of large-scale mines in areas of concentrated mineral deposits will be carried out. Through the expansion of ore dressing facilities and the improvement of smelting facilities for copper, lead and zinc ores, the quality of ores will be improved.

(iv) Priority of sectors

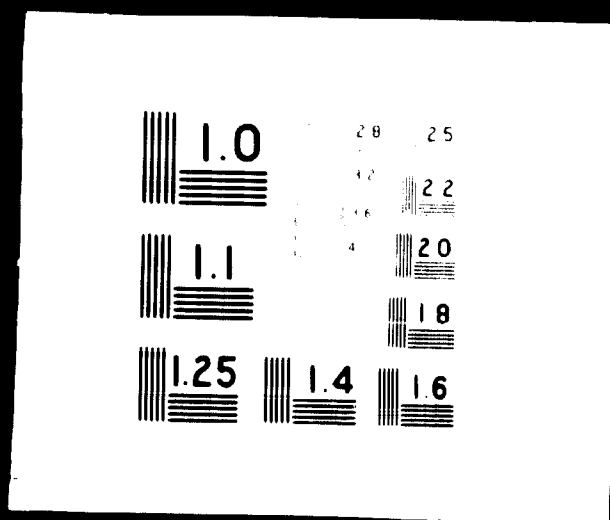
The growth of heavy and chemical industries will be promoted during the 1972-1976 period. At the same time such emphasis will accelerate the production of related or linked sectors so that the entire structure of the manufacturing sector will improve.



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iv Infrastructure connected with industryInvestment expenditures of the transport sector, 1970-1976
(Million dollars)

	<u>Government</u>	<u>Private</u>	<u>Total</u>
Railroads	288.6	-	288.6
Subways	197.6	-	197.6
Highways	620.9	-	620.9
Harbours	149.3	7.9	157.2
Shipping	15.3	385.3	400.6
Airports	30.5	-	30.5
Storage and stevedoring	40.9	125.7	166.6
Other	-	1,075.5	1,075.5
Total	<u>1,343.1</u>	<u>1,594.4</u>	<u>2,937.5</u>

Demand, 1970 and 1976
(Million ton kilometres)

	<u>1970</u>	<u>Share of total(%)</u>	<u>1976</u>	<u>Share of total(%)</u>
Railroads	7,709	57.6	13,423	50.4
Highways	1,441	10.8	3,985	15.0
Shipping	4,232	31.6	9,228	34.6
Total	<u>13,382</u>	<u>100.0</u>	<u>26,636</u>	<u>100.0</u>

Demand, 1970 and 1976
(Million passenger kilometres)

	<u>1970</u>	<u>Share of total(%)</u>	<u>1976</u>	<u>Share of total(%)</u>
Railroads	9,919	32.3	15,768	23.5
Highways	20,045	66.0	49,537	73.7
Shipping	241	0.8	410	0.6
Airlines	257	0.9	1,458	2.2
Total	<u>30,462</u>	<u>100.0</u>	<u>67,173</u>	<u>100.0</u>

Investment expenditures of the communication sector
by the Government, 1972-1976

(Million dollars)

Telecommunication projects	390.3
Intracity telephones	(249.9)
Long-distance telephones	(102.0)
Telegraphs	(14.4)
Overseas telegraphs	(4.3)
Other	(19.7)
Postal services	11.1
Other	5.4
	<hr/>
Total	406.8

Water resources

Total investment is planned to amount to \$736.4 million. During the period of the plan three multipurpose dams will be completed, and five others will be constructed which will reduce flood damages.

Emphasis will be placed on providing water supplies for large and medium towns. The demand for industrial water is expected to increase from 198 million tons in 1970 to 386 million tons in 1976.

(vi) Relationships with non-industry sectors of the economy

Agriculture

The main objectives of the third plan for the agricultural sector are:

- To increase the production of crops
- To develop livestock industry and sericulture
- To implement irrigation projects
- To carry out projects of paddy cultivation
- To accelerate farm mechanisation
- To promote special projects for the increase of rural incomes
- To raise prices for farm products
- To improve marketing and processing facilities for agricultural and fishery products
- To develop agricultural technology

Investment expenditures of the agricultural sector, 1972-1976

(Million dollars)

	<u>Government</u>	<u>Private</u>	<u>Total</u>
Agricultural production	231.4	95.1	326.5
Creation of production basis	434.7	39.5	474.2
Modernization of rural environments	150.0	101.9	251.9
Mechanization	82.1	28.9	111.0
Agricultural experimentation and guidance	42.3	0.8	50.1
Improvement of distribution structure and other agricultural support activities	136.3	6.8	143.1
Total	<u>1,083.0</u>	<u>273.0</u>	<u>1,356.8</u>

The output of the agricultural and fishery sector will raise from \$2,542 million in 1970 to \$3,423 million in 1976 which will represent an average annual increase of 5.1 per cent. This growth will be mainly attributable to the increased production of rice, barley, cash crops, fruit, vegetables and livestock.

The changed pattern of food consumption will require a shift in the production structure of the agricultural sector. To modernize the agricultural sector and to increase farm incomes, experimentation and extension projects will be both improved and expanded.

Production of major agricultural goods, 1970 and 1976

	<u>Production</u> <u>(thousand tons)</u>		<u>Average</u> <u>annual</u> <u>increase (%)</u>
	<u>1970</u>	<u>1976</u>	
Rice	3,939	4,860	3.5
Barley and wheat	2,331	2,894	3.6
Fish	935	1,457	7.7
Livestock	161	296	10.7
Total	<u>7,366</u>	<u>9,507</u>	<u>4.3</u>

ForestryInvestment expenditures of the forestry sector, 1972-1976

(Million dollars)

	<u>Government</u>	<u>Private</u>	<u>Total</u>
Afforestation	25.6	18.2	43.8
Protection	6.3	0.8	7.1
Erosion control	28.7	-	28.7
Other	7.6	35.6	43.2
Total	68.2	54.6	122.8

FisheriesInvestment expenditures of the fishing sector, 1972-1976

(Million dollars)

	<u>Government</u>	<u>Private</u>	<u>Total</u>
Improvement of fishing facilities and equipment	36.6	154.4	191.0
Development of fish propagation	14.1	4.3	18.4
Fishing port facilities	38.8	-	38.8
Marketing and processing facilities and other	41.5	2.4	43.9
Total	131.0	161.1	292.1

Production of marine products is expected to increase from 935,000 tons in 1970 to 1,457,000 tons in 1976. Exports of marine products will amount to \$183 million in 1976 as against \$72 million in 1970.

Total tonnage of fishing vessels will be expanded from 54,000 gross tons in 1970 to 67,000 gross tons in 1976.

5. Planned industrial projectsShipbuilding

A new shipyard will be built, and existing shipyards will be expanded.

Petrochemical and other chemical industries

A basis for the development of the petrochemical industries will be laid by the construction of a styrene monomer plant for the production of raw materials for high density polyethylene, synthetic resin and synthetic rubber.

Fertiliser industry

In order to meet the fertiliser demand of 916,000 tons in 1976 an ammonia centre will be constructed, and plans for the establishment of a superphosphate plant will be promoted.

Rubber industry

Existing plant facilities will be expanded to satisfy the expected demand for tires. A synthetic rubber plant with an annual production capacity of 21,000 tons will be built for the supply of raw materials.

Oil refining

A demand of 26,500,000 kilolitres is expected for 1976. The existing oil refineries will be expanded to satisfy this increased demand.

Cement industry

Existing cement plant facilities will be expanded. Clinker batcher plants and storing facilities will be enlarged in consumer areas to ensure a reliable supply of cement on the domestic market.

Flat glass industry

Efforts will be made to expand existing facilities and to explore new products during the period of the plan to meet the expected demand at home and abroad.

Ceramic industry

Production of tableware, tiles, porcelain insulators, sanitary wares, toys and fire-proof bricks will be expanded and improved.

Pulp and paper industries

The expansion of some paper-making plants will be promoted, and the construction of pulp plants will be studied.

6. Organizational and institutional changes required for industrial plan implementation

The planning functions of the local Government agencies will be activated to make sure that the individual projects are in line with the over-all development plan.

The investment evaluation system will be adopted to serve as a link between the plan and its execution. Both the Government and private businesses will have to use this system. The selection of individual investment projects will be decided within the framework of each annual plan. The ministries concerned with the different projects will improve and develop the investment screening system regarding the characteristics of their own projects.

The Economic Planning Board has already established an Investment Project Screening Committee. Ministries and agencies concerned are expected to establish their own internal screening organization such as the Economic Planning Board.

An over-all screening organization which will include the Economic Planning Board will be established soon for the review of the feasibility studies taking into account the national economy.

Trained staff will be urgently required to obtain the effective application of the investment screening system. The Korea Development Institute will contribute in training Government officials in this system. However, it is desired that private

corporations will follow Government efforts. The Korea Chamber of Commerce and Industry and the Federation of Korea Industries will urge all private business enterprises to adopt the screening method voluntarily.

7. Problem areas particular to the industrial sector

The advantage of an abundant supply of cheap labour will decrease and will have a negative effect on the competitiveness of manufactured exports. Therefore, Korea will have to raise productivity and reduce production costs.

Small and medium-scale industries represent a considerable proportion of the mining and manufacturing sector. A great number of these industries suffer from inferior technology, shortage of capital, obsolete facilities and inadequate management.

Difficulties will arise from the shift within the industrial structure, but the development plan 1972-1976 indicates no such details.

IV. MALAYSIA : 1971-1975^{1/}

A. GENERAL BACKGROUND INFORMATION, 1966-1970

1. Basic statistics

<u>Area</u>		<u>Square kilometres</u>
	Total	326,465
	Agricultural area	32,180
	Forests and pastures	232,839
	Other	61,545
<u>Major cities</u>	(1970)	<u>Population</u>
	West Malaysia	
	Kuala Lumpur	500,000
	Georgetown	260,000
	Ipoh	140,000
	Sarawak	
	Kuching	56,000
	Sibu	29,000
	Sabah	
	Kota Kinabalu	30,000
	Sandakan	30,000
<u>Other data</u>	(1970)	
	Roads in West Malaysia	14,880 km ²
	Roads in Sarawak	1,136 km ²
	Roads in Sabah	2,400 km ²
	Railways	1,920 km ²
	Electricity production	3,550 million kwh
	Electricity consumption per head (1969)	252 kwh
<u>Exchange rates</u>	(1971)	<u>Malaysian dollars (\$M)</u>
	<u>Currency unit</u>	<u>equivalent</u>
	US dollar	2.90
	Pound sterling	7.40
	Swiss franc	0.74
	French franc	0.56
	German mark	0.90
	Italian lira (100)	0.48

2. Population

During the period of the first Malaysian plan, 1966-1970, the labour force of the country grew faster than the created employment possibilities resulting in an increase of unemployment.

^{1/} Second Malaysian Plan, 1971-1975, Kuala Lumpur, 1971, 267 pp.

Labour force, employment and unemployment, 1965 and 1970
(Thousands)

	<u>1965</u>	<u>1970</u>	<u>Average annual growth rate(%)</u>
Total population of Malaysia	9,421	10,945	3.0
Labour force	3,246	3,768	3.0
Employment	3,048	3,533	2.8
Unemployment	198	275	6.8
Unemployment rate	6.1%	7.3%	
Population of West Malaysia	8,021	9,345	3.0
Labour force	2,730	3,150	2.8
Employment	2,590	2,940	6.8
Unemployment	180	250	2.6
Unemployment rate	6.5%	8.0%	
Population of East Malaysia	1,400	1,600	2.7
Labour force	516	618	3.7
Employment	498	593	3.5
Unemployment	18	25	6.8
Unemployment rate	3.5%	4.0%	

Labour force of West Malaysia by age group, 1967 and 1970
(Percentage)

<u>Age group</u>	<u>1967</u>	<u>1970</u>
15 - 19	20.1	20.5
20 - 24	14.5	16.0
25 - 49	48.5	47.3
50 - 64	16.9	16.2
Total	100.0	100.0

Distribution of population, by ethnic origin, 1967
(Percentage)

	<u>Malaysian</u>	<u>Chinese</u>	<u>Indians and Pakistani</u>	<u>Other</u>	<u>Total</u>
West Malaysia	50.3	36.5	11.1	2.1	100.0
Sarawak	18.1	32.1	-	49.8	100.0
Sabah	-	22.9	-	77.1	100.0

Distribution of employment by sectors in west Malaysia, 1965 and 1970

	1965		1970		Average annual increase (%)
	Number of workers (thousands)	Share in total (%)	Number of workers (thousands)	Share in total (%)	
Agriculture	1,350	52.1	1,454	49.5	1.5
Mining	66	2.5	64	2.2	-0.6
Manufacturing	217	8.4	270	9.2	4.5
Construction	90	3.5	103	3.5	2.7
Electricity, water	16	0.6	19	0.6	3.5
Transport	101	3.9	110	3.7	1.7
Commerce	287	11.1	340	11.6	3.4
Services	463	17.9	580	19.7	4.6
Total	2,590	100.0	2,948	100.0	2.6

Education

During the period of the plan the educational system was modified as follows

Basic education was extended by adding three years of lower secondary education to primary education

Secondary education was reorganized by introducing comprehensive and post-comprehensive education

Balance between general academic education and vocational, technical education was aimed at

Development of the education system in west Malaysia, 1965 and 1970

Level of education	1965		1970		Average annual increase of enrolments (%)
	Number of institutions	Enrolments (thousands)	Number of institutions	Enrolments (thousands)	
Primary	4,366	1,217	4,382	1,421	3.2
Secondary	755	277	747	479	11.6
Teacher training	44	9	11	3	-24.6
College	3	1	5	5	38.0
University	1	3	3	8	21.6

In 1970 over 90 per cent of the primary school age population were enrolled. About 68 per cent of students completing primary education proceeded to the secondary level.

The number of trained graduate teachers, particularly in science and mathematics, for upper and post-secondary education did not meet the requirements.

Apart from the educational development under the Ministry of Education, a number of other important educational programmes were started or expanded: the educational programmes sponsored by the Majlis Amanah Ra'ayat (MARA) ^{a/} in the MARA Institute of Technology (ITM), the courses at the Tunku Abdul Rahman College, the training programmes at the National Productivity Centre, at the Management Institute of Malaysia, at the Industrial Training Institute (ITI) of the Ministry of Labour and Manpower, and at the National Youth Pioneer Corps.

Development expenditure on education and training, 1966-1970

	Original plan allocation <u>—(million dollars)—</u>	Estimated actual expenditure <u>—(million dollars)—</u>	Achievement <u>(%)</u>
Ministry of Education	151.5	88.1	58.2
West Malaysia	126.4	73.5	58.1
Primary	18.8	16.7	88.8
Secondary	65.1	34.6	53.4
Technical	10.6	3.7	35.1
University	10.4	8.4	81.3
Teacher training	9.8	3.5	34.0
Other programmes	11.7	6.6	56.0
East Malaysia	25.1	14.6	58.4
Sabah	9.4	5.6	60.7
Sarawak	15.7	9.0	57.0
Other agencies	10.9	25.5	234.3
Ministry of Labour	0.5	0.3	53.3
MARA Training Division	9.0	22.1	246.2
ITM	1.4	3.1	225.0
Total	162.4	113.6	70.0

^{a/} Established in 1966 to provide technical and financial assistance to Malaysians and other indigenous people engaged in commerce and industry.

3. GNP^{2/}

GNP of West Malaysia, 1965 and 1970

	<u>1965</u>	<u>1970</u>	<u>Average annual increase (%)</u>
Manufacturing GNP per capita (dollars)	...	...	...
Total GNP per capita (dollars)	316.2	363.4	2.8
Population (thousands)	9,421	10,945	3.0
Manufacturing GNP (million dollars)	...	...	...
Total GNP (million dollars) ^{a/}	2,978.3	3,978.3	6.0
Manufacturing GNP as percentage of total GNP	...	...	...

a/ At factor cost in 1965 prices.

GDP of West Malaysia, 1965 and 1970

	<u>1965</u>	<u>1970</u>	<u>Average annual increase (%)</u>
Manufacturing GDP per capita (dollars)	29.3	40.5	6.6
Total GDP per capita (dollars)	281.6	317.7	2.5
Population (thousands)	8,021	9,300	3.0
Manufacturing GDP (million dollars)	235.2	377.2	9.9
Total GDP (million dollars)	2,259.3	2,954.8	5.5
Manufacturing percentage of total GDP	10.4	12.8	

^{2/} Data on GDP only available for West Malaysia.

GDP structure of West Malaysia, 1965 and 1970

Sector	1965		1970		Average annual increase (%)
	Value (million dollars)	Share in total (%)	Value (million dollars)	Share in total (%)	
Agriculture, forestry and fishing	212.4	31.5	222.1	33.6	6.8
Mining and quarrying	202.4	8.0	213.4	7.2	1.1
Manufacturing	235.2	10.4	377.2	12.5	9.5
Construction	92.5	4.1	113.4	3.8	4.1
Electricity, water and sanitary services	51.7	2.3	76.2	2.6	6.1
Transport, storage and communication	97.9	4.3	113.4	3.8	3.0
Wholesale and retail trade	346.2	15.3	404.5	13.7	3.2
Banking, insurance and real estate	35.9	1.6	58.3	2.0	10.2
Ownership of dwellings	100.7	4.5	119.1	4.0	3.4
Public administration and defence	139.3	6.2	179.3	6.1	5.2
Services	244.8	10.8	307.9	10.4	4.7
Total	2,259.3	100.0	2,954.8	100.0	5.5

Investment, 1965 and 1970

	Value (million dollars)		Average annual growth rate (%)	Cumulative total, 1960-1970 (million dollars)
	1965	1970		
Total investment	486	664	6.4	2,829
Public sector	217	238	1.9	1,087
Private sector	269	426	9.6	1,742
Investment in West Malaysia	394	524	5.9	2,278
Public sector	180	184	0.6	870
Private sector	214	340	9.7	1,408
Investment in East Malaysia	92	140	8.7	551
Public sector	37	54	7.6	217
Private sector	55	86	9.4	334

4. Macro-economic indicatorsMoney supply

1966 - S\$72.8 million

1971 - S\$65.5 million

Average annual increase 5.9%

Consumer price index

1954 - 100.0

1969 - 107.0

Price index for industrial goods

1954 - 100.0

1969 - 114.1

GDP

1965 - \$2,978.3 million

1970 - \$3,978.3 million

Average annual increase 6.0%

Balance of payments, 1965 and 1970

(Million dollars)

	<u>1965</u>	<u>1970</u>	<u>Cumulative total 1965-1970</u>
Current account	44	75	366
Capital account			
Private capital	52	55	270
Public capital	34	4	131
Net use of foreign assets	-48	-2	-50 ^{a/}
Errors and omissions including short-term capital movements	-82	-113	-717
	<u>-44</u>	<u>-75</u>	<u>-366</u>

^{a/} Excluding allocation of IMF Special Drawing Rights.

Savings and investments, 1965 and 1970

(Million dollars)

	<u>1965</u>	<u>1970</u>	<u>Cumulative total 1966-1970</u>
Public sector			
Savings	103	253	937
Investments	217	219	1,087
Balance	<u>-114</u>	<u>14</u>	<u>-150</u>
Private sector			
Savings	427	487	2,259
Investments	262	426	1,742
Balance	<u>158</u>	<u>61</u>	<u>517</u>
Total savings	530	740	3,196
Total investment	486	665	2,829
Balance	<u>44</u>	<u>75</u>	<u>367</u>

Total public sector financing, 1965 and 1970
(Million dollars)

	<u>1965</u>	<u>1970</u>	Cumulative total <u>1966-1970</u>
Government current revenue	597	968	4,019
Government current expenditure	567	827	3,540
Government current surplus	30	141	479
Surplus of public authorities	17	28	117
Public sector current surplus	47	169	596
Development expenditure	273	304	1,463
Over-all deficit	-226	-135	-867
Sources			
Net domestic borrowings	141	99	643
Net foreign borrowings	34	4	158
Foreign grants	29	7	84
Use of accumulated assets	22	25	-18
Total	226	135	867

Foreign loans

Malaysia received significant loans from international finance agencies and foreign governments. Three loans were received from the World Bank: two amounting to \$22.9 million for land settlement and one for \$21.3 million to increase the capacity of the Port Bickson thermal electric power station. In addition, a number of loans were received from the Asian Development Bank. One loan of \$5.3 million was used for a water supply project at Malacc, another one of \$4.5 million for the irrigation development of rice growing in the state of Trengganu and the last one at the amount of \$3.7 million for the expansion of the Sibn port in Sarawak. A special aid of \$60.8 million was received from the United Kingdom to help counter the effects of the withdrawal of British forces. \$1.2 million were received from the Overseas Development Administration for a textile mill being built at Kajang.

Actual development expenditures of the public sector, 1966-1970

Million dollars

	West			Share of	
	Malaysia	Sabah	Sarawak	Total	total (%)
Agriculture and rural development	314.2	40.1	29.9	384.2	26.3
Mineral resources' development	0.1	0.1	-	0.2	-
Commerce and industry	47.2	0.7	0.8	48.7	3.3
Transport	102.8	37.3	27.8	167.9	12.8
Communication	55.0	8.7	6.3	70.0	4.8
Utilities	223.0	3.1	2.9	235.0	16.1
Education and training	85.9	5.7	3.0	113.6	7.8
Social and community services	54.0	5.4	2.8	95.2	6.5
Health and family planning	39.4	4.5	6.7	50.6	3.5
General administration	37.6	6.6	3.4	47.6	3.3
Security	222.7	2.5	4.7	229.9	15.6
Total	1,244.9	123.7	94.3	1,462.9	100.0

5. Industrial products and technology - main manufacturing industries

In West Malaysia value added of the manufacturing sector rose from \$235.2 million in 1965 to \$377.2 million in 1970 at an average annual rate of growth of 10.4 per cent. During the same period manufactured exports increased from \$97.2 million to \$177.6 million at an even higher average annual rate of growth of 12.8 per cent. This significant development of manufactured exports indicated the increasing export orientation of the country's industry. The sector's employment figures grew from 261,000 in 1965 to 270,000 in 1970 at an average annual rate of 4.5 per cent. The output within the sector varied among the individual industries.

In terms of value added the leading industries were food, wood products, rubber, coconut and tin processing, chemicals and chemical products and non-metallic minerals. These industries accounted for more than half of the total value added. About 44 per cent of the total labour force were working in the manufacturing sector. However, in terms of rate of growth of output and of employment, the textiles, basic metals, electrical and non-electrical machinery and the assembly of motor vehicle industries grew two to three times as fast as the leading industries. The new and relatively small intermediate and capital goods industries such as the assembly of motor vehicles, primary iron and steel boat building and fertilisers were also rapidly gaining importance in the manufacturing sector.

In Sabah value added of the manufacturing sector grew from \$6.2 million in 1967 to \$6.9 million in 1970 at an annual average rate of growth of 3.6 per cent. The output of sawmille and plywood factories accounted for 25 per cent of the value added, food processing for about 18 per cent. Motor vehicle repairing contributed more than 10 per cent to the sector's output. About 2,800 people were employed in manufacturing industries. Sawn timber and other wood products were the main export products.

In Sarawak value added of the manufacturing sector increased at an average annual rate of growth of 5.6 per cent between 1967 and 1970. In 1970 value added amounted to \$27.6 million of which petroleum products accounted for 40 per cent and wood products for about 30 per cent. Export products were petroleum products amounting to 80 per cent of Malaysia's total exports and wood products.

In the rubber industry a diversification and modernization process was aimed at. The competitive position was strengthened by reducing production costs and by product quality. Production of exports and rubber expanded during the period of the plan, although the dependence of the economy on rubber was reduced. A rapid growth of production was also experienced in timber, palm-oil and rice production.

Production of main selected goods, 1965 and 1970

	Production (thousand tons)		Average annual growth rate (%)
	1965	1970	
Rubber	902.5	1,256.0	6.8
Tin	63.7	72.6	2.7
Round timber	6,870.0	12,470.0	12.7
Sawn timber	1,360.6	2,128.0	9.4
Palm-oil	148.0	424.4	23.5
Palm kernels	34.5	90.7	21.3
Petroleum (crude)	48.0	845.0	77.5
Petroleum fuels	2,505.0	2,790.1	2.2
Fish and fish products	249.2	365.0	7.9
Canned pineapples	54.5	68.0	4.5
Copra	159.1	190.0	3.6
Coconut oil	67.8	93.0	6.5

6. Industry - related resources and sectors

Agricultural sector

The agricultural sector is still the most important sector of the country's economy. In 1970 it contributed 34 per cent to the gross domestic product and provided employment for about 45 per cent of the total labour force, accounting for about 50 per cent of the country's foreign exchange earnings.

The agricultural output, including forestry and fishing, grew at an average annual rate of 8 per cent during the period of the plan as compared to the plan target of 5.5 per cent. Emphasis was given to land development, drainage and irrigation and rubber replanting.

The output of rubber, timber, palm-oil and palm kernels expanded rapidly, and these items were major export commodities.

The output of livestock, poultry and paddy also increased at a high rate and was of great importance for the domestic consumption.

Public development expenditure for agricultural development, 1966-1970

(Million dollars)

	Original plan allocation	Estimated expenditures			
		Total	West Malaysia	Sabah	Sarawak
Agriculture	29.0	33.4	21.0	7.1	4.40
Crop production service	-	6.1	3.4	2.0	0.63
Crop protection service	-	2.2	0.7	0.2	0.63
Soil and agricultural service	-	0.3	0.2	-	0.03
Extension	4.3	6.5	5.3	0.5	1.10
Education	5.4	1.7	1.1	0.2	0.60
Coconut replanting	-	6.7	4.3	-	2.40
Crop subsidies	19.3	10.8	8.6	2.0	1.20
Rubber replanting	56.2	56.2	40.1	3.4	14.70
Land development	129.7	125.4	106.7	16.2	2.40
Federal Land Development Authority (FELDA)	105.2	105.6	75.7	-	-
Federal Land Rehabilitation and Consolidation Authority (FELCRA)	10.3	7.7	6.7	-	-
Public estates and other schemes	4.5	14.8	8.6	3.8	2.40
Rubber and palm-oil schemes	9.7	16.3	3.8	12.4	-
Drainage and irrigation	114.7	118.1	113.3	2.9	2.00
Animal husbandry	11.7	6.4	4.8	0.9	0.60
Agriculture credits and marketing	12.7	10.2	4.8	3.3	2.20
Agricultural research	8.0	4.5	3.0	1.0	0.40
Other	1.7	19.7	14.5	3.1	2.20
Total	362.7	375.9	308.3	38.7	28.90

Forestry

75 per cent of Malaysia's total land area are forested of which 28 per cent are located in West Malaysia, 29 per cent in Sarawak and 18 per cent in Sabah. Only about one third of the forested area is accessible and commercially exploitable.

The original plan allocation for the period 1966-1970 of the forestry sector amounted to \$4.3 million. Estimated expenditures were \$5.1 million of which \$4.1 million were spent in West Malaysia.

Fisheries

The main reasons for the rapid expansion of this sector were the introduction of fish trawlers in West Malaysia which increased from 20 units in 1965 to 734 units in 1969 and the modernization of the total fishing fleet. Fish exports rose from \$14.4 million in 1965 to \$32.8 million in 1970. The original plan allocation amounted to \$7.7 million. Estimated expenditures for the period 1966-1970 were \$3.1 million of which \$1.8 million were spent in West Malaysia.

Mining

Production, 1965 and 1970

	Production (thousand tons)		Average annual increase (%)
	1965	1970	
Tin	63.7	72.6	2.7
Iron-ore	6,852.0	4,420.1	-8.4
Bauxite	843.0	1,121.3	5.9

Exports, 1965 and 1970

	1965		1970		Average annual increase of volume (%)	Average annual increase of value (%)
	Volume (thousand tons)	Value (million dollars)	Volume (thousand tons)	Value (million dollars)		
Tin	73.9	300.6	91.0	349.4	4.3	3.1
Iron-ore	6,634.2	55.6	4,778.4	36.7	-6.4	-8.0
Bauxite	...	...	...	6.2	...	...

In 1965 value added in West Malaysia decreased from \$202.4 million to \$191.7 million. In East Malaysia value added increased from \$3.4 million in 1967 to \$9.3 million in 1970.

Employment in the mining sector decreased from 66,000 persons in 1965 to 64,000 in 1970.

Power

Rapid growth of the power generating capacity was experienced in West Malaysia. By 1970 the installed generating capacity of the National Electricity Board (NEB) totalled 664 MW of which 265 MW were used for the hydroelectric plant, 360 MW for the steam plant and 39 MW for the diesel plant. The installed capacities of private licensees and the Penang City Council amounted to 200 MW, including hydrothermal and diesel plants.

