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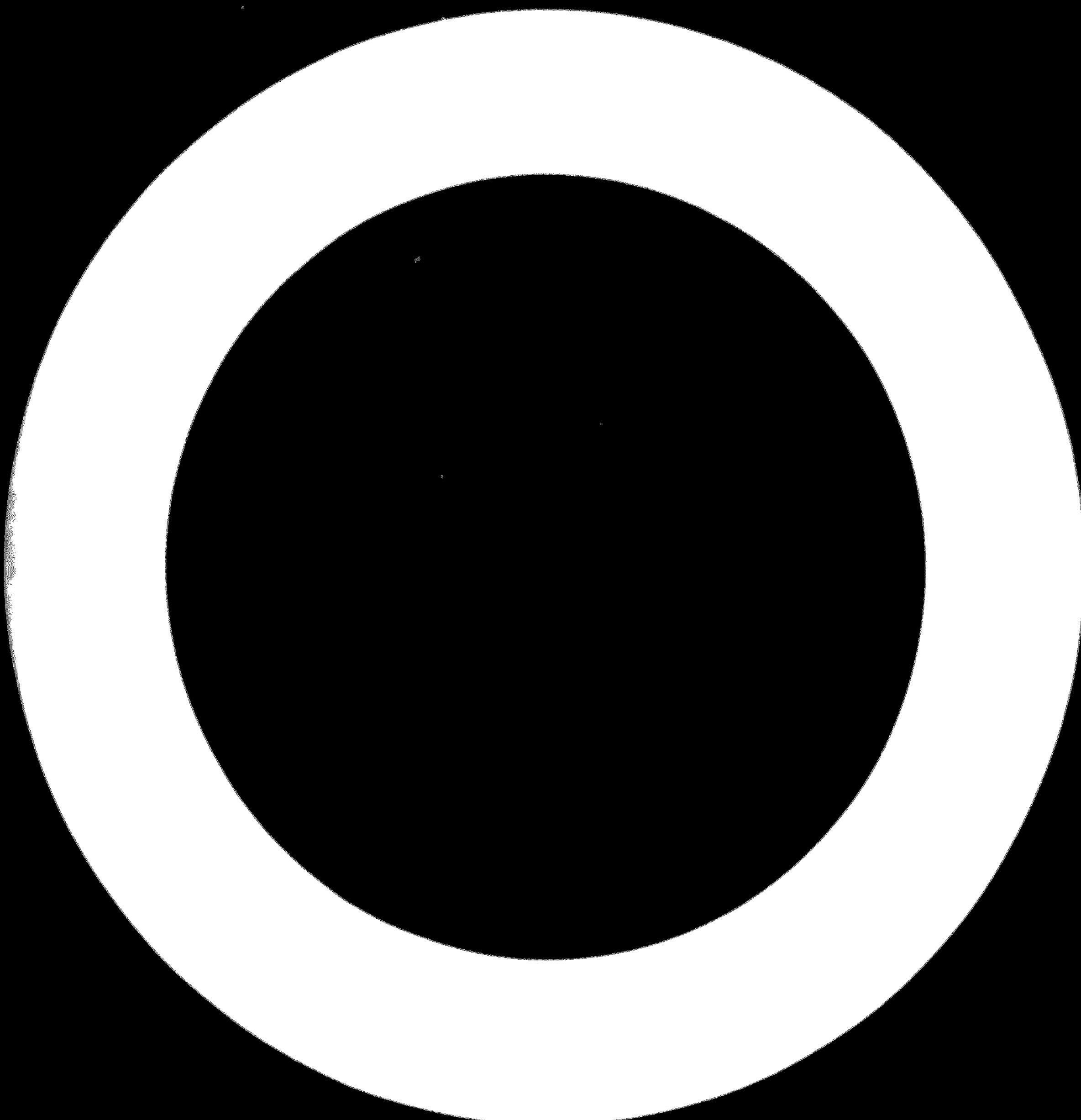
SUMMARIES OF THE INDUSTRIAL DEVELOPMENT PLANS OF THIRTY COUNTRIES

UNITED NATIONS



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
VIENNA

SUMMARIES OF THE INDUSTRIAL DEVELOPMENT PLANS OF THIRTY COUNTRIES

UNITED NATIONS
New York, 1970

UNIDO/IPPD/11

Foreword

The purpose of the summaries contained in this publication is to provide readily usable information on the industrial development features of the development plans of a number of countries to national planners, and to international technical assistance experts. Such information, although obviously useful, is not usually available to a planner. Even when the plans of other countries can be obtained, considerable work has to be done to put the information they contain into a readily usable, and relatively comparable form.

Among the obstacles to the immediate use of the development plans of other countries is the fact that, in many cases, the industrial part of a country's plan is dispersed throughout several different parts of the over-all development plan. Furthermore, the value data shown in most plans are in terms of a different currency for almost every country. And, most plans are published in only French, Spanish or English; they are not usually available in a single common language.

To meet the needs of the industrial development planner for readily available, more easily assimilated, and more readily comparable information on the industrial development plans of other countries, UNIDO has undertaken to provide interested planners with Summaries of the industrial development plans of selected countries. As a first step, Summaries of the plans for the 1960s of thirty countries are being published in this volume.

These countries and their approximate manufacturing output *per capita* are as follows:

Selected Countries and their 1965 Manufacturing GDP Per Capita

$4 to $20		$25 to $50		$60 to $280	
Tanzania (Un.Rep.	4	Libya	27	Peru	64
Ethiopia	4	Iraq	27	Panama	84
Uganda	4	Tunisia	33	Trinidad-Tobago	98
Togo	6	Philippines	33	Malta	99
India	9	Honduras	36	Greece	109
Ceylon	10	Ecuador	38	Venezuela	115
Pakistan	11	Malaysia	41	Chile	133
Kenya	12	China (Taiwan)	43	Spain	177
Korea (Rep.)	18	El Salvador	46	Argentina	250
Bolivia	20			Puerto Rico	280
Jordan	20				

Source: See table 3, following the introduction.

Over the next several years, additional plan summaries will be prepared, covering the industrial development plans of a number of countries for the 1970s. In addition, those summaries which have already been published will be up-dated, as information becomes available on changes in the original plans.

Contents

INTRODUCTION

The thirty plan summaries outlined in this volume have been prepared using a standard outline to make them easier to compare and to facilitate the [illegible] analysis by the reader. The outline followed in each summary is as follows:

I. Goals and objectives

   A. Planned growth
   B. Other objectives

II. Investment, strategy, policy and institutions

   A. Investment
   B. Strategy and policy
   C. Institutions

III. Demand projections and data bases

IV. Planned development of manufacturing sectors

   A. Planned growth of manufacturing sectors
   B. Priority of sectors
   C. Other sectoral plans

V. Planned manufacturing projects

VI. Productivity and capacity utilization

VII. Organizations and systems for planning and implementation

VIII. Problem areas

IX. Previous industrial growth

In order to indicate the extent of coverage of the respective plans, each heading of the outline is shown in every country summary, even though in some cases nothing was found in the plan concerning a particular heading.

To further assist the planner in assimilating, comparing and using information and data from the summaries, they are presented in a single language, English, and all value figures have been converted to US dollars. In addition, only those items which are believed to be fairly directly related to industrial development have been included. As a result, the number of pages has been reduced from an average of 350 pages in the original plans to fifteen in the average summary.

Using the summaries

Some of the ways in which an industrial planner may use the plan summaries are, *inter alia*:

a) As a reminder of the different planning areas which may be covered in a country's industrial plan and as an illustration of the detail which may be contained in each planning area;

b) As a source of strategic approaches to industrial development;

c) As a source of industrial sector and industrial project ideas;

d) As a source of ideas for planning and implementation systems and organizational arrangements;

e) As a source of general information on the amount and type of support which countries plan to give to industrial development, compared to the development of other sectors of their economies;

f) As a source of general information on the capital investment per annual unit of output envisioned by other countries, for new industrial plants of various types and sizes;

g) As a reminder of possible problem areas in planning and plan implementation.

To facilitate quick reference to selected planning information and data in plan summaries, the reader should make use of Tables 1 and 2, on the following pages.

Table 1 shows the reader, at a glance, those plan summaries which contain the most detailed information and data in each of nine major planning areas. For example, the table indicates that the Pakistan plan summary strongly emphasizes area I, goals and objectives, while the summaries for Ecuador, El Salvador, Pakistan and Spain strongly emphasize area II, productivity and capacity utilization.

Table 2 provides the reader with a ready reference to some fifteen additional planning items, selected for their apparent importance in many of the plans. For example, table 2 shows that item 9, the development of large-scale heavy industries, appears in the plans of ten countries, and that item 6, improved regional co-operation with neighboring countries, appears in the plans of twelve countries.

INDEX TO AREAS COVERED IN THE PLAN SUMMARIES OF THIRTY COUNTRIES

PLANNING AREAS

I. GOALS AND OBJECTIVES
- A. Planned Growth
- B. Other Objectives

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS
- A. Investment
- B. Strategy and Policy
- C. Institutions

III. DEMAND PROJECTIONS AND DATA BASE

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS
- A. Planned Growth of Manufacturing Sectors
- B. Priority of Sectors
- C. Other Sectoral Plans

V. PLANNED MANUFACTURING PROJECTS

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

VIII. PROBLEM AREAS

IX. PREVIOUS INDUSTRIAL GROWTH

The purpose of this chart is to guide the Planner to those Plan Summaries which contain information on a particular area of planning. The key symbols (•+○) are meant for use only as a guide to [illegible] the other [illegible] Summaries. In this connexion, it should be noted that a country with [illegible] heading or sub-heading may actually have very good planning in that area, the [illegible] found in the published version of the country's Plan, or that it was [illegible] or sub-heading in the Summary.

SELE[illegible]

The [illegible]	
1. [illegible]	[illegible]
2. [illegible]	[illegible]
3. [illegible]	[illegible]
4. [illegible]	[illegible]
5. [illegible]	[illegible]
6. [illegible]	[illegible]
7. [illegible]	[illegible]
8. [illegible]	[illegible]
9. [illegible]	[illegible]
10. [illegible]	[illegible]
11. Improvement of the rate [illegible] manufacturing growth	[illegible]
12. Increasing the [illegible] capacity	[illegible]
13. [illegible]	[illegible]
14. [illegible]	[illegible]
15. Increasing the manufacturing [illegible]	[illegible]

Features of the summaries

Each plan summary is self-contained, and the exchange rate used for conversion, the source of the original plan, and similar footnotes appear directly in the summary itself.

The coverage and completeness of the summaries vary widely, due to a similar variation in the original plans from which they were prepared. While the average summary is about 15 pages long, individual summaries range from 4 pages to 46 pages.

It should be noted that in some of the summaries the 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 exchange rates used to convert the local currencies used in the source plans to US dollars in the summaries are indicated in section I-A of each summary.

The data for both the starting year and the ending year of most of the plans are, of course, estimates. This explains the sometimes considerable difference in a country's actual reported GDP and the GDP which it used in its plan.