Public development expenditures on electric power, 1966-1970

	Original plan allocation <u>—(million dollars)—</u>	Actual expenditure	Achievement <u>(%)</u>
West Malaysia	187.9	170.5	95.0
Frai power station	15.5	15.3	98.7
Temengor hydroelectric scheme	8.6	-	-
Betang Padang hydroelectric scheme	41.8	42.2	117.9
Port Dickson power station	37.2	47.1	126.4
Johore Bahru power station	9.6	8.7	90.4
Bentong hydroelectric scheme	6.9	-	-
Raub hydroelectric scheme	6.9	-	-
Distribution	47.2	38.6	81.6
Rural electrification	5.2	7.9	153.3
Other	9.0	11.7	130.8
Sabah	5.2	3.0	68.7
Power	4.7	3.9	68.9
Rural electrification	0.5	0.3	66.7
Sarawak	8.4	0.9 ^a	11.1
Power development	8.0	0.9 ^a	11.3
Rural electrification	0.4	0.03	8.3
Total	201.5	183.0	90.8

^a Excluding expenditures financed from the Sarawak Electricity Supply Corporation's internal resources.

In Sabah, the power supply system consists mainly of two centres, one with a capacity of 17.5 MW located near the capital and the other with a capacity of 26.5 MW at the East coast.

In Sarawak the Sarawak Electricity Supply Corporation (SESCO) is the major supplier of power operating 23 power stations all over the country. In 1970 the total installed capacity was about 33 MW compared to about 18 MW in 1965.

Transport and communicationPublic development expenditures for transport and communication, 1966-1970

	Original plan allocation (million dollars)	Actual expenditure	Achievement (%)
Total transport	185.2	183.0	99.3
Roads	127.5	106.8	83.8
Railways	7.3	17.6	239.0
Ports and marine	39.3	32.1	81.7
Civil aviation	7.4	21.1	284.2
Plant and equipment	6.7	10.5	155.3
Total communication	70.9	70.0	98.7
Postal services	3.3	1.6	47.9
Telecommunication	49.2	50.4	102.6
Broadcasting	18.3	17.6	96.0
Meteorological services	0.1	0.4	400.0
West Malaysia	179.9	177.7	98.8
Transport	125.7	122.7	97.4
Roads	84.6	55.6	65.7
Railways	6.9	16.2	235.0
Ports and marine	27.9	28.6	102.6
Civil aviation	3.1	13.9	447.8
Plant and equipment	3.4	8.4	244.0
Communication	54.0	55.0	101.8
Telecommunication	36.2	40.9	113.0
Postal services	3.1	1.6	48.5
Broadcasting	14.6	12.1	83.2
Meteorological services	0.1	0.4	400.0
Sabah	32.6	46.1	141.5
Transport	23.7	37.5	157.7
Roads	17.1	27.6	161.2
Railways	0.4	1.4	300.0
Ports and marine	2.5	2.0	79.5
Civil aviation	2.1	4.9	238.3
Plant and equipment	1.6	1.6	101.9
Communication	8.9	8.6	98.0
Telecommunication	6.6	4.7	72.6
Postal services	0.2	0.03	16.7
Broadcasting	2.1	3.9	186.7
Sarawak	46.6	34.1	73.2
Transport	38.6	27.8	71.9
Roads	25.8	23.5	91.2
Ports and marine	8.9	1.5	16.8
Civil aviation	2.2	2.2	100.0
Plant and equipment	1.7	0.6	30.0
Communication	8.0	6.3	79.0
Telecommunication including postal services	6.4	4.7	74.1
Broadcasting	1.6	1.6	95.8
Total	259.1	258.0	99.5

The road network in West Malaysia increased by 14 per cent from 9,500 miles in 1965 to 10,832 miles in 1970.

The number of vehicles increased by more than 69 per cent during the period 1965-1970, i.e. from 395,000 to 669,100 vehicles.

Vehicle registration, West Malaysia, 1965 and 1970

	Registration (thousands)		Average annual growth rate (%)
	1965	1970	
Private motor cycles	175.8	350.0	14.1
Private motor-cars	154.3	231.5	8.4
Taxis	5.2	6.7	5.4
Buses	3.8	5.9	9.6
Lorries and vans	41.9	95.8	5.9
Other vehicles	14.1	19.1	6.3
Total	395.1	669.1	11.1

The road network in East Malaysia expanded from 1,740 miles in 1965 to 2,673 miles in 1970. The number of vehicles increased from 35,600 to 76,300 in 1970.

In 1965 the Malaysian railways carried 2.8 million tons of goods excluding iron-ore. In 1970, 3.3 million tons of goods were transported.

Passenger traffic at West Malaysian airports increased from 362,800 passengers in 1965 to 517,000 passengers in 1970 at an average annual rate of 16.4 per cent.

Goods traffic of West Malaysian ports expanded from 2.1 million tons in 1965 to 3.9 million tons in 1970 at port Swettenham and from 2.1 million tons to 2.6 million tons at port Penang.

The Malaysian International Shipping Corporation (MISC) was founded in 1968 as the national shipping line with a 30 per cent Government participation. The Malaysian International Shipping Corporation is operating on a commercial basis. Two second-hand steamers were purchased, and six new cargo lines, two woodchip carriers, a bulk carrier and an ore/oil carrier were ordered.

With regard to telephone, telegraph and telex systems, capacity of external services was substantially increased. The Southeast Asian Commonwealth (SEACOM) cable link was completed in 1967 together with other Commonwealth countries. For the first time, high quality semi-automatic communication services were made available from Malaysia to Europe, North America, Japan, Australia, New Zealand and Hongkong. The Southeast Asian Commonwealth cable also links West Malaysia with Sabah, thereby improving the facilities between these two parts of the country. Malaysia's satellite television station at Kuantan for the transmission of international television programmes was completed in 1970. Several new radio broadcasting stations were constructed.

The postal services were also extended during the period of the plan, thus by the end of 1970, there were 242 post offices, 660 postal agencies and 72 mobile postal units in West Malaysia.

7. Over-all economic development strategy and policy

The major goals of the first Malaysian plan were:

- To raise the national income and improve income distribution
- To improve education
- To promote traditional and new export possibilities
- To create employment opportunities
- To promote import substitution
- To emphasize rural development
- To develop land settlement schemes
- To set up village programmes for social improvements
- To develop social and economic infrastructure
- To encourage birth control

The major instruments of industrial policy used by the Government were tariffs as well as fiscal incentives.

Economic development from 1965 to 1970 was characterized by a growth of the national income of 5.3 per cent per year. This was higher than the plan estimate of 4.2 per cent per year. Per capita income rose at 2.2 per cent during the same period despite of a population growth of 3 per cent per year.

Special encouragement was given to agro-industries and to export-oriented industries. The growth of the traditional exports was larger than expected. Furthermore, diversification of the agricultural and industrial sectors was aimed at.

In 1968 the Malaysian Government introduced the Investment Incentives Act to promote investment, providing enterprises with an investment tax credit of not less than 25 per cent and up to a maximum of 40 per cent of the capital expenditure during a five-year period.

The Malaysian Industrial Development Finance Ltd. (MIDF) provided loan facilities for industry, and the Federal Industrial Development Authority promoted the establishment of industries and assisted investors in settling down in Malaysia.

8. Regional co-operation and international trade

Principal exports of West Malaysia, 1967 and 1969

(Million dollars)

	<u>1967</u>	<u>1969</u>
Rubber	419.5	669.2
Tin and tin concentrates	260.8	324.3
Palm-oil	38.3	49.3
Sawn timber	24.1	42.4
Iron-ore	42.1	40.0
Sawn logs	20.2	29.6
Fish	13.1	21.7
Canned pineapples	14.8	15.1
Coconut oil	7.9	7.2
Total	<u>840.8</u>	<u>1,198.8</u>

Other exports include palm kernels, pepper, copra, bauxite, ilmenite and tea. Total exports in 1970 were valued at \$1,441.2 million.

Principal destinations of exports in West Malaysia, 1967 and 1970
(Million dollars)

	<u>1967</u>	<u>1970</u>
Singapore ^a	213.8	291.4
United States of America	174.6	222.2
Japan	144.9	187.0
United Kingdom of Great Britain and Northern Ireland	75.3	102.8
Union of Soviet Socialist Republics	67.6	73.1
Italy	32.1	55.2
Netherlands	18.7	52.8
Federal Republic of Germany	23.8	50.3
France	<u>26.2</u>	<u>37.6</u>
Total	777.0	1,072.4

^a Including transit to other countries.

Principal imports to West Malaysia, 1967 and 1969
(Million dollars)

	<u>1967</u>	<u>1969</u>
Transport equipment	72.8	97.3
Non-electrical machinery	98.6	80.0
Cereals and cereal preparation	72.5	79.7
Petrol and petrol products	74.3	70.7
Textile yarns and fabrics	45.5	63.1
Metallic ores and concentrates	14.5	48.0
Electrical machinery	48.3	44.9
Iron and steel	43.7	39.5
Metal manufactures	29.6	27.3
Fruit and vegetables	<u>28.2</u>	<u>27.3</u>
Total	534.0	577.8

Import of food-stuffs amounted to 20 per cent of the value of total imports. Rice imports have fallen considerably in recent years; it is hoped to achieve self-sufficiency in the rice production by the mid-1970s. In 1970 total imports were valued at \$1,806.6 million.

Principal sources of imports to West Malaysia, 1967 and 1970

(Million dollars)

	<u>1967</u>	<u>1970</u>
Japan	127.3	215.5
United Kingdom of Great Britain and Northern Ireland	138.4	167.7
United States of America	53.8	33.1
Singapore	75.6	75.3
Australia	68.0	74.7
Indonesia	16.2	67.7
Federal Republic of Germany	48.3	66.6
People's Republic of China	66.6	56.3
Thailand	63.4	44.3
Total	<u>657.6</u>	<u>863.3</u>

Customs duties of Malaysia are based on the Brussels Tariff Nomenclature granting preferential duties to a small range of British goods. Most imports to Malaysia are subject to a 4 per cent surtax. However, the import tax on industrial raw materials is only 2 per cent.

9. System for planning and plan implementation

Initiation, preparation and co-ordination of public sector investment programmes have primarily been the responsibility of the Economic Planning Unit (EPU) and operating ministries.

However, the Economic Planning Unit has only a few competent and experienced planners, and the operating ministries suffer from a general shortage of staff at the technical and sub-technical levels.

The Federal Industrial Development Authority (FIDA) has been engaged in direct promotional activities, especially concerning foreign investment.

During the period of the plan the State Economic Development Corporations (SEDCs) were established which sponsored various activities ranging from industrial and commercial ventures to housing and agricultural projects.

10. Problems encountered through the previous period of the plan

Shortcomings in the creation of jobs were experienced during the first period of the plan

The Government's capacity in planning and implementing investment programmes was insufficient

Delays in education were caused by an inadequacy in programme planning and preparation

A major reason for the shortcomings in the water supply programme was inadequate technical skills

The limited engineering and construction capacity of the Government affected negatively the development of the transportation sector

Land development was hampered by the lack of technical and managerial manpower

B. SUMMARY OF THE INDUSTRIAL DEVELOPMENT PLAN, 1971-1975

1. General goals and objectives(1) Planned growth

	<u>1970</u>	<u>1975</u>	<u>Average annual increase (%)</u>
Manufacturing GNP per capita (dollars)	...	...	...
Total GNP per capita (dollars)	363.4	442.1	4.1
Population (thousands)	10,945	12,500	2.8
Manufacturing GNP (million dollars)	...	...	...
Total GNP (million dollars) ^a	3,970.3	5,528.0	6.8
Manufacturing GNP as percentage of total GNP	...	...	...
Total consumption (million dollars)	3,274.5	4,512.8	6.6
Private	2,485.5	3,390.0	6.4
Public	789.0	1,122.8	7.3
Gross domestic savings (million dollars)	739.7	1,038.3	7.0
Total investment (million dollars)	664.8	965.9	7.8
Exports (million dollars)	1,943.4	2,432.8	4.6
Imports (million dollars)	1,806.6	2,314.8	5.1

^{a/} Data on GDP are only available for West Malaysia; GNP figures are at constant 1965 prices.

West Malaysia

	<u>1970</u>	<u>1975</u>	<u>Average annual increase (%)</u>
Manufacturing GDP per capita (dollars) ^{a/}	40.5	61.7	8.7
Total GDP per capita (dollars)	317.7	385.5	3.9
Population (thousands)	9,300	10,600	2.7
Manufacturing GDP (million dollars) ^{a/}	377.2	654.5	11.7
Total GDP (million dollars) ^{a/}	2,954.8	4,086.9	6.7
Manufacturing GDP as percentage of total GDP	12.8	16.0	

^{a/} At factor costs of 1965 prices.

GNP structure of the country, 1970 and 1975

	1970		1975		Average annual increase(%)
	Value (million dollars)	Share in total (%)	Value (million dollars)	Share in total (%)	
GNP of West Malaysia	3,371.4	84.7	4,571.4	82.7	6.1
GNP of East Malaysia	606.9	15.3	956.6	17.3	9.5
GNP of Malaysia	3,978.3	100.0	5,528.0	100.0	6.8

(11) Other objectives

To reduce and eradicate poverty by raising the income level.

To increase employment opportunities for all Malaysians through the adoption of modern techniques and better use of facilities.

To design programmes in order to increase the participation of Malaysians in the economy to own at least 30 per cent of the total commercial and industrial activities.

To achieve a better regional distribution of industries and of GDP per capita.

To promote small-scale industries.

To create urban renewal projects, public housing programmes, health and sanitation projects and projects for the youth.

To increase opportunities for intersectoral movements from low to higher productivity activities.

To design policies and programmes to transform the rural sector into a genuinely dynamic force for agricultural and economic development.

To emphasise education and urban job creation.

2. Strategy and policy

(1) General

Economic policies will be formulated in accordance with the needs for social development and national unity.

Special attention will be directed towards increased production for export, i.e. in promoting local processing of domestic raw materials and import substitution.

Special measures are expected to ensure the rapid expansion of the private sector.

The Government itself will promote the decentralisation of industry participating in the establishment of new enterprises and in providing special incentives and facilities. Through the Capital Investment Council, the Government will assist in the identification of opportunities for manufacturing projects, undertake the promotion and development of viable projects, improve and extend industrial incentives and further streamline the administrative procedures in order to expedite project implementation.

Public sector institutions such as the Majlis Amanah Rakyat Institute (MARA), and the State Economic Development Corporations (SEDC) will endeavour to establish enterprises and joint ventures with private investors in a variety of manufacturing activities.

Proper commodity standards, processes and practices will be developed and promoted by the Standards Institution of Malaysia (SIM).

The Government will establish a new development bank.

The establishment of the National Institute of Scientific and Industrial Research (NISIR) will facilitate industrial development through research.

(11) Manpower and productivity

Labour force, employment and unemployment, 1970 and 1975

(Thousands)

	1970 (estimate)	1975 (target)	Average annual growth rate (%)
Total population of Malaysia	10,945	12,500	2.8
Labour force	3,768	4,413	3.2
Employment	3,593	4,129	3.2
Unemployment	275	324	3.3
Unemployment rate	7.3%	7.3%	
Population of West Malaysia	9,345	10,600	2.7
Labour force	3,150	3,690	3.2
Employment	2,940	3,435	3.2
Unemployment	250	295	3.3
Unemployment rate	8.0%	8.0%	
Population of East Malaysia	1,600	1,900	3.5
Labour force	618	723	3.2
Employment	593	694	3.2
Unemployment	25	29	3.0
Unemployment rate	4.0%	4.0%	

Estimated employment by sector in West Malaysia, 1970 and 1975

Sector	1970		1975		Average annual growth rate (%)
	Employed (thousands)	Share in total (%)	Employed (thousands)	Share in total (%)	
Agriculture	1,454	49.5	1,579	46.0	1.7
Industry	456	15.5	594	17.3	5.4
Mining	64	2.2	60	1.7	-1.3
Manufacturing	270	9.2	378	11.0	7.0
Construction	103	3.5	133	3.9	5.2
Utilities	19	0.6	23	0.7	3.9
Services	1,030	35.0	1,262	36.7	4.1
Commerce	340	11.6	419	12.1	4.3
Transport	110	3.7	122	3.6	2.1
Other services	580	19.7	721	21.0	4.4
Total	2,940	100.0	3,435	100.0	3.2

495, 00 new jobs are planned to be created during the period of the second plan. The manufacturing sector which will play a key role is expected to have an annual growth rate of 7 per cent.

To meet the strong demand for skilled workers, the education system will be increasingly oriented towards science and technology. Measures will be taken to increase labour productivity. Expanded training efforts will be undertaken by the Ministry of Labour and Manpower and the Majlis Amanah Ra'ayat Institute's vocational training schools.

Education

The Government will improve the quality of the education programme through increases in the teacher supply, especially in rural areas, changes in teaching methods, introduction of an educational television service, and will provide equal educational opportunities for people of all races.

Enrolments at college and university level in West Malaysia, 1970 and 1975

	1970	1975	Average annual increase (%)
College level	1,819	4,020	17.2
Technical college	943	1,400	7.2
Ungku Omar Polytechnic	290	1,540	39.0
College of Agriculture	586	1,080	13.0
University level	8,505	13,130	9.0
University of Malaya	8,052	8,000	-0.2
University of Kebangsaan	191	2,850	71.0
University at Penang	262	2,280	54.0

Other education programmes envisage the expansion of the MARA Institute of Technology (ITM), the Tunku Abdul Rahman College and the establishment of a junior college by MARA.

Various training programmes will include formal apprenticeship and preparatory industrial training at the Industrial Training Institutes (ITIs), in-plant training with industries, co-ordination and supporting services.

An extensive in-service training programme organised within industrial establishments will be launched in consultation with the newly established National Advisory Council on Industrial Training.

Planned allocation of education and training programmes, 1971-1975
(Million dollars)

West Malaysia	158.2
Ministry of Education	127.5
Primary education	19.0
Secondary education	53.3
Technical and vocational education	11.0
Technical (post-secondary) education	3.7
University education	30.0
Teacher training	1.0
Other	9.5
Other agencies	30.7
Ministry of Labour and Manpower	1.3
MARA	14.6
ITM	14.8
Sabah	12.5
Primary education	3.8
Secondary education	5.1
Technical education	1.5
Teacher training	0.7
Other	1.4
Sarawak	14.6
Primary education	2.7
Secondary education	9.6
Technical and commercial education	1.4
Teacher training	0.3
School broadcasting	0.1
Loans to school managements	0.5
Total	<u>185.3</u>

(iii) Investment and capacity utilisation

The total development expenditure by the public and private sectors is planned to be \$4,948.3 million. The public sector's share of this target will amount to \$2,500.0 million and the private sector's share to \$2,448.3 million.

Public development expenditures, 1971-1975

	West			Total	Share of total (%)
	Malaysia	Sabah	Sarawak		
	(million dollars)				
Agriculture and rural development	541.7	68.4	52.3	662.4	26.6
Mineral resource development	0.2	0.1	-	0.3	-
Commerce and industry	194.6	4.4	2.2	201.2	8.0
Feasibility studies	8.0	0.03	2.4	10.4	0.4
Transport	274.0	83.9	51.9	409.8	16.4
Communication	99.1	22.6	16.3	138.0	5.5
Utilities	226.8	12.2	18.6	257.6	10.3
Education and training	158.2	12.4	14.6	185.2	7.4
Health and family planning	59.0	8.6	6.1	73.7	2.9
Social and community services	71.1	21.7	16.4	109.2	4.4
General administration	48.0	13.7	11.2	72.9	2.9
Security	342.8	18.8	17.7	379.3	15.2
Total	2,023.5	266.8	209.7	2,500.0	100.0

59.4 per cent of the total public development expenditure will be invested in fixed assets. Fixed investments of the private sector are estimated at \$2,704.5 million.

Planned fixed investments in the private sector, 1971-1975

	Investment (million dollars)			Average annual increase (%)
	1970	1975	1971-1975	
West Malaysia	339.6	507.9	2,129.3	8.4
East Malaysia	86.5	140.7	575.2	10.2
Total	426.1	648.6	2,704.5	8.8

Financing of private investments, 1971-1975

(Million dollars)

Direct Government financing	255.9
Foreign financing	396.6
Capital depreciation allowances and retained earnings	1,379.3
Equity and loans	672.7
Total	2,704.5

v. Interconnexions between growth factors

	<u>1970</u>	<u>1975</u>
Export/Import ratio	1.1	1.1
Import/GNP ratio	0.3	0.4
Investment/GNP ratio	0.2	0.2
Domestic savings/GNP ratio	0.2	0.2

v. Regional industrial planning

During the period of the plan, several regions with agricultural potential will be selected for accelerated development. The forested areas in the Johore, Tengah and Bantong Penghawang regions will provide a basis for an integrated timber industry. The Pahang Tenggara region will become the most important centre of new land development. In Sarawak a plan for the development of land, forestry and mineral resources in an area between 500,000 and 800,000 acres will be continued.

In the less developed areas of the country new industrial activities and growth centres will be developed.

The regional land development authorities formed by the State Economic Development Corporations (SEDCs), the Federal Land Development Authority (FLDA), the Federal Land Rehabilitation and the Consolidation Authority (FELCRA) will fulfil an important role to settle 23,700 families over a period of five years.

The Northern Regional Research Centre at Bimbang Lima will concentrate on rice, rotation crops and water management.

In Johore, a Southern Regional Research Centre will be established in order to do research on a wider range of crops, soil engineering, crop protection and livestock.

3. Data bases and projections

In 1970 the Federal Industrial Development Authority carried out an industrial survey in Sabah which determined a considerable scope for the establishment of a wide range of industries processing timber, agricultural products and minerals, as well as for the manufacture of selected consumer goods. A similar study will be carried out in Sarawak.

The Government will continue to expand the capacity of the Department of Statistics. The data processing capacity and the analysis of data of the department will be considerably improved. Basic statistical series on national accounts and balance of payments data, as well as data relating to the major sectors of the economy will be improved. The data of the population censuses of 1970 with regard to population and manpower will be upgraded. A census of agriculture is expected to be undertaken sometime during the period of the plan.

4. Planned growth of the industrial sector

(1) Planned growth of manufacturing sector

Value added and employment in west Malaysia, 1970 and 1975

	<u>1970</u>	<u>1975</u>	<u>Average annual growth rate (%)</u>
Manufacturing sector (million dollars):	377.2	654.5	11.7
Employment (thousands):	270	470	7.1

Value added in manufacturing as a proportion of GDP will rise from 12.8 per cent in 1970 to 16.0 per cent in 1975. During the period of the plan, a total investment of about \$637.9 million will be required to obtain this output target. The Government will provide a total of \$113.0 million for investment in the manufacturing sector.

Important elements of the strategy will be the development of small-scale industries and the dispersal of industries to achieve a more balanced geographic distribution. A wide range of management, technical and financial assistance will be provided to encourage the development of small-scale industries and to integrate them into the modern industrial sector.

The Government will grant credit facilities and technical consultancy services. It will provide \$113.0 million for investment in manufacturing and encourage the inflow of more foreign investment. For this purpose, it will establish investment promotion centres in selected countries. It will also enter into double taxation and investment guarantee agreements with various countries.

Branch offices of commercial banks are expected to provide increased lending and advisory services to local investors, as well as to mobilize an increasing amount of local savings.

In addition, the Government will provide new incentives to encourage industries to locate their plants outside the main urban centres.

Imports of capital, intermediate and consumer goods represent more than 45 per cent of the domestic demand. Import substitution will be encouraged, especially in food, metal and non-metallic, electrical and non-electrical machinery and transport equipment branches. Infant industries will be protected.

The gross value of manufacturing exports is expected to rise from \$177.6 million in 1970 to \$357.2 million in 1975 at an average annual growth rate of 15 per cent.

35 per cent of the increment in the value of the total exports during the period of the second Malaysian plan will be manufactured products; in 1970 the share of the manufactured products was only 10 per cent.

Special attention will be given to the improvement of the export performance of Malaysian manufactures.

The introduction of an export insurance scheme is under consideration.

Free trade and export processing zones are being established in selected parts of Malaysia.

In order to reach the export target, the Government will improve export incentives under the Investment Incentives Act. Incentives provided by the Investment Incentives Act of 1963 will continue but will give priority to labour-intensive projects, particularly with regard to textiles, electronics and shipbuilding. Free trade and export processing zones will be established in selected parts of Malaysia. An introduction of an export insurance scheme is also under consideration.

The recently created National Export Advisory Council will be in charge of ensuring the improvement of the export performance.

Industrial development in the East Malaysian states will largely be based on the processing of primary resources.

(ii) Planned growth of electricity

The expected power demand will require a growth of the supply system of about 11 per cent per year from 1970 to 1973 and an annual growth of 10 per cent from 1974 onwards.

The recommended power plant installations for the period of the plan are:

The installation of three 120 MW thermal units at Port Dickson

The development of the Temenggor hydroelectric project consisting of three 87 MW units

The above programme involves the addition of nearly twice as much generating plants as constructed during the period of the first Malaysian plan.

Allocation for power development, 1971-1975

(Million dollars)

West Malaysia	172.6
Prai power station	2.2
Temenggor hydroelectric scheme	21.9
Port Dickson power development	68.2
Johore Bahru power development	2.4
Transmission	21.0
Distribution	39.5
Rural electrification	6.9
Other	10.5
Sabah	7.1
Generation	3.2
Distribution	2.8
Rural electrification	1.1
Sarawak	14.4
Generation	6.0
Distribution	7.0
Rural electrification	0.5
Other	0.9
Total	<u>194.1</u>

The programme for rural electrification will be important to accelerate the process of dispersal of industries and to increase the processing activities in the rural sector.

(iii) Planned growth of mining

During the period of the second Malaysian plan, the general trends of the recent past will continue.

The production of tin and iron-ore will decline. Tin output is expected to amount to about 70,000 tons in 1975. Iron-ore production is projected at about 1.4 million tons in 1975. The output of crude oil may increase substantially if new fields are found.

Employment in the mining sector is expected to decline from 64,000 people in 1970 to 60,000 in 1975. This reduction will be partly due to the closing down of iron mines.

Minor exports, 1971 and 1975

	Value (million dollars)		Average annual increase (%)
	1971	1975	
Iron-ore	36.9	7.2	-27.8
Copper	-	34.5	...
Tin	349.3	271.7	-4.9
Total	<u>386.2</u>	<u>313.4</u>	...

The contribution of the mining sector to GDP in West Malaysia is expected to fall from \$300.0 million in 1970 to \$177.2 million in 1975, a decline of 41.3 per cent per year.

Private investment of a total of \$100 million in West Malaysia is planned for the periods of the mines, off-shore explorations, prospecting and surveys.

The new copper mine in Sabah is expected to commence its production in the second half of the period of the plan, while possibilities also exist for its covering unexploiting coal, lead, zinc and nickel deposits.

IV Priority sectors

The largely increased role of the public sector in industrial and commercial development is intended to facilitate the accelerated expansion of the manufacturing sector. Agriculture will continue to contribute the largest share to GDP. In terms of growth rates, the manufacturing sector will have the highest one of all sectors compared to a growth rate of the agricultural sector of 2.4 per cent with 11.7 per cent per year.

V Infrastructure connected with industry

Allocation for transport, 1971-1975

Million dollars

	<u>West Malaysia</u>	<u>Sabah</u>	<u>Sarawak</u>	<u>Malaysia</u>
Roads	184.2	44.3	31.6	260.8
Railways	31.7	2.8	-	34.5
Ports	42.4	20.8	16.1	79.3
Civil aviation	17.1	16.1	4.3	37.5
Total	<u>276.1</u>	<u>84.0</u>	<u>52.0</u>	<u>412.1</u>

A number of projects of the plan will be financed from external sources such as the World Bank, the Asian Development Bank and bilateral aid programmes. External financing will be able to meet 40 per cent of the transport and communication development programmes.

The transport sector will play a leading role in the implementation of the new economic policy by making less developed regions of the country accessible and attractive for industrial and commercial activities.

The construction of transport facilities will be co-ordinated with measures relating to:

A comprehensive road transport licensing policy

A tax for using roads

A revised railway tariff structure

Special measures encouraging the participation of Malaysians and other indigenous people in the transport industry

In line with the new economic policy, the promotion of a greater participation by Malaysians and other indigenous people in the road transport will be vigorously pursued. For that reason, the Government will establish a National Maritime Corporation under the auspices of the Pajaris Amanah Malaya Institute (PAMA) which will provide the necessary training, technical assistance and repair facilities. A national container ship service will also be formed with the participation of the Malaysian International Shipping Corporation, the Pajaris Amanah Malaya Institute, COMMERCE and PISMA^a. This company will be exclusively responsible for the handling of container traffic in West Malaysia.