The names of countries and titles used in the plan summaries are taken from the original source plans. Some of them may have changed by now. Also, some of the original plans may no longer be valid, or there may have been substantial changes in them. For this reason, the plan summaries will be up-dated from time to time, as sufficient information on changes becomes available.

Table 1, following this introduction, shows the derivation from United Nations data sources of the *per capita* manufacturing GDPs which appear in the foreword.

Future work

Over the next several years, UNIDO will summarise a number of industrial development plans for the 1970s. As far as possible, priority will be given to the plans of those countries which are, or expect to be, co-operating on a regional basis with other countries.

APPROXIMATE MANUFACTURING GDP PER CAPITA - 1967

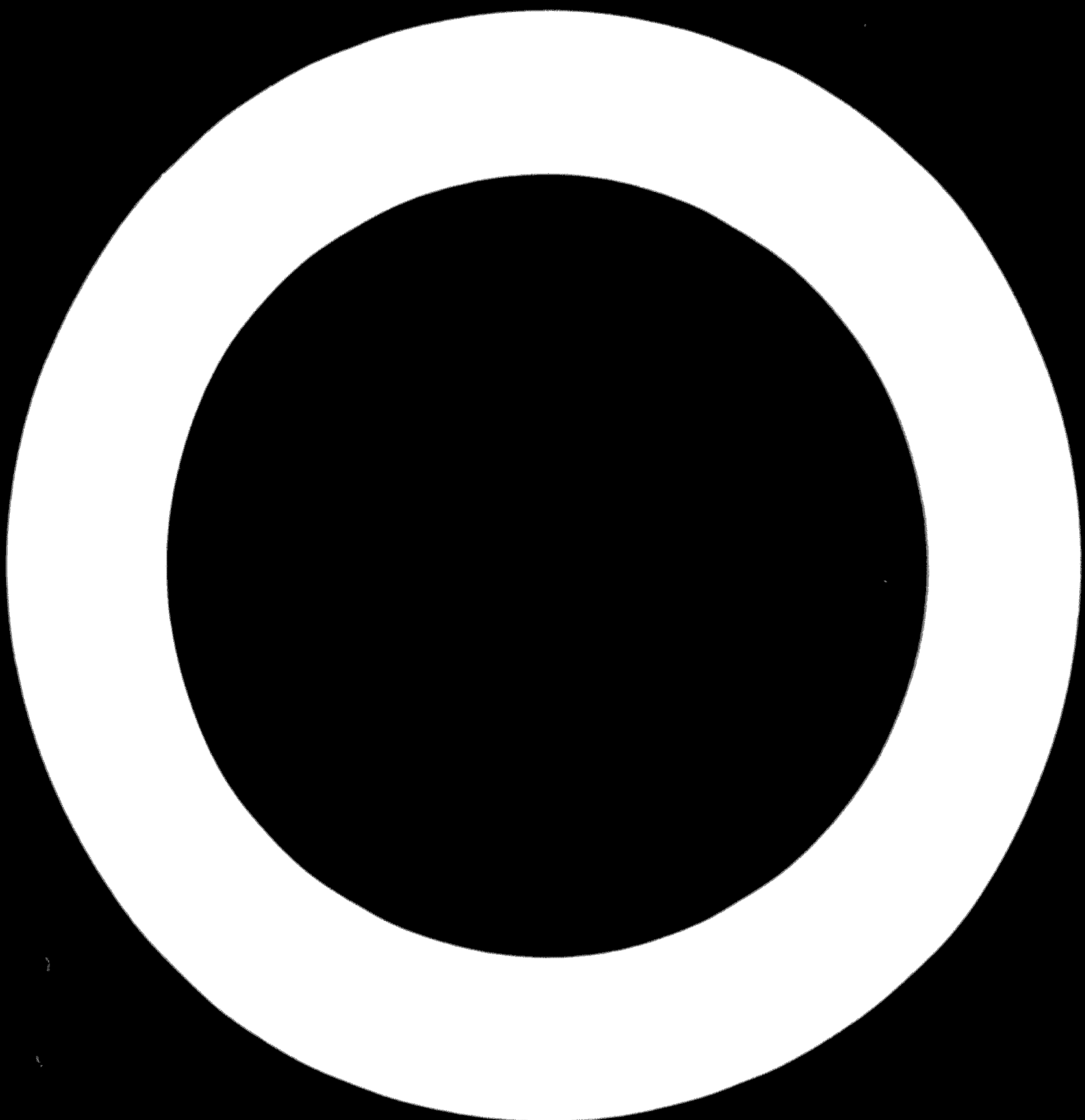
(At Market Prices)

Country	GDP at Market Prices (Millions or Billions of National Currency)	Exchange Rate National Currency Per U.S. Dollar	GDP at Market Prices (Millions of U.S. Dollars)	Population (Thousands)	Per Capita (Dollars)	Manufacturing % of GDP	Manufacturing GDP per Capita (Dollars)
Tanzania	[illegible] million	7.14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ethiopia	[illegible] million	2.5	[illegible]	23,[illegible]	[illegible]	[illegible]	[illegible]
Uganda (Factor cost)	[illegible] million	7.14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Togo	[illegible] billion	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
India (Factor cost)	280 billion	7.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nigeria	[illegible] million	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pakistan	[illegible] billion	4.76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] million	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kenya	[illegible] million	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Thailand	81.[illegible] billion	20.8	3,91[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rep. of Korea	[illegible] billion	271	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bolivia	[illegible] million	11.88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jordan	[illegible] million	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Egypt (Factor cost)	[illegible] million	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Iran	[illegible] billion	75.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tunisia	[illegible] million	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Philippines	21 billion	3.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Honduras	1,[illegible] million	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ecuador	20.[illegible] billion	18.[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Malaysia	[illegible] million	3.06	[illegible]	8,[illegible]	[illegible]	[illegible]	[illegible]
China (Taiwan)	115.4 billion	40	2,8[illegible]	13,44[illegible]	[illegible]	[illegible]	[illegible]
Turkey	79.8 billion	9.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
El Salvador	1,[illegible] million	2.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Peru	114.9 billion	38.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jamaica	[illegible] million	.357	[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]
Panama	648 million	1	[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]
Trinidad-Tobago	1,303 million	1.714	7[illegible]	974	[illegible]	[illegible]	[illegible]
Yugoslavia (Material Product)	79.3 billion	12.5	[illegible]	19,[illegible]	[illegible]	[illegible]	[illegible]
Malta	52.7 million	.357	150	319	470	21	99
Greece	173.5 billion	30	[illegible]	8,551	680	14	130
Venezuela	37.6 billion	4.5	8,35[illegible]	9,7[illegible]	960	12	115
Chile	17,9[illegible] million	4.22	4,855	8,[illegible]	490	27	133
South Africa	8,077 million	.714	11,300	17,867	630	22	139
Spain	1,2[illegible] billion	60	21,4[illegible]	32,4[illegible]	660	26	17[illegible]
Japan	38,6[illegible] billion	361	84,[illegible]	97,9[illegible]	865	28	240
Argentina	3,243 billion	180	17,850	22,543	765	33	250
Puerto Rico	3,182 million	1	3,180	2,6[illegible]	1,210	23	280
Italy	35,440 billion	625	56,700	51,576	1,100	29	320
United Kingdom	35.3 billion	.357	98,870	54,436	1,815	34	615
Canada	53.1 billion	1.08	49,165	19,604	2,510	25	625
France	429 billion	4.95	98,780	48,719	2,020	35	705
Germany (Fed. Rep. of)	454 billion	4	113,500	56,839	1,995	39	780
U.S.A.	692 billion	1	692,000	194,592	3,555	28	995

A. Data Sources: GDP at market prices, exchange rates, and population data taken from U.N. Monthly Bulletin of Statistics, July 1969. Manufacturing % of total GDP taken from "Industrial Origin of Gross Domestic Product at Factor Cost", U.N. Statistical Yearbook-1968.

B. Country Distribution:

Manufacturing GDP per capita	Number of countries shown
$ 1 to $ 20	Thirteen
$ 20 to $ 100	Sixteen
$ 100 to $ 300	Nine
$ 600 to $ 1000	Five (for comparison purposes only - Plans will not be summarized for these countries).



[illegible]

[illegible]

[illegible]

A. [illegible]

	[illegible]	[illegible]	Average Annual Increase
[illegible]	$ [illegible]	$ [illegible]	[illegible]
[illegible]	$ [illegible]	$ [illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
Industrial [illegible] $ millions	[illegible]	[illegible]	[illegible]
Total [illegible] $ millions	[illegible]	[illegible]	[illegible]
Industrial % of Total [illegible]	[illegible]	[illegible]	[illegible]

Exchange rate: [illegible] pesos [illegible] $ [illegible]

[illegible] Other Objectives

To increase per capita GNP.

To maintain full-employment, and achieve a more equitable income distribution.

To increase consumption in accordance with the increase in supply.

To improve education, public health, and housing standards.

To invest sufficient [illegible] in the country's infrastructure to overcome the deficiencies.

To control inflation. Monetary and fiscal policies must be co-ordinated.

To promote import-substitution.

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*CONSEJO NACIONAL DE DESAROLLO: "Plan Nacional de Desarollo, 1965 - 1969", Buenos Aires, 1965. 459 pp.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment: Planned Total Investment

	1965-1969 ($ millions)	% of Total
Total Investment	1,270	100
Investment in Industry	240	19
Domestic	187	
Foreign	53	

(approximately 75% of government investment will be in the transport and energy sectors, 5% in health and education, and less than 1% in industry.)

B. Strategy and Policy

The efficiency of resource allocation in the industrial sector will be maximized.

Integration in industry will be encouraged to:

- eliminate disparities between the production of final and intermediate goods.
- accelerate import-substitution of intermediate and producer goods.
- utilize all available resources.

Costs will be reduced and competitiveness increased by introducing greater economies of scale and generating externalities.

Labor legislation must be improved to facilitate labor mobility and adaptation to technological changes.

Real wages must increase after the decline of 1962-1963. A mobile minimum wage rate was established in 1964.

A trade surplus will be created to help pay the foreign debt, and to allow for an increase in imports.

Export production will be diversified to smooth out the effects of fluctuations in world prices, particularly in textiles and petro-chemicals.

Exports will be promoted through export subsidies, sales tax exemptions, and re-imbursement of taxes on new export industries. In addition, no tariffs will be placed on raw materials for which there is no domestic substitute, and which are used for export production.

The emphasis in tariffs will be shifted to the rational protection of domestic goods, rather than the raising of government revenue and the maintenance of external balance.

Fiscal policy will becc e more selective, in order to encourage needed investment and reduce expenditure on non-essentials.

Banks should make medium-term and long-term credit available, particularly for cases of export production.

Legislation should be encouraged to further the substitution of foreign for domestic credit, in both the private and public sectors.

Higher lines of credit will be granted to domestic firms in order to place them on the same level as foreign ones, as regards the availability of credit.

C. <u>Institutions</u>

Investment, for 1965 - 1969, depends more than before on domestic saving.

It is essential that the domestic capital market be improved.

III. DEMAND PROJECTIONS AND DATA BASES

Projections were made for the following sectors of the economy:

- manufacturing
- transportation
- energy
- housing construction
- cattle and agriculture

Employment was also projected.

Exports were projected.

A surplus of only $96 million was projected for the 1969 balance of payments, due to a capital account deficit and anticipated repayment of foreign debt. The projection indicates a long-term inflow into the economy of $1,738 million during the 1965-1969 period, 60% of this into the private sector, and 40% into the public sector. Of this, the inflow into the private sector will be mostly to chemicals, paper, cellulose, and steel, and that into the public sector will be mostly into hydro-electric facilities.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors: Growth of Output

Developing Industries:	(GDP in $ 000) 1964	1969	Average Annual Increase
Paper and cellulose	7,000	13,050	12.6%
Metallurgy (incl. steel)	51,000	75,000	8 %
Vehicles and machinery	52,000	81,000	9.3%
Machinery and electrical equipment	13,700	30,000	17 %
Stone, glass, ceramics	11,300	17,200	8.8%
Petroleum derivatives	32,500	47,000	7.7%
Chemicals	22,000	44,000	15 %
Rubber	6,950	9,450	6.3%
All Developing Industries	196,650	316,700	10 %
Developed Industries:			
Food and milk	71,000	89,000	4.5%
Textiles	31,000	42,000	6.2%
Others	71,000	93,000	5.5%
All Developed Industries	173,000	224,000	5.3%
ALL INDUSTRIES	369,650	540,700	7.9%

(This planned growth reflects the pursuance of an import-substitution policy for semi-finished and capital goods. $361 million worth of imports will have been substituted by domestic production in 1969.)

Source of Planned Investment 1965 - 1969:

Industry	Domestic	Foreign	Total
Steel	18%	82%	100%
Paper, cellulose	55%	45%	100%
Chemicals	28%	72%	100%
Mining	50%	50%	100%

Capital goods as a % of total manufacturing production: 1964 - 18%, 1969 - 21%.

B. Priority of Sectors

C. Other Sectoral Plans

Steel:

- to increase the degree of vertical integration.
- to concentrate on the use of domestic imports in new plants.

Paper and cellulose:

- to increase the degree of vertical integration.
- to improve product quality.
- to substitute for imports.
- to produce all types of paper which can be manufactured from available natural resources.

Chemicals:

- to increase the degree of vertical integration in order to permit import-substitution.
- to initiate a protectionist policy.

Capital goods:

- to concentrate on machinery and equipment.
- to enforce the "buy Argentine" law.

Automotive industry:

- to achieve complete vertical integration by 1969 so that only domestic imports will then be used.

Textiles:

- to produce at maximum capacity.
- to introduce improved technology.
- to increase productivity.

V. PLANNED MANUFACTURING PROJECTS

Steel: SOMISA, and other efficient firms will be enlarged.

Paper and cellulose: plants will be established in the provinces of Misiones, Jujuy, Delta Entrerriano, and Bonaereuse.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

The number of jobs available in industry is planned to increase by 27% between 1960 and 1969, while industrial output is to increase by 60%.

Textiles: a considerable improvement in productivity is planned for the textile industry. This is to be obtained by operating the plants at close to their capacities and through the introduction of improved technology.

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

Programming will be the responsibility of a central unit - the Office of Sector Programming (Oficina de Programación Sectorial).

The National Development Council (Consejo Nacional de Desarollo) will decide upon investment projects and their priority.

Study groups are to be organised to analyse the planning and implementation meth[illegible]ed in different sectors.

VIII. PROBLEM AREAS

There is a growing realization that overall growth and abnormal inflation are not compatible with each other. The major problem is how to prevent price increases - an ever-present problem.

The further development of the domestic capital market is essential for the financing of new projects.

The existence of monopolies in distribution is a growing problem. The government would like to prevent this, but finds it difficult to prove the existence of such clandestine agreements in industry. Other distribution problems might be improved through the establishment of super-markets and better transport systems.

Special care must be taken that short-term and long-term policies do not conflict with each other.

IX. PREVIOUS INDUSTRIAL GROWTH

1950 - 1963: rates of growth differed from sector to sector. The overall average annual rate of growth of total GDP was 2%.

Developing industries formed 41% of total industrial GDP in 1950 and 58% by 1963.

The population increase was 2% per year, so that per capita GDP in 1963 was approximately the same as in 1950.

The volume of industrial production increased by 31% during the 1950 - 1963 period. The most active industries were:

- capital and durable goods
- petroleum derivatives

ARGENTINA

- chemicals
- paper and cellulose
- stone, glass and ceramics

The proportion of total industrial production channelled to domestic investment was: 1959 - 4%, 1961 - 11%, while the proportion channelled to domestic consumption was: 1959 - 59%, 1961 - 48%.

The lack of programming of industrial investment prevented an import-substitution policy from being carried out effectively.

SUMMARY OF THE 1962 - 1971 INDUSTRIAL DEVELOPMENT PLAN OF BOLIVIA*

I. GOALS AND OBJECTIVES

A. Planned Growth:

	1958**	1971	Average Annual Increase
Manufacturing GDP/capita	$ 7.20	$ 12.80	4.6%
Total GDP/capita	$84	$147	[illegible]
Population (000)	[illegible]	4,[illegible]	[illegible]
Manufacturing GDP ($ millions)	24	63	[illegible]
Total GDP ($ millions)	280	670	6.[illegible]%
Manufacturing % of Total GDP	8.6%	[illegible]	

Exchange rate: 11.88 Bolivian Pesos = US $1

**The Plan does not give these data for 1961 or 1962

B. Other Objectives

To increase the % which manufacturing GDP comprises out of total GDP over the 1958 - 1971 period.

To integrate the regional sectors of the economy.

To integrate the subsistance sector with the commercial sector of the economy.

To expand economic activity, in order to increase employment.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Two structural changes in financing the development will become apparent:

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*JUNTA NACIONAL DE PLANEAMIENTO: "Plan de Desarollo Económico y Social, 1962 - 1971", La Paz, 1961. 288 pp.

- the quantity of net investment in relation to GDP will decline from 17% in 1962 to approximately 13% in 1966 and 1971.
- the required foreign investment will decline from $80 million in 1962 to $3 million in 1971.

B. Strategy and Policy

To realize a significant expansion of industry:

- smuggled imports will be supressed.
- labor legislation will be applied far more carefully.
- an import-substitution policy will be pursued.
- export production will be diversified.

The deficit of $30 million in the goods and services account of the balance of payments will be reduced by 1971, and a surplus is forecast after that year.

The private sector must play an important role, particularly in food processing.

Technical services will be provided by the government and oriented in a suitable manner.

C. Institutions

Administrative procedures concerned with the right of establishment and operation of firms will be simplified.

To facilitate transactions, a new monetary unit, the Boliviano, will replace the old Bolivian peso; 1000 pesos = 1 Boliviano.

Money supply will be increased slowly to prevent inflationary pressures.

Domestic savings must increase considerably in order to eliminate the necessity of foreign sources of finance.

Credit will be made easier to obtain, on a more equal basis, in all sectors of the economy. In industry, this will be largely the responsibility of the Bolivian Development Corporation (Corporación Boliviana de Fomento).

III. DEMAND PROJECTIONS AND DATA BASES

Projections were made of the domestic production and imports of the following products:

- tobacco
- textiles
- shoes and leather goods
- furniture
- rubber goods
- paper
- chemical and pharmaceutical products
- metal goods

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors:

	GDP in $ millions 1958	1971	Average Annual Increase
Tobacco	1.9	4.4	6.7%
Furniture, wood	2.7	5.8	6 %
Rubber products	0.3	0.6	5.2%
Metal products	2.4	5.4	6.4%
Food processing	16.8	49.0	8.6%

Growth of Output in other Sectors
(1958 - 1971)

Textile cloth production will increase from 16 million to 45 million meters. Out of this, the % of production in the form of clothing will increase from 30% to 35%.

Shoe production will double over the period, from 2 million to 4 million pairs.

The production of printed matter (newspapers, books and magazines) will be increased from 3,600 tons to 10,000 tons a year.

Soap production will be increased so as to provide for an average yearly consumption per person of 1.3 kg in 1971, compared to 0.6 kg in 1958.

Pharmaceutical products production will be increased so as to provide for an average yearly expenditure per person of $[illegible].00 in 1971, compared to $1.20 in 1958.

B. Priority of Sectors

Food processing will play a large part in the industrial development.

C. Other Sectoral Plans

The anticipated effects of an import-substitution policy are shown by the following table:

Domestic Production as a % of Domestic Consumption

	1958	1971
Food processing	66	98
Tobacco (cigarettes)	94	95
Textiles (all forms)	83	91
Shoes	96	98
Printed matter	90	90
Chemicals	42	59
Metal products	30	28
Furniture	81	98
Rubber goods	81	81

Production of pharmaceutical products will increase from 34% to 50% of total domestic consumption.

The increased domestic production of soap should satisfy total consumption completely.

Particular attention will be given to the manufacture of quebracho extract, carbon, and explosives.

V. PLANNED MANUFACTURING PROJECTS

Sugar:

Production in 1958 amounted to 15,000 tons. A yearly production of 60,000 tons is anticipated by 1970. Since total consumption in 1970 will be 130,000 tons, new factories will be built with a capacity of 70,000 tons per year. The investment required is $13 million to $15 million.

Textiles:

The production of woolen textiles requires much modernization. In order to replace imports, new factories will be built for spinning and weaving, as well as to produce finished clothes and to print cloth. The domestic production of hop-sacks will be initiated to make use of local jute, and to exploit a favorable export market. A factory to produce 3 million sacks a year will require an investment of $1 million.

Chemicals:

A project to produce 5000 tons of carbon annually will be undertaken, based on the growing possibilities of processing natural gas. An investment of approximately $1 million will be needed.

In relation to explosives - glycerin, sulphuric acid, and nitric acid will be produced at a daily rate of 5, 10, and 10 tons respectively. The required investment is $5 million.

Rubber:

Plants will be installed for washing and laminating rubber, and to prepare latex for export.

Tires for cars and other vehicles will be initially produced at a yearly rate of 60,000 to 70,000 units. Investment of $3 million to $4 million is required.

Machinery:

Production will be diversified, to include agricultural and construction tools, pumps, coffee and chestnut peelers, and drying machinery. The four major firms are expected to increase their production considerably over the next 10 years.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

Efforts will be made to encourage firms to produce at close o their maximum capacity. In 1960, firms in the following sectors operated at well below this level:

		Actual production as a % of maximum production capacity
Food processing		40
Textiles:	cotton cloth	66
	wool cloth	50
	silk cloth	30
	clothing	35
Cigarettes		45
Construction materials		45
Cement and glass		50
Tannery		50 - 70
Machinery		50

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

A National Development Council (Consejo Nacional de Desarollo) will be created and presided over by the Presidency of the Republic.

The Ministry of Economics and the General Controller will be responsible for the co-ordination, implementation, and control of the Plan's execution.

The administrative organization of the Plan will be headed by a central office, to which offices concerned with the different sectors of the economy will be responsible.

A special agency, the National Planning Council, has been created to evaluate and co-ordinate plans as a whole. Similar agencies will be created to evaluate and co-ordinate plans and specific projects within each sector.