Allocation for the development of communication, 1971-1975

(Million dollars)

	<u>West Malaysia</u>	<u>Sabah</u>	<u>Sarawak</u>	<u>Malaysia</u>
Telecommunication	76.7	13.2	12.7	102.6
Postal services	5.2	0.5	1.1	6.8
Broadcasting	15.7	1.2	2.7	27.2
Meteorological services	1.2	-	-	1.2
Total	98.8	22.9	16.2	137.7

(vi) Relationships with non-industry sectors of the economy

The achievement of the over-all objectives of the second Malaysian plan will mainly depend on the progress of the agricultural sector. High priority will therefore be attributed to the modernization process of agriculture. The sector's policy will be further directed towards the following objectives:

- The increase of employment opportunities through the exploitation of land, water and timber resources
- The raising of the workers' income by increasing the productivity and the scale of operation
- The expansion of quantity and improvement of quality of agricultural products, particularly food-stuffs, commercial crops and livestock products
- The strengthening of institutions such as farmer associations

The agricultural sector will continue to be very important for the Malaysian economy. It contributes one third of the GDP, employs one half of the working population and accounts for about 50 per cent of the country's foreign exchange earnings.

The development of agro-based industries will be encouraged. It is expected that agricultural employment will expand at least at 1.7 per cent annually which means an average of 25,000 jobs per year. However, in order to reach this target, 150,000 acres of new land in West Malaysia, 30,560 acres in Sarawak and 31,400 acres in Sabah must be created. The growth rate of the total output of the

^a/ No explanation of this abbreviation is given in the original plan.

agricultural sector in West Malaysia is projected at 8.4 per cent per year. The target of value added is \$1,483.1 million in 1975.

The total investment for agricultural development will amount to \$2,374 million during the period of the second plan.

Public development expenditures, 1971-1975

(Million dollars)

	<u>West Malaysia</u>	<u>Sabah</u>	<u>Sarawak</u>	<u>Total</u>
Trop production service	2.2	-	-	2.2
Trop protection service	0.7	-	-	0.7
Soil and agricultural service	0.7	-	-	0.7
Extension	17.2	0.8	2.8	20.8
Education	2.7	2.0	0.1	4.8
Coconut replanting and rehabilitation	5.7	-	2.6	8.3
Pineapple replanting	1.6	-	-	1.6
Para crop subsidies	6.5	0.1	5.0	12.2
Buildings	0.2	-	-	0.2
Total	37.5	2.9	11.1	51.5
Rubber replanting	72.6	2.8	17.4	92.8
Land development	274.2	35.4	3.8	313.4
Drainage and irrigation	78.7	5.3	4.5	88.5
Animal husbandry	12.8	1.3	1.1	15.2
Agriculture credits and marketing	33.5	10.1	9.9	53.5
Agricultural research	11.7	4.6	1.0	17.3
Other	4.0	2.8	1.5	8.3
Grand total	525.0	65.2	50.3	640.5

Forestry

The sector's contribution to GDP of West Malaysia is expected to increase from \$53.8 million in 1970 to \$67.9 million in 1975 at an annual average growth rate of 4.8 per cent.

Public development expenditures, 1971-1975

(Million dollars)

<u>West Malaysia</u>	<u>Sabah</u>	<u>Sarawak</u>	<u>Total</u>
3.0	2.5	0.8	6.3

About 22.5 million acres of West Malaysia are forested, but only 14.2 million acres are suitable for permanent productive or protective forestry use.

Apart from using the forests commercially, forestry projects will be undertaken to enhance the quality of forests for future exploitation and to ensure their contribution to the soil and water conservation. Projects will be directed towards forest research on forest product utilization and reforestation.

Fisheries

The sector's contribution to West Malaysia's GDP will increase rapidly from \$89.5 million in 1970 to \$143.1 million in 1975 at an annual average rate of 10.0 per cent.

Public development expenditures, 1971-1975

(Million dollars)

	<u>West Malaysia</u>	<u>Sabah</u>	<u>Sarawak</u>	<u>Total</u>
Fisheries sector	13.7	0.9	1.3	15.9

A Fisheries Industry Development Authority will be established in order to promote the extensive use of modern techniques and to provide cold storage and processing facilities.

5. Planned industrial projects

New projects to be carried out by the Majlis Amanah Ra'ayat Institute (MARA) during the period of the plan are tapioca processing, fruit canning and timber processing plants, an integrated coconut complex, fish-meal and train-oil plants.

Joint venture projects include a pulp and paper factory.

PERNAS was set up as a private limited company to speed up the joining of Malaysians and other indigenous people in modern sector activities. In addition to the construction corporation that PERNAS will establish, it will engage in a variety of other industrial activities. These include projects such as timber, mining, chemicals, wholesale and retail trade.

The Government allocation to the Urban Development Authority (UDA) will be used for the Kuala Lumpur area. As the main body responsible for urban development, it will co-ordinate the activities of the Majlis Amanah Ra'ayat Institute (MARA) and of the State Economic Development Corporations (SEDCs) in undertaking urban, commercial and housing projects. The funds of the State Economic Development Corporations are to be used for a wide range of activities including housing, manufacturing enterprises, commercial activities and the establishment of industrial estates.

The Malaysian Industrial Development Finance Ltd. (MIDF) is a private company organized to support manufacturing development. Its activities will be expanded to pay special attention to small-scale industries and the location of industries in less developed areas.

Public development expenditures for planned industrial projects, 1971-1975
(billion dollars)

	<u>West Malaysia</u>	<u>Sabah</u>	<u>Sarawak</u>	<u>Total</u>
PERMEX	34.5	-	-	34.5
MAAM	25.2	-	-	25.2
AMM	15.7	-	-	15.7
MM	34.5	-	-	34.5
MMB	34.5	-	-	34.5
MMB, MM, MM	1.9	-	-	1.9
MMB	3.4	-	-	3.4
Industrial estates	1.5	4.4	2.2	8.1
Malaysian Rubber Development Corporation	12.1	-	-	12.1
Malaysian International Shipping Corporation	15.9	-	-	15.9
Federal Malaysia Explosives	0.9	-	-	0.9
National Pineapple Canneries	2.4	-	-	2.4
Malaysian Banking	11.6	-	-	11.6
Malaysia Latex and Handicrafts	0.6	-	-	0.6
Development Bank	3.4	-	-	3.4
Total	<u>198.1</u>	<u>4.4</u>	<u>2.2</u>	<u>204.7</u>

Organizational and institutional changes required for industrial plan implementation

To achieve the development tasks of the second Malaysian plan, effective measures for improving the administrative machinery for planning and implementation will be required. The success of the plan will heavily depend on the activities of the Government. The Government will require better trained planners and administrators with the ability to mobilize the full potential of the state's resources for the implementation of the plan. The federal Government will assist the state Governments in their efforts to establish state economic planning units and to improve its planning capacity.

Within the Government departments, the working procedures will have to be improved so that a larger development programme can be implemented.

The Economic Planning Unit (EPU) will be responsible for national development planning and implementation. The Economic Planning Unit will also serve as the secretariat to the National Development Planning Committee (NDPC) responsible for the formulation of the plan, its periodic review and its implementation. The Estimates Subcommittee of the National Development Planning Committee will be responsible for the detailed appraisal and examination of the development estimates. These estimates provide the annual phasing of the public sector development expenditures. The Standards and Costs Subcommittee of the National Development Planning Committee will be in charge of formulating and providing guidelines for project designs and standards to ensure that maximum economies will be achieved.

Both subcommittees will be supported by the Economic Planning Unit. To complete the work of the central planning agencies, steps are to be taken to establish planning and research units in the major ministries and departments.

7. Problem areas particular to the industrial sector

The growth of new job opportunities is estimated at 3.2 per cent per year, although it is expected that employment growth will not be able to keep pace with the increase in the labour force. The rate of unemployment will remain at 7.3 per cent.

Possible bottlenecks will result from the shortage of certain categories of manpower. This fact will for instance concern the capacity of the Power and Water Development Institute which designs, constructs and supervises the construction of roads, schools, hospitals and other public facilities. Backlogs in its performance will therefore create shortcomings in many other programmes. It is expected to overcome these difficulties by intensifying the training of Malaysian personnel as well as by using foreign experts, especially at the executive and professional levels.

Difficulties are also expected in the field of project implementation where, during the last period of the plan, in a number of cases the control of expenditures, commitments of funds, approval of projects and detailed plans have inhibited a quick execution and implementation of projects. Action will be taken to revise these procedures. Ministries and departments will be authorized to forward expenditures on projects to speed up implementation.

Further problem areas will result from imbalances in income, employment, ownership and control of means of production.

V. SRI LANKA: 1972-1976^{1/}

A. GENERAL BACKGROUND INFORMATION, 1966-1971

1. Basic statistics

<u>Area</u>	<u>Square kilometres</u>
Total	63,125
Agricultural area	19,900
Forestry	29,100
Pastures and meadows	4,400
<u>Major cities</u> (1967)	<u>Population estimate</u>
Colombo	2,207,400
Joffna	612,600
Kandy	1,043,600
Galle	641,500
<u>Other data</u>	
Number of telephones (1969)	58,000
Railways (1970)	925 miles
Number of cars (1969)	198,600
Literacy rate	80%
Electricity consumption per head (1970)	51.5 kWh
<u>Exchange rates</u> (1970)	<u>Sri Lankan rupee (₹) equivalent</u>
<u>Currency unit</u>	
US dollar	6.70
Pound sterling	15.40
Swiss franc	1.80
French franc	1.30
German mark	2.00
Italian lira (100)	1.20

2. Population

	<u>1968</u>	<u>1970</u>	<u>Annual rate of growth (%)</u>
Total population (thousands)	11,976	12,571	2.5
Employed (thousands)	4,114	4,481	4.4
Unemployed (thousands)	447	550	10.9
Unemployment rate	10.9%	12.3%	

^{1/} The Five-Year Plan, 1972-1976, Ministry of Planning and Employment, Government of Sri Lanka, November 1971, 137 pp.

Distribution of employment by sector, 1968 and 1970

Sector	1968		1970	
	Employed (thousands)	Share in total (\$)	Employed (thousands)	Share in total (\$)
Agriculture	1,916	52.2	1,972	50.2
Mining	18	0.5	22	0.6
Manufacturing	387	10.6	446	11.3
Banking, trade, commerce	403	11.0	445	11.3
Construction	148	4.0	167	4.2
Transport	209	5.7	221	5.6
Services	586	16.0	658	16.7
Total	3,667	100.0	3,931	100.0

During the period 1968-1970, the high rate of unemployment was partly due to the insufficient creation of additional jobs.

Education

The Government expenditures on education increased from \$16.0 million in 1950-1951 to \$75.0 million in 1969-1970. During the same time the number of pupils increased from 1,336 million to 2,679 million and the number of teachers from about 39,200 to about 100,000. However, the expansion of educational facilities, which was not in accordance with the industrial development of the country, caused the problem of unemployment of educated people.

3. GDP

	1966	1970	Average annual increase(%)
Industrial GDP per capita (dollars)	14	18	6.6
Total GDP per capita (dollars)	127	139	2.2
Population (thousands)	11,439	12,571	2.4
Industrial GDP (million dollars)	162	227	8.8
Total GDP (million dollars)	1,451	1,755	4.5
Industry percentage of total GDP	11.2	13.0	

GDP structure, 1966 and 1970

	1966		1970		Average annual growth rate(%)
	Value (million dollars)	Share in total (\$)	Value (million dollars)	Share in total (\$)	
Agriculture	494	34.0	638	36.3	6.6
Industry	162	11.2	227	13.0	8.8
Construction	58	4.0	114	6.5	18.9
Services	737	50.6	776	44.2	1.5
Total	1,451	100.0	1,755	100.0	4.5

5. Foreign exchange indicators

<u>Foreign reserves</u>	1966 - 245.4 million
	1971 - 317.3 million
	Average annual increase 7.3%
<u>Price index</u>	1966 - 101.2
	1971 - 130.4
<u>GDP</u>	1966 - \$1,451.0 million
	1970 - \$1,751.0 million
	Average annual increase 4.5%

Balance of payments, 1966 and 1970

(Million dollars)

	<u>1966</u>	<u>1970</u>
Current account	65	69
Capital account		
Public sector	46	49
Private sector	-6	-1
Net external assets	29	18
Errors	-4	3

7. Industrial products and technology - main manufacturing industries

The country's industry is characterized by an excessive reliance on imported raw materials, a highly capital-intensive production and a low level of capacity utilization. About three quarters of the raw materials used by the industrial sector were imported. 40 per cent of the total industrial production resulted from the processing of these materials. Only 1 per cent of the total industrial output was exported.

80 per cent of the industrial enterprises are located around the capital, Colombo. The Government started to encourage the establishment of industries in the underdeveloped or non-industrial areas of the country.

The most recent expansions have been undertaken by the public sector corporations. Their contribution to the total industrial output amounted to 31 per cent being engaged in the following branches: salt processing, rice milling, sugar factories, oil refining, fish canning, cotton spinning, motor tyre and tube production, as well as in certain industrial chemicals, rolled steel, wire drawing, metal fittings for tea chests and blades.

Industrial production has been diversified through the establishment of an oil refinery and a small steel plant. The oil refinery's output was large enough to cover the total demand of the country.

6. Industry - related resources and sectors

Agriculture

34 per cent of the total gross domestic product were contributed by the agricultural, forestry and fisheries sectors.

The Government's plans for the agricultural sector were mainly directed towards self-sufficiency in essential food-stuffs such as rice.

The country is now self-sufficient in eggs, potatoes and chilli.

Selected agricultural products, 1966 and 1970

<u>Agricultural products</u>	<u>Unit</u>	<u>1966</u>	<u>1970</u>	<u>Average annual increase (%)</u>
For export				
Tea	Million pounds	490	468	-1.2
Rubber	Million pounds	289	351	4.9
Copra	Thousand hundredweight	417	305	0.7
Coconut oil	Thousand hundredweight	1,457	1,142	-6.2
Desiccated coconut	Thousand hundredweight	930	967	1.0
For domestic consumption				
Paddy (rice)	Million bushels	45.7	76.8	13.9

Forestry

200,000 acres in the wet zone and about 2,500,000 acres in the dry zone are available for the exploitation of timber. At present, about 6 million cubic feet per annum have been extracted.

Electricity

Electricity output and consumption, 1966 and 1970

	<u>1966</u>	<u>1970</u>
Installed capacity (MW)	195.0	262.0
Hydroelectric	110.0	192.0
Thermal	85.0	70.0
Power generated (million kWh)	477.6	772.0
Power sold to (million kWh)	407.5	648.0
Households	45.2	60.0
Commerce	67.5	85.0
Industry	162.4	329.0
Local authorities	106.9	161.0
Other	25.5	13.0

In 1970 electricity accounted for 41.6 per cent of the total fuel and power consumption.

7. Over-all economic development strategy and policy

The period 1966-1970 was characterized by three years of a fairly rapid growth of GDP of 5.1 per cent until 1969 and 4.1 per cent in 1970. In 1971 the growth of the GDP dropped to 1 per cent due to political changes.

During this political and economic crisis the private as well as the total public sector investment fell to the lowest level during the last ten years.

The expansion of capital-intensive industries was emphasized while the small-scale industry was neglected, but still accounted for 70 per cent of employment in industry and contributed 30 per cent to the total industrial output.

Revised investment plans emphasized an increase in consumption and the solution of the unemployment problem. Immediate consumption gains, however, were preferred to the employment programme. As a result, the balance of payments deteriorated, and the employment problem grew. The newly implemented tax measure even discouraged the use of labour.

In the agricultural sector the revision of the plans negatively influenced paddy production.

The foreign borrowings increased up to \$62.0 million. In order to avoid external bankruptcy, an unprecedented aid of \$22.0 million was needed in addition to normal net aid receipts.

E. Regional co-operation and international trade

Exports, 1967 and 1971

(Million dollars)

	<u>1967</u>	<u>1971</u>
Tea	158.2	170.8
Crude rubber	42.1	45.8
Coconut oil	13.1	22.3
Desiccated coconut	9.1	15.4
Coir fibres	6.1	...
Cinnamon	4.7	...
Copra	2.7	3.6
Other	7.3	...
Total	<u>243.3</u>	<u>(257.9)</u>

The balance of payments problems of the last years made Sri Lanka heavily dependent on foreign aid.

More than 90 per cent of Sri Lanka's exports consist of agricultural products. Export earnings are highly dependent on world prices. Tea prices rose during the period 1970-1971, but are still below the level of the mid-1960s. Despite a world-wide overproduction of tea during the period of the plan 1972-1976, a rise of nearly 20 per cent in annual tea production is planned.

Principal destinations of exports in 1967

	Value (million dollars)	Share in total (%)
United Kingdom of Great Britain and Northern Ireland	70.5	29.0
People's Republic of China	22.8	9.4
United States of America	20.6	8.5
Union of Soviet Socialist Republics	8.5	3.5
Federal Republic of Germany	7.7	3.2
South Africa	12.6	5.1
Australia	13.7	5.6
Other	86.9	35.7
Total	243.3	100.0

Imports, 1967 and 1971
(Million dollars)

	<u>1967</u>	<u>1971</u>
Consumer goods	138.9	169.4
Intermediate goods	65.7	57.9
Machinery and equipment	26.1	29.8
Transport equipment	13.3	...
Other	15.2	...
Total	259.2	(257.1)

Principal sources of imports in 1967

	Value (million dollars)	Share in total (%)
United Kingdom of Great Britain and Northern Ireland	40.8	15.7
People's Republic of China	27.6	10.7
India	18.3	7.1
Japan	14.4	5.5
Federal Republic of Germany	14.0	5.4
United States of America	18.7	7.2
Australia	16.5	6.4
Other	108.9	42.0
Total	259.2	100.0

Due to a substantial import reduction in 1970, the trade deficit was at its lowest level since five years.

9. Systems for planning and plan implementation

4. Problems encountered through the previous period of the plan

The major problems were unemployment, income disparities, balance of payments deficit and investment being inadequate for industrial development.

The present employment situation was mainly due to the past investment policies which did not meet the need for creating employment. Especially in the industrial sector, an attempt was made to utilize labour-intensive production methods. Even for the construction of buildings and irrigation works, where labour-intensive techniques were feasible, there was no conscious attempt to use them.

The plan for the creation of 200,000 new jobs at a cost of \$24 million had to be cancelled.

Wages and other labour disputes affected the productivity of labour in various sectors of the economy.

The non-essential and luxury items were produced at high production costs and, therefore, could not be exported.

The increase in export prices reduced foreign exchange earnings.

Investments in semi-productive fields such as housing construction and industries encouraging consumption-oriented imports hindered the necessary restructuring of the economy.

The structural weakness of the small-scale sector placed stringent limits on the surplus available for investment.

Services for the development of the small-scale industry such as credit facilities, extension of marketing services and technical know-how were not provided.

Management problems, difficulties in labour relations and pricing prevented the public sector industries from realizing an adequate return on their investments.

The growth of the non-metallic mineral products sector has been impeded by the competition from imported products.

The fibre resources available were not fully utilised. Problems of collection and marketing have impeded the growth of the fibre-based industries.

The growth of the wood industry was handicapped by the shortage of timber.

The absence of detailed programmes for the main industrial subsectors consistent with the needs and resources of the economy has been a major drawback in the field of industrial development.

The surplus capacity prevailing in certain areas was alongside with under-investment in others.

B. SUMMARY OF THE INDUSTRIAL DEVELOPMENT PLAN, 1972-1976

1. General goals and objectives(i) Planned growth

	1970 ^a	1976	Average annual increase ^(%)
Industrial GDP per capita (dollars)	18	26	6.3
Total GDP per capita (dollars)	139	159	2.2
Population (thousands)	12,571	15,758	3.8
Industrial GDP (million dollars)	227	402	10.0
Total GDP (million dollars)	1,755	510	6.1
Industrial GDP as percentage of total GDP	13	16	
Total consumption (million dollars)	...	...	...
Gross domestic savings (million dollars) ^{b/}	264	330	5.7
Total investment (million dollars) ^{b/}	383	506	7.2
Exports of goods and services (million dollars)	298	403	5.1
Imports of goods and services (million dollars)	...	...	...

^{a/} Figures for 1971 are not available.

^{b/} Figures only available for 1972.

(ii) Other objectives

To invest in basic industries which will provide the input material for other industries.

To achieve agricultural self-sufficiency in essential food-stuffs and to reduce food imports.

To create agriculture-based or non-traditional commodities.

To create entirely new sectors in industry.

To correct the widening gap in the balance of payments.

To reduce unemployment.

To emphasise export-oriented and labour-intensive industries.

To reduce social tensions through the elimination of wasteful consumption and redistributive measures.

To raise the living standard of the low income groups by improving housing and sanitary facilities.

To take measures to regenerate the rural society by creating new industries in rural areas.

To involve people in the formulation and execution of development projects at the local level.

1. Strategy and policy

(i) General

The strategy of the plan attempts to achieve a balance between long-term growth and the present social economic crisis. The investment programme given priority to raise economic and social conditions of the majority of the population through the creation of employment opportunities geared to increase production.

Investments in basic industries, such as steel, machine tools, chemicals, petroleum-based industries, cement and glass and irrigation projects will be emphasized. Measures will be taken to increase the area of land under cultivation and the supply of electricity for the expansion of industry. The basic large-scale industries will be state-owned.

The growth of the industrial sector will be mainly based on projects with low capital intensity.

The increase in output of the industrial sector will have to be realised up to 75 per cent through a fuller utilisation of existing capacities, especially in the public sector. An expansion in trading will contribute to a surplus in the public sector. Changes in the organisation and management of the existing public sector enterprises are also expected to provide an effective infrastructure for co-operatives and the private sector industry. Mixed enterprises in the form of a joint participation between Government and private capital, whether domestic or foreign, will also contribute to the industrialization process.

Large-scale enterprises will not be permitted to enter into production in those fields where small-scale industries could be effective; the latter will also be strengthened in the regeneration programme of the rural sector.

Another element in the strengthening of the economy will be a major change in the structure of foreign trade. It is planned to increase the present minor export products and to create a new export sector, particularly through a shift from import substitution to export orientation. Food imports which constituted a major part of imports in the past will be drastically reduced together with an increase in the local production of rice, subsidiary food crops, sugar, milk and other food items. Imports will shift accordingly to the intermediate and capital goods sector.

(ii) Manpower and productivity

At the beginning of the period of the plan, 550,000 people were unemployed, i.e. 12 per cent of the total labour force of 4.5 million. Total employment created during the period of the plan will amount to 810,000.

Sectoral distribution of employment created during the period of the plan

Agriculture	300,000
Industry	165,000
Construction	60,000
Services	285,000
Total	810,000

Special work programmes will be organised in the urban, rural and estate sectors. Funds will be allocated for these from the Government's budget. Many of these work programmes will form part of the Divisional Development Council programme and will strengthen both infrastructure and the productive base of rural areas.

Education

The education system will be improved according to manpower requirements.

17.5 per cent of the total expenditure on education will be spent on technical education in 1976.

Capital expenditures on education, 1972 and 1976

	Value (million dollars)		Average annual increase(%)
	1972	1976	
General education	3.2	3.6	2.9
Teacher training	0.2	0.4	18.9
Technical education	1.2	1.4	4.0
Research and development	0.1	0.1	-
Universities	1.3	2.2	14.0
Other investments	0.2	0.3	10.7
Total	6.2	8.0	6.6

Various training institutes such as the Management Development and Productivity Centre, the Administrative Academy, the Agrarian Research and Training Institute and the Co-operative Management Training Centre will co-ordinate their programmes and provide their personnel with the right training to fulfil their tasks.

The scope for the creation of employment possibilities appears to be the greatest in the following sectors: textiles, wood products, mining and quarrying, light engineering, paper products (printing and publishing) and structural clay products.

(iii) Investment and capacity utilisationInvestments in public and private sectors, 1972 and 1976

	Value (million dollars)		Average annual increase (%)
	1972	1976	
Public sector	164.3	266.6	12.8
Private sector	218.4	239.8	2.4
Total	382.7	506.4	7.2

Sectoral composition of
investments in public and private sector, 1972-1976

	Public sector		Private sector		Total (million dollars)
	Value (million dollars)	Share in total (%)	Value (million dollars)	Share in total (%)	
Agriculture	254	24.2	194	16.7	448
Industry (mining, quarrying and manufacturing)	164	17.5	149	12.8	313
Transport, communication and power	342	32.6	28	2.4	370
Services	82	7.8	45	3.9	127
Construction	39	3.7	603	52.0	642
Capital replacements	75	7.1	74	6.4	149
Additions to stocks and work in process	75	7.1	67	5.8	142
Total	1,051	100.0	1,160	100.0	2,211

The private sector will account for 50 per cent of the total investment during the period of the plan. Investments in the private sector include private housing construction, investments by co-operatives, all producers and businesses outside the Government sector.

It is expected to obtain 10 per cent of the total investment from foreign sources.

Financing of the investment programme, 1972 and 1976

	Value (million dollars)		Average annual increase(%)
	<u>1972</u>	<u>1976</u>	
Government savings	16.7	57.1	36.0
Surplus from public corporations	17.9	40.6	22.7
Private savings	302.0	374.9	5.5
Net capital inflow	<u>46.1</u>	<u>33.7</u>	<u>-8.2</u>
Total	362.7	506.3	7.2

(iv) Interconnexions between growth factors

	<u>1972</u>	<u>1976</u>
Investment/GDP ratio	0.22	0.20
Gross domestic savings as percentage of GDP	15.00	13.10

(v) Regional industrial planning

3. Data bases and projections

4. Planned growth of the industrial sector1. Planned growth of manufacturing sectorProduction targets for the public sector industry

<u>Industrial corporation</u>	<u>Unit</u>	<u>Capacity</u>			<u>Actual production</u>		<u>Average annual increase (%)</u>
		<u>1970</u>	<u>1970</u>	<u>1970</u>	<u>1970</u>	<u>1970</u>	
National Milk Board							
Processed milk	Thousand pints	59,250	32,105	59,000	10.7		
Condensed milk	Thousand cans	20,000	14,676	29,000	9.2		
Powdered milk	Thousand one pound tins	12,000	11,921	12,000	0.2		
Ceylon Oils and Fats							
Proxender	Tons	60,000	48,720	100,000	12.7		
Fatty acids	Tons	5,400	1,527	3,000	12.3		
Glycerine	Tons	5,400	170	300	9.9		
Sri Lanka Sugar							
Sugar (Kantalai and Galoya only)	Tone	40,200	8,219	36,000	28.0		
Spirits (Kantalai and Galoya only)	Thousand gallons	1,350	1,373	1,600	2.2		
State Flour Milling							
Flour	Long tons	51,000	47,917	73,000	7.2		
By-products	Long tons	20,000	19,966	29,000	6.4		
National Salt (including private salterns)							
Salt	Tons	91,000	62,067	130,000	13.0		
National Textiles							
Yarn (Thulhiriya, Veyangoda and Pugoda)	Million pounds	20.6	2.3	15.4	31.0		
Textiles (Thulhiriya, Veyangoda and Pugoda)	Million yards	27.1	5.1	32.1	35.0		
Ceylon Leather Products							
Footwear	Thousand pairs	350	359	456	4.1		
Chrome leather	Thousand square feet	1,200	1,116	1,700	7.2		
Tanned leather	Thousand pounds	420	215	408	11.3		
Eastern Paper Mills							
Paper	Tons	10,000	9,665	22,000	14.7		
Paperboard	Tons	-	-	12,000	...		
Ceylon Plywood							
Gintota factory							
Plyboards	Million square feet	30	24	43	10.2		
Tea chests	Million square feet	-	1.04	1.20	2.4		
Avissawella factory							
Tea chests	Thousand square feet	-	-	3,250	...		
Plyboards	Million square feet	-	-	12	...		
Chipboards	Thousand cubic feet	-	-	265	...		
Sliced veneer	Million square feet	-	-	5.05	...		
Doors, door frames, windows	Thousand pieces	-	-	360	...		
Lodging furniture	Sets	-	-	8,500	...		
School furniture	Sets	-	-	2,000	...		