A reform of administrative procedures will be carried out to facilitate the implementation of the Plan. The major aim will be to prevent the present decentralized system from making decisions which are too much in the interest of a particular regior, rather than of the country as a whole.

The establishment of a Development Bank (Banco National de Desarollo) will be considered.

The Commission on Administrative Reform has reached the conclusion that decentralized institutions with similar tasks should be merged.

Taking into consideration the specifications of the Plan, budgets will be programmed at both national and local levels.

VIII. PROBLEM AREAS

The most serious obstacle to industrial development is insufficient sources of finance.

Production is too concentrated on primary goods.

There is a lack of skilled labor, personnel and technical services.

Sources of energy are insufficient in the majority of urban centers.

The economy is particularly sensitive to adverse conditions in foreign trade markets.

Income distribution is inadequate, and further distortions are caused by inflation.

Sixty per cent of the population is Indian and 40% or less of the total population speak Spanish, the official language.

IX. PREVIOUS INDUSTRIAL GROWTH

1952 - 1956:

The period of re-organisation after the Revolution in 1952 was characterised by:

BOLIVIA

- inflation, a 100% increase per year in prices.
- budget and balance of payments deficits.
- large wage increases.

19[illegible] - 196[illegible] :

This was a stabilization period in which there was:

- only a 12% per annum price increase.
- a credit squeeze.
- a stable exchange rate system.

GDP per capita decreased from $118 in 1950 to $99 in 1959. The output of manufacturing industries declined over the same period from $48 million to $42 million, after attaining a maximum in 1954-56.

SUMMARY OF THE 1959 - 1968 INDUSTRIAL DEVELOPMENT PLAN OF CEYLON*

I. GOALS AND OBJECTIVES

A. Planned Growth:

	1957	1968	Average Annual Increase
Manufacturing GDP/capita	$ 8.3	$ 20.2	8.4%
Total GDP/capita	$108	$148	2.9%
Population (000)	9,660	13,350	3.[illegible]
Manufacturing GDP ($ millions)+	80	270	11.7%
Total GDP ($ millions)	1,045	1,980	6.[illegible]
Manufacturing % of Total GDP	7.6%	13.6%	

Exchange rate: US $1 = 4.76 Ceylon rupees

+The extent of industrialisation in Ceylon is understated in the figures for manufacturing GDP because production in tea and rubber processing factories is included in the category of agriculture.

B. Other Objectives:

To develop the manufacturing sector by exploiting the potential for import-substitution.

To diversify the structure of the economy, in order to make it less dependent on the traditional export crops and less vulnerable to external changes.

To realise and maintain equilibrium in the balance of payments.

To raise the standard of living and to bring about an equitable distribution of income.

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* The Ten-Year Plan, National Planning Council, Colombo, 1959. 490 pages.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Gross Investment in Manufacturing (1957 - 1968)
(Rs millions)

	Planned Sector	Unplanned Sector	Total
In Large and Medium-Scale Enterprises:			
Fixed Capital Investment	248	100	348
Working Capital	21	11	32
Depreciation	70	36	106
Gross Investment	339	147	486
In Small-Scale and Cottage Industries:			
Gross Investment	84	-	84
Total Gross Investment in Manufacturing	423	147	570
Gross Investment in Manufacturing as % of All Gross Investment	22%	16%	20%

The investment programs for the "planned sector" comprise priority projects, which reflect actual investment decisions and for which the Government assumes direct responsibility for implementation. They will, in some cases, be undertaken by private enterprise. The programs for the "unplanned sector" are broad targets set for enterprises, mainly in the private sector, which will be encouraged by suitable policies and incentive measures. The initial burden of investment in manufacturing will fall on the planned sector, which is expected to be primarily Government enterprise. As industrialization gathers momentum, it is expected that an increasing proportion of the investment program will be undertaken in the unplanned sector, primarily by private enterprise.

Net Investment in Large and Medium-Scale Manufacturing Enterprises
(Annual Phasing of Expenditures by Branch of Industry in $ millions)

Planned Sector	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	Total 1959-68
Sugar Refining:	5.25	3.15	8.5	3.57	2.6	5.35	2.95	1.05			32.5
- power alcohol		1.26		0.56	0.56	0.56					2.35
- rayon					0.49	2.46	2.52	3.15	3.57	0.31	14.5
- hardboard					1.8	0.97					2.77
Cotton Spinning and Weaving	2.1	2.62	4.2		4.2	2.73	3.15	3.15	3.15		25.1
Leather Footwear	0.46										0.46
Gintota Plywood Corporation	0.21										0.21
Paper						5.25	4.2				9.45
Chemical Fertilizers		0.2	2.1	10.4	10.4						23.1
Paranthan Chemicals Corporation						0.56	[illegible]	0.1			5.36
Drug Manufacture		0.1									0.1
Ilmenite Refinery	0.86	0.57									1.4[illegible]
Salt Works	0.42	0.49	2.04	0.42	0.63						4.0
Ceramics Industry		1.65	0.55								2.2
Cement Industry	1.36	7.55	8.4	4.6	2.58	3.12	5.35	.78	4.0	5.45	46.[illegible]
Bricks and Tiles	0.1	0.4	0.52	0.52	0.52						2.06
Industrial Estates	0.1	1.05	1.05	1.05	1.05						4.3
Total for Existing Projects	10.9	19.0	27.7	21.2	24.8	21.0	20.9	13.2	10.7	7.8	177
Projects under Study							5.2	16.2	21.4	30.0	72
Fixed Capital Expenditure	10.9	19.0	27.7	21.2	24.8	21.0	26.1	29.4	32.1	37.8	249
Working Capital	0.63	1.05	1.47	2.1	2.1	2.1	2.52	2.73	2.94	3.36	21
Net Investment	11.5	20.0	29.0	23.3	26.9	23.1	28.6	32.1	35.0	41.2	270
Unplanned Sector											
Fixed Capital Expenditure	3.78	4.62	5.67	7.14	8.4	9.87	11.76	13.65	16.17	18.9	100
Working Capital	0.42	0.63	0.84	0.84	1.05	1.05	1.26	1.47	1.68	2.1	11
Net Investment	4.2	5.25	6.51	7.98	9.45	10.92	13.02	15.12	17.85	21.0	111
Total Net Investment	15.9	25.4	35.3	31.3	34.6	34.0	41.6	47.3	53.0	62.2	381

Financial Implications of the Planned Investment in Large and Medium-Scale Manufacturing Enterprises in the Planned and Unplanned Sectors

(₨ millions)

		1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	Total 1959-68
1	Gross profit on new investment	0.63	1.47	4.62	9.45	13.[illegible]	22.6[illegible]	27.3	34.44	4[illegible].35	53.5	[illegible]
2	Dividends paid by the unplanned sector			0.42	1.[illegible]5	1.62	[illegible].52	3.30	4.[illegible]	5.[illegible]	7.35	[illegible]
3	Potential gross savings on new investment	0.63	1.47	4.2	[illegible].4	11.32	[illegible].16	23.94	29.[illegible]	35.[illegible]	4[illegible].15	1[illegible]1
4	Pre-plan gross industrial savings	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	115
5	Total gross savings (3 + 4)	12.1	13.0	15.7	19.9	[illegible]	31.7	35.4	41.3	46.6	5[illegible].7	296
6	Gross new investment	18.9	28.5	39.5	37.4	43.5	45.[illegible]	54.6	53.	71.4	[illegible]	4[illegible]6
7	Ratio gross savings to gross investment	65%	46%	40%	53%	53%	7[illegible]%	6[illegible]%	5[illegible]%	65%	6[illegible]%	[illegible]1%
8	Depreciation on new investment			1.05	[illegible].94	5.67	7.9[illegible]	9.97	1[illegible].6	15.33	1[illegible].69	[illegible]
9	Net savings on new investment (3 - 8)	0.63	1.47	3.15	5.46	5.65	1[illegible].1[illegible]	14.[illegible]7	17.[illegible]	1[illegible].74	[illegible].46	1[illegible]
10	Depreciation on pre-plan capital stock	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	31
11	Pre-plan net industrial savings (4 - 10)	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	[illegible]
12	Total net savings (9 + 11)	9.03	9.87	11.55	13.86	14.[illegible]5	[illegible].58	[illegible].47	25.62	[illegible]	[illegible].86	1[illegible]1
13	Net new investment	15.9	25.4	35.3	31.3	34.6	34.[illegible]	41.6	47.3	53.	[illegible].2	3[illegible]1
14	Ratio net savings to net investment	57%	32%	33%	44%	41%	6[illegible]%	4[illegible]%	46%	53%	5[illegible]%	[illegible]
15	Net investment less net savings (13 - 12)	6.9	15.5	23.7	17.4	[illegible].5	13.4	19.1	21.6	24.[illegible]	26.3	1[illegible]

The financial program aims at maximizing the net profits generated in the large and medium-scale manufacturing sector in order to make them available for re-investment (row 1^ .
This implies that the Government:

- does not attempt to seek early benefits for the consumer by lowering prices.
- realizes a maximum re-investment of the profits from the operation of the public sector enterprises.
- frames business taxation policy in a way which favors profit retention by private sector enterprises.

Assuming that the target for re-investment of industrial profits is realised, two major problems of financing will remain:

1) net savings of industrial enterprises begin to assume significant proportions only in the later years of the Plan period (row 12), while the burden of new investment is relatively high initially as well as in later years (row 13).

2) the total re-investment target accounts for only about 50% ($191 million) of the total net investment of $381 million, while the remaining 50% ($189 million: $136.5 million in the planned sector and $52.5 million in the unplanned sector) has to be financed from other domestic sources, as well as external sources.

The planned annual investment in manufacturing represents a major effort, as net industrial investment in previous years has only been around $10.5 million a year.

The Planned Financing of Gross Investment in the Whole Economy
(1959 - 1968)

Public Sector		$ millions	% of Total
Government Revenue Surplus		978.8	
Government Enterprises Surplus		134.6	
Depreciation on Government Account		203.7	
Transfers and Loans:			
a) to private sector	-61.9		
b) from private sector	227.8		

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Public Sector (Cont'd.)	$ millions	% of Total
Net Transfer Payments	168.[illegible]	
Self-Help Schemes Nonmonetized investment	179.5	
Total Domestic Resources	1,662.[illegible]	[illegible]
Foreign Aid and Loans	267.8	[illegible]
Total Public Sector Resources	1,[illegible]	6[illegible]
Private Sector		
Net Private Savings	739	
Less Transfers and Loans to Public Sector	-228	
Plus Depreciation	414	
Total Domestic Resources	925	
Private Foreign Investment	-	
Total Private Sector Resources	925	33
Total Public and Private Sector Resources	[illegible]	[illegible]

[illegible]. Strategy and Policy

The essential elements in the strategy for industrial development include:

- the satisfaction of the domestic demand for manufactured consumer goods by developing local production to replace imports.
- the development of an industrial infrastructure with priority accorded to building up:
    a) an adequate and extensive power supply system;
    b) an adequate building materials industry.
- the acquisition of the capital goods and machinery required for industry through imports, rather than through the prior establishment of a domestic capital goods industry.
- the progressive alteration of the structure of imports, by giving priority in the use of foreign exchange resources to capital goods imports.

- the expansion of foreign exchange earnings by increasing the output of the traditional export crops on the one hand, and by developing the domestic production of other agricultural goods (mainly food) to replace imports on the other.
- restraining consumption and accelerating the marginal rate of savings out of new income through appropriate policy and institutional measures.

The over-all strategy for developing manufacturing is based on the consideration that there is an established domestic market for manufactured products due to:

- relatively high productivity and income levels in the plantation sector and in other sectors of the economy.
- the large demand for manufactured imports: 85% of the total value of industrial products used for consumption and investment purposes in 1957 was supplied through imports, while only 15% was supplied from domestic production.

The establishment of policies to encourage import-substitution through domestic production will be subject to the following criteria:

- the size of the domestic market. The established market for a particular product must be large enough to absorb the output of an economically viable plant.
- the contribution made to national income. The net value added through the domestic processing of imported raw materials must surpass the cost of the required imports.
- the contribution made to further growth and industrialization, through the reinvestment of industrial profits, must be adequate.

One objective of the planned investment is to concentrate on large projects, whose investment requirements and output will have a significant impact on the economy, and which will tend to:

- economize on scarce managerial and technical skills.

- permit staging of the investment program where a number of production units or plants in one branch are feasible so that skills acquired in one project may be used in subsequent ones.

Long-term possibilities of domestic production for export markets will be exploited:

- in lines of activity based on domestic raw materials.
- in lines of production where domestic demand will be large enough to generate economies of scale that will make production for export competitive in foreign markets (as fertilisers).

In order to overcome tariff barriers to imports in other countries of the Asian region, which are also undergoing industrialization, the Government will:

- promote specialisation in the production of certain intermediate and capital goods (fertilizers, cement and building materials, mechanical components, etc.) to obtain a comparative advantage.
- foster co-ordinated regional planning through co-operation and negotiation with other countries.

A serious and effective policy of protection, which will go beyond that envisaged in the "infant industry" argument, and which will be sustained over a longer period until the infra-structure of an industrial economy is built up, will be initiated, in accordance with the following principles:

- protection will be discriminatory and not excessive.
- wherever possible, protection will take the form of subsidies, rather than tariffs, in order to avoid price rises and to ensure the efficiency of enterprises which are entitled to a subsidy.

A new approach to the development of cottage industries, as a means of spreading modern industrial techniques and raising productivity and efficiency (rather than solely as a means of relieving rural unemployment) will be implemented. The

Broad strategy for the development of small-scale and cottage industry will include:

- the introduction of mechanization whenever power supplies are available, in order to raise productivity and improve quality.
- linking the rural cottage industries, in areas where electric power supplies are not available, to bigger industrial units established in areas where power is available, which will furnish cheap processed or semi-finished raw materials to the craftsmen.
- the organisation of the rural craftsmen into co-operative societies for bulk purchasing, co-operative marketing, etc.
- the establishment of a special statutory agency to implement the investment program.

It is proposed to encourage foreign investment in manufacturing by means of a variety of incentive measures, including:

- concessions in the form of tax holidays, tariff protection, adequate depreciation allowances and tax deductions for expansion, the free remittance of dividends and the eventual repatriation of capital (including appreciation thereof).
- equality of treatment of approved foreign investment with regard to concessions and protection vis-à-vis domestic private enterprises.
- guarantees against nationalization.

C. <u>Institutions</u>

Steps must be taken to improve the efficiency and scope of the organized capital market, in order to stimulate and channel the flow of private savings into investment in industry.

A Tariff Commission should be set up:

- to examine and revise the present tariff structure.
- to prepare and publish a systematic schedule of protective duties and of subsidies to serve as encouragements to domestic producers.

- to establish a clear distinction between protective and revenue duties, in order to ensure that the latter may not result in a subsidy to local producers, unless this is actually intended.

A system of trade schools and institutes of higher technical education will be set up to provide trained manpower for industry. The projects to be implemented during the Plan period include:

- an Institute of Practical Technology in Katubedde. This will consist of an expansion and relocation of the present engineering section of the Ceylon Technical College. The new Institute will have a capacity of 500 students, and will have residential facilities for [illegible] students. It will offer training in:
  - construction and work services (civil building
  - metal work and woodwork
  - electrical and radio engineering and electronics
  - chemical engineering.
- 9 Junior Technical Schools in the provincial capitols, each with a capacity of 100 students.
- a Trades School in Colombo, with a capacity of:
  - 400 full-time students (2-year course)
  - 900 part-time students (4-year course)

  It will provide training in building, woodworking, metal working, electrical and motor technology, and printing.
- a College of Science and Technology in Colombo. This will consist of the expansion of the Commerce Department of the Ceylon Technical College. It will provide courses up to degree and professional levels in accountancy, banking, transport, management and insurance.
- a Technical Teacher Trainee College in Katubedde.
- Training Units on Industrial Estates.

A School of Business Management, providing both full-time and in-service training programs, is also proposed.

III. DEMAND PROJECTIONS AND DATA BASES

A Plan-Frame, setting out the major economic aggregates relevant to a development plan, was drawn up to serve as a guide to the preparation of the sectoral programs.

The various sectoral programs were drawn up, on the basis of data supplied by the Ministries and Departments of Government, and by means of programming techniques, applied to population projection, estimates of future consumption needs, employment, output, savings, foreign exchange outlays, etc.

The programs relating to the main productive sectors of the economy, including agriculture and industry, were covered in detail, but programs relating to certain other sectors like transport and social services were estimated on a less detailed basis.

The Plan is flexible; periodic revisions to take into account changes in internal and external conditions and actual performance, are envisaged. It is also foreseen that revision in one sector may require corresponding adjustments in other sectors.

The bases for some of the data and projections used in the industrial plan are given below:

- Gross Value of Output: calculated for each of the projects included in the Plan, on the basis of the planned operating data available to the Planning Secretariat. For new projects a ratio of 1.25 of the fixed capital expenditure, lagged two years, was used. This ratio was derived on the assumption that for the projects concerned, the capital to net output ratio was 2 : 1, and that net output was 40% of gross output.
- Gross Profit: calculated on the assumption that this was 25% of the value of gross output. (The "Census of Industry 1952", indicated a proportion of 26.1%.)

- Capital Costs in Foreign Exchange: for those projects for which detailed estimates were available, their individual expected foreign exchange costs have been used, and for the new projects, it was assumed that 60% of total fixed capital costs would represent the cost of overseas purchases.

- Import Savings: for existing projects, individual calculations of net import savings (value of output c. i. f., less foreign operating costs) were made; over the period these savings were 42% of realized fixed capital expenditure. For new projects, a ratio of 25% applied to the capital expenditure series, lagged two years, was assumed, on the basis that these projects would offer less important import savings.

- Additional demand for industrial raw materials and intermediate goods: derived by fitting a straight line trend to the estimates of imports in 1957 and 1968, which was calculated when preparing the over-all physical and financial balances. It takes into account projected population increases and some increase in real incomes per capita.

- Depreciation: rates were estimated on the assumption that a 5% rate should be applied to buildings and a 10% rate to plant and machinery. Capital expenditure was assumed to consist of 45% building, 55% plant. These assumptions result in an average annual rate of depreciation of 7.75%.

- Pre-plan Capital Stock: estimated on the basis of the 1952 Census of Industry, with allowances for the increase in investment between 1952 and 1958.

- Dividends (unplanned sector): estimated on the basis of an assumed 10% rate on the cumulative capital expenditure in the unplanned sector, lagged two years.

- Potential Gross Savings: calculated for industry by assuming that all corporation income tax (on both public and private enterprises) is re-invested in industry.

- Pre-plan Gross Savings: estimated using data available in the "Census of Industry 1952". It is equal to gross profit less corporate income tax and dividends, and less consumption expenditure and income tax of unincorporated firms.

- **Operational Employment in the Planned Manufacturing Projects**: for the existing capital-intensive projects, representing a capital expenditure of about $16[illegible] million, average investment per man employed is about $[illegible]. The bulk of the remaining capital investment is on less capital-intensive projects, with an average investment per man of about $[illegible]. The remainder of the employment was calculated on the basis of new project capital expenditure, lagged two years.

- **Power Requirements**: the power requirements of individual projects for which data were available were aggregated, and this was related to the capital expenditure on them, giving a ratio of power demand to the industrial capital expenditure of MW [illegible] per $[illegible]. (This ratio appeared reasonable because the high power demand of some projects was balanced by large expenditures on other projects - such as sugar processing - which were assumed to be self-sufficient in electric power, and hence, would make no demand on the general supply system.) The ratio was then applied to the new projects' capital expenditure series, lagged two years. The requirements of the highly power-intensive fertiliser factory were excluded from the calculations, but added to the result. These projected power requirements exclude the demand of some new projects under study, like the rubber tire and tube factory, the steel rolling mill, the integrated iron and steel smelting plant, and the oil refinery.

The targets for the growth of industrial production have been established, with a view to the potential for import-substitution, based on the domestic demand for imports of manufactured goods.

CEYLON

The Potential for Import-Substitution

Estimated Domestic Demand for Selected Manufactured Products

($ millions)

	1957 Retained Imports	1968 Estimated Import Requirements High Projection	1968 Estimated Import Requirements Low Projection
Textiles and Clothing	4[illegible]	55.1	63.[illegible]
Paper	7.7	1[illegible].6	1[illegible]
Fertilizers	11.7	[illegible].3	[illegible]
Chemicals	4.3	5.9	[illegible].7
Petroleum Products	27.	37.2	[illegible]
Cement	5.9	8.	1[illegible].6
Iron and Steel Products	17.6	24.3	34.9
Electric Machinery	1[illegible].3	14.2	[illegible]
Vehicles and Transport Equipment	23.1	32.2	[illegible]
Miscellaneous [illegible]	57.6	79.2	1[illegible].5
Total	208	287	412

The low projections for 1968 are based on a projected population growth of 38%; in addition to this, the high projections also take into account accelerated rates of investment and improvements in the standard of living as indicated by the following 1968 indices (1957 = 100):

Investment goods and fertilizers	205
Intermediate goods	180
Consumption goods	160

With an estimated ratio of realized capital investment to imports replaced of 2.7, there is scope for:

- an investment program of about $460 million, in terms of the 1957 actual import demand for manufactured goods.
- an investment program of about $840 million, in terms of the high projections for 1968.

The basic assumptions underlying the Plan as a whole are:

- there will be no serious international depression during the next 10 years.
- external terms of trade will average those prevalent in 1957.

- sufficient external aid in the form of technical assistance and finance will be forthcoming.
- population and the workforce will each increase by [illegible] between 19[illegible] and 19[illegible].
- the Government's financial and monetary policies will be geared to the implementation of the Plan.
- the political will and effort required to implement the Plan will manifest in both the Government and the people.

[illegible]

[illegible]. Planned Growth of Manufacturing Sectors

B. Priority of Sectors

Those industries included in the investment programme of the planned sector are accorded high priority.