Production targets for the public sector industry (continued)

<u>Industrial corporation</u>	<u>Unit</u>	<u>Capacity 1970</u>	<u>Actual production</u>		<u>Average annual increase (%)</u>
			<u>1970</u>	<u>1971</u>	
Paranthan Chemicals					
Caustic soda	Tons	1,600	1,373	3,200	14.7
Chlorine	Tons	1,200	577	2,500	27.0
Table salt	Tons	400	276	600	12.3
Hydrochloric acid	Tons	1,000	190	1,000	30.8
Calcium chloride	Tons	30	-	150	...
Potassium chlorate	Tons	50	4.5	230	31.0
Ceylon Tyre					
Tyres	Thousand pieces	250	84	342	26.5
Tubes	Thousand pieces	152	99	256	17.2
Ceylon Petroleum					
Crude petroleum processed at Sapugaskanda Blending plant	Million metric tons	2.04	1.81	2.27	4.1
	Million gallons	5.00	4.16	5.30	3.9
Ceylon Fertiliser (Mixing)					
Mixed fertilizers	Thousand tone	300	193	290	7.0
Ceylon Fertiliser Manufacturing					
Urea	Thousand tons	-	-	250	...
Ceylon Ceramics					
Ceramic ware	Tons	2,540	1,879	3,200	9.0
Clay	Tone	5,000	3,610	5,000	5.6
Floor tiles	Tone	600	182	540	20.1
Sanitary ware	Tone	500	545	1,230	15.7
Electrical porcelain	Tone	-	-	300	...
Ceylon Cement					
Cement - KKS and Galle	Thousand tons	350	255	270	1.0
Puttalam	Thousand tone	220	89	440	30.3
National Small Industries					
Bricks and tiles	Million pieces	10.7	10.6	30.0	18.9
Ceylon Mineral Sands					
Ilmenite	Thousand tons	91	83	135	8.5
Rutile	Thousand tone	11	2	12	34.8
Ceylon Steel					
Rolling mill products	Thousand tone	90	22.3	58.5	17.4
Wire mill products	Thousand tons	12	5.5	8.4	7.4
State Hardware					
Agricultural implements	Thousand pieces	1,115	138	839	34.8
Door and window fittings	Thousand pieces	2,600	510	1,975	26.0
Brass fittings and other	Thousand pieces	207	33	194	33.0
Cutlery	Thousand pieces	720	189	631	22.3
Cast iron foundry products	Thousand pieces	82	5	35	38.3

Output and value added, 1970 and 1976

	Value (million dollars)		Average annual increase (%)
	1970	1976	
Gross value of industrial output (at 1970 producer prices)	811.3	1,330.9	8.6
Value added of industrial sector (at 1970 factor costs)	227.2	401.6	10.1

Based on the expected increases in domestic demand and the planned investments, the highest rates of growth are planned in the following industrial groups.

Planned rates of growth for selected industries, 1972-1976

(Percentage)

	Increase in output 1972-1976
Rubber products (including footwear)	108
Machinery and equipment (excluding transport equipment)	100
Chemicals and chemical products	98
Textiles	95
Processed food and animal feed	83

The total planned investment in the manufacturing sector will amount to \$334.2 million; the foreign exchange component is estimated at \$117.5 million. Investments in the public sector are expected to be \$113.4 million and in the private sector \$149.2 million, including both large-scale and small-scale industries and co-operative enterprises.

Investments in public sector projects, 1972-1976

(Million dollars)

<u>Project</u>	<u>Capital outlay 1972-1976</u>
Spinning and weaving mill	20.9
500 power looms	0.9
Paper mill	16.5
Urea fertiliser	50.7
Oleo-chemical	7.9
Ilmenite factory expansion	7.2
Titanium dioxide (preliminary expenses)	1.5
Petroleum refinery (removal of bottle-necks)	2.4
Steel foundry	0.8
Structural shop and galvanizing plant	0.7
Boron rubber wood	0.1
Ligno plastic wood	0.1
Paranthan chemical plant expansion	0.7
Potassium chlorate plant expansion	0.1
Nahaweli development scheme timber	0.7
Graphite mining and processing	1.5
Expansion of flour mill	0.7
Total	<u>113.4</u>

In addition, investments will be made for the further expansion of the spinning capacity of cotton textiles for the production of about 6.5 million pounds of yarn.

Employment is estimated to increase by about 165,000 jobs during the period of the plan. The score for employment creation appears to be the greatest in the following sectors: textiles, wood products, mining and quarrying, light engineering, paper products, printing and publishing, and structural clay products.

Exports will be emphasized, distinguishing between three categories, i.e. major export products such as tea, rubber and coconut, minor export products such as spices, oils, fibres and graphite, and the new export products.

65 per cent of the export income will be contributed by the major export products. Ceramics, wood-based products, rubber and woodchips used as a raw material for pulp will possibly be export-oriented industries.

Export targets for selected minor export products, 1970 and 1976

	Value (million dollars)		Average annual increase (%)
	1970	1976	
Industrial exports			
Essential oils	0.5	0.9	10.3
Coir fibre bristle	3.3	3.7	1.9
Coconut shells, charcoal	1.0	1.5	7.0
Total	4.8	6.1	4.1

Targets for new industrial exports, 1976

(Million dollars)

Food, beverages and tobacco	5.2
Textiles, wearing apparel	5.6
Chemical products	6.3
Leather, rubber, wood and paper products	6.7
Non-metallic mineral products	2.9
Metal products	1.5
Machinery	2.9
Electrical goods	3.7
Miscellaneous industries	2.2
Total	37.0

(11) Planned growth of electricityTotal investment, 1972-1976

(Million dollars)

Generation	54.0
Transmission	24.6
Rural electrification	7.5
Other	11.5
Total	97.6

The total power requirement is expected to rise from 211 MW in 1971 to 367 MW in 1976.

Three hydroelectric units are expected to come into operation during the period of the plan. Work will commence on a fourth project which will be completed at the beginning of 1977.

Demand forecast for power, 1971 and 1976

	Power demand (million kWh)		Average annual increase(%)
	1971	1976	
Domestic use	64.13	85.82	6.0
General purpose	88.43	118.35	6.0
Small and medium industries	210.44	352.73	10.9
Large industries	167.16	508.97	24.9
Bulk supplies to local bodies	167.83	219.43	5.6
Street lighting	10.50	13.00	4.4
Total sales	708.49	1,298.30	12.9

(iii) Planned growth of mining

Mineral exports, 1970 and 1976

	Value (million dollars)		Average annual increase (%)
	1970	1976	
Graphite	1.6	2.4	7.0
Ilmenite	0.6	2.2	24.1
Total	2.2	4.6	13.0

Programmes for the expansion of ilmenite and rutile mining have already been formulated and are ready for implementation.

A pilot plant for the production of titanium slag, a product of high export value, will be installed during the period of the plan. The feasibility of further ilmenite processing will be examined.

Concerning graphite, a programme for the modernisation, rationalization and expansion of production will be implemented.

It is further planned to process the minerals into exportable products such as glass and ceramics.

Gem processing will be totally reorganised, and more attention will be paid to find new markets for this industry.

(iv) Priority of sectors

During the period of the plan, relations between the different sectors of the national product will not change significantly.

Main emphasis will be given to the development of agriculture and certain types of basic industries.

Sectoral contribution to GDP, 1970 and 1976

Percentage

	Share in GDP		Average annual rate of growth
	1970	1976	
Agriculture	36.7	33.7	4.9
Tea (including processing)	...	...	2.8
Rubber (including processing)	...	...	2.2
Coconut	...	...	3.5
Paddy	...	...	7.1
Other	...	...	5.5
Industry	13.0	16.0	10.0
Construction	6.5	6.5	6.0
Services	44.2	43.8	5.9
Total	100.0	100.0	

v Infrastructure connected with industry

The main objectives of the transport sector during the period of the plan are:

- To expand rail and road transportation to cope with the increasing demand for passenger and goods traffic
- To establish public transport agencies on a sound commercial basis which would enable them to replace and improve services
- To implement a co-ordinated plan for transport in the greater Colombo area which accounts for a substantial part of both passenger and haulage goods
- To improve port facilities in accordance with the changes in international shipping and the development of the Trincomalee harbour
- To establish a national merchant fleet with the capacity to transport a substantial part of the country's import and export cargo
- To strengthen the rural infrastructure, to improve the standard of existing agricultural roads and, where necessary, to expand the road network in the rural areas
- To improve the external telecommunication system through necessary changes, and to develop internal telecommunication in order to cope with the economic and commercial needs
- To undertake investments required to generate additional power, the corresponding expansion of the transmission network and the programme of rural electrification

(vi) Relationships with non-industry sectors of the economyAgriculture

During the period of the plan, agriculture is expected to grow at a rate of about 5 per cent per year.

The agricultural plan will especially strengthen the traditional export sector. Special agricultural programmes are also set up for agro-based industries.

Investments in the major programmes will amount to approximately \$368 million. Major investments in agriculture consist of improving irrigation facilities. In

In addition, investments will be made in replanting programmes in the traditional export sector, in the crop diversification project, in equipment for agricultural operations and in the expansion of storage facilities.

Total investment in the agricultural sector, 1972-1976

(Million dollars)

Tea replanting of 7,500 acres per annum	33.6
Modernisation of tea factories	5.9
Rubber replanting of 15,000 acres per annum	22.4
Rubber processing factories	3.7
Coconut replanting scheme	11.9
Paddy and other field crops	240.0
Animal husbandry	13.4
Cashew	4.5
Cocoa	2.9
Floriculture	0.6
Fisheries	35.4
Forestry	14.9
Natural silk	5.9
Investments in other agricultural programmes	49.3
Total	447.4

Forestry

Emphasis will be given to increasing the present extraction rate of timber from 6 million to about 12 million cubic feet in 1976.

Total capital investment in the above programme will amount to about \$14.9 million.

As a result of the planned increase in timber supplies, expansion of the construction and furniture industries is envisaged. By 1974 full import substitution will also be reached in the production of tea chests, 75 per cent of which are currently imported.

Fisheries

Large investments will be made in this sector. Deep sea and off-shore fisheries will be expanded by an investment of \$14.9 million for 200 vessels. For the coastal fisheries, the over-all number of fishing boats with outboard motors will be increased from 2,600 in 1971 to 5,300 in 1976. Suitable anchorage and repair facilities will be provided.

Concerning shell fish, the Ceylon Fisheries Corporation will invest in the freezing and transport facilities which will be necessary to increase exports of shell fish.

Planned industrial projects

Apart from a programme of research for identifying and developing local raw materials, the following programmes prepared in consultation with research organizations will be started for their use on an industrial scale:

New process for oil and protein extraction (coconut kernels) from coconut cream

Industrial use of rubber wood and rubber seed

Wanted flour for bread making

Industrial carbon and chemicals from coconut shells, vegetable fibres, e.g. ramie, banana fibres, pineapple fibres

A programme for oil exploration and mineralogical surveys are also currently in progress

Textile industry

During the period of the plan, handloom production will increase from about 40 million yards in 1970 to 90 million yards in 1976, and powerloom production from 15 million yards to 40 million yards.

Coconut-based products

The output of industries based on coconut oil is expected to grow by 3 per cent per year. Substitution by other vegetable oils, such as oils from cotton seed, soya beans, ground-nuts and rice bran will be encouraged. The expansion of industries based on coconut fibre is part of the programme for the small-scale sector.

Food products

The production of palm sugar, jaggery, dried fish and maldive fish will be expanded. Canning plants for planned increases in fruit growing will be set up on a regional basis under the Divisional Development Council Programme.

Other products

Several plants for boron treatment, as well as small sawmills will be set up on a regional basis under the Divisional Development Council Programme.

Production of several new items based on rubber will be started during the period of the plan. A great part of this expansion will occur in industrial units already engaged in related fields. Further production units will be set up in the planned industrial estates.

6. Organizational and institutional changes required for industrial plan implementation:

For the development and plan implementation of the small-scale sector, it will be essential to strengthen and expand the role of co-operatives.

The Industrial Development Board is being reorganized to provide extension services to small industries on a regional basis. The People's Bank will provide credit facilities for the rural sector. In addition, a rural credit branch will be attached to each primary co-operative society. These will be financed and supervised by the People's Bank. Special agencies for the development of particular crops and commodities are being established to co-ordinate policies and production programmes

and to co-ordinate activities of the Livestock Board, Coconut Development Authority and the Fruit Board. The Territorial Engineering Service has been set up to undertake construction activities in the districts and divisions. For all these programmes, the district administration will be responsible for co-ordinating the activities of the major development agencies: the Department of Agriculture, the Department of Irrigation, the Industrial Development Board, the Territorial Engineering Service, the Co-operative Department and the Department of Agrarian Services; the Government agent will be the principal officer for plan implementation and progress control. In implementing the regional component of the national plan, the Government agent will be responsible to the relevant ministries and to the Ministry of Planning and Employment. To facilitate this work, planning offices will be set up in each district.

District and divisional organizations will play a major role in drawing up programmes of regional development. The divisional development councils will be the main link between the network of Government agencies on the one hand and the local community and its representative institutions on the other. The councils will consist of Government officials and of representatives of institutions such as the co-operative societies, people's committees and the village committees. Their function will be the formulation of development projects and the preparation of development programmes for their area. They will also assist in the co-ordination of development activities and in the review of plan implementation in the development council areas.

The public sector's successful plan implementation will depend on the functioning of the State Engineering Corporation, the Mahaveli Development Board, the River Valleys Development Board, the State Construction and Development Corporation and the Buildings Department.

National agencies will work out the broad framework of policies and targets for the private sector. In the case of tea, the Tea Board will perform this function, for coconut the Coconut Development Authority will promote development. Sectoral boards will co-ordinate the activities of the public and private sector production units in all major branches of industry. The Export Promotion Council will direct exports and encourage the creation of new export industries.

The progress of plan implementation in all sectors will be reviewed regularly at all levels. Each agency which is responsible for any element in the plan will regularly supply information to the next level of supervision and evaluation. Corrective actions will be taken where programmes are behind schedule.

Sectoral committees of the Ministry of Planning will work in close collaboration with the planning units in the different ministries. Their function will be to review the plan performance, to formulate corrective measures where necessary, to adapt programmes and policies to changes in the economic framework and to prepare long-term programmes of development.

7. Problem areas particular to the industrial sector

The major problems of the previous period of the plan, such as unemployment, lack of foreign exchange, limited domestic market, etc., will not be solved within the period of the plan 1972-1976. (See also section A.10., para 130.) Detailed problem areas are not discussed in the development plan.

VI. THAILAND: 1971-1976

A. GENERAL BACKGROUND INFORMATION, 1967-1971

1. Basic statistics

<u>Area</u>		<u>Square kilometres</u>
	Total	914,000
	Agricultural area	123,300
	Forests and pastures	264,710
<u>Major cities</u>	(1971)	<u>Population</u>
	Bangkok	2,000,000
<u>Other data</u>	(1971)	
	Railways	4,170 km
	Highways	22,500 km
<u>Exchange rates</u>	(1972)	<u>Thai baht (B)</u>
	<u>Currency unit</u>	<u>equivalent</u>
	US dollar	21.00
	Pound sterling	48.72
	Swiss franc	5.59
	French franc	4.08
	German mark	6.60
	Italian lira (100)	3.60

2. Population

	<u>1967</u>	<u>1971</u>	<u>Annual rate of growth (%)</u>
Total (thousands)	32,855	37,840	3.6
Labour force	14,793 ^{a/}	16,902	2.7

a/ As per 1966.

Distribution of employment by sector, 1966 and 1971

<u>Sector</u>	<u>1966</u>		<u>1971</u>	
	<u>Employed (thousands)</u>	<u>Share in total (%)</u>	<u>Employed (thousands)</u>	<u>Share in total (%)</u>
Agriculture	11,803	79.8	13,076	77.4
Mining and quarrying	43	0.3	51	0.3
Manufacturing	660	4.5	715	4.2
Construction	125	0.8	150	0.9
Electricity, gas, water and sanitary services	23	0.2	42	0.2
Commerce	951	6.4	1,278	7.6
Transport, storage and communication	223	1.5	317	1.9
Services	965	6.5	1,273	7.5
Total	<u>14,793</u>	<u>100.0</u>	<u>16,902</u>	<u>100.0</u>

1/ Third National Economic and Social Development Plan, 1971-1976, Government of Thailand, Bangkok, October 1971.

Education

Although there was an improvement at every educational level, the targets of the second plan could not be met.

Actual enrolments and targets in 1971

	<u>Actual</u>	<u>Target</u>
Primary education	5,697,500	5,891,000
Secondary education (academic courses)	5,441,000	5,409,400
Secondary education (vocational courses)	62,300	62,300
Higher vocational training (technical institutes)	16,800	19,100
Teacher training	89,350	147,000
Higher education (undergraduates in all faculties)	45,100	46,370

Regarding secondary education, an experimental school programme providing students with academic knowledge, as well as vocational training and practical experience, was first implemented in 1968. Presently there are 200 schools with 2,400 pupils under this programme.

During the period of the plan loans were obtained from the World Bank to improve the vocational education in Thailand. Twenty-five agricultural and technical schools were provided with funds for the improvement of buildings and equipment installation.

The high actual enrolment in teacher training courses was due to evening programmes and special courses.

In 1971 the Ram Khamhaeng university was founded for 40,000 students. Further three additional universities were established in the rural areas, i.e. in the North-East, the South and in the North comprising the following faculties: science, medical science, engineering, agriculture and education.

The shortage of qualified teachers and the rapid increase in the number of students were the major problems which hampered the expansion and improvement of education at all levels. A continuing education programme for adults was lacking as well.

3. GDP

	<u>1967</u>	<u>1971</u>	<u>Average annual growth rate (%)</u>
Manufacturing GDP per capita (dollars)	21.8	26.9	5.3
Total GDP per capita (dollars)	138.7	159.0	3.6
Population (thousands)	32,855	37,840	3.6
Manufacturing GDP (million dollars)	717.6	1,019.0	9.2
Total GDP (million dollars)	4,560.0	6,019.2	7.2
Manufacturing GDP as percentage of total GDP	15.7	16.9	

GDP structure, 1967 and 1971, at 1962 market prices

	1967		1971	
	Value (million dollars)	Share in total (%)	Value (million dollars)	Share in total (%)
Agriculture	1,530	33.6	1,776	29.5
Mining	74	1.6	100	1.7
Manufacturing	718	15.7	1,019	16.9
Construction	291	6.5	400	6.6
Electricity, water supply	43	0.9	91	1.5
Transportation	308	6.7	410	6.8
Trade	730	16.0	976	16.2
Banking, insurance	142	3.1	243	4.1
Ownership of dwellings	97	2.1	114	1.9
Public administration	185	4.0	271	4.5
Other services	442	9.8	619	10.3
Total	4,560	100.0	6,019	100.0

4. Macro-economic indicators

Money supply

1967 - \$ 754.0 million

1971 - \$1,016.0 million

Average annual increase 6.2%

Price index

1967 - 111

1971 - 119

Average annual increase 1.7%

GDP

1967 - \$4,560.0 million

1971 - \$6,019.2 million

Average annual increase 7.2%

Balance of payments, 1967 and 1971

(Million dollars)

	1967	1971
Trade balance	-388	-479
Net services	282	257
Transfers	57	43
Capital inflow	107	83
Private	97	69
Public	10	14
Errors and omissions	5	66
Change in reserves	-63	30

7. Industrial products and technology - main manufacturing industries

Major industrial production targets

<u>Industrial production</u>	<u>Unit</u>	<u>Actual 1965</u>	<u>Estimate 1971</u>	<u>Actual 1971</u>
Sugar	Tons	320,000	270,000	280,000
Paper	Tons	12,000	15,000	51,000
Steel	Tons	100,000	400,000	326,000
Air mobile tyres	Number	140,000	300,000	270,000
Cement	Million tons	1.25	2.80	3.20
Gunny bags	Million bags	69.00	65.00	60.00
Cotton textiles	Million square yards	251	610	500
Refined oil	Million barrels	13	18	41

Targets for manufacturing value added

(Million dollars)

<u>Industrial production and sector</u>	<u>Actual 1966</u>	<u>Estimate 1971</u>	<u>Actual 1971</u>
Food	150	196	233
Beverages	58	115	97
Tobacco manufacturing	63	76	81
Wood products	29	42	41
Furniture and fixtures	6	11	31
Paper	2	9	6
Printing, publishing and allied industries	12	19	29
Leather	7	8	2
Rubber products	13	20	12
Chemicals	30	45	64
Non-metallic industries	33	56	75
Electrical machinery	3	6	13
Total	406	605	684

Sugar industry

The increase in the production capacity of sugar resulted in a surplus output. Four white sugar factories owned by the Government produced one third of the total production.

Gunny bag industry

Ten gunny bag factories had an output of 60 million units per year. The three Government-owned factories had a total capacity of 30 million units per year.

Cement industry

Five cement factories were in operation producing 2,625,000 tons annually.

Paper industry

Twenty paper factories were registered at the Ministry of Industry of which two were state enterprises. Nine privately-owned factories have been granted promotional certificates by the Board of Investment Promotion, and five have started operation. The other four factories were under construction. The total capacity of all these factories was 143,000 tons per year.

Vegetable oil industry

Twelve vegetable oil factories utilized soya beans, ground-nuts and cotton seeds as raw materials at a total capacity of 15,000 tons.

Automobile tyre industry

All four factories with a total production capacity of 1,090,000 units received promotional certificates.

Automobile industry

Nine automobile plants with a total capacity of 2,000 to 2,500 cars per month were in operation.

Oil refining industry

Four oil refineries processed about 130,000 barrels per day. \$3.4 million of the budget allocation had been granted to the refinery in Fang.

Steel and iron industry

There exist two steel mills in Thailand smelting scrap iron and 30 small processing factories.

Textile industry

About 400 mechanised weaving mills (cotton and hand-made fibres) and 500 textile factories were in operation.

Fruit canning industry

There are four fruit (mainly pineapples) canning firms with a total capacity of 180,000 tons.

In 1972 the Small Industries Service Institute (SISI) finished the first phase of the small industries promotion programme. The cottage industry products and handicrafts for export have been promoted.

With regard to industrial estates, the Government established its first industrial estate at Bangchan.

In 1967 the Industrial Product Standardisation Office was set up which standardised 17 industrial products until now.

Five military state enterprises produced for military requirements and the domestic market preserve jars, batteries, textiles, food and leather products.

The target of the manufacturing sector for the total value added was \$848 million in 1971 based on the actual figure of \$504 million in 1966. The actual value added was

higher than expected, i.e. \$1,100 million in 1971.

It was planned to promote 50-70 projects annually. This target was surpassed during the 1967-1971 period, and 341 projects with a total working capital of \$748 million were promoted.

6. Industry - related resources and sectors

Agriculture

During the period of the second plan the agricultural sector contributed 4.2 per cent annually to GDP. The value of goods and services originating from agriculture was \$1,776 million in 1971.

At the end of 1971 the production level of some major products was substantially higher than expected.

The output of maize and cassava has doubled, and the output of rubber rose at 30 per cent during the period of the plan.

The major reason for the increased crop output was the expansion of the cultivated area.

The output of rice was 3 per cent below the target. The country's traditional dependence on rice has been substantially diminished. Despite a drop of 40 per cent in the export value of rice, the total value of agricultural exports was reduced by only 4 per cent, as the export of maize, cassava, shrimps, tobacco and rubber increased significantly.

Central Government expenditures

(Million dollars)

	<u>1966</u>	<u>1971</u>
Agriculture	37.3	84.2
Irrigation	32.7	75.2
Other	4.7	9.0

Forestry

Thailand has valuable national forest resources. 55 per cent of the total land area are covered by forests. The total volume of standing timber is 194 million m³ of which the annual increment is 5 million m³. The annual growth rate of GDP in forestry has slowed down from 5.8 per cent in 1960-1965 to 4.5 per cent in 1965-1970.

The task output doubled from 1960 to 1970, while exports fell at 70 per cent, partly as a result of field practices impairing the quality of timber, export taxes and Government policies.

Mining

During the period of the plan the average output of the mining industry increased by 4 per cent. In 1967 the export value was \$87.5 million, rising to \$141.2 million in 1971.

The national income deriving from mining activities accounted for about 2 per cent of GDP.

Employment in this sector was estimated at 51,000 workers, being less than 1 per cent of the total labour force.

Tin has been the most important mineral in terms of value of production and of exports. Other minerals were fluorite, wolfram, antimony, manganese, iron-ore, gypsum and zinc, kaolin, silica sand and marl.

Fuels and power

The construction targets of generating facilities were attained. The total installed capacity was increased from 269,880 kW in 1961 to 1,169,000 kW in 1971 of which 3 per cent were hydroelectric, 44 per cent thermal and 18 per cent diesel and gas turbine power plants. The expansion of the transmission system included the construction of substations of which 7 were of 230 kV, 40 of 115 kV, and 21 of 69 kV. Further, 5,176 of high tension transmission lines were constructed.

The distribution systems in the provincial areas were also improved and expanded.

In the metropolitan area the targets for expansion were achieved. In order to provide electricity to unelectrified areas, small diesel generating units were installed.

Despite of the construction of a distribution line system throughout the country, only 19 per cent of the country's total population received the benefits of electrical services. In the metropolitan areas only 63 per cent of the total population were served by the Metropolitan Electricity Authority (MEA). In the provincial areas electric power supplied by the Provincial Electricity Authority was made available to only 4 million people.

Transport and communication

During the period of the second plan the total investment expenditure was \$766 million against a target of \$884 million. The difference was due to delays in project implementation caused by alterations of plans and targets and the limited capacities of the agencies concerned.

94 roads of the national highway system with an over-all length of 5,778 km have been constructed. With regard to the expansion of the provincial highway system, the construction of roads with an over-all length of 3,018 km has been completed.

The main objectives of the railroad sector have been reached. However, implementation was delayed in some cases such as the acquisition of 84 diesel locomotives.

Most objectives of the waterways development programmes such as acquiring dredging and survey machines, constructing a breakwater at Songkhla and improving navigable channels leading to the ports of Songkhla, Phuket, Suratthani and Pattani were reached.

With regard to the improvement and expansion of the ports, most of the objectives were reached.

At the end of 1971 the survey and design work for a second deep-sea port at Lae Krabang was completed.

In the sector of air transportation, improvement of the aeronautical radio service quality was reached, existing airports were improved and additional ones constructed. The old models B-47 were replaced by T propeller jets.

The objectives of the communication sector have mostly been fulfilled by the end of the period of the second plan; part of the programme will have to be continued after 1971.

7. Over-all economic development strategy and policy

It was expected that the manufacturing sector would grow at an annual rate of about 11 per cent and would contribute 13.6 per cent to GDP in 1971. The actual growth of the sector amounted to 9.2 per cent and contributed 17 per cent to GDP. This growth was partly due to the fact that Thailand became more self-supporting in the fields of food processing, textiles and construction materials. Thailand became also less dependent on imported consumer goods and semi-processed materials. Special promotion privileges supported the rapid expansion of the production of consumer goods.

During the period of the plan, the Government strongly emphasized and promoted industrial development.

The Ministry of Industry provided special services to industries such as promoting product standardization, conducting industrial research, establishing industrial estates, providing technical services and credits to sugar-cane planters and training in management.

The Industrial Finance Corporation of Thailand, established in 1952, granted loans to industrial investors at the amount of \$23,810 or more according to the economic feasibility.

With regard to small-scale industry, more than 90 per cent of the industrial establishments were small-scale establishments with a capital of less than \$47,619. The small-scale industry served as the basis for national industrial development. Special support was given to small-scale and cottage industries to improve their efficiency and increase their production.

The public sector's projects were largely infrastructure construction projects which laid a solid foundation for the rural development of the private sector. It increased the supply of public utilities in the rural areas.

The main policy in the field of income distribution was to spread the fruits of development among rural people in all regions, particularly in remote rural areas.

To expand private investment, three main policies were set up:

To adopt measures to promote private investment according to the Private Investment Promotion Act

To assist in promoting efficient and progressive private operations

To develop public utilities which would encourage the role of the private sector in maintaining the country's fiscal and monetary stability

Regional planning was introduced to accelerate the development in the remote areas of the country by reducing differences in the standard of living.

Five Regional Development Committees were set up, and programmes operated by the local administration were financed by the Central Government.

B. Regional co-operation and international trade

Exports, 1968 and 1971

(Million dollars)

	<u>1968</u>	<u>1971</u>
Rice	180	136
Maize	74	107
Rubber	87	90
Tin	72	76
Tapioca	37	60
Kenaf and jute	32	44
Teak and other woods	10	13
Total including other products	<u>651</u>	<u>767</u>

During the last half of the 1960s rice exports declined. In 1971 the Government abolished export taxes in order to increase rice exports. It also released the control on credit sales and introduced sales on a barter basis.

Principal destination of main exports, 1968 and 1970

(Million dollars)

	<u>1968</u>	<u>1970</u>
Japan	137	178
United States of America	85	92
Singapore	56	45
Malaysia	49	35
Netherlands	46	61
Hongkong	44	52
India	37	42
United Kingdom of Great Britain and Northern Ireland	21	14

Imports, 1967 and 1969
(Million dollars)

	<u>1967</u>	<u>1969</u>
Food-stuffs	49	64
Beverages and tobacco	15	24
Mineral fuels, lubricants and related products	76	87
Chemicals	128	150
Manufactured goods	304	301
Machinery and transport equipment	308	449
Miscellaneous products	52	124
Total including other products	<u>1,056</u>	<u>1,200</u>

In order to reduce the deficit of the trade balance, the Government increased the import duties for 200 items in 1970. The items chosen were consumer goods.

Principal origin of main imports, 1967 and 1970
(Million dollars)

	<u>1967</u>	<u>1970</u>
Japan	383	481
United States of America	174	191
Federal Republic of Germany	93	109
United Kingdom of Great Britain and Northern Ireland	77	96
Taiwan	27	29
Australia	28	41
Italy	22	23
Netherlands		

9. Systems for planning and plan implementation

A Project Inspection Team was established within the office of the Prime Minister to improve the implementation process at the project level. This team co-operated closely with the National Economic Development Board and the Budget Office in controlling the progress of project implementation against the targets, promoting standardized methods for reporting on development projects, and in informing people about difficulties and the financial situation of the projects concerned.

10. Problems encountered through the previous period of the plan

During the period of the plan, 1967-1971, the country was facing the problems of a high population increase and unemployment, since the economic growth was not sufficient to provide for an adequate number of additional jobs.

The development of education and training of skilled labour was not sufficiently promoted.

Changes in the demand and price levels of major export products such as rice, rubber and tin resulted in lack of foreign exchange and low incomes per capita in the rural area.

The decline in expenditures of the United States of America, as well as the devaluation of the United States dollar caused a shortfall in foreign investments.

The small and badly-organized capital market and the inflexible credit system hampered the industrial expansion.

Shortage of capital was the major problem for small-scale enterprises.

Government services and infrastructure were insufficient for the achievement of the planned growth of industrial production.

The structure of tariffs and taxes was designed for the purpose of maximizing Government revenues rather than for the purpose of industrial development.

Industrial data and information were not available in time.

There was a lack of effective co-ordination between various Government agencies concerned with industrial development.

The criteria for the selection of industries were not well defined.

II. SUMMARY OF THE INDUSTRIAL DEVELOPMENT PLAN, 1971-1976

1. General goals and objectives(i) Planned growth

	<u>1971</u>	<u>1976</u>	<u>Average annual increase(%)</u>
Manufacturing GDP per capita (dollars)	29.1	33.9	3.0
Total GDP per capita (dollars)	159.0	192.7	3.7
Population (thousands)	37,840	44,028	3.0
Manufacturing GDP (million dollars)	1,101.1	1,433.8	6.3
Total GDP (million dollars)	6,019.2	8,485.8	7.1
Manufacturing GDP as percentage of total GDP	18.3	17.6	
Total consumption (million dollars) ^{a/}	5,276.0	7,362.0	8.3
Gross domestic savings (million dollars) ^{a/}	1,261.0	1,781.0	7.1
Total investment (million dollars) ^{a/}	1,452.0	2,130.0	8.6
Exports (million dollars)	766.6	1,092.4	7.3
Imports (million dollars)	1,257.1	1,442.8	2.8

a/ 1970.

(ii) Other objectives

To promote the structure of production sectors and promote economic growth.

To overcome the economic recession and to increase national income by utilizing the available national resources.

To solve the balance of payments problem.

To maintain stability of prices, currency and a reasonable level of foreign exchange reserves.

To raise the standard of living of the rural population in various regions.

To increase public services to satisfy the requirements of the population

To reduce the population growth rate.

To raise the level of employment and develop manpower resources.

To increase the role of the private sector in economic development.

1. Strategy and policy

1. General

For the period of the plan, the following policies were outlined to achieve the objectives and targets of economic development:

Local industries will be promoted to process agricultural products

Export promotion will be achieved by reducing production costs and in improving the quality of products to increase the competitiveness in the world market

The major producers of export goods will be supported by means of subsidies, technical assistance, investment capital and assistance in marketing

The Government financial institutions will provide the necessary credits

Import substitution will be supported by fiscal measures

Monetary and fiscal policies will be introduced to achieve economic stability

Emphasizing the agricultural development; public services in the rural area will help to improve income distribution

Private investment will be encouraged and the role of the private sector strengthened

Competition between public and private enterprises will be avoided

The infrastructure will be improved by expanding the transport system especially in remote rural areas

A plan for the location of industrial areas and the establishment of industrial estates will be formulated

With regard to industrial estates, a new agency will be set up under the direction of a national committee. This agency will study the best locations for industrial estates, free trade zones and industrial export zones

Family planning will be encouraged to cut down the birth rate

Elementary education and vocational training will be expanded, as well as training of manpower

Employment opportunities for the growing labour force will be created in the urban as well as in the rural areas

Training institutions will be promoted to train skilled manpower

The possibility of developing science and technology for a meaningful application in the domestic industry will be studied. Apart from that the Government will promote the standardization of industrial products

Emphasis will be placed on the research work in food technology and chemical industry

During the period of the plan loans amounting to \$1.5 million annually were given to small industries

90 per cent of all industrial establishments are small-scale establishments with a capital of less than \$0.05 million. The Government has developed a number of programmes to assist the small-scale industries. The Small Industries Service Institute will continue to provide technical extension and advisory services to small plants, train managers and skilled workers and develop prototypes of simple equipment

To improve the efficiency of rice mills, the Government will establish an experimental rice milling centre to serve as a demonstration and training station.

In the textile sector the Ministry of Industry will increase and expand its promotional activities by conducting research and experimentation, providing technical training and quality testing services and in promoting designs for the improvement of the quality. Data and information concerning the textile industry will also be collected.

The Government will extend credits and technical services given to sugar-cane growers, facilitate long-term export sales and will try to stabilize the prices.

The success of the third plan depends mainly on a number of industries. These industries are mineral smelting, food processing and manufacture of machinery, providing a basis for future expansion.

The importance of Government-operated industrial enterprises will decline according to the Government policy in order to not compete with the private sector.

(11) Manpower and productivity

During the period of the third plan a shortage of teachers, technical and scientific manpower is expected. The labour force will grow from 17.0 million to 19.6 million. The average annual rate of increase will be 2.9 per cent. In 1976, employment possibilities will exist for almost 19.5 million people. During the period of the plan 2.5 million jobs will be created.

Employment, 1971 and 1976

	1971		1976	
	Employed (thousands)	Share in total (%)	Employed (thousands)	Share in total (%)
Agriculture, forestry, fisheries	13,076	77.4	14,606	75.1
Mining and quarrying	51	0.3	66	0.3
Manufacturing	715	4.2	785	4.0
Construction, repair and demolition	150	0.9	191	1.0
Electricity and water supply	42	0.2	66	0.3
Commerce	1,278	7.6	1,688	8.7
Communication, storage and transportation	317	1.9	404	2.1
Services	1,273	7.5	1,658	8.5
Total	16,902	100.0	19,464	100.0

At the end of the period of the plan, 80,000 people will still be unemployed.

Education

The total demand for teachers will amount to 80,900 whereas the supply will be 77,000.

The demand for technicians in the field of trade and industry of 15,200 will be met by a supply of 15,300.

(iii) Investment and capacity utilisation

The total capital investment in state enterprises is planned to be \$1,012.2 million during the period of the plan.

Capital investment by sector in state enterprises, 1971-1976

(Million dollars)

<u>Sector</u>	
Agriculture	11.6
Industry	37.3
Transport and communication	335.6
Power	478.2
Commerce and services	33.6
Other	115.9
Total	<u>1,012.2</u>

The total private investment is expected to amount to \$6,238 million between 1971 and 1976. The average annual increase will be 5 per cent.

Source of private funds, 1971-1976

(Million dollars)

Corporate and private	4,604.6
Foreign investments	660.5
Financial institutions	972.9
Total	<u>6,238.0</u>

Public development expenditures by sector, 1971-1976

Million dollars)

	Central Government	Local Government and state enterprises	Foreign loans and grants	Total
Agriculture and irrigation	57	5	100	162
Industry, mining and commerce	33	71	10	114
Transport and communication	519	153	257	929
Power	95	147	129	371
Education	1,486	-	81	1,567
Public health	262	-	38	300
Other	362	286	195	843
Total	<u>3,304</u>	<u>662</u>	<u>710</u>	<u>4,776</u>

During the period of the plan, the Industrial Finance Corporation will grant loans to certain industries, giving priority to industries producing goods for export or import substitution using domestic raw materials. A demand for industrial loans of \$16 million per year or \$80 million for the whole period of the plan is expected. Therefore the Industrial Finance Corporation will need \$19 million in local currency and \$40 million in foreign currency.

(iv) Interconnexions between growth factors

	<u>1971</u>	<u>1976</u>
Export/import ratio	0.61	0.76
Import/GDP ratio	0.21	0.17
Investment/GDP ratio ^{a/}	0.24	0.26

a/ 1970.

(v) Regional industrial planning

Various regional development programmes will be implemented to diminish the gap in income and living conditions. For this reason a large amount of the development budget will be allocated to agriculture.

Labour-intensive infrastructural projects will be carried out in the rural areas such as irrigation distribution and other social services projects.

In order to increase rural employment and to create domestic markets for agricultural products, the Government will encourage the establishment of factories in rural areas using agricultural products as raw materials. The Government will also build-up development growth centres in various regions.

To stimulate the growth of the agricultural sector the tax burden of the farmers will be relieved.

The Government will provide more social services to the rural population.

Various rural development programmes will be the accelerated rural development programme, the community development programme, the land development programme, the health programme and the compulsory education programme.

The development of each region will be based on its geographical and natural conditions.

In the central region especially the food, edible oil and canning industry will be promoted. The growing of crops being in high foreign demand will also be encouraged during the second crop season.

The central region will be the industrial base of Thailand, since its location will be favourable for exports to other regions and abroad.

In the western region the development will be based on the natural resources such as timber, water resources and various minerals.

The eastern region will be the most important region in the over-all national economic development having large potentialities in the fields of industry and commerce. As this region is having access to the seashore, its fishing industry and shrimp fishing will be further promoted. The same will apply to the southern region as it is also situated at the coast. The Government plans to build and expand many fishing wharves in the South.

Most important for the South will be the planned rapid development of the tin and rubber production through the expansion of the rubber replanting scheme and the improvement of tin mining methods.

The main problem in the North will be the rapid increase of the population in relation to the expansion of the agricultural sector and related activities. Therefore especially the human resource development will be stressed. Apart from this, export-oriented industries which process agricultural products will be promoted as well.

3. Data bases and projections

4. Planned growth of the industrial sector

a. Planned growth of manufacturing sector

For the non-metropolitan areas of the country feasibility surveys will be carried out to determine suitable types of medium-scale industries. These industries will receive special privileges, financial assistance through the Government credit institutions and special relations on the electricity rates, water supply and on other public utilities.

Value added is planned to increase from \$1,101.1 million in 1971 to \$1,493.8 million in 1976. The average annual increase is expected to amount to 6.3 per cent.

Targets for manufacturing value added, 1971 and 1976

	1971		1976	
	Value (million dollars)	Share in total (%)	Value (million dollars)	Share in total (%)
<u>Industrial sector</u>				
Food industries	237.4	21.1	263.0	17.7
Beverage industries	26.7	2.4	131.4	8.8
Tobacco manufacturing	83.2	7.6	106.1	7.2
Textiles, footwear and wearing apparel	161.4	14.7	214.3	14.3
Wood products	41.0	3.7	54.3	3.6
Furniture and fixtures	30.5	2.8	43.8	2.9
Paper	6.2	0.6	18.6	1.2
Printing, publishing and allied industries	26.6	2.6	35.7	2.4
Leather processing	2.4	0.2	3.8	0.3
Rubber products	12.4	1.1	17.6	1.2
Chemicals	63.8	5.8	95.2	6.4
Petroleum	111.4	10.1	166.5	11.1
Non-metallic minerals	74.8	6.8	93.3	6.2
Basic metal industries	11.0	1.0	20.5	1.4
Metallic minerals	17.1	1.6	25.7	1.7
Mechanical repair	18.1	1.6	25.2	1.7
Electrical machinery	13.3	1.2	21.0	1.4
Transport equipment	73.8	6.7	122.0	8.2
Other	21.9	2.0	33.8	2.3
Total	1,101.1	100.0	1,493.8	100.0

Vegetable oil industry

During the period 1972-1976 the production will increase to 47,000 tons.

Automobile tyre industry

In 1976 the production is expected to increase to 1,600,000 units.

Oil refining industry

To meet the rapidly increasing demand for refinery products, a supply of 500,000 barrels per day is expected for 1976.

Steel and iron industry

A production of 750,000 tons per year is planned for 1976.

Textile industry

Until the end of 1976, the output will increase to 600 million yards.

Sugar industry

To reach the export quota laid down by the International Sugar Organization, sugar production will amount to 700,000 tons in 1976.

Major industrial production targets, 1971 and 1976

<u>Industrial product</u>	<u>Unit</u>	<u>1971</u>	<u>1976</u>
Sugar	Thousand tons	580	700
Gunny bags	Million bags	60	60
Cement	Million tons	3	4
Paper	Thousand tons	51	100
Vegetable oil	Thousand tons	15	47
Automobile tires	Million pieces	970	1,600
Petroleum	Million barrels	41	78
Steel and other iron	Thousand tons	326	750
Cloth	Million yards	500	700
Fruit canning	Thousand tons	180	300

Imports, 1972 and 1976

	<u>1972</u>		<u>1976</u>	
	<u>Value</u> <u>(million</u> <u>dollars)</u>	<u>Share in</u> <u>total</u> <u>(%)</u>	<u>Value</u> <u>(million</u> <u>dollars)</u>	<u>Share in</u> <u>total</u> <u>(%)</u>
Consumer products	248	19.3	256	17.7
Capital goods	452	35.2	503	34.9
Raw materials and miscellaneous imports	583	45.5	684	47.4
Total	1,283	100.0	1,443	100.0

During the period of the third plan it is expected that imports will increase more slowly than during the period of the second plan.

Export targets, 1972 and 1976

	1972		1976	
	Value (million dollars)	Share in total (%)	Value (million dollars)	Share in total (%)
Agricultural products	524	63.4	650	59.5
Forestry products	11	1.3	13	1.2
Fishery products	19	2.3	29	2.6
Mineral products	97	11.8	112	10.3
Industrial products	69	8.3	130	11.9
Miscellaneous products	107	12.9	158	14.5
Total	827	100.0	1,092	100.0

Export targets, 1972 and 1976

<u>Industrial product</u>	<u>Unit</u>	<u>1972</u>	<u>1976</u>
Rice	Thousand tons	1,300	1,500
Rubber	Thousand tons	315	383
Pin	Thousand tons	23	26
Kenaf	Thousand tons	350	300
Maize	Thousand tons	2,000	3,000
Livestock	Thousand pieces	40	50
Shrimps	Thousand tons	10	14
Sugar	Thousand tons	120	200
Silk	Hundred yards	10,360	15,616
Cassia products	Thousand tons	1,400	1,000
Fluorite	Thousand tons	450	600
Canned fruit	Thousand boxes	2,200	5,000
Cement	Thousand tons	400	400
Thread	Thousand tons	2.5	15
Materials	Million yards	10	16
Ready-made dresses	Thousand dozens	400	800
Gunny bags	Million bags	25	25
Watch parts	Thousand pieces	900	1,500
Watch boxes	Thousand pieces	500	2,500
Other	Thousand tons	26	170

Especially the gunny bag, cement, thread, clothes, edible oil, sugar, construction material and tire industries will be promoted for export.

In order to expand the export markets, the Government will promote a systematic search for markets abroad, negotiate long-term buying and selling contracts for some products, provide targets on exports to various countries

and at the same time create measures to achieve them. Furthermore, the Government will encourage exporters to a co-operative pricing policy to increase their bargaining power with buyers abroad.

Destinations of rice exports in 1976

(Thousand tons)

Malaysia, Hongkong and Singapore	600
Other markets in Asia	300
European markets	100
African markets	250
Middle East	150
New markets	100
Total	<u>1,500</u>

Destinations of maize exports in 1976

(Thousand tons)

Japan	1,500
Taipei	800
Other	700
Total	<u>3,000</u>

In addition to the above-mentioned export markets, the following countries will be major export partners: United States of America, United Kingdom of Great Britain and Northern Ireland, Federal Republic of Germany, and Italy.

(ii) Planned growth of electricityElectric energy development projects and expenditures

(Million dollars)

	<u>National budget appropriation</u>	<u>Foreign loans</u>	<u>State enterprises' own revenue</u>	<u>Total</u>
Government agency projects				
Ongoing projects	23	61	30	114
New projects	42	91	68	201
Future projects	(8)	(24)	(14)	(46)
Provincial electricity authority				
Ongoing projects	3	1	1	5
New projects	7	25	7	39
Future projects	(6)	(1)	(5)	(12)
Metropolitan electricity authority	-	41	42	83
National energy authority				
Ongoing projects	7	-	-	7
New projects	0.1	-	-	0.1
Future projects	(4)	-	-	(4)
Office of Atomic Energy for Peace	1.4	-	-	1.4
Total	<u>83.5</u>	<u>219</u>	<u>148</u>	<u>450.5</u>

Expansion and improvement of high tension primary and secondary transmission lines and substations will be encouraged. Accelerated expansion of distribution networks to communities without electricity will also be promoted. In order to increase the growth of the economy gradual reductions for all classes of consumers will be encouraged.

Closer co-operation with member countries participating in the Lower Mekong Basin development activities will be emphasized.

In 1976 the thermal and hydroelectric capacity will grow from 451 MW to 510 MW and from 921 MW to 1,340 MW respectively. The gas turbine and diesel generating capacity will remain unchanged.

In 1971 the production of electric energy was 4,833 million kWh which will increase to 9,914 million kWh in 1976.

Electric energy sold by the Electricity Generating Authority of Thailand amounted to 4,521 million kWh in 1971 and is expected to increase to about 9,574 million kWh in 1976.

(iii) Planned growth of mining

Mineral production and export targets

<u>Minerals</u>	<u>Volume</u> <u>(thousand tons)</u>		<u>To be</u> <u>exported (✓)</u>
	<u>1972</u>	<u>1976</u>	
Tin	23	26	100
Fluorite	354	600	95
Wolfram	1	1	100
Antimony	4	4	100
Manganese (battery grade)	5	7	50
Manganese (metallurgy grade)	27	34	90
Iron	27	30	-
Kaolin	7	13	-
Silica sand	103	116	-
Marl	1,986	2,804	-
Lignite	377	393	small quantity
Gypsum	133	138	100
Barium	24	27	-
Total	<u>3,071</u>	<u>4,193</u>	

For the period of the third plan the objectives of the Department of Mineral Resources are:

- To use the known mineral resources to the maximum
- To accelerate the production of minerals for export
- To encourage the search for new mineral deposits
- To provide ground water wells, particularly in arid areas

The following policies are planned to achieve the plan's targets:

Apart from paying utmost attention to the mining development of tin and fluorite, the development of kaolin, manganese, silica sand and marl will be encouraged

The geological survey of the country will be continued

Private mining activities will be emphasized by means of mining rights, technical assistance and marketing procedures

A survey will be carried out to determine the need for ground water for the whole country

700 ground wells per year (450 in the north-east and 250 in other parts of the country) will be drilled. Ground water supply systems in 200 villages having wells will now be installed annually.

The total development budget amounts to \$14 million of which \$12.5 million will be provided by the Government and \$1.5 million by foreign loans and aid. Out of this total \$3.3 million will be used for mining development and \$10.5 million for ground water drilling.

(iv) Priority of sectors

During the period of the third plan, first priority will be given to strengthening of the economic structure by means of accelerating agricultural production. The reason for this decision is that farming is the main source of income for the people of Thailand and that the growth of the agricultural sector will strongly influence the rate of growth of other sectors.

(v) Infrastructure connected with industry

A large share of the national budget will be spent on the highway development programme.

A survey for dredging the main waterways will be carried out.

The improvement of the existing railroad system will be continued.

Feasibility surveys on the improvement and construction of deep sea ports in the East and South will be undertaken. If these surveys show favourable results, construction and improvement work will start in the last stage of the period of the plan.

A survey on the improvement of the service and capacity of the international airport will be done. The construction of a second international airport will be considered.

Total investment expenditure will amount to \$2,041 million.

Investment expenditure 1971-1976

(Million dollars)

<u>Project</u>	<u>Total</u>
Construction and rehabilitation of the national highway system	399
Construction and rehabilitation of the provincial highway system	317
Tertiary road system	59
Railroad development	92
Acquisition of buses and trucks	17
Other	4
Land purchase	888
Waterways	43
Aircraft	39
Communication	183
Total	2,041

In case the Government cannot finance all of the above economic development programmes, project priorities have been established.

(vi) Relationships with non-industry sectors of the economy

Agriculture

As the growth of the agricultural sector will influence the rate of growth in other sectors, it will be necessary to accelerate and improve agricultural production. It was planned that value added will grow from \$1,500 million in 1971 to \$2,300 million in 1976.

The objectives for the agricultural sector are:

- To raise the level of income by accelerating farm production
- To increase exports of agricultural products through increased efficiency in production and better marketing techniques
- To reduce underemployment and underutilization of farm labour through a programme of modernized labour-intensive techniques
- To strengthen the economic and social position of farmers by promoting farmer associations and farmer institutions

To reach these objectives, certain regions will be classified as agricultural production areas. Improvements in the marketing process will be emphasized. Measures will be taken to establish incentives for investment in agricultural processing industries. Effective linkages between organizations of primary producers and processors will be set up.

Fisheries

During the period of the third plan the coastal and deep sea fisheries will be promoted to realize a sufficient supply of the home market and to increase exports.

The research and demonstration activities in fresh water fishing and brackish water will also be stimulated.

Forestry

The major development projects in the field of forestry are:

- To preserve forestry resources
- To increase the planting of teak and other wood
- To reafforest areas being depleted.

Private enterprises will co-operate in the reafforestation projects. In addition to teak plantings, pine planting projects will be encouraged to supply raw materials for the pulp and paper industry.

5. Planned industrial projects

Fruit canning industry

During the period of the third plan, four additional firms will be established. Their total capacity will amount to 300,000 tons.

A state enterprise will be established in order to improve the design of cottage products.

The Design Centre, the Thai Industry Store, The Bangkok Handicraft Factory, and the Lacquer Ware Factory will be combined to achieve greater efficiency.

Cement Industry

During the period 1972-1976, two additional factories will start their operation. Total production will then amount to 3,150,000 tons in 1976.

Paper Industry

Five factories started to operate, and four others are under construction. Total expected capacity will amount to 100,000 tons in 1976.

6. Organizational and institutional changes required for industrial plan implementation

The operational methods of various governmental departments will be changed and improved so that the private investor will not be hampered by organizational limitations or ineffective administration of departments.

The objectives and operation of all state enterprises will be reviewed to determine further Government support, improvement, closure or transformation into private enterprises.

7. Problem areas particular to the industrial sector

Unemployment will be noticeable as never before, even among college graduates. Income within the various regions, but especially between rural and urban areas will still be unequally distributed. Benefits derived from national development will only be felt in urban areas.

The educational and income levels and conditions of employment of female labour force will have to be improved. The problems encountered during the previous period of the plan are expected to be solved at the beginning or at least during the period of the plan.

VII. UGANDA: 1972-1976^{1/}

A. GENERAL BACKGROUND INFORMATION, 1966-1971

1. Basic statistics

<u>Area</u>	<u>Square kilometres</u>
Total	236,000
Agricultural area	48,600
Meadows and pastures	48,600
Swamp and water	47,200
Forests and other	91,600
<u>Major cities (1969)</u>	<u>Population</u>
Kampala	331,889
Bugembe	48,054
Jinja	47,298
Mbale	23,539
Entebbe	21,176
Gulu	19,707
Tororo	14,136
<u>Other data</u>	<u>Number</u>
Trucks and buses (1971)	13,700
Automobiles (1971)	26,500
Telephones (1969)	27,000
Installed power capacity (1972)	150,000 kW
<u>Exchange rates (1972)</u>	<u>Uganda shilling (UA Sh) equivalent</u>
<u>Currency unit</u>	
US dollar	7.143
Pound sterling	16.768
Swiss franc	1.893
French franc	1.394
German mark	2.231
Italian lira (100)	1.226

2. Population

Distribution of population by nationality and ethnic origin in 1969
(Thousands)

	<u>Ugandans</u>	<u>Non-Ugandans</u>	<u>Total</u>
African	8,970.3	486.2	9,456.5
Asian ^{a/}	25.7	48.7	74.4
All other	6.5	11.6	18.1
Total	<u>9,002.5</u>	<u>546.5</u>	<u>9,549.0</u>

^{a/} Indian subcontinent only.

^{1/} The Third Five-Year Development Plan, 1972-1976, Government of Uganda, Kampala, 426 pp.

Distribution of population by age group in 1969

<u>Age group</u>	<u>Population (thousands)</u>	<u>Share in total (%)</u>
0-4	1,837.3	19.2
5-9	1,470.5	15.4
10-14	1,096.5	11.5
15-19	831.2	8.7
20-24	2,060.0	21.6
25-29	1,210.5	12.7
30-34	664.8	7
35-39	365.5	3.8
40-44	12.7	0.1
45-49		
50-54		
55-59		
60 and over		
Not stated		
Total	9,549.0	100.0

From the economic point of view the age structure is extremely unfavourable, since only half the population is in the working age group (15-60), the other half being either too young or too old to contribute positively to the growth of the economy.

The population growth rate between 1959 and 1969 was 3.8 per cent and was estimated at 3.3 per cent during the rest of the period of the plan.

Paid employment - plan targets and actual performance

	Actual	Actual	Actual	Plan	Achievement
	level	level	increase	targets	of target
	1966 ^{a/}	1970 ^{a/}	1966-1970 ^{a/}	for	in the first
	(thousands)			increased	4 years
				employment ^{b/}	of the plan ^{d/}
				1966-1971	
Agriculture, forestry, fishing, hunting	52.9	54.9	2.0	23	9
Mining and quarrying	6.4	7.9	1.5	1	150
Manufacturing ^{c/}	42.7	54.0	11.3	19	59
Construction	29.2	47.7	18.5	12	154
Commerce	14.2	14.3	0.1	5	2
Transport and communications	9.8	12.6	2.8	3	93
Government administration	35.7	45.1	9.4	10	94
Services	55.1	75.9	20.8	12	173
Total	246.0	312.4	66.4	85	78

^{a/} Official data.

^{b/} Adjusted second plan data.

^{c/} Including crop processing.

Education

The literacy rate was approximately 20 per cent.

During the period of the plan, enrolments in grant-aided primary schools have increased by about 170,000 which was substantially below the plan target of 227,000. This shortcoming was due to the switch-over from a six to a seven-year primary school course and the rapid growth of the population. Universal primary education could not be achieved.

The shortage of trained primary school teachers was due to the failure of not having expanded the output from primary teacher training colleges.

The targets set for secondary school enrolments were exceeded, and graduates had great difficulty in finding employment.

Secondary teacher training has been provided by the National Teachers' College in Kyambogo offering a 3-year training course to trainees with the East African Advanced Certificate of Education (E.A.A.C.E.) and the East African Certificate of Education (E.A.C.E.) and by the 3-year undergraduates education courses at the Makerere University College leading to a B.A. or a B.Sc. degree. These courses have been combining a study of academic subjects with professional training.

There was still a large number of teachers recruited from abroad. At the beginning of 1971, about 60 per cent of the teachers were foreigners. Too little attention has been paid to technical and commercial education at middle and lower levels. There were 12 vocational secondary schools and 5 technical schools providing training at the craft level.

The Uganda Technical College has been providing a wide range of technical courses at the technician level. The Uganda College of Commerce has had a wide range of commercial, business and secretarial courses.

The enrolments of Ugandans in undergraduate courses at the Makerere University College grew from 850 in 1966/67 to 1,850 in 1970/71. The number of Ugandans enrolled in undergraduate courses in East Africa rose from 1,120 in 1966/67 to 2,500 in 1970/71.

3. GDP

	1966	1970 ^{a/}	Average annual increase (d)	
			Actual	Planned target
Manufacturing GDP per capita (dollars) ^{b/}	8.3	9.0	1.9	...
Total GDP per capita (dollars) ^{b/}	69.0	72.1	1.0	...
Population (thousands)	8,526	9,855	3.8	2.8
Manufacturing GDP (million dollars) ^{b/}	70.6	88.3	5.8	10.0
Total GDP (million dollars) ^{b/}	588.0	710.5	4.8	7.2
Manufacturing GDP as percentage of total GDP	12.0	12.4		

^{a/} Preliminary estimates.

^{b/} At factor cost of 1966 prices.

GDP Structure, 1966 and 1970

	1966		1970	
	Value (million dollars)	Share in total (%)	Value (million dollars)	Share in total (%)
Agriculture	207.2	35.2	247.5	34.8
Cotton ginning, coffee curing and sugar manufacture ^{a/}	13.4	2.3	15.8	2.2
Forestry, fishing and hunting	7.3	1.2	10.6	1.5
Mining and quarrying	14.6	2.5	17.2	2.4
Manufacture of food ^{a/}	6.9	1.2	9.2	1.3
Miscellaneous manufacturing ^{a/}	50.3	8.5	63.3	8.9
Electricity	9.5	1.6	12.2	1.7
Construction	9.7	1.6	15.2	2.1
Commerce	113.5	19.3	123.9	17.5
Transport and communications	31.5	5.4	42.6	6.0
Government	45.2	7.7	57.6	8.1
Miscellaneous services	49.1	8.4	63.1	8.9
Rents	29.8	5.1	32.3	4.6
Total	588.0	100.0	710.5	100.0

^{a/} Manufacturing GDP.