C. Other Sectoral Plans

Additional Import, Employment, and Power Requirements of Manufacturing in the Planned Sector

	Import Requirements ($ millions)	1959	196	1961	1962	1963	1964	1965	1966	1967	1968
1	Gross value of output	2.73	5.[illegible]	1[illegible].69	37.59	51.[illegible]	[illegible].3	[illegible]	137.[illegible]	163.[illegible]	[illegible]
2	Gross profit	0.63	1.47	4.62	9.45	13.[illegible]	[illegible].6[illegible]	27.3	34.[illegible]	4[illegible]	53.[illegible]
3	Capital cost in foreign exchange	8.4	13.65	21.0	1[illegible].9	21.	22.[illegible]	27.3	33.0	[illegible]	[illegible]
4	Import savings	1.05	3.15	5.4	18.9	28.35	4[illegible].3	5[illegible]	71.4	[illegible]	[illegible]5.55
5	Foreign exchange balance (4 - 3)	-7.35	-1[illegible].5	-12.6	[illegible]	7.35	26.3	31.5	37.[illegible]	41.	[illegible].3
6	Additional demand for industrial raw materials and intermediate goods	10.5	21.0	35.7	5[illegible].4	65.[illegible]	74.0	[illegible].3	1[illegible]	119.7	134.4
7	Less import savings (6 - 4)	9.45	17.85	27.3	31.5	36.65	26.3	31.5	33.6	3[illegible].85	3[illegible].85
8	New capital equipment imports	8.4	14.7	21.0	18.9	18.9	23.1	26.25	3[illegible].45	34.65	39.9
9	Import content depreciation			1.05	2.1	3.15	4.2	5.25	6.3	7.35	8.4
10	Total additional imports for industrial plan (7 + 8 + 9)	17.85	3[illegible].55	4[illegible].35	71.4	[illegible]	53.6	63.	[illegible]	[illegible]	97.15
	Operational Employment (000)	1	2	5	11	16	[illegible]	2[illegible]	34	44	6[illegible]
	Power Requirements (million KWH):										
	MW capacity		4	7	17	25	[illegible]	58	76	[illegible]	1[illegible]
	Energy requirements		2	31	75	11	3[illegible]	33[illegible]	41[illegible]	45[illegible]	5[illegible]

Composition of Merchandise Exports
($ millions f. o. b. at 1957 prices)

	1957	% of Total	1968	% of Total
Manufactured Exports	14	4	17	4
Exports of Agricultural Origin (including processed tea, rubber, and coconut products)	319		415	
Total	333		432	

Composition of Merchandise Imports
($ millions c. i. f. at 1957 prices)

	1957	% of Total	1968	% of Total
Consumer Goods:				
- manufactured products	91	25	105	25
- agricultural and fisheries products	117	33	63	15
Intermediate Goods	119	33	158	38
Capital Goods	33	9	95	22
Total	360	100	421	100

Growth of Self-Sufficiency

	% share of domestic production in total supply 1957	1968
Manufactured Products	21	40
Agricultural Products	71	89
Fisheries Products	30	87

V. PLANNED MANUFACTURING PROJECTS

Large and Medium-Scale Industries Programs - Planned Sector Only

Projects	Status	Total Cost ($ millions)	Products	Annual Output	Foreign Exchange ($ millions) Savings	Foreign Exchange ($ millions) Earnings	Employment on Completion
Sugar Manufacturing		32.6			17.85*		Permanent: 1,950 (1966) Seasonal: 660 (Employment in sugar-growing plantations: 23,900)
Kantalai Factory I	New Project	(5.2)	Sugar	19,200 tons			
Gal Oya Factory	" "	(6.6)	"	40,000 "			
Kantalai Factory II	" "	(8.4)	"	60,000 "			
Walawe Factory I	" "	(6.2)	"	31,500 "			
Walawe Factory II	" "	(6.2)	"	31,500 "			
(by-products of sugar manufacturing in the above factories)	" "	29.4	Power Alcohol Acetic Acid Acetic Rayon Hardboard	420,000 " 600 " 1,500 " 20,000 "			
Textile Manufacturing		26.8					
Cotton Spinning Mill	Projects under construction	(3.2)	Yarn	2.2 million lbs.		0.84	440 (1960)
Spinning and Weaving Mill		(6.8)	Cotton Textiles	10 million yds.	2.83*		875 (1961)
2 Spinning and Weaving Mills	New Project	(16.8)	" "	30 " "	8.4	[illegible]	2,000 (1963)
Footwear	Expansion	0.5	Shoes	400,000 pairs	0.27*	0.07	450 (1960)
Wood Products							
Gintota Plywood Factory	"	0.2	Tea Chests Door Units Board	480,000 5,000 150,000 sq. ft.			100 (196[illegible]
Paper (factory)	New Project under study	9.45					
Rubber Products							
Rubber Tire and Tube Factory		6.3					

* refers to gross value of output

Projects	Status	Total Cost ($ millions)	Products	Annual Output		Foreign Exchange ($ millions) Savings	Earnings	Employment on Completion
Chemicals and Chemical Products		30.6						
Nitrogenous Fertilizer	New Project	(25.2)	Ammonium Sulphate	[illegible]	tons	15.5		
Paranthan Chemicals Corporation	Expansion	(5.4)	Caustic Soda	1,500	"	3.5*		[illegible] (1963)
			Chlorine	1,300	"			
			Superphosphates	7,000	"			
			PVC	4,000	"			
			Calcium Carbide	3,000	"			
			Carbon Dioxide	12,000	"			
Petroleum Products								
Petroleum Refinery	New Project under study	31.5						
Non-Metallic Mineral Products								
Ilmenite Refinery	Project under construction	1.68	Rutile	[illegible]	"		1.[illegible]	Permanent: [illegible]
			Ilmenite	[illegible]	"			Seasonal: [illegible]
			Zircon	[illegible]	"			
Salt Works	" "	2.24	Salt	[illegible]	"		1.[illegible]	1,[illegible] (1[illegible])
			Gypsum	15,[illegible]	"	.11*		
" "	Expansion	1.47	Potash	7,[illegible]	"	.[illegible]		
			Salt	[illegible]	"			1,[illegible] ([illegible])
			Gypsum	[illegible]	"			
			Magnesia	[illegible]	"	.[illegible]	.31	
Kaolin Refinery	Project under construction	0.46	Refined Kaolin	1,500	"	.21		[illegible] (196[illegible])
			Kaolin Dust	[illegible]	"			
Ceramic Factory (2nd Kiln)	Expansion	2.3	Ceramics	[illegible]	"	.1[illegible]		[illegible] (196[illegible])
Second Ceramic Factory	New Project	1 - 1.5	Ceramic Ware	1,[illegible]	"	.[illegible]		16[illegible]
			Sanitary Ware	[illegible]	"			
			Wall Tiles	[illegible]	"			
Glass Sheets and Glassware	New Project under study	0.42						
Cement and Cement Products:		[illegible]						
- Kankesan Factory	Expansion	(7.[illegible])	Cement	[illegible]	"			[illegible]
- second factory (Puttalam)	New Project	(14.7)	"	[illegible]	"			

Projects	Status	Total Cost ([illegible] millions)	Products	Annual Output	Foreign Exchange [illegible] millions: Savings	Foreign Exchange [illegible] millions: Earnings	[illegible]
- third plant (site not determined)	New Project	[illegible]	Cement	[illegible] tons			
- Clinker Grinding and Packing Plant	" "	[illegible]	"	[illegible] "			
- ten concrete products factories (all over the island)	" "	[illegible]	Pre-stressed and pre-cast concrete, telegraph poles, railway [illegible]				
- supporting facilities for cement industry, including research laboratory	" "	[illegible]					
Pre-fabricated Housing	Project under study	[illegible]					
Tile Factory	Project under construction	.1[illegible]	Tiles Bricks	1 million 6[illegible] "	[illegible]		[illegible]
Brick and Tile Factories	New Project	[illegible]	Tiles Bricks	15 million [illegible] "	[illegible]		[illegible]
Basic Metals Industry							
Steel Rolling Mill	Project under study	[illegible]					
Steel Smelting from Local Ores	" "	[illegible]					
Metal Products Industry							
Foundry and Machine Tool Factory	Project under study	[illegible]					
Electrical Machinery							
Telecommunication Equipment	" "	1.[illegible]					
All Projects		[illegible]			[illegible]	[illegible]	

Note: Unless there is a downward revision of the scale of some projects, notably fertilizers, or unless there is very slow response in the unplanned sector, some of the projects under study will not be scheduled to commence until 1965, as otherwise an excessive strain would be put on the rest of the programme with respect to finance and skilled manpower resources. The exceptions may be the two stages of the integrated iron and steel plant, the tire factory and the oil refinery, which are expected to be financed either [illegible] or by private foreign investment.

Small-Scale and Cottage Industries Programs - Projects under Implementation - Planned Sector Only

	Completion Dates	Number of Units	Investment ( )	Employment on Completion Direct	Employment on Completion Indirect
Handlooms	1955 - 59	1,[illegible]	46[illegible] *	25,[illegible]	n. a.
Art textiles	1958	3	153	500	-
Power looms	1955 - 63	6	1,660	2,[illegible]	n. a.
Coir weaving	1957	10	157	[illegible]	1,[illegible]
Coir power looms	1959	1	[illegible]	300	4,5[illegible]
Brick making	1960	4	30	30	-
Hats and leather processing	1959 - 63	6	70	6[illegible]	1,[illegible]
Doll-making	1958 - 60	14	46	[illegible]	n. a.
Pottery	1958	4	86	15[illegible]	n. a.
Bamboo and rattan work and basketry	1958	1	10	25	n. a.
Woodworking schools	1957 - 59	75	13[illegible]	21	-
Woodworking workshops	1958 - 59	1	[illegible]	[illegible]	-
Denture gold and silver	1958 - 59	1	1	[illegible]	
Totals			3,[illegible]	29,5[illegible]	

(total new investment in small-scale and cottage industries during the Plan period: 884 million)

[illegible] capital expenditure to be incurred during 1[illegible]

CEYLON

[illegible]

[illegible] in manufacturing is expected to increase from $[illegible] in [illegible] to $[illegible] in 19[illegible], as compared to an increase from an average $[illegible] in 19[illegible] to $[illegible] in 19[illegible] for the economy as a whole.

[illegible]

It is proposed to set up an industrial promotion corporation to provide the necessary machinery for mobilizing the private sector in the interests of development. Its functions will be:

- to investigate new industrial opportunities.
- to have likely projects fully studied and valued.
- to have the full project details worked out, if the results of the feasibility study are promising.
- to take the legal steps required to incorporate the project under existing law.
- to arrange for the financing, and the operation, of the project.

It is proposed to establish a statutory body (the Small-scale and Cottage Industries Development Board) to administer planned investment in small industry. Its functions will be to provide:

- research services and technical advice.
- training facilities.
- capital equipment.
- credit and to mobilise financing from other sources.
- bulk purchasing services and central storage facilities.
- marketing services.

The Board will also ensure the co-ordination of policy with other Government departments and organizations, such as the co-operative societies movement, the community self-help schemes, etc.

specific short-term "follow-up" programs, emphasizing the actual operational tasks necessary for the implementation of the Plan, are envisaged.