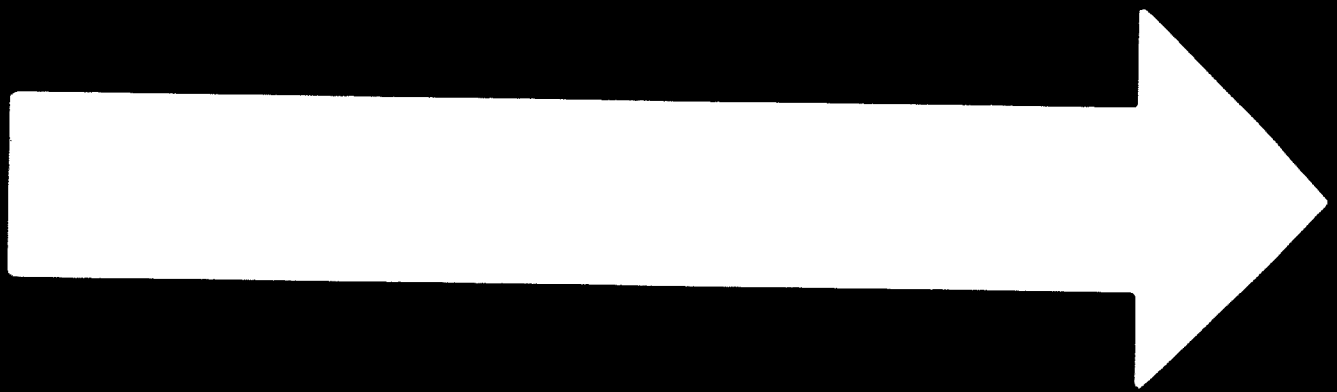
4. Macro-economic indicators

<u>Money supply</u>	1966 - ...
	1970 - ...
	Average annual increase ...
<u>Price index</u>	
Cost of living indices 1966-1970 ^{g/} 1966 = 100	
High income index	1970 = 118
Middle income index	1970 = 119
Low income index	1970 = 123
Food	1970 = 123
Drinks and tobacco	1970 = 108
Fuels and soaps	1970 = 95
Household goods	1970 = 169
Clothing	1970 = 165
Export price index (1964 = 100)	1966 = 90
	1970 = 104
Import price index (1964 = 100)	1966 = 103
	1970 = 109
<u>GDP</u>	1966 - \$588.0 million
	1970 - \$710.5 million
	Average annual increase 4.8%

^{g/} Average annual data for Kampala.

Balance of payments, 1966 and 1970
(Million dollars)

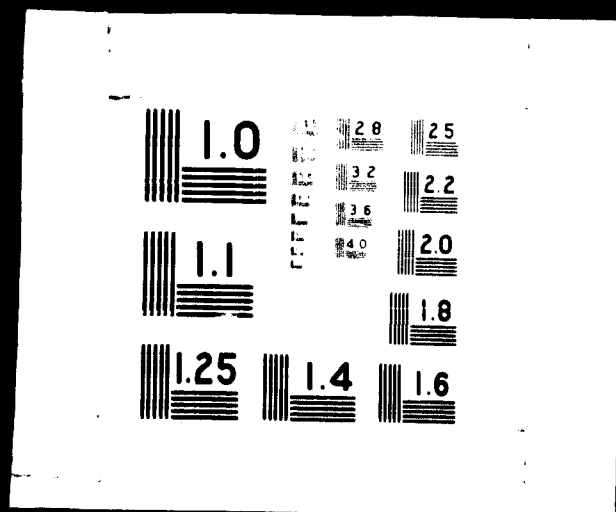
	<u>1966</u>	<u>1970</u>
Merchandise exports	205.8	261.1
Merchandise imports	187.1	204.8
Trade balance	18.7	56.3
Invisible exports	15.8	31.7
Invisible imports	33.3	47.1
Invisible account balance	-17.5	-15.4
Net transfers received	1.1	-5.4
Net factor income received	-17.4	-15.0
Current account balance	-15.1	20.5
Net capital movements	36.0	-16.1
Over-all surplus of balance of payments	20.9	4.4



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Government finance and expenditure at current prices

(Million dollars)

	<u>1966</u>	<u>1970</u>
Fixed investment (monetary sector)	108.4	138.7
Construction	(45.2)	(69.3) ^{a/}
Plant, machinery and equipment	(63.2)	(69.4)
Government sector	22.0	(...)
Private sector	86.4	(...)
Change in stocks (monetary sector)	-1.1	17.8
Total capital formation (monetary sector)	107.3	156.5
Domestic savings (monetary sector) ^{a/}	92.0	177.0
Foreign savings	15.3	-20.4
Fixed investment (subsistence sector)	15.3	17.1 ^{a/}
Change in stocks (subsistence sector)	2.2	5.6
Total capital formation	124.8	179.3
Domestic savings (subsistence sector) ^{a/}	17.5	22.7
Total domestic savings ^{a/}	109.5	199.7

^{a/} Preliminary estimate only.5. Industrial products and technology - main manufacturing industries

The manufacturing sector relies mainly on labour-intensive production techniques.

6. Industry - related resources and sectorsForests

The forest area comprises a total of 1.6 million hectares, which is about 8 per cent of the country's total land and swamp area, containing over 500 tree species of which 70 were currently exploited for timber. Most of the forest reserve is public property. The most important economic value of the forests is their output of round wood (logs, poles, and fuel wood) which rose by 50 per cent during the period of the plan.

Round wood production

	Production ₃ (thousand m ³)		Average annual increase (%)
	<u>1966/67</u>	<u>1970/71</u>	
Logs	144	175	4.9
Poles	11	13	4.2
Fuel wood	99	200	19.2
Total	254	388	11.0

Main crops and livestockPlanned and actual production of selected products

	Production (thousand tons)			Actual average annual increase (%)
	Plan forecast 1966	Actual 1966	Actual 1970	
Coffee	200.0	165.0	216.0	6.8
Cotton	77.0	60.9	64.9	1.0
Sugar	115.0	129.0	144.0	2.9
Tea	10.0	11.2	18.2	12.8
Tobacco	4.0	2.5	3.3	7.2
Fish	76.0	85.2	129.0	10.9

The output targets of the plan for tea, tobacco, fish and poultry were exceeded.

The food crop production appears to have kept pace with the population growth.

Major shortcomings only occurred in the cotton and ground-nut production.

The number of cattle has increased from 3.7 million to 4.3 million heads during 1966 to 1970; this was an annual average rate of increase of 3.6 per cent which exceeded the plan targets.

The major factor responsible for the higher than anticipated increase in the number of cattle has been the animal disease control programme.

Minerals and mining

Main emphasis was laid on searching for economic mineral deposits.

Fuels and power

The generation and transmission network of the Uganda Electricity Board was considerably extended. At the Owen Falls the total nominal capacity at the station was expanded to 150 MW in 1968.

In 1966 a diesel generator was put into operation for the supply of Moroto; similar supplies were provided in Kitgum and Mubende in 1969 so that all district headquarters except Kapchorwa and Kotiodo were served by the Uganda Electricity Board.

In 1970 the Masaka-Mbarara 33 kV transmission line was completed. A diesel set was installed at Rukungiri in the Kigezi district, and work started on the construction of the Mbale-Lira 132 kV transmission line.

TransportNetwork of classified roads

(kilometres)

	Roads maintained by the Ministry of Works, Communications and Housing		Roads maintained by local authorities ^a	Total
	Bitumen	Gravel		
1966	1,270	4,079	18,134	24,091
1970	1,197	4,718	20,180	26,595 ^b

^a Roads for which local authorities receive a road maintenance grant.

^b Excluding 120 km of bitumen roads and 412 km of gravel roads under urban authorities and roads in national parks.

A particular feature of the road implementation programme was the increase of the annual road development expenditure, starting at a level of about \$0.8 million in 1966/67 to the estimated figure of \$14.7 million in 1970/71.

Air transport

Uganda is a joint owner together with Kenya and Tanzania of the East African Airways Corporation (E.A.A.C.) having not only a monopoly of scheduled internal flights within the partner states, but also between South Africa and a number of foreign countries.

The passenger traffic including transit passengers at the international airport of Entebbe increased from 133,000 in 1965 to nearly 345,000 in 1970.

The freight traffic trebled during the plan.

A runway turning loop and a fire station were constructed.

Railway transport

The East African Railways Corporation (E.A.R.C.) is the major carrier of imports and exports in the country. In addition to the railway transport, the East African Railway Corporation provides inland water services on lake Victoria and lake Tanganyika. The volume of goods railed from the coast to stations in Uganda has grown from about 340,000 tons in 1964 to over 600,000 tons in 1969. Passenger traffic increased from 141,000 in 1964 to 254,000 in 1969.

Uganda accounts for 1,237 km of the total East African railway network (5,890 km).

Ship transport

Inland services, although of great importance to the country, declined in the last few years. This was due to the extension of the railway line to Gulu and Pakwach, at lake Albert and lake Kyoga and to the overflow of the ports of lake Victoria.

Being a joint owner of the East African Harbours Corporation, which operates harbours on the Indian Ocean coast of Kenya and Tanzania, the expansion of the Mombasa ports is of particular interest to Uganda.

Oil pipeline

The possibility of constructing an oil pipeline from Mombasa through Nairobi to Kampala has been under study.

Postal facilities and telecommunication

These services are provided by the East African Post and Telecommunication Corporation (E.A.P. and T.C.). The number of telephones grew from 18,200 in 1964 to 27,000 in 1969. Exchange lines connections to automatic changes grew from 6,682 in 1964 to 9,122 in 1969. \$10.9 million were invested in the development of such facilities; this was 20 per cent more than the plan forecast.

In 1971-1972 there existed 257 post offices and sub-post offices.

7. Over-all economic development strategy and policy

The objective of the plan was to reduce the economy's excessive dependence on coffee and cotton through agricultural diversification and industrialization. The output level of tobacco, peanuts, sugar-cane, tea, animal and dairy products was expanded.

The education and health systems were to be expanded.

8. Regional co-operation and international trade

Uganda, as a member of the East African Community, is also a joint owner together with Kenya and Tanzania of the East African Railways Corporation, the East African Harbours Corporation and the East African Post and Telecommunication Corporation. Within the East African Community, the 3 countries have a common external tariff and a common regional development bank. The country participated in several formal and informal multilateral and bilateral arrangements regulating the flow of the export products especially to markets in developed countries.

Jointly with Kenya and Tanzania, Uganda has been a signatory to the Arusha Convention of 1970 which grants special entry privileges for a range of certain exports to partner states of the East African Community and the member states of the European Economic Community.

As a member of the Commonwealth, Uganda has been part of the Commonwealth preference area which grants to certain domestic exports a non-reciprocal preferential entry into the British market.

The country also participated in the Commonwealth Sugar Agreement granting preferential entry of raw sugar into Britain, the International Sugar Agreement and the International Coffee Agreement.

Together with Kenya, Tanzania and Zambia, Uganda jointly owns the East African National Shipping line and the East African Airways Corporation.

Merchandise exports

	<u>1966</u>		<u>1970</u>	
	<u>Million dollars</u>	<u>Tons</u>	<u>Million dollars</u>	<u>Tons</u>
Arabica coffee	14.8	17,545	12.4	11,399
Robusta coffee	82.6	149,631	129.7	179,845
Raw cotton	43.0	69,803	49.1	78,117
Tea	8.9	8,967	13.3	15,052
Sugar	0.7	4,945	2.5	22,267
Animal feed	6.0	82,953	7.0	94,699
Tobacco	1.9	2,461	2.6	1,975
Hides and skins	5.0	4,059	3.8	4,159
Copper	16.1	15,799	23.2	16,446
Cotton fabrics	9.7	19,441	7.8	16,318
Other agricultural exports	15.4	...	16.0	...
Other manufactured exports	9.7	...	12.5	...
Re-exports	3.3	...	1.9	...
Merchandise export adjustment	-11.3	...	-20.7	...
Total exports	205.8	...	261.1	...

Merchandise imports

	<u>Value</u> <u>(million dollars)</u>		<u>Average</u> <u>annual</u> <u>growth</u> <u>rate</u>
	<u>1966</u>	<u>1970</u>	<u>1966-1970 (%)</u>
Intermediate goods	38.9	48.3	5.5
Construction materials	9.3	13.0	8.6
Equipment	33.3	35.9	1.9
Food, drinks, tobacco	18.6	17.2	-2.0
Consumer manufactures	56.7	43.7	-6.8
Fuel	6.2	12.1	18.5
Total retained merchandise imports	163.0	170.2	1.1

9. Systems for planning and plan implementation

A Standing Planning Committee of the Cabinet has been set up to operate as the final authority in the institutional framework for planning, subject to the ultimate direction of the Cabinet. The Committee, chaired by the minister responsible for planning, consists of those ministers most directly concerned with economic and social affairs. It has replaced the Uganda Planning Commission.

Ministerial planning units were established within the Ministry of Agriculture, Forestry and Co-operatives and the Ministry of Education; a unit was set up in the Ministry of Works, Communications and Housing, and steps were taken to create units

in the Ministries of Health and Animal Industry, Game and Fisheries. An Economic Advisory Unit was established in the Ministry of Finance. The success of the planning units has been limited, largely because of the shortage of qualified personnel.

10. Problems encountered during the period of the plan

The main problems were:

- Poor capacity utilization of the manufacturing sector
- Limited market possibilities
- Scarcity of employment opportunities and widespread unemployment
- Lack of skilled, semi-skilled and technical manpower
- Ugandanization of the economy
- Lack of adequate knowledge of the country's mineral wealth
- High rate of population growth
- Scarcity of capital resources and foreign exchange
- Insufficient development of the country's infrastructure

SUMMARY OF THE INDUSTRIAL DEVELOPMENT PLAN, 1972-1976

1. General goals and objectives

(i) Planned growth

	1970	1976	Average annual increase (%)
Manufacturing GDP per capita (dollars) ^{a/}	9.0	11.6	4.3
Total GDP per capita (dollars) ^{a/}	72.1	81.9	2.2
Population (thousands) ^{a/}	9,855	12,000	3.4
Manufacturing GDP (million dollars) ^{a/}	88.3	139.4	7.9
Total GDP (million dollars) ^{a/}	710.5	963.5	5.5
Manufacturing GDP as percentage of total GDP ^{a/}	12.4	14.2	
Total consumption (million dollars) ^{b/}	597.8 ^{c/}	1,205.5	9.2
Total investment (million dollars)	142.2 ^{c/}	267.4	8.2
Merchandise and invisible exports (million dollars)	238.6 ^{c/}	347.9	4.8
Merchandise and invisible imports (million dollars)	226.5 ^{c/}	375.5	6.6
Employment (thousands)	210,000 ^{c/}	380,000	7.7

^{a/} Preliminary estimates.

^{b/} At current prices.

^{c/} Average 1967-1969, as indicated in the original plan.

(ii) Other objectives

The national development objectives elaborated in the plan are:

A rapid and steady expansion in the per capita production of goods and services and such transformation of the economic structure facilitating this expansion

The ugandanization of the economy, i.e. in the field of employment and ownership

A more equitable distribution of income and wealth among the population by emphasizing the rural development opportunities

A substantial increase in employment opportunities

A growth of manufactured exports of about 5.3 per cent per annum during 1970-1976

2. Strategy and policy

(i) General

The plan emphasizes the promotion of export-oriented production as the main impetus of growth. Expanded export possibilities will be an additional outlet for the domestic production and will permit the import of capital and intermediate goods for the expansion of domestic production and of essential consumer goods which are not locally produced. A successful export programme will also stimulate the domestic market.

Measures for strengthening and widening the Common Market and the East African Community will be supported.

The use of labour-intensive production techniques will be promoted through appropriate fiscal and income policies and through a deliberate bias in favour of employment generation in the evaluation of public sector projects.

In the field of natural resources, the Government strategy will consist of increasing the knowledge of available natural resources and improving their quality, discovering their better use and promoting their exploitation in general.

In all sectors of the economy, production methods improving the productivity of the scarcest resources, i.e. capital, foreign exchange and skilled manpower will be promoted.

Greater participation by the country's population in industrial ownership and management will be emphasized.

(ii) Manpower and productivity

In the field of education and training the Government's main long-term objectives are:

To make primary education available to a fast increasing proportion of school age children until universal primary education is achieved

To promote sufficient manpower of the type and quality necessary to meet the skill requirements of the expanding Ugandan economy

The total capital cost for the expansion of teacher training colleges will amount to \$3.9 million. An additional million dollars will be spent on renovating existing facilities at these colleges.

The total capital cost for the establishment of new colleges is estimated at \$7.0 million.

Major emphasis in secondary education will be placed on the improvement of the quality and contents of instruction.

Secondary vocational schools

The Government will spend about \$2.2 million for the expansion and improvement of the existing schools.

Technical schools

Intakes and output will both more than double. A two-year craft course for students at the age of 15 with some secondary education will be introduced.

Vocational training centres

Two vocational training centres will be established, one in Kampala, the other in Jinja, providing courses for apprentices leading eventually to Grade I Trade Test and a variety of vocational training courses to upgrade the large number of craftsmen who have been in employment for some years. The centres will operate under the auspices of an Industrial Training Board having responsibility for industrial training and for a National Apprenticeship Programme.

Enrolments in full-time courses will grow only slightly, to 230 in 1976, during the period of the plan. This is because four of the full-time courses will end in the course of the period of the plan.

Intakes to the Uganda Technical College during the period of the plan

	<u>1971</u>	<u>1975</u>	<u>Average annual increase (%)</u>
Total full-time courses	170 ^{a/}	170	-
Total part-time courses	154	357	18.3
Total day-release courses	40	60	5.4

^{a/} Includes 25 intakes for the East African Certificate of Education which will be finished by 1973.

Commercial educationIntakes to full-time courses at the Uganda College of Commerce

	<u>1971</u>	<u>1975</u>	<u>Average annual increase (%)</u>
Professional studies	150	230	11.2
Secretarial department	330	650	18.5
Distribution, hotel and catering courses	84	204	19.3
Total	564	1,084	17.7

Enrolments in full-time courses lasting 3 months to 2 years will rise to 660 in 1976.

Planned intakes of Ugandans into undergraduate courses within
East Africa

<u>Faculty</u>	<u>1971</u>	<u>1975</u>	<u>Average annual increase (%)</u>
Arts and social science, excluding commerce <u>a/</u>	293	170	-14.5
Commerce	99	80	-5.5
Law	37	70	17.2
Science <u>a/</u>	198	160	-5.5
Education <u>b/</u>	231	250	1.0
Agriculture, excluding forestry	61	60	-0.5
Forestry	7	5	-8.8
Medicine <u>c/</u>	90	130	9.5
School of fine arts	21	30	9.4
Technology	57	75	7.0
Veterinary science	41	60	9.9
East African school of librarianship	8	8	-
Architecture	6	6	-
Total Ugandan undergraduate intakes	1,149	1,104	-1.0
of which at the Makerere University College	1,073		-4.9

a/ Excluding those entering for B.A. or B.Sc. degrees.

b/ Excluding intakes into the postgraduate diploma course.

c/ Even if the planned growth of intakes for medicine is achieved, it will still be necessary to send students abroad for undergraduate training in medicine during the period of the plan.

d/ 1971 actual, 1975 tentative estimates, depending on the number of Ugandans who go to the universities of Nairobi and Dar es Salaam on a reciprocal basis.

The intake of students at the Makerere University College will reach 900 by 1975/76 and will be related to manpower needs.

The plan target for paid employment is estimated at 30,000 Ugandan wage earners in 1976. This target represents an annual growth of the number of Ugandans in paid employment of 7.1 per cent per annum. About 40,000 of the additional jobs created for Ugandans will be for skilled manpower.

The Government wage policy is emphasizing minimum wages to guarantee the increase in paid employment.

During the period of the plan wages will be permitted to grow at an average of 4 per cent per annum to prevent the emergence of real hardship among those in paid employment.

iii) Investment and capacity utilization

The total planned development expenditure is set at \$448 million for the period of the plan. Of the total development expenditure, the Government will allocate \$47.4 million to manufacturing, mining and construction sectors which amount to 10.6 per cent of the target. High percentages of the target will also be allocated to the rural production sector (21.2 per cent) and the transport and communication sector (15.0 per cent).

Financing of Government development expenditures

	<u>Million dollars</u>	<u>Percentage</u>
Surplus on recurrent budget	70.0	16
Total borrowings	345.8	77
Local borrowings	(170.8)	(38)
External borrowings	(175.0)	(39)
External grants	14.0	3
Other development revenues	18.2	4
Total development expenditure	448.0	100

The total recurrent expenditure is estimated at \$1,023 million during the period of the plan. The rapid rise of the total expenditure at an annual average rate (1971-1975) of 6.0 per cent will be matched by a more rapid growth of revenue of 7.8 per cent and by considerable local and external borrowings.

The commercial banking systems handles primarily short-term credits. The requirements in the field of medium and long-term credits are met by special development banks.

New investments in manufacturing will be carried out through the public corporations and particularly through the Uganda Development Corporation. The level of investments by the private sector will also be increased. The Government will undertake through the public corporations joint industrial ventures with the private sector.

To improve the capacity utilization in existing enterprises a rapid growth of output for domestic and export markets will be aimed at.

(iv) Intercornections between growth factors

Investment growth rate 1967-1969 to 1976 = 8.2 per cent

GDP growth rate 1967-1969 to 1976 = 5.6 per cent

	<u>1967-1969</u>	<u>1976</u>
Export/import ratio	1.05	0.93
Import/GDP ratio	0.36	0.38
Investment/GDP ratio	0.22	0.27

(v) Regional industrial planning

The main objective of regional planning will be a more even distribution of development among the different geographical areas of the country. The disparities in general standard of living between rural and urban areas and in the level of development from district to district will have to be reduced.

The functions of regional planning will, therefore, be the following:

The continuous analysis of the regional implementation of over-all development

The definition of criteria for the regional allocation of the national development effort

The preparation of comprehensive and sectoral plans for particular regions of the country as an integrated part of the over-all planning process

The co-ordination within each regional area of all governments, local administration projects and urban and rural development

3. Data bases and projections

4. Planned growth of the industrial sector

(i) Planned growth of manufacturing sector

The planned growth of the manufacturing output is based upon the anticipated expansion of the domestic market, continued import-substitution and growth in manufactured exports.

The GEP at factor costs at 1966 prices is expected to amount to \$19 million in 1976.

Planned production of selected goods

	Unit	Average 1967-1969	1976	Average annual growth rate(%)
Arabica coffee	Thousand tons	13.6	20.0	4.9
Robusta coffee	Thousand tons	165.7	160.0	-0.4
Cotton	Thousand bales	98.0	600-1,000	5.3-12.2
Sugar	Thousand tons	143.2	240- 250	6.7
Tea	Thousand tons	14.7	38.4	12.8
Fire-cured tobacco	Tons	1.4	3.0	10.0
Blue-cured tobacco	Tons	2.5	5.0	9.0
Fish	Thousand tons	107.4	171.0	6.0
Spirits (Waragi)	Thousand litres	339.5	680.0	9.1
Beer	Million litres	20.5	49.0	11.5
Cement	Thousand tons	155.7	400.0	12.5
Superphosphate	Thousand tons	18.3	32.3	7.4
Blister copper	Thousand tons	15.5	17.0	1.2

Accurate estimates of investment data for the public sector do not exist. The Government's development expenditure for the industrial sector is estimated at \$47.7 million.

The employment target of the manufacturing sector will be close to 90,000 persons by 1976.

Estimated manufactured exports in 1976

	<u>Million dollars</u>
Arabica coffee	18.5
Robusta coffee	106.7
Tea	28.7
Sugar	6.6
Tobacco	7.0
Cotton fabrics	7.0
Total	<u>174.5</u>

Import requirements for the period of the plan

	Average 1967-1969 (million dollars)	1976 (million dollars)	Average annual increase (%)
Intermediate goods	41.6	86.5	9.0
Construction materials	11.6	28.0	11.6
Equipment	39.6	66.8	6.7
Food, drinks and tobacco	16.7	23.7	4.5
Consumer manufactures	45.8	65.1	4.5
Fuel	3.5	21.0	11.9
Total	<u>163.8</u>	<u>291.1</u>	7.4

(ii) Planned growth of electricity

The domestic consumption of electrical energy generated by the Uganda Board is expected to rise from 450 million kwh in 1976. Sales to Kenya are expected to amount to 240 million kwh in 1971 and to remain at about 200 million kwh in 1971 per annum thereafter.

The total power capacity required will rise from 127 MW in 1971 to 161 MW in 1976. It will, therefore, be necessary to provide additional capacity by 1974. The expenditure envisaged will amount to \$56.0 million. Additionally, \$2.0 million will be spent for the expansion of the supply network. Another \$5.6 million are planned for several other extensions.

(iii) Planned growth of mining

\$0.7 million are estimated as budget requirements for special studies, surveys, explorations and equipment for the Geological Survey Department during the period of the plan. Copper ore production will amount to 16,000-17,000 tons of blister copper annum. This will be a slight increase in comparison with the period of the second plan. Superphosphate and limestone production are both expected to rise. Tungsten (wolfram) output and exports depend on the level of ore prices which show substantial fluctuations. Ore exports are expected to reach 300 tons by 1976. Tin production will remain constant at its present level of 200 tons.

(iv) Priority of sectors

In the construction and manufacturing sector production is expected to grow rapidly. The average growth between 1967-1969 and 1976 in the construction sector is estimated at 7.6 per cent per annum and in the manufacturing sector at 6.6 per cent per annum. The mining and quarrying sector will grow very slowly.

The development of the transport, communication and electricity sector will be promoted to provide the basis for the planned growth of the productive sectors of the economy.

(v) Infrastructure connected with industryRoad transportRoad and bridge programme during the period of the plan

	Length (Kilometres)	Total cost (million dollars)
Bitumen	626	30.2
Under construction	128	7.0
New roads	498	23.2
Gravel main roads	1,628	31.9
Under construction	344	5.0
New roads	1,284	26.9
Total main roads	2,254	62.1
New feeder and access roads	600	6.3
City and town roads	-	4.9
Reconstruction of main roads	2,426	7.4
Bridge programme	-	2.1
Survey, designs and supervision	-	4.2
Total road programme	5,280	87.0

Air transport

A new 3,700-metre runway will be completed at the airport of Entebbe. The costs of completing the new runway and the parking apron adjacent to the runway are estimated at \$3.9 million and \$1.8 million respectively. The construction of a new air traffic and control tower and console will cost \$0.4 million.

Other additional facilities to be provided are:

	<u>Thousand dollars</u>
A night stop apron and hangars	300,000
A stand-by generator including auxiliary works	50,000
Ground equipment	300,000
A new launch	100,000
Fire service equipment	200,000
Access road to the parking apron	70,000
Total	<u>1,020,000</u>

Provisions are made to construct a new terminal building; the investment forecast amounts to \$7.0 million. Apart from the airport in Entebbe, there are 11 other airfields. Their facilities vary considerably and are planned to be extended according to the intensity of aircraft movements.

For the purchase of new aircrafts, \$14.9 million are planned to be invested.

Railway transport

The East African Railways Corporation will invest \$227.0 million in Uganda during the period of the plan.

Postal facilities and telecommunication

It is planned to open 10 new sub-post offices every year during the period of the plan. The total capital cost is estimated at \$70,000.

\$0.6 million will be spent for the improvement of post office buildings.

Every year \$2.8 million will be spent for the perfection of the telephone and telegraph system. The total investment programme will amount to \$14.7 million.

(vi) Relationships with non-industry sectors of the economy

The rural sector being the most developed of the economy will be given greater emphasis than in the previous plan.

The agricultural production in the monetary sector is planned to grow by 4.8 per cent per annum. Self-sufficiency in staple food crops will be maintained, the dependence on wheat and milk imports will be considerably reduced. Agricultural exports will be expanded at the maximum feasible rate. Receipts from agricultural export sales are expected to rise at 4.5 per cent annually based on 1967/1969 figures despite the expected decline on coffee prices.

4. Planned industrial projects

Tea processing

The Government is preparing a programme for the expansion of crop processing facilities including the establishment of a cotton ginning unit in the West Nile region at a cost of \$1.2 million. The double-rolling ginning equipment being replaced will either be used for stand-by purposes or will be shifted to expand capacity elsewhere. The over-all costs of the programme including the costs of the cotton ginning unit and of capacity expansions for the processing of 600,000 bales per annum are estimated at \$1.8 million. \$2.5 million will be made available by the Government through the Uganda Development Bank.

The existing tea processing plant in Kigezi will be expanded and 4 new factories installed. The total cost will amount to \$2.2 million of which \$1.7 million will be provided by the Government.

A new sugar plant will start its production with an initial capacity of 40,000 tons in 1973 and 60,000 tons by 1976. Total sugar production will amount to 240,000 - 260,000 tons by 1976 and will leave an exportable surplus of about 60,000 tons.

The costs of the new sugar plant and the nucleus estate of 5,000 ha are estimated at \$14.8 million of which the Government will contribute \$7.7 million. Additional expenditures for capacity expansions of existing mills will amount to \$1.8 million.

Food processing, beverages and tobacco products

The capital cost for milk processing units will be \$0.4 million of which the Government will contribute \$0.3 million to the Livestock Development Corporation.

A pork processing factory is to be established in the Kampala area early in the period of the plan. This will reduce the present level of imports of pork and pork products and at the same time stimulate the local production.

A Food Technology Centre will be set up to engage in the technology of different food processing methods and their economic viability.

The establishment of a new oil-milling plant in the northern region is planned to process the increased cotton crop expected in that area. The production capacity will be 30,000 tons of cotton seed per annum, being equivalent to about 4,000 tons of oil. Most of the oil production, as well as the resulting seed-cake, will be exported. The new oil-mill is expected to cost \$1.4 million.

The establishment of an instant coffee plant for domestic use is under consideration.

Textiles and wearing apparel

A cotton yarn spinning mill will be established in Lira. The total capacity will amount to 3,700 tons per annum. The expenditures during the period of the plan are estimated at \$8.4 million.

Wood and paper products

The Government will establish a sawmill at Lendu in the West Nile region to utilize the output of soft wood and to train Ugandans. The capital cost is estimated at \$0.2 million.

Printing and publishing

The Government Printing Press in Entebbe will be expanded. The capital cost is estimated at \$0.4 million.

Leather products

A tannery for the processing of hides and skins will be situated in Jinja. The total capital cost is estimated at \$2.0 million.

Chemical products

The production of sulphuric acid as a by-product of the cobalt processing project in Kilembe will be started.

At lake Katwe in Toro a salt project will be implemented. The estimated capital cost is \$1.5 million. The pharmaceutical plant run by the Government will be expanded, as well as the ten fertilizer plants in Tororo.

Non-metallic mineral products

The cement plant in Hima will be expanded to a capacity of 300,000 tons at a cost of \$10.5 million. A new refractory brick plant will be established in Kajansi to supply local and export markets. A large quarry and crushing plant will start its operation.

Basic metal and metal products

The existing steel mill in Jinja will be expanded at a capital cost of \$19.6 million.

The establishment of a cobalt extraction plant from the pyrite stock in Kilembe is under consideration.

Petroleum refining

The construction of a petroleum refinery with a capacity of 700,000 to 800,000 tons will be considered.

6. Organisational and institutional changes required for industrial plan implementation

The planning units in the Ministry of Education, Ministry of Agriculture and Forestry and in the Ministry of Works and Housing are to be strengthened, while the units in the Ministry of Health and Animal Industry and in the Ministry of Game and Fisheries will become fully established. An Economic Advisory Unit will be established in the Ministry of Commerce and Co-operatives, the Ministry of Industry and in the Ministry of Power and Communication.

The duties and functions of each planning unit will be:

- The formulation of development policies relevant to the sector
- The establishment and recommendation of priorities for the allocation of resources to the Ministry of Finance and Planning
- The detailed preparation and design of projects for submission to the Ministry of Finance and Planning including any necessary pre-investment studies
- The detailed preparation of the annual development estimates for submission to the Ministry of Finance and Planning
- The establishment and operation of an efficient reporting scheme on the progress of the implementation of all projects within the sector in co-operation with the Ministry of Finance and Planning
- The evaluation of prepared projects
- The integration and co-ordination of the development proposals in the relevant parastatal organizations into the over-all sector programme
- The compilation and distribution of statistical data relevant to the sector in co-operation with the Statistic Division of the Ministry of Finance and Planning
- The identification and execution of research projects relevant to the sector in conjunction with the National Research Council

In the field of regional planning, new and more systematic attempts will be made to draw up district plans based on a thorough appraisal of the district's problems and potential and to incorporate the elements of a physical land utilization plan. Each district plan is intended to identify definite development programmes in all sectors to be undertaken by the Government, the local authorities, public corporations and other agents. In the first instance, district plans will be prepared only for selected regions of the country.

7. Problem areas particular to the industrial sector

The main problem areas will more or less remain the same as indicated in the previous plan (see Part I, chapter 10), since it will not be possible to solve them within 5 years:

- High rate of unemployment
- Lack of skilled and technical manpower
- Scarcity of capital and foreign exchange
- High population growth

VIII. YUGOSLAVIA: 1971 - 1975

A. GENERAL BACKGROUND INFORMATION, 1966-1970

1. Basic statistics

<u>Area</u>		<u>Square kilometres</u>
	Total	256,000
	Agricultural area	147,000
	Forestry	88,530
<u>Major cities</u>	(1971)	<u>Population</u>
	Belgrade	1,209,000
	Zagreb	602,000
	Skopje	389,000
	Sarajevo	292,000
	Ljubljana	258,000
	Titograd	99,000
<u>Republics</u>	(1971)	<u>Population</u>
	Serbia	8,466,000
	Croatia	4,431,000
	Bosnia and Herzegovina	3,760,000
	Slovenia	1,730,000
	Macedonia	1,654,000
	Monte Negro	531,000
<u>Other data</u>	(1971)	
	Number of passenger cars	884,600
	Number of telephones	822,880
	Electric power production	29,000 million kwh
<u>Exchange rates</u>	(1971)	<u>Dinar (Din)</u>
	<u>Currency unit</u>	<u>equivalent</u>
	US dollar	17.00
	Pound sterling	43.39
	Swiss franc	4.34
	French franc	3.25
	German mark	5.20
	Italian lira (100)	2.86

2. Population

	<u>1966</u>	<u>1970</u>	<u>Annual rate of growth (%)</u>
Total population (thousands)	19,640	20,370	1.0
Employed (thousands)	3,593	3,765	1.2
Unemployed (thousands)	258	320	1.2
Unemployment rate	7.2%	8.5%	

Distribution of employment by sector in 1970

<u>Sector</u>	<u>Employed (thousands)</u>	<u>Share of total (%)</u>
Agriculture	241	6.4
Industry	1,454	38.5
Construction	347	9.2
Other sectors	1,723	45.9
Total	3,765	100.0

Highest increase of the number of employed persons was achieved in the private and social sector of the economy excluding agriculture. During the period 1953-1970, the number of employed persons in the social sector of the economy, in spite of the difficulties the country's economy faced, had been increased by more than a million persons; it means that employment had doubled, and in industry by about 1.5 million persons, that was more than twice and a half. The fastest increase of employment had developing republics with the exception of Bosnia and Hercegovina.

Employment structure of industrial production by branch in 1970

(Percentage)

<u>Branch of industry</u>	
Energy	2.8
Coal	4.2
Petrol	1.1
Non-ferrous metals	3.7
Ferrous metals	3.7
Non-metals	3.0
Metals	19.3
Shipbuilding	1.6
Electrical equipment	6.1
Chemicals	5.7
Building materials	4.5
Woodworking	8.7
Pulp and paper	2.0
Textiles	15.7
Leather and footwear	3.2
Rubber	1.2
Food processing	8.1
Printing	3.4
Manufacture of tobacco	1.1
Motion picture production	0.4
Mining explorations	0.4
Other	0.1
Total	100.0

Education

In 1970 there existed 13,995 elementary schools with 119,675 teachers and 2,834,581 pupils and 422 senior secondary schools with 10,259 teachers and 186,298 pupils. For higher and specialized education there were 256 faculties, academies and high schools with 16,783 professors and instructors for 261,203 students.

3. GDP

	<u>1966</u>	<u>1970</u>	<u>Average annual growth rate(%)</u>
Industrial GDP per capita (dollars)	113.8	171.8	10.9
Total GDP per capita (dollars)	296.5	453.9	11.2
Population (thousands)	19,640	20,370	1.0
Industrial GDP (million dollars)	2,235.2	3,499.8	11.9
Total GDP (million dollars)	5,823.2	9,246.5	12.3
Industrial GDP as percentage of total GDP	38.4	37.8	

GDP structure, 1966 and 1970

<u>Sector</u>	<u>1966</u>		<u>1970</u>		<u>Average annual growth rate(%)</u>
	<u>Value (million dollars)</u>	<u>Share in total (%)</u>	<u>Value (million dollars)</u>	<u>Share in total (%)</u>	
Agriculture, forestry, fishing and hunting	1,529.3	26.3	1,752.8	19.0	3.6
Mining and quarrying					
Manufacturing	2,235.2	38.3	3,499.8	37.8	11.9
Electricity, gas and water					
Construction	508.2	10.1	1,111.7	12.0	17.3
Wholesale and retail trade, commerce	1,058.8	18.2	2,076.3	22.5	18.3
Transport and communication	411.7	7.1	747.1	8.1	16.0
Other	-	-	58.8	0.6	...
Total	5,823.2	100.0	9,246.5	100.0	12.3

4. Macro-economic indicators

<u>Money supply</u>	1966 - \$1,329.3 million
	1970 - \$2,105.8 million
	Average annual increase 12.1%
<u>Price index</u> (1963 = 100)	1966 - 184
	1970 - 248
<u>GDP</u>	1966 - \$5,823.2 million
	1970 - \$9,246.5 million
	Average annual increase 12.3%

Revenue and expenditure, 1966 and 1970

	Value (million dollars)		Average annual increase(%)
	1966	1970	
Revenue	1,142.7	1,678.7	10.1
Expenditure	1,125.4	1,592.4	9.0

In 1970 the revenue was composed of \$889.1 million in the federal budget, \$300.9 million in the state's budget and \$488.7 million in other budgets. Main sectors of distributed resources in 1970: defence \$462.6 million, education \$35.0 million, Government \$315.0 million, contributions to territorial communities \$124.5 million, and investments in economy \$50.4 million.

5. Industrial products and technology - main manufacturing industries

The most important manufacturing industries of the country are: metalworking with a share of 17 per cent in industry as a whole in 1970, textiles (10.7 per cent), electrical equipment, woodworking, chemicals, food processing, petrol, etc.

Industrial production by branch in 1970

(Percentage)

<u>Branch of industry</u>	
Energy	6.3
Coal	3.7
Petrol	5.1
Non-ferrous metals	3.7
Ferrous metals	4.3
Non-metals	2.4
Metals	17.0
Shipbuilding	1.8
Electrical equipment	7.1
Chemicals	6.9
Building materials	3.6
Woodworking	7.2
Pulp and paper	1.9
Textiles	10.7
Leather and footwear	2.3
Rubber	1.7
Food processing	6.7
Printing	4.6
Manufacture of tobacco	1.9
Motion picture production	0.5
Mining explorations	0.4
Other	0.2
Total	<u>100.0</u>

The policy of rapid industrialisation has resulted in a remarkable increase of over-all industrial production which grew approximately ten times during the period 1939-1970. Such a growth rate was possible through very intensive investments in industry which reached sometimes 80 per cent of total investment in the economy.

Output of some specified goods in 1970

<u>Product</u>	<u>Unit</u>	
Power generation	Million kwh	26,023
Oil processing	Thousand tons	1,091
Steel	Thousand tons	2,228
Electrolytic copper	Tons	89,287
Refined lead	Tons	97,399
Zinc	Tons	65,023
Aluminium	Tons	47,738
Ferro-alloys	Tons	101,765
Sintered magnesite	Tons	210,309
Hollow glass	Tons	227,155
Agricultural machines and implements	Tons	27,387
Machines for manufacturing industries	Pieces	80,045
Motor-cars	Pieces	110,709
Scooters and motor bicycles	Pieces	84,039
Bicycles	Pieces	349,804
Rotary machines	MW	1,537
Transformers	MVA	5,760
Radio receivers	Sets	276,758
Television sets	Sets	320,471
Thermal appliances	Pieces	44,523
Refrigerators	Hundred litres	645,864
Fertilizers	Thousand tons	2,626
PVC powder	Tons	23,116
Synthetic fibres	Tons	40,712
Cement	Thousand tons	4,399
Sawn timber	Thousand cubic metres	3,065
Furniture	Sets	342,147
Newsprint	Tons	74,989
Other paper	Tons	452,890
Ready-made garments	Thousand metres	51,812
Leather footwear	Thousand pairs	31,074
Car tires	Thousand pieces	2,762
Canned vegetables	Tons	78,575
Sugar	Tons	56,741
Beer	Thousand hectolitres	6,665
Cigarettes	Tons	32,179

By the end of 1970, the country produced annually about 30 million tons of coal and coke, about 2.9 million tons of petroleum, 2.2 million tons of crude steel, 89,000 tons of raw (blister) copper, 97,000 tons of refined lead, 65,000 tons of zinc, 48,000 tons of aluminium, 530,000 tons of mercury, etc. Among the 200,000 products of the country's industry, of great importance is also the annual production of the metal industry of about 80,000 pieces of machines and industrial tools, 27,000 pieces of machines for the construction industry, 27,000 pieces of agricultural machines, 12,000 tractors, 13,000 trucks, and the annual production of the chemical industry of 746,718 tons of sulphuric and 578,629 tons of nitric acid, 1.2 million tons of nitric and nearly 1.0 million tons of phosphoric fertilizers.

6. Industry - related resources and sectors

Agricultural sector

The main agricultural products are: wheat, potatoes, sunflower, barley, rye, hemp, maize and tobacco.

Forestry

Forest areas consist largely of beech, oak and fir. The gross timber cut in 1970 was 17 million m³.

Transport and communication

In 1970, there were 27,345 km of asphalted road and 41,346 km of macadamized roads with 875,365 passenger cars and 138,509 trucks and buses.

In the same year, 10,332 km of railways carried 145,594 million passengers and 75,630 million tons of freight.

7. Over-all economic development strategy and policy

The period 1966-1970 was characterized by a growth rate of the total GDP of 12.3 per cent.

Industrialization of the country, especially accelerated development of some industrial branches and areas, led to a regional redistribution of industries. A number of industries not existing before in certain republics was established. Territorial dispersion of industries is therefore much higher now. There was also significant development of industries in the former developing regions of Yugoslavia.

This development originated from two parallel processes of development. First of all, Yugoslavia made efforts to develop branches based on own natural minerals and water resources, which allocation coincided with the developing areas. Secondly, traditional industrial branches were set up in some developing areas. But at the same time, new branches such as chemical industries, metal processing, electrical equipment, etc. were promoted. Some new development could be remarked in connexion with the promotion of export-oriented industries.

Measures for accelerated development of developing regions were designed for the creation of basic conditions for the work of an administrative and educational-social mechanism through budgetary grants from the federal budget as well as for

industrialization of their economy. Aid is achieved through a special fund for development of developing regions amounting to about 2 per cent of the Yugoslav national income. The fund is at federal level, and the resources are allocated to developing republics and regions which themselves make independently the necessary allocation to various productive orientations through the banking system.

According to statistical analyses, productivity of labour has doubled since 1952. Highest increase was in chemical industries, shipbuilding and construction material industry, while the growth in the tobacco, rubber, leather and footwear industries was slower. Labour productivity in food processing industries stagnated by 1970 and even fell in the textile industry. This results from the rate of modernization of individual sectors as well as from employment goals.

The share of industrial fixed assets in total fixed capital formation was increased, particularly that of developing regions.

8. Regional co-operation and international trade

In 1970, total exports amounted to \$2,172.9 million and total imports to \$3,402.1 million.

Structure of exports and imports in 1970

(Percentage)

	<u>Exports</u>	<u>Imports</u>
Food	15.3	7.0
Beverages and tobacco	3.4	0.2
Raw materials	9.4	10.9
Mineral fuels, lubricants and related materials	1.2	4.6
Animal and vegetable oils and fats	0.1	0.6
Chemicals	5.8	9.5
Manufactured goods	29.1	28.7
Machinery and transport equipment	22.8	33.2
Miscellaneous manufactured articles	12.8	5.1
Miscellaneous transactions and commodities	0.1	-
Total	<u>100.0</u>	<u>100.0</u>

Industrial products occupied the dominant position in exports; in the first place metals, non-ferrous metals, textiles, wood products, electrical machinery, shipbuilding, etc. Intermediate goods (raw materials, semi-manufactured products, etc.) accounted for the largest value of exports, followed by consumer goods, including agricultural products (\$0.3 million) and investment goods (\$416.5 million). It is characteristic that in the structure of exports highly finished products account for 53 per cent, finished products 32 per cent, and crude products for only 15 per cent.

Industry, is however, also the largest importer of materials. The highly varied degree of dependence of individual industries on imports determines their significance for the country's balance of payments. Products of the metal industry account for the greatest value of imports, followed by chemicals, textiles and ferrous metals.

Regional distribution of the country's foreign trade was of particular interest. A high degree of concentration of exports and imports with the European countries was noticed. But the share of this area in total exports diminished in the past period. In addition, an improvement of economic relations with developing countries in Asia and Africa was achieved. Development in imports was almost the same.

Destinations of exports in 1970

(Percentage)

Austria	3.0
Belgium and Luxembourg	0.6
Bulgaria	1.3
Czechoslovakia	5.3
Denmark	0.4
France	3.8
Greece	1.9
Netherlands	1.6
Italy	15.2
Hungary	2.8
German Democratic Republic	3.0
Poland	3.4
Romania	1.8
Germany, Federal Republic of	11.8
Union of Soviet Socialist Republics	14.4
Switzerland	3.1
Sweden	1.1
United Kingdom of Great Britain and Northern Ireland	5.8
Other European countries	1.9
Asia	7.0
Africa	3.6
United States of America and Central America	6.0
South America	1.0
Oceania	0.2
Total	100.0

Sources of imports in 1970
(Percentage)

Austria	5.3
Belgium and Luxembourg	1.4
Bulgaria	1.2
Czechoslovakia	5.3
Denmark	0.3
France	3.8
Greece	1.5
Netherlands	1.7
Italy	13.2
Hungary	1.7
German Democratic Republic	2.6
Poland	1.8
Romania	1.2
Germany, Federal Republic of	19.7
Union of Soviet Socialist Republics	6.7
Switzerland	4.5
Sweden	1.4
United Kingdom of Great Britain and Northern Ireland	6.2
Other European countries	1.1
Asia	6.5
Africa	2.7
United States of America and Central America	6.8
South America	2.2
Oceania	<u>1.2</u>
Total	100.0

9. Systems for planning and plan implementation

The Federal Planning Institute (board) and the planning institutes (boards) of republics and autonomous provinces are technical and advisory bodies responsible to their respective government (executive councils) and legislative assemblies. They have the duty to organize the preparation and elaboration of social plans and to carry out all technical work in this connexion, to analyse the accomplishment of these plans, to elaborate and recommend appropriate policy measures and instruments, as well as adequate planning methods and techniques. The development of the planning methodology is a special responsibility of the Federal Planning Institute.

Various research projects on certain development problems and methodological questions, initiated and co-ordinated by the Federal Planning Institute, are often made by the specialized research institutions.

Planning institutes co-operate very closely with the professional industrial associations and with the industrial sections of economic chambers. Industrial associations, as the professional organizations of industrial enterprises of a given branch, are continuously engaged in analysing joint development problems of their

branch, in searching for the adequate solutions of these problems and in proposing the corresponding measure to the relevant Government institutions. They also form important links between the planning agencies at all governmental levels and the economic enterprises by co-ordinating the plans of their member enterprises. In line with the basic principles of the planning system, discussed in the preceding sections, they are called upon to take an active part in the preparation of social development. The Federal Planning Institute is assisted by the relevant federal secretariats and agencies (economy, finance, foreign trade, prices). In the deliberations on the basic development policy targets, an active part is taken by the associations of trade unions.

There are three stages in the procedure of the federal social development plan:

Analysis of the current development and problems; the Federal Assembly on the basis of this analysis and the Executive Council issue the basic guidelines for the preparation of the development plan for the next period and calls upon all interested institutions to take part in this preparation

The Federal Assembly discusses the preliminary draft of the plan and submits it for public discussion

In the third stage, the final draft of the plan is discussed and adopted by the Federal Assembly. A similar procedure is applied in the preparation of development plans in the republics and communes. As already has been pointed out, concrete measures for the implementation of the federal plan have to be based on the consensus of all republics and autonomous provinces

10. Problems encountered during the period of the plan

The Yugoslav economy encountered several significant problems. Among the most important ones, the following have to be mentioned:

Unbalanced growth hampered the realization of a dynamic and intensive development and caused structural disharmony, particularly between the raw material and manufacturing branches. In addition, the market mechanism did not act as a cohesive force in the implementation of the five-year plan targets

The price trend, particularly at the end of the five-year plan, was rather unbalanced and under strong inflationary pressure. The realization of the plan's objectives were therefore negatively affected

Insufficient saving ability of the economy and inadequate allocation of savings among various sectors of the economy were other obstacles for development

The employment growth rate was not in accordance with the planned targets, resulting in an extensive migration of workers

B. SUMMARY OF THE INDUSTRIAL DEVELOPMENT PLAN, 1971-1975

1. General goals and objectives(i) Planned growth

	1970	1975 ^{a/}	Average annual increase(%)
Industrial GDP per capita (dollars)	171.8	315.3	13.0
Total GDP per capita (dollars)	553.9	618.2	6.3
Population (thousands)	20,370	21,389 ^{b/}	1.0
Industrial GDP (million dollars)	3,499.8	6,744.3	8.0
Total GDP (million dollars)	9,246.5	13,222.5	7.5
Industrial GDP as percentage of total GDP	37.8	51.0	
Total consumption (million dollars)	1,034.7	1,417.5	6.5
Gross domestic savings (million dollars)	...	...	...
Total investment (million dollars)	2,219.2	3,106.8	7.0
Exports (million dollars)	1,234.6	2,172.9	12.0
Imports (million dollars)	2,113.1	3,402.1	10.0

^{a/} Figures calculated on the basis of annual growth rates indicated in the original plan.

^{b/} Estimate based on the growth rate of the previous period.

(ii) Other objectives

To emphasise the development of socio-economic relations.

To improve the stability of economy, dynamic economic growth and efficiency in economy.

To improve the standard of living.

To accelerate the development of each developing area, particularly of Kosovo.

To promote further development of employment and the change of the social structure of the population.

2. Strategy and policy(i) General

During the period of the plan, 1971-1975, a growth rate in GDP of 7.5 per cent per annum is expected, rising from \$9,246.5 million in 1970 to \$13,222.5 million in 1975. In order to reach the targets of the plan, the

economy should provide preconditions for stable development of the economy and secondly improve the economic structure.

Policy measures will be directed towards a better use of existing potentials, improvement of organization of work, raising of rentability and modernisation of capacities. Special attention will be paid to increase co-operation with foreign partners.

Economic development will also depend on an accelerated growth of:

The power and transport sector

The realisation of various industrial sectors such as ferrous and non-ferrous industry, chemical industry, non-metal industry, cement and cellulose production

Agriculture, food industries, and animal husbandry

Specialized manufacturing industries based on industrial co-production, specialisation and division of labour

(ii) Manpower and productivity

Employment will be provided for approximately 660,000 skilled people coming from specialised schools and universities.

(iii) Investment and capacity utilisation

Total capital investment funds are expected to grow at an average rate of 7 per cent annually from \$2,219.2 million in 1970 to \$3,106.8 million in 1975.

Structure of investments by sectors, 1971-1975

(Percentage)

	<u>1971-1975</u>
Industry	49.0
Forestry	0.9
Agriculture	9.1
Construction	3.3
Transport	21.0
Trade, tourism, catering	14.9
Handicraft	1.8
Total	<u>100.0</u>

Within the industrial sector, investments in the power sector, metallurgical sector and chemical industry will be specially promoted.

Of the total volume of investments for the five-year period, 47 per cent are expected to be secured by the organisations' investing work. The share of the credits raised by the local banks will be 35 per cent, and the residual 18 per cent will be provided by foreign investors.

(iv) Interconnexions between growth factors

	<u>1970</u>	<u>1975</u>
Export/import ratio	0.58	0.64
Import/GDP ratio	0.23	0.26
Investment/GDP ratio	0.24	0.26

(v) Regional industrial planning3. Data bases and projections

Methods and techniques used in the preparation of medium-term plans have been gradually developed and adapted to the evolution of the economic system and decentralization. The elaboration of the plan generally proceeds in three main stages: First, preliminary aggregates and sectoral forecasts, based on extensive analyses of past development trends and on factors likely to determine the expected further growth, are prepared in the planning institutes. Different common analytical techniques of the forecasting methods are used. Enterprises and their associations prepare their development programmes in terms of minimum obligatory indicators which allow their mutual comparison, the calculation of their global effects on aggregate economic proportions and a general verification of their feasibility. A co-ordination process takes place in the second stage in which all relevant institutions, agents, and groups participate. The result is the first draft of the plan.

After discussion of this draft in the legislative assemblies and by the public, the final plan is elaborated in the planning institutes.

The procedure for the elaboration of the federal and republic plans is similar.

For the analysis of development trends of various economic phenomena and their mutual interdependence, regular statistical data are compiled and published by the federal and republics' statistical offices. Detailed statistical surveys of different fields are issued periodically in a separate statistical bulletin. Regular foreign trade statistics are published in great detail.

A system of national accounts serves for the analysis of the aggregate economic flows. The Social Accounting Service publishes integrated statistics on financial flows and all financial operations of economic enterprises and other institutions on the basis of their annual balance sheets. They comprise data on income distribution in individual economic sectors and branches, on available resources of various funds and on investment financing.

Intersectoral relations of the structure of production based on input-output tables are compiled in two-year intervals since 1962. The entire production system is divided into 98 sectors, 69 of which relate to industry and mining. Separate matrices of import flows are also compiled, permitting a detailed analysis of the import dependence of various sectors and segments of the economy; they are also used to calculate the complex effects of price corrections or exchange rate changes.

Special surveys for the analysis of the structure of personal consumption and for the calculation of income elasticities are completed.

In addition to these main statistical sources, data on many other relevant features of industrial development are collected regularly and periodically and analyzed. Plans for individual enterprises and industrial sectors are based on detailed technical, economic and financial considerations which are specific for each case.

Joint indicators for enterprises, associations and communes contain data on fixed assets, total revenue, operating expenses, depreciation and income with distribution of income to personal incomes and enterprise funds. The communes have to consolidate these indicators for all economic organizations in their territory.

Additional indicators for enterprises and associations are: number of employees, volume of output, inputs of main intermediate goods, investments in fixed assets, investments in working capital, investments in social standard facilities and volume of exports.

For the plans of communes, there are additional indicators relating to demographic and labour force development, social product and its elements, public budgets, collective consumption, investments, personnel income, etc.

4. Planned growth of the industrial sector

(i) Planned growth of manufacturing sector

Industrial GDP is expected to grow at an average rate of 8 per cent per annum from \$3,499.8 million in 1970 to \$6,744.3 million in 1975.

Fast development is envisaged for selected industrial branches. For an 8 per cent rate of growth of industrial production, power generation will increase by about 9 per cent, extraction of basic metals by 11 per cent, manufacture of equipment and household durables by 8.5 per cent, non-metals and construction materials by 9 per cent, and the production of the chemical industry by 12 per cent. The rest of manufacturing industries are to register a growth of not more than 5.5 per cent. This scheme is expected to bring about some important changes in the structure of industrial production.

Structure of industrial production, 1970 and 1975

(Percentage)

	<u>1970</u>	<u>1975</u>
Power	13.2	13.7
Basic metals	7.5	8.6
Equipment and consumer durables	26.1	26.6
Non-metals and building materials	7.3	7.7
Chemical industry	8.8	10.5
Other manufactures	37.1	32.9
Total	<u>100.0</u>	<u>100.0</u>

The development of the manufacturing industry should be proportionate to the development of the economy as a whole, particularly to that of the country's own raw material base, the needs of the home market and the possibilities of export. Provision is made for a relative decrease in the importation of raw materials, while assembly parts will be increasingly produced at home; these products should also be made available on the basis of co-production between national and foreign producers.

Structural changes are to be accelerated by the development of basic extractive activities, particularly in ferrous and non-ferrous metals, non-metals, organic chemical products and building materials. Increased production is to be achieved through modernizing existing facilities, building new production facilities through joint investment by interested producers and users of raw materials and through using domestic and foreign credits for the development of national sources of raw materials.

Production of selected goods, 1970 and 1975

(Thousand tons)

	<u>1970</u>	<u>1975</u>
Steel	2,200	4,500 - 5,000
Steel products	2,200	3,400 - 3,700
Coke	1,300	2,500
Copper	89	115 - 135
Aluminium	48	150 - 200
Zinc	65	94 - 100
Lead	97	150 - 160
Plastics	97	380 - 400
Synthetic fibres	9	36
Synthetic rubber	-	50
Sulphuric acid	747	1,200 - 1,300
Chlorine	44	125
Cement	4.4	8 - 9

In the iron and steel industry, existing works are to be overhauled and enlarged and some new ones to be built, thus increasing supplies for the engineering industry. A more efficient utilization of raw materials is to be achieved, and supply of domestic coke is to be improved. Harmonious development of the iron and steel industry is to be promoted by speeding up the construction of primary facilities and by satisfying at least 70 per cent of domestic requirements with home-produced steel by the end of 1975.