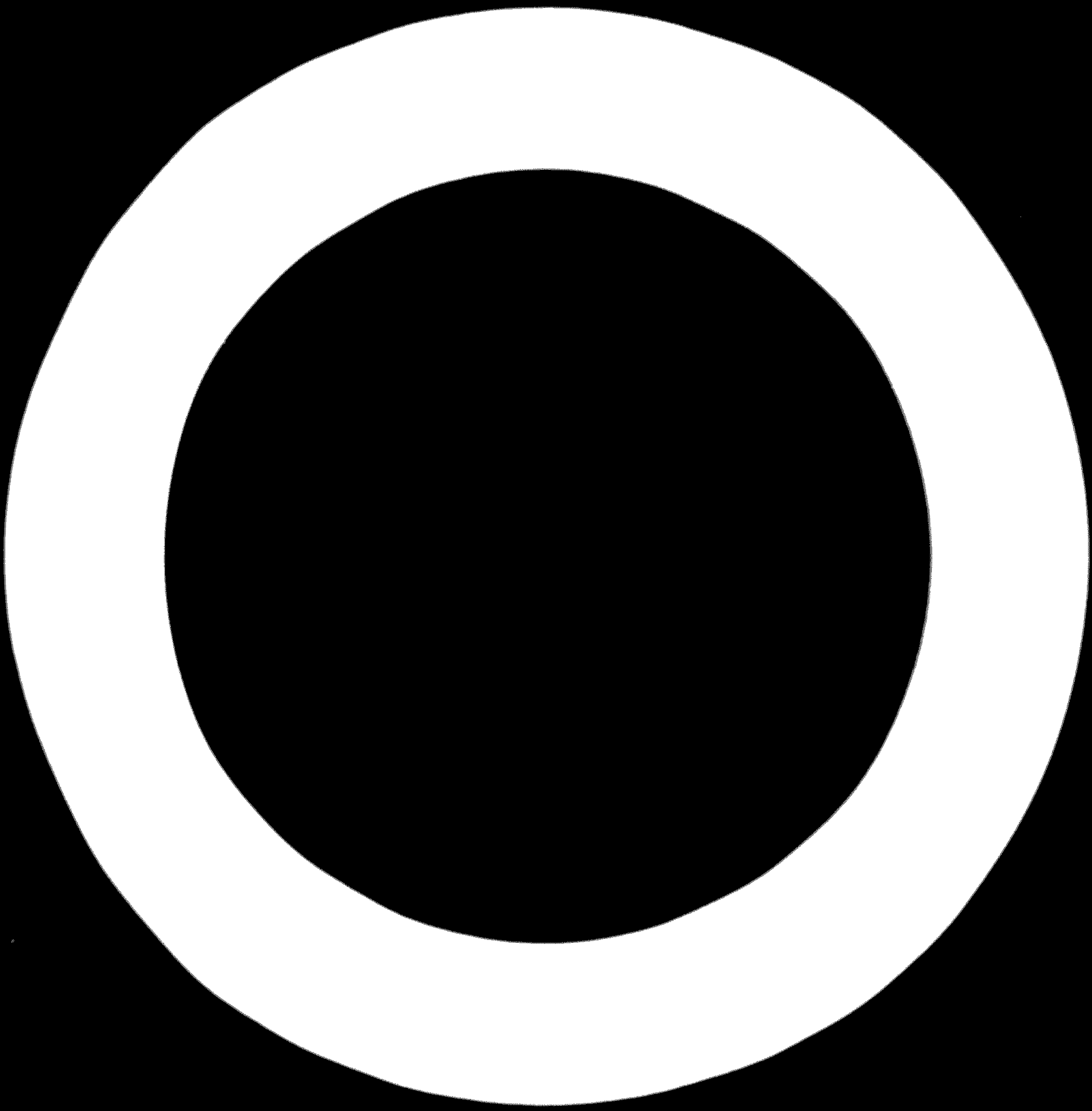
VIII. PROBLEM AREAS

The investment program, especially in industry, implies a rapid extension of the public sector, with Government investment over the Plan period rising from [illegible]% to [illegible]% of the national income, as compared with a rise of private investment from [illegible]% to only [illegible]%. The public sector expansion will greatly strain the Government's managerial, administrative and technical skills. The capability of Government to meet these additional demands may prove to be the limiting factor in the implementation of the Plan.

The investment program involves large outlays in foreign exchange to acquire capital equipment and to meet the additional demand for industrial raw materials and intermediate goods. The extent to which the economy will be able to meet these augmented exchange needs by expanding exports, reducing or replacing imports and by drawing on reserves is limited so that a considerable amount will have to be realized from foreign sources.

The opportunities for absorbing the large increase in population and the work force, in the traditional sectors (peasant and plantation agriculture) are limited, and so is expansion of service industries based on those traditional activities.

IX. PREVIOUS INDUSTRIAL GROWTH



[illegible]

[illegible]

A. [illegible] Growth:

			Average Annual [illegible]
Manufacturing [illegible] capita	[illegible]	[illegible]	[illegible]
[illegible] capita	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
Manufacturing [illegible] $ millions	[illegible]	[illegible]	[illegible]
[illegible] $ millions	[illegible]	[illegible]	[illegible]
Manufacturing [illegible] of total [illegible]	[illegible]	[illegible]	[illegible]

Exchange rate: [illegible]

B. Other Objectives:

To diversify export production.

To prevent inflation.

To bring the balance of payments into equilibrium.

III. INVESTMENT, STRATEGY, [illegible] AND [illegible]

A. Investment

Total Investment in the Economy

($ millions)

	Total Investment	In Private Sector	%	In Public Sector	%
1961	402	159	40	[illegible]	[illegible]
1970	887	473	[illegible]	414	[illegible]
Total for 1961-1970 period	[illegible],188	3,094	[illegible]	[illegible]	[illegible]

* CORPORACIÓN DE FOMENTO DE LA PRODUCCIÓN: "Programa Nacional de Desarollo Economico, 1961 - 1970", Santiago, 1964. 191 pages.

(The Plan analyzed is a summary of the original [illegible]-page Plan. A table of contents of the original Plan appears on page 189 of the summary.)

CHILE

Total planned investment [illegible] is $[illegible] million. It will increase from [illegible]% of total [illegible] in [illegible] to [illegible]% in [illegible].

Public sector investment will mainly be concerned with transport and communication, energy, and urbanization. Strengthening these areas will help the private sector to grow.

Investment in Industry

Total investment in industry over the [illegible]-year period will amount to $[illegible] million, or [illegible]% of the total investment in all sectors of the economy.

Foreign investment will amount to $[illegible] million ([illegible]%) and domestic investment to $[illegible] million ([illegible]%) of the total investment in industry.

Out of the total industrial investment over the period ($[illegible] million) [illegible]% is to be direct public investment; [illegible]% is to be indirect public investment; [illegible]% is to be direct private investment.

Public financing of private investment in industry is expected to amount to $111 million over the period.

[illegible]. Strategy and Policy

The production of new goods, such as plastics, will be promoted.

The demands for traditional intermediate products, such as cement, will be satisfied.

The production of finished manufactured goods for domestic consumption will be encouraged.

To encourage industrial development, fiscal policy will be used to:

- promote capital accumulation by industrial firms.
- eliminate taxes which tend to prevent specialization and to hold down quality.
- attract foreign investment to those sectors concerned with export production.

Specific fiscal action to be taken includes the following:

- taxes will be cut in order to lower Government revenue below the now planned level of 14.5% of total GDP.
- savings will be transferred to the private sector through long-term credit at low rates of interest.
- increased investment by the private sector will be encouraged in order to attain higher rates of growth.
- after the third year, Government expenditure will be increased.

Tariff policy will be used to allow foreign competition in certain cases and reduce tariffs on machinery and equipment imports for certain industries. Special action will be taken whenever:

- other countries dump industrial products.
- foreign countries subsidize their export industries.
- foreign devaluations occur.
- irregularities occur favoring imports which might be harmful to domestic production.

C. <u>Institutions</u>

Savings will increase from 1[illegible]% of GDP in 1961 to 1[illegible]% of GDP in 1970 and enhance capital accumulation.

The average rate of savings for the decade will be 16%.

It is essential that the domestic capital market be improved.

CHILE

III. DEMAND PROJECTIONS AND DATA BASES

Projections were made for each of the [illegible] groups into which the industrial sector is divided.

A distinction is made between those industries which are already well established and the developing ones which are to increase exports or to replace imports.

Projections were made:

- to estimate the growth of investment requirements over the next [illegible] years, in both private and public sectors.
- to estimate the growth of demand, the production of goods and services, and improvements in living standards.
- to show the incidence of planned growth on the balance of payments.
- to draw up the general direction which economic growth should take. However, adjustments will be made periodically as new situations arise.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Growth of Output	GDP in $ millions 1961	1970	Average Annual Increase
Foodstuffs	131	197	4.5%
Drink	17	27	5%
Tobacco	5.7	8.[illegible]	4%
Textiles	83	125	4.5%
Shoes, clothing	160	235	4%
Wood and cork	40	99	10.5%
Furniture	42	65	5%
Paper and cellulose	14	31	9%
Printing	33	49	4.5%
Leather	10.5	15	3.5%
Rubber	8	13	5%
Chemicals	47	97	8%
Petroleum derivatives	18	40	9%
Non-metallic ores	33	88	11%

(cont'd.)	[illegible] (in millions) 1961	[illegible]	Average Annual Increase
Basic metallurgy		[illegible]	
Machinery, electrical and transport equipment	[illegible]	[illegible]	[illegible]
Miscellaneous	4[illegible]	[illegible]	
All Manufacturing	[illegible]	[illegible]	[illegible]

<u>Source of Planned Investment in Industry (1961 - [illegible])</u>

	$ millions		
	Foreign	Domestic	Total
* Specific Projects:			
Sugar	14	[illegible]	[illegible]
Fabrics	16	[illegible]	[illegible]
Paper and cellulose	64	[illegible]	[illegible]
Wood	[illegible]	17.[illegible]	[illegible]
Cement	19	[illegible]	[illegible]
Steel	99	68	[illegible]
Agricultural tools	1	1.[illegible]	[illegible]
Shipyards	11	[illegible].5	[illegible]
Chemicals	12	8.5	[illegible]
Petroleum derivatives	111	[illegible]	[illegible]
Totals	380	191	571
**Non-specific Projects:	194	194	388
Arts and Crafts:	27	71	98
Replacement Projects:	230	245	475
All Projects	831	701	1,532
	(54%)	(46%)	(100%)

*Specific Projects are those for which there are precise investment requirements, based upon the cost of the specific plants envisaged.

**Non-specific Projects are those for which investment is required in order to increase the present production capacity, but the investment is not actually calculated for any specific plants.

B. **Priority of Sectors**

Investment priority will be given for the production of intermediate and finished capital goods.

CHILE

Both the quantity and the quality of goods entering international markets will be increased, particularly steel, paper, cellulose, and wood.

Newer industries, such as fisheries, chemicals, and shipyards, will also receive special attention.