A notable increase in the extraction of ores and processing of non-ferrous metals is envisaged, particularly of those which can be exported without prejudices to the domestic consumption. This applies particularly to aluminium, copper, lead and zinc, of which there are rich deposits and favourable conditions of exploitation. The rapid growth of production is not only based on the building of new facilities but also on the modernization and optimization of existing ones.

In the production of non-metals, diversification as well as an overall increase in production are planned. Domestic raw material resources are to be increased through the building of new facilities based on modern technology which will permit rapid development of production, especially of refractory materials, glass, ceramics, asbestos and its products, as well as of other non-metal products.

In the chemical industry, an accelerated growth of the organic chemical industry is planned, especially of the petrochemical industry. Plans exist for the construction of new facilities for the manufacture of basic raw materials and the corresponding capacity for final production. This increase in the basic chemical industry should promote further use in agriculture as well as changes in the pattern of consumption of some raw materials, ensuring

the substitution of deficitary natural raw materials by synthetic products, i.e. chemical fibres, synthetic rubber, plastics and other organic products.

As the inorganic chemical industry has nearly reached the level of developed countries, faster development is not planned, but rather its adjustment to the demand of the market, i.e. the manufacture of sulphuric acid on the basis of gases obtained from non-ferrous metals, the manufacture of soda for the requirements of the aluminium industry, etc.

The chemical processing industry should expand, since relatively favourable conditions are being created through the development of the basic chemical industry which will provide the basic raw materials for finished chemicals, such as the pharmaceutical industry.

With regard to building materials, an increase in the production of natural and manufactured building materials from national sources is planned.

The output of cement is planned to increase by about 3.5 to 4.0 million tons after the expansion of existing and the construction of some new plants, although even this will hardly meet the domestic requirements.

Planned production of selected machinery and equipment
at 1970 prices, 1970 and 1975

	Value (million dollars)		Average annual growth rate
	<u>1970</u>	<u>1975</u>	<u>(%)</u>
Machinery and equipment (non-electrical)	788.8	1,241.0	9.5
Rail vehicles	142.8	187.0	5.5
Lorries	291.5	527.0	12.6
Ships	500.6	799.0	9.8
Electrical machinery and equipment	367.2	612.0	10.8

The engineering industry will select a number of products and technologies in accordance with the market demand and raise labour productivity and competitiveness by promoting co-production, specialization, a more intensive utilization of scientific procedures and co-operation with foreign partners.

This development of the engineering industry arises from the need to meet domestic requirements of power supply, metallurgy and manufacturing industries.

The shipbuilding is expected to construct very large ships by increasing the production to 850,000 or one million gross register tons by the end of 1975.

An important increase is planned in the production of meat, tinned food, sugar, oil and other basic food, as well as of large food factories for home needs and for exports to Europe for which there are excellent conditions.

(ii) Planned growth of electricity

The five-year plan envisages to increase the electric power production from 26,000 million kWh in 1970 to approximately 45,000 million kWh at an average annual growth rate of 11 per cent. This increase is expected to result from a better exploitation of existing power plants and from the construction of new generating capacity by the end of 1975. In view of the fact that some big consumers of electric power are to start production after 1975 (considerable increase in manufacture of aluminium, ferro-alloys, steel, etc.), further generating units will have to be built during the period of the plan to ensure a continued growth of production after 1975.

Provision has also been made for the modernization and enlargement of the high tension transmission network (in 400, 220 and 110 kV), aiming at creating a single power system for the whole country and linking it with the power systems of the neighbouring countries. Nearly 3,000 km of the basic 400 kV transmission network are to be built during this period, as well as the corresponding lengths of the 220 kV and 110 kV grids.

(iii) Planned growth of mining

The five-year plan provides for the following increase in the basic sources of energy:

Increase in basic sources of energy, 1970 and 1975

	<u>Unit</u>	<u>1970</u>	<u>1975</u>
Electric power	Billion kWh	26.0	43.5 - 45.0
Coal	Million tons	28.5	38.0 - 40.0
Oil	Million tons	2.9	4.5
Oil derivatives	Million tons	7.0	12.0 - 13.0
Natural gas	Billions cubic metres	1.0	2.5 - 3.0

Consequently, provision is made for a relatively slower development of coal production at a rate of about 6 per cent and a relatively faster development of other forms of power, particularly of natural gas at a rate of 25 to 30 per cent, and oil derivatives between 12 and 13 per cent.

Planned coal production will be achieved through a more efficient exploitation of highly productive mines, mainly of lignite coal, where strip mining can be used efficiently owing to modern machinery and mining methods. Such mines are to be modernized in order to meet the needs of existing power plants and of new ones which are to be built before the end of 1975. Those mines of brown coal, which can produce economically better quality coal, are also to be modernized.

It is expected that current research work will result in an increased production of crude oil and particularly natural gas from national sources.

Despite all the efforts to find new oil wells and to use all the present ones more efficiently, the anticipated production of 4.5 million tons for 1975 is not likely to meet the needs of the refineries which have planned a production of oil derivatives of about 13 million tons.

The envisaged need for imported oil, twice the quantity produced domestically, calls for the modernization of transport facilities to the refineries. Consequently, an oil pipeline is to be built to meet not only the needs of this country, but also those of neighbouring countries. At the same time, provision is made for further expansion of new oil refineries in order to increase their production from the present 7 million tons to 13 million tons.

The high increase in the consumption of natural gas, which is to be 2.5 to 3 times higher than in 1970, should be met from domestic sources and partly from imports. At the same time, the necessary gas lines, reservoirs and distribution network will be built. Greater utilization of natural gas should facilitate faster development and more economic production in a number of activities.

(iv) Priority of sectors

(v) Infrastructure connected with industry

The entire transport system is obsolete with regard to both infrastructure and available facilities. Consequently, a higher degree of mechanization of the entire transport system is planned, thereby ensuring material conditions for higher speed, better quality and safety together with increased profitability of transport.

Railway transport will be reconstructed and modernized by building trunk lines. The share of electrified railway lines will be increased from 12 to about 24 per cent. Obsolete and worn-out rolling stock is also to be replaced during this period.

The basic road network will be improved by increasing the share of asphalted highways from 26 to about 40 per cent.

Provision has also been made to develop other types of transport, particularly the merchant navy to about 3 million gross register tons, which is twice as much as in 1970. The capacity of seaports is to be enlarged considerably. There will also be an increase in river transport.

Air transport is to double its capacity, and airport facilities are expected to expand accordingly.

(vi) Relationships with non-industry sectors of the economy

Although there is a tendency of diminishing the share of agriculture in economy, this sector will continue to represent an important source of supply for the country's increased needs, and even more for exports, which should also improve the balance of payments.

Agricultural production is expected to grow until 1975 at an average annual rate of about 3.5 per cent. Animal husbandry is expected to grow at an annual rate of 4.5 per cent and will satisfy the home requirements and leave some surplus for export.

Planned production, 1969/70 and 1975

	Unit	Average 1969/70	1975
Wheat and rye	Thousand tons	4,466	5,100
Maize	Thousand tons	7,377	8,800
Sugar-beet	Thousand tons	3,293	4,800
Sunflower	Thousand tons	327	500
Tobacco	Thousand tons	48	60
Meat	Thousand tons	827	1,000
Milk	Million litres	2,688	3,100
Eggs	Million	2,671	3,800

Within the total growth of agriculture, production on the socially-owned farms is expected to grow much faster, i.e. at a rate of 6 per cent, than production on individual farms which will average 3 per cent per annum. This output is expected to be achieved through more intensive production of high yield cereals, increasing the number of breeding cattle, equipping farms with modern machinery, increased utilization of plant protection chemicals and fertilizers, more rational utilization of animal feeds, and through land improvement schemes.

In view of the differing climatic and other natural conditions in the country, agricultural production is expected to vary according to areas. The main orientation of the low lying areas will continue to be the production of cereals, industrial crops, meat, milk and vegetables.

Mountainous regions will have to change their pattern of production in favour of those products for which such regions have a comparative advantage (cattle, sheep, fruit, potatoes, etc.). These areas are the largest, and many of them are undeveloped; faster development is expected to be achieved through a better division of labour and specialisation.

More fishing and the cultivation of good quality fruit, vegetables and tobacco required for processing at home and for exports may be expected in the Mediterranean area.

5. Planned industrial projects

6. Organizational and institutional changes required for industrial plan implementation

Evolution of the economic system

At present Yugoslavia may be characterized as a free economy directed by a system of planning that functions together with a developed market mechanism. Protagonists of direct economic decision-making are not deprived of their autonomy; they may make decisions on long-term development, investment, changes in product mix, production of new products, and they may also enter into business arrangements with partners within the country and abroad or engage in any other business activity of the enterprise.

The planning of industrial development in Yugoslavia has grown parallel with the evolution of the socio-political and economic system. The country has been moving progressively away from centralized economic planning and management towards a decentralized, market-oriented economy based on workers' self-management. In sum, planning has been transferred to various self-managing entities, with the Federal Government now performing the function of co-ordinator.

This evolution has taken place over three main periods: the first was from 1947 to 1952; the second was from 1953 to 1964, with the introduction of workers' self-management and the consequent reorganization and decentralization of the entire political and institutional system; and the third began with the economic reform in 1965.

A system of detailed directives in the first period was gradually replaced by macro-economic social plans at the federal, republic and local levels. Implementation of the social plans has been characterized increasingly by economic incentives and policy measures. Enterprises have become free to make their own plans which are approved by their workers' councils without any formal interference from outside.

At the same time, a radical transformation of the price structure has been undertaken with the aim of eliminating earlier internal price disparities. The establishment of the new price structure has been based on the principle that the domestic price system should be in line with prices in foreign markets so that foreign trade could be liberalized and the domestic economy could be exposed to the criteria for efficiency of developed economies.

When it is established, a socialist enterprise is granted fixed and working assets. In the course of its business activity, it may enlarge these resources through credits obtained from banks or by investing its own savings. The management of an enterprise may decide on the disposal of these resources - i.e. to buy, sell, exchange, enlarge or depreciate them - but it may not sell or spend such funds as personal income.

This is what is meant in Yugoslav social, legal and economic practice by the free disposal of socially owned production resources. In other words, the managing organs of enterprises are free to make all the decisions they consider to be of benefit for the business success of the enterprise. Economic interest and competition force them to constantly improve their technology and production.

In its daily business the enterprise is free to produce, to choose its suppliers of raw materials, and to decide to whom to sell its products and at what prices. Business activity is planned by the enterprise's specialized services on the basis of an independent study of market conditions and is approved by the corresponding organ of management, i.e. the workers' council. The director of the enterprise carries out decisions. Until 1965, there were certain restrictions on the placement of production and the purchase of raw materials and semi-finished products in foreign markets. Since the economic reform the rights and possibilities of an enterprise have been considerably extended, permitting it to engage independently in business activities in foreign countries, at first completely in exports and partly in imports.

In 1967, regulations were adopted whereby enterprises could also maintain closer relations with foreign partners with regard to joint investment, co-operation, division of work etc.

Administrative measures of management and planning were abandoned gradually in the period after 1951. Market considerations gained in importance to the point where the market is now the basis of economic policy and activity. However, the market in Yugoslavia is also planned; that is, the system of planning has been changed to include a better and more comprehensive exploration of market phenomena.

The country has a market economy that permits enterprises to decide autonomously on the volume and product mix in accordance with demand and to fix the prices of products within certain limits of price control established by the economic reform. The enterprise comes into conflict with price control only if it disturbs the level that existed earlier. If it wants to raise prices, it must ask for permission. The corresponding institution of planning does not determine the price level but may only give or withhold consent. Thus, for over 40 per cent of all products prices are determined freely on the market, depending on production costs, supply and demand.

A new system of planning, so-called social planning, has been created in the process of decentralising the management of the country's economy. The basic purpose of this system is to find the best instrument for planned management of the economy that would be in accord with maintaining the autonomy of enterprises in decision-making. Social planning in Yugoslavia must take into account market conditions that have gained in economic significance.

Each institutional entity formulates independently its development plan and, at the same time, participates in and exerts a decisive influence on the elaboration of broader social plans. Planning is conceived as an integral social function so that socio-economic development plans result from the joint and concerted efforts of all economic agents.

The social plan of the country is thus a contract among organizations of associated labour (enterprises and their freely formed organizations), communes and other self-managing institutions, and is agreed to by the republics and autonomous provinces. The Federation is responsible for the general co-ordination of development planning and for the formulation and implementation of development policy, for supporting the accelerated development of less developed republics and regions, and for ensuring the proper functioning of the market and of the economic system as a whole. For all these activities, it has to seek the agreement of the republics and autonomous provinces. In preparing the development plans of the entire country, the federal agencies cooperate closely with the republics and their planning agencies. Each republic establishes the more detailed targets of its own social plan within the framework of the federal economic policy.

Enterprises and their associations draw up development programmes independently according to their specific market situation, development prospects, agreements of co-operation and integration with other enterprises, without any formal obligation as to the content of the programme or the period it covers.

The principal aim of this co-operation, exchange of information, adjustment and co-ordination in the elaboration of the plan, in which professional associations and economic chambers take important part, is to ensure that social development plans at all levels shall represent a realistic and consistent synthesis of development programmes and of the basic decision-making units. The communes draw up their development plans on the basis of the plans of enterprises, after ascertaining that the necessary conditions exist for the realization of this development. Special emphasis is given to education, public health, social welfare, housing, recreation, adequate transport facilities, water and power supply and to encouraging the tertiary sector.

The self-management system of the producers also applies for the management of the economy. An enterprise is managed by the workers' council; the managing board and the director are elected by the workers' council. This system, which was inaugurated at the beginning of 1950, is showing obvious results. The rights of the workers' councils are extensive. In practice they are authorized to establish the business policy of the enterprise within the framework of the juridical system and of the economic policy expressed in the plans of socio-political communities, and in accordance with market conditions affecting daily business activity.

The workers' council, while it is free to make decisions and to guide the economic policy of its enterprise, is of course free only so far as the objective circumstances of the market and available resources permit. The main factor is that no one outside the enterprise may disapprove its decisions, provided that the council follows the broad economic policy guidelines in force. The enterprise is able to deviate from the plan and at its own risk only if harm results because its activity is not in line with the

plans of the socio-political community. However, if such a deviation does not go against the laws in effect, the enterprise is not legally accountable.

The autonomy of the organs of management in enterprises to make decisions encompasses:

(a) Production, i.e., its volume, structure, product mix, costs and terms of sale; and the form and volume of services, retail network and transport;

(b) Retained earnings, i.e. whether to distribute them freely as workers' personal income or savings or to invest them according to their own criteria and decisions;

(c) Credit arrangements with foreign partners, i.e., to grant credits for the export of equipment, services and investment projects and to decide on the terms of credit; to approve commodity and investment credits, joint capital investment and business and technical co-operation in various forms;

(d) Disposal of fixed assets and working capital, i.e., to change them or buy new ones, or to arrange loans for the expansion of production;

(e) Regulations governing the enterprise's activity, such as statutes, internal rules for business activity, working relations, income distribution, improvement of production, effectiveness of work, and inter-personal relations.

In other words, the existence and work of an enterprise develop according to decisions of the workers' council. These decisions are executed by the managing board and the director.

Within individual economic groups, voluntary work associations and economic chambers exist that are engaged in improving production. These associations may not make decisions on the enterprises' business activities. They are unions that are formed to assist enterprises in improving efficiency or to consult on particular questions to be submitted to the Government for joint resolutions or legislation. Producers have associations for initiating joint action in order to change a regulation. Through such associations they combine their resources, increase the division of labour, and co-operate in carrying out work of mutual interest such as research, commercial activity, legal advice and sales by agents.

There are several forms of business associations. They may relate to technical co-operation or to increased specialization in production, marketing development, investment in joint projects and scientific research. The most comprehensive form of association is the merging of enterprises in order to increase production and the productivity of labour.

The managements of enterprises decide independently to establish business associations.

Five-year plan

There are two types of plans: a social plan, which is formulated and enacted by socio-political communities, and an economic plan, which is formulated and enacted by work organizations.

A central role is assigned to medium-term plans which cover as a rule a period of five years. These are based on detailed investigations and analyses to determine the main objectives and measures of the development policy, and they encompass all aspects of economic and social development.

Instead of annual plans, at the end of each year an analysis is made of the current economic situation and of how far the targets of the five-year plan have been fulfilled. A resolution on the economic policy for the next year is prepared for discussion and approval by the legislative assemblies of the republics and the Federation.

Recently, long-term development programmes and projects have been elaborated for the whole economy and for various republics. They have been considered as research studies only and have not been formally adopted. Measures for improving economic activity have also been proposed. Enterprises make plans for shorter periods - one year as a rule - but some enterprises have also made quarterly plans.

The new five-year plan, according to the new constitutional reform, represents an agreement among the republics and autonomous provinces on common economic policy. It is based on the development programmes of the labour associations and of the socio-political communities, prepared in co-operation with economic associations and other social and political institutions in the country.

The plan outlines the main objectives and measures of development policy and defines the corresponding tasks of all agents responsible for the attainment of targets.

Provisions of the plan encompass:

(a) Rates of growth of social product, employment, labour productivity, investment, living standards, collective consumption, exports, imports and prices;

(b) Development policy relating to structure of production and of investment by sector and sources of finance; science and research; education and training; culture and health; economic infrastructure with fixed targets for expansion of power production and supply; production targets for the most important raw materials such as iron and steel, non-ferrous metals, basic chemicals, cement and lumber; development of capital goods production, of construction and of other manufacturing industries with the main organizational measures that should be undertaken; agriculture and food-processing industry; and the tertiary sector;

(c) Foreign trade, credit and economic relations with the outside world;

(d) Regional development and a policy of accelerated development of less developed republics and the autonomous province of Kosovo;

(e) Employment and professional cadres;

(f) Standard of living;

(g) Guidelines for economic policy measures: this section gives the main lines of economic policy to be pursued in various fields at all institutional levels. These guidelines refer to the stabilization of economic flows, market and prices; economic relations with foreign countries; monetary and credit policy; fiscal policy, i.e. taxes, contributions, financing of the federation; policy measures relating to expanded production and the encouragement of accelerated development of less developed countries.

Five-year plans are broadly conceived and based on prior scientific research and on consultations with research institutions, economic organizations and their associations, and with socio-political organizations of a lower level. Thus, the economic policy contained in the social plans of socio-political communities represents a consensus on the largest number of questions of development policy and economic activity. Almost any economic agent and socio-political community may influence the creation of economic policy for the entire community in the next period. It is impossible to see to everyone's interest, naturally, but broad consultations ensure the maximum possibility for hearing all opinions and for selecting the best solutions for future development, bearing in mind concrete economic conditions in both domestic and foreign markets.

Various policy measures and incentives for fulfilling targets are usually drawn up as general guidelines to be followed by institutional bodies in implementing the plan. Besides traditional economic policy measures, special emphasis is placed on obtaining agreement on how to achieve the targets of the plan. The regulations governing income distribution in enterprises are important; these are coupled with the fiscal system prescribing how enterprise funds may be used. The rules are designed to ensure the planned proportion in the division of national income between consumption and accumulation, thus stimulating producers to maximize total income by increasing their efficiency and by satisfying both the qualitative and quantitative requirements of the market.

The regulation of the distribution of enterprise income has recently been developed further through the introduction of income policy agreements among the Government, the economic chambers and the trade unions, establishing guidelines for payments of personal income in enterprises; the aim is to bring personal income more in line with the increase in productivity and efficiency, to reduce unjustified disparities in personal income between branches and firms, and to ensure socially desirable rates of accumulation. These new measures are designed to serve as a tool for influencing the development of personal income, aggregate demand, resource mobilization and allocation.

Resource allocation in accordance with development targets is influenced through various economic and institutional measures and policy instruments. To ensure the planned expansion of power production (electricity, coal, oil), the republics, individually or on the basis of agreement, take appropriate measures to mobilize the necessary investment resources. Expansion of various sectors is stimulated through priorities in allocating credits to sectors, reduced interest rates and other preferential conditions. Fiscal charges may also be conceived in such a manner as to foster the development of the sectors having priority in the plan.

Export promotion of capital goods industry is made through the Export Credit and Insurance Fund. Export incentives include tax rebates, special rediscount facilities at subsidized interest for export credits, and so-called retention quotas.

An important aspect of development policy in the post-war period has been the promotion of the faster growth of less developed areas of the country. With the discontinuance of direct investment financing on the part of the federal Government, a special fund for the accelerated development of developing regions has been set up.

Within the framework of the social development plan, the market mechanism also makes for the optimal allocation of resources.

Price policy is of great importance, not only for the realization of a given development policy, but also for the functioning of the entire economic system. In principle, price determination had been left to the market mechanism, subject to the general regulation of economic policy measures, and direct price control was resorted to only in cases where price relations and stability could not be ensured by economic means. The basic principle of free price determination according to market conditions will henceforth be subject to systematic but flexible social price control, effected primarily through various forms of agreements among those concerned, and also through direct control, if needed, to secure conditions for the realization of development policy and to preclude a monopolistic position in the market.

Roles of economic and socio-political institutions
in economic planning

The Federation naturally undertakes measures within its competence to ensure the successful realization of the five-year plan. Such measures are regulative and guide the economy in the period of the plan. The Federation establishes the conditions for economic activity which apply to all work organizations. According to principles of the country's legislation and system of social planning, the Federation may not establish special conditions relating only to one work organization; it may only formulate measures of a general character that apply to all work organizations in a given branch or sector. Such measures concern taxes, customs tariffs, foreign trade and exchange, rates of interest, distribution of income, amortization etc. On the basis of these regulations, work organizations decide on their economic activity.

Republics elaborate their plans autonomously within the framework of related policy contained in the federal social plan. They may work out plans in detail to conform with their specific conditions, consulting with economic chambers and enterprises. After enacting their plans, the republics pass measures within their competence to implement the five-year plan. These are basic administrative acts that apply to a large number of organizations.

Communal assemblies are primarily under obligation to make decisions for improving the conditions of activity of the economic organizations and for bettering the living conditions of the population. The plans of the community are more directly linked with the development and activity of work organizations and have the purpose of creating better conditions for their development. Community plans must be devised specifically to assist in the development of local transport, education, culture, health services etc.

Economic organizations make plans for current and future production. Their plans are determined by general market conditions and on the basic guidelines for economic policy expressed in social plans. It may happen that a larger number of work organizations within a business association or several communes co-ordinate their actions, thus making it possible for socio-political communities to co-ordinate and organize joint action. Socio-political communities may not even then, however, give compulsory orders, but may only serve in an advisory capacity.

Socio-political communities may participate in taking certain investment initiatives relating to some productive and investment activities. This happens rarely and applies only to some key sectors of the economy, such as transport, roads, railways, iron and steel metallurgy, ferrous metals and the chemical industry. However, here again the Federation is a participant and not a decision-maker. It takes part in financing decisions only when a work organization decides to invest its resources in a branch that is of interest to the entire society or when the Federation itself is interested in financing part of the costs of the project.

State organs may use their regulative and guiding powers in several other ways, but not in decisions governing economic activity. They may intervene in the market by passing anti-inflationary measures, by importing to prevent the rise of prices, by maintaining the balance of payments, by income policy etc.

The state organs may influence enterprise decisions if such decisions are contrary to the social plan or to the general interests of the society, producers and consumers. Through customs, taxation and income policy the authorities may influence producers not to behave in a manner detrimental to the society and to sound economic activity. Through import policy they may influence the behaviour of producers with regard to prices and product mix, and through monetary policy they may affect the balance of supply and demand, thus preventing inflationary trends. Finally, the authorities may intervene in establishing prices if undesirable trends appear that could endanger the living standard of the population.

Some state organs may influence the investment policy of enterprises in an indirect way. If they find that some branches of activity are within the interests of the national economy, they may assign them to some investment project or other special undertaking, paying part of the costs from their budget. Specific examples of this are the development of tourism, agriculture and other sectors. Influence may be exerted particularly in the domain of foreign trade, which is always of particular interest to the community.

All these measures are indirect and do not interfere with the decision-making of the work organizations, which are the backbone of the country's economic system. Such measures are more stimulative than regulatory.

In their own development planning enterprises must take into account the expected macro-economic environment (over-all growth, structural changes, economic policy parameters etc.) that will be relevant to the possible expansion of the sector. This information is furnished by the social development plans. The main development programmes within each sector are co-ordinated in the course of preparing social plans.

The development possibilities of each individual enterprise or of a given integrated industrial complex are determined by its specific market prospects, its position asserted through past performance, and its ability to absorb innovation and contribute to technical progress through its financial potential and capacity to mobilize additional investment resources. Enterprises must try to keep pace with the dynamics of economic development, with technical and technological innovations, and should build these into their own plans and programmes.

Development programmes in enterprises are based on:

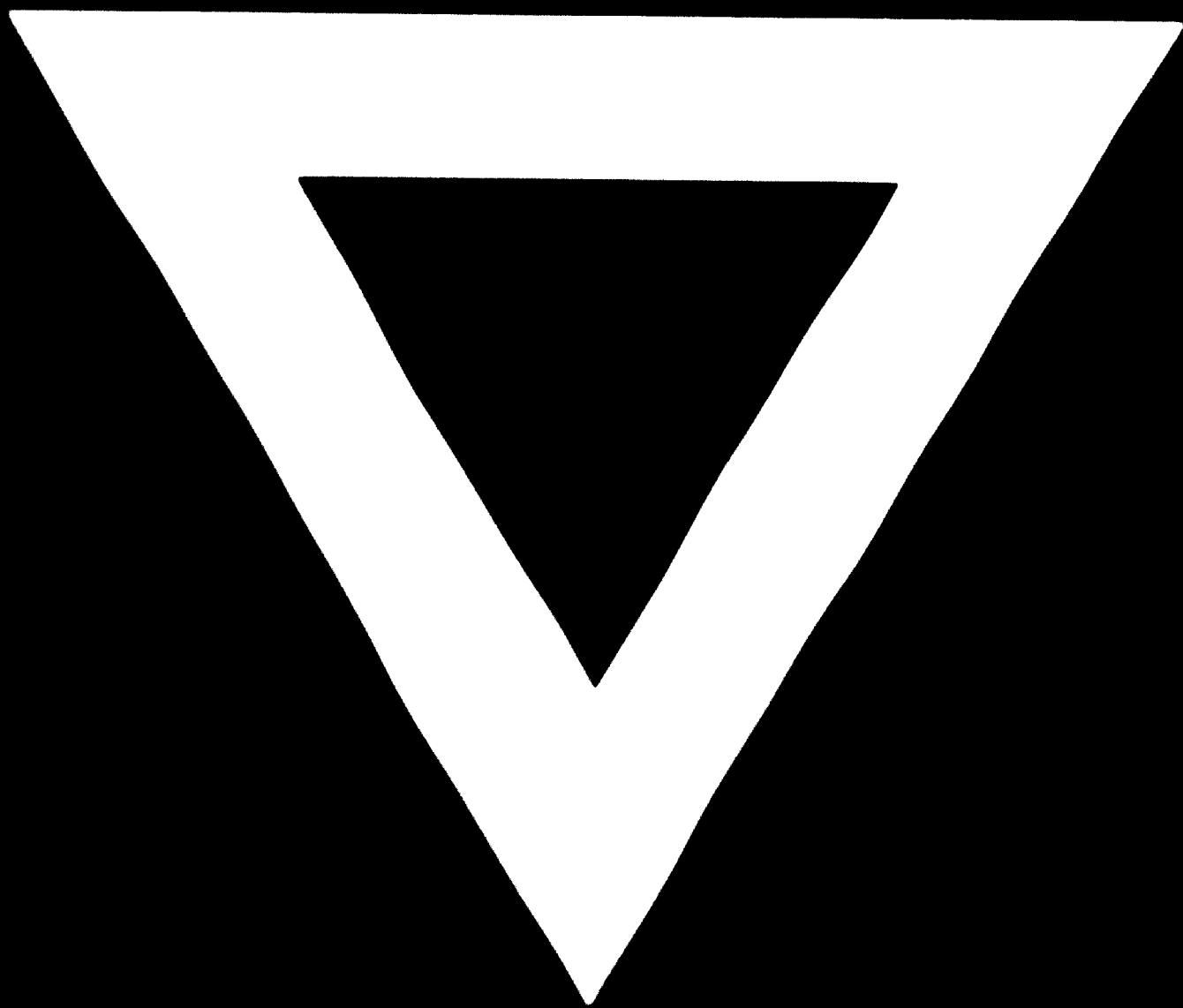
- (a) Increase in domestic demand, export possibilities, and the competitive position in the domestic and foreign market;
- (b) Technological improvement through own research and development, licensing contracts, joint production, and technical assistance arrangements with foreign manufacturing firms;
- (c) Co-operation or closer integration with other industrial organizations, and specialisation;
- (d) Own or borrowed financial resources for the realization of the development programme and joint resources with other partners.

Plans with different time limits are made in enterprises, depending on the specific technico-economic characteristics of the various industrial branches and complexes.

7. Problem areas particular to the industrial sector

The original plan does not indicate any problem areas.

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