C. Other Sectoral Plans

V. PLANNED MANUFACTURING PROJECTS

No specific projects have been planned for many traditional industries, such as textiles, shoes, clothing, tobacco, drink and food. Instead, the decision of when and how expansion is to take place will remain in the hands of the firms themselves. In many cases, firms in these sectors will increase production to maximum capacity.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

Very little gain is expected in productivity, due to the low level of technology and a lack of conscientiousness in work. However, adequate educational programs will be established, even at the management level. These will promote the type of human relations which are conducive to greater efficiency.

The Government should give its support to:

- improve industrial organization and production planning.
- promote the maintenance of equipment and machinery.
- improve the administrative systems of companies.
- improve the transport of factors of production within the country.

Policies will be developed to encourage companies to produce at full capacity.

Well established industries will be encouraged to increase both productivity and quality.

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

The Committee for Economic Programming and Reconstruction (Comité de Programación Económica y de Reconstrucción - COPERE) will continue to play a major part in programming economic development. Its main functions will be:

- to co-ordinate governmental decisions.
- to diffuse technical information and statistics.
- to obtain a closer participation of government agencies in the task of programming economic development.

Assistance in accomplishing these functions will be given by an advisory group which the Chilean Government has obtained from the UN Economic Commission to Latin America. This group of 5 experts will work with the Planning Department of the Development Corporation (Direción de Planificación de la Corporación de Fomento).

Both the Economic Commission for Latin America and the Department of Technical Assistance (Dirección de Operaciones de Assistencia Técnica - DOAT) have played, and will continue to play, a significant part in the country's industrial programming. Investigations will be made of industrial processes, the local availability of raw materials, and the situation of domestic and foreign markets.

The formation of corporations will be encouraged and facilitated. At the same time, corporations will be required to divulge to shareholders pertinent data on their operations. Such regulations pertaining to industry must be codified.

While, at the moment, there is a lack of skilled labor only in certain industrial sectors, the Plan recommends that:

- training be carried out by bringing schools' study programs in close contact with industry, and by the creation of apprenticeships.
- adult training be accelerated.

[illegible]

VIII. PROBLEM AREAS

Some of the major problems arise due to the country's low level of technology.

Lack of electric power is one of the main obstacles to the development of the manufacturing industries.

A lack of conscientiousness toward work results in low productivity.

Insufficient transportation holds back the development of agriculture and related processing and manufacturing plants.

The domestic capital market needs to be improved.

The economy is particularly vulnerable to fluctuations of world market prices.

IX. PREVIOUS INDUSTRIAL GROWTH

Rates of growth have been slow. GDP per capita increased at approximately 1.[illegible] per annum from 1930 to 1960.

The manufacturing industries' part in GDP grew considerably during this 30-year period, from 15% to 26% of the total output.

It is difficult to measure the effects of the import-substitution policy, largely due to fluctuations and distortions in the price system, and to changes in the composition of exports and imports.

It should be noted that the cost of the earthquakes of May 1960 amounts to approximately $245 million.

SUMMARY OF THE 1965 - 1968 INDUSTRIAL DEVELOPMENT PLAN OF CHINA (TAIWAN)*

I. GOALS AND OBJECTIVES

A. Planned Growth:

	1964	1968	Average Annual Increase
Manufacturing GNP/capita	$ 45.5	$ 63	8.5%
Total GNP/capita	$200	$237	4.3%
Population (000)	12,605	13,965	2.6%
Manufacturing GNP ($ millions)	575	887	11.4%
Total GNP ($ millions)	2,520	3,310	7.1%
Manufacturing % of Total GNP	23%	27%	

Exchange rate: US $1 = 40.0 Taiwan $

B. Other Objectives:

To transform the economic structure, with manufacturing playing a much more important role in the economy than it has in the past.

To give particular attention to the development of large-scale heavy industries.

To develop the industries that produce for the overseas market, concentrating on those export products that have high income elasticity of demand and low transportation costs.

To modernise industrial equipment and to rationalize industrial organisation and management.

To promote large-scale production, in the interest of economic efficiency, and to strengthen the competitiveness of Taiwan's products in the world market.

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* Fourth Four-Year Plan for the Economic Development of the Province of Taiwan, 1965 - 1968; Council for International Economic Co-operation and Development, Taipei, 1965. 272 pages.

CHINA (Taiwan)

To develop specialization and complementarity in the manufacture of export products, by promoting vertical and horizontal linkage of export-oriented industries.

To promote the adoption and dissemination of modern industrial technology.

To realize rapid growth, while maintaining economic stability.

To realize the full development and utilisation of natural, human and investment resources.

To increase employment at an average annual rate of 3.8%, from 4.35 million in 1964 to 4.96 million in 1968. Employment in manufacturing is to increase from 588,000 to 733,000, providing 24% of the new employment.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Total Investment in Development (1965 - 1968)

	$ millions	%
In Manufacturing	700	31
In the Whole Economy	2,225	100

Source of Investment in Development (1965 - 1968)

	Government Surplus Revenue	Government Enterprises	Domestic Private Sector	Foreign Sources	Total	%
Domestic Savings (net)	67	150	1,178		1,395	57
Depreciation Reserves (on fixed assets of enterprises)	-	320	550		870	35
Foreign Sources (net)	-	-	-	200	200	8
Total	67	470	1,728	200	2,465	100%
% of Total	3%	19%	70%	8%	100%	

B. Strategy and Policy

Government assistance will be furnished to selected industries in the private sector, in line with the general objectives for the development of manufacturing. (For example, one of the criteria for development of import-substituting industry will be whether it can be sucessfully transformed into an export industry.)

Administrative procedures for sanctioning and assisting private industry will be streamlined, and all restrictive controls affecting the establishment and operation of industrial enterprises will be gradually removed.

Incentive measures will be periodically reviewed, so as to achieve effective allocation and utilization of resources. In particular, a list of "Criteria for Assistance to Industry" will be promulgated, and tariff policy will be revised.

Investment activities will continue to be encouraged through fiscal, monetary, foreign exchange allocation, and other measures.

The formation by industries of large-scale research, production and marketing organizations for cultivating the domestic and foreign markets, and for developing new products, will be assisted.

Overseas sales and distribution facilities to increase the competitiveness of Taiwan's products will be improved.

The development of a domestic capital market will continue to be encouraged.

The modernization of organization and management in private and government enterprises will be promoted; production, marketing and managerial personnel will be trained.

A periodical review of the propriety and effectiveness of existing protective measures, such as restrictions on new plants, import controls and tariffs, will be made in order to effect changes needed to ensure a dynamic and competitive industrial system.

Industrial policy, generally, will aim at reconciling the objectives of promoting large-scale production and large-scale marketing systems on the one hand, and of preventing the emergence of monopolies on the other.

Following the establishment of the Northern Taiwan and Southern Taiwan Industrial Land Development Planning Groups in 1960-61, to develop pilot industrial districts at Lintu and the Kaohsiung Harbor respectively, the development of other Industrial Districts in different parts of the country is envisaged as a solution to the problem encountered in the acquisition of industrial land for additional industrial growth. Public installations and facilities will be provided, in these Districts, and in some cases, factory building loans of up to 80% of the cost will be provided to induce manufacturers to move into these districts.

A considerable amount of resources will be directed to scientific research, improvement of the quality of manpower, increased educational opportunities, and to the expansion of advanced vocational schools for the training of industrial technicians.

C. Institutions

III. DEMAND PROJECTIONS AND DATA BASES

The major demand projections made for industry appear in IV - A of this Summary.

The data bases used in developing this Plan include data on the supply of, and demand for, goods and services and closely allied data, during the four years just prior to the Plan period. Included are data on:

- changes in inventory.
- export volume and markets.
- imports of raw materials or parts, in relation to home-produced inputs.
- normal production capacity and equipment utilization rates.
- employment and labor-output ratios.
- investment projects.
- annual requirements of investment and working capital.
- sources of financing.
- requirements of major materials and equipment.
- requirements of additional workers.
- estimated returns of individual investment projects.

The data that are directly related to production in the industrial sector are collected by the co-ordinating agencies for the sector (the First Division, the Production Committee of the Council for International Co-operation and Development, and the Industrial and Mining Technical Office of the Ministry of Economic Affairs) which send out questionnaires to all private and government business enterprises.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Planned Growth of Value-Added in Manufacturing ($ millions)

	Value Added 1964	Value Added 1968	Average Annual Increase	Investment (1965 - 1968)	% of Total Investment
Food products	243	295	5 %	67	10%
Chemicals and chemical products; petroleum products; petro-chemicals; plastics; pharmaceuticals; and rubber products	81	157	18 %	166	24%
Synthetic fibers and textiles	82	149	16 %	144	20%
Wood products and paper	40	66	13 %	72	10%
Non-metallic mineral products	31	48	11.5%	40	6%
Metals and metal products; machinery; electrical machinery and appliances; and transportation equipment	64	128	19 %	192	27%
Miscellaneous, including handicrafts	32	42	7 %	19	3%
Total	573	885	11.5%	700	100%

Planned Growth of Physical Output in Manufacturing

	Unit		1964 Demand Domestic	1964 Demand Export	1964 Demand Total	1964 Output (actual)	1968 Demand Domestic	1968 Demand Export	1968 Demand Total	1968 Output (target)
Food, Beverages and Tobacco:										
Refined sugar	metric tons	(000,	105	803	908	795	123	750	873	873
By-products of sugar:										
- alcohol	kilolitres	"			27	27			20	20
- yeast	M. T.	"	1.4	2.4	3.8	3.8	2.5	4.0	6.5	6.5
Canned pineapple	cases	"	100	2,776	2,876	3,800	150	4,150	4,300	4,300
Canned mushrooms	"	"	16	1,171	1,187	1,097	100	2,000	2,100	2,100
Canned oranges	"	"	5	392	397	458	50	950	1,000	1,000
Canned vegetables	"	"	179	564	743	743	200	1,350	1,550	1,550
Canned fruits	"	"	20	86	106	106	70	380	450	450
Cigarettes	"	"	1,228	-	1,288	1,288	1,476	-	1,476	1,476
Alcoholic beverages	hectolitres	"	1,102	4	1,106		1,152	7	1,159	1,159
Monosodium Glutomate and glutamic acid	metric tons		4,984	8,009	12,993	12,993	7,000	12,000	19,000	19,000
Preserved foods	"	"	-	4,500	4,500	4,500	-	8,500	8,500	8,500
Frozen fruits and vegetables	lbs.	"	-	200	200	200	-	200	200	200
Chemical Fertilisers:										
Nitrogen	metric tons		152	6	158	135	158	78	236	236
Phosphoric anhydride P_2O_5	"	"	38	-	38	34	34	-	34	42
Potash K_2O	"	"	43	-	43	4	45	-	45	0
Others	"	"	-		n. a.	n. a.	n. a.	n. a.	n. a.	1,000

	Unit	1964 Demand Domestic	1964 Demand Export	1964 Demand Total	1964 Output (actual)	1968 Demand Domestic	1968 Demand Export	1968 Demand Total	1968 Output target
Basic Chemicals:									
Caustic soda	metric tons	52	5	57	57	108	[illegible]	[illegible]	[illegible]
Hydrochloric acid	" "	76	3	79	79	116	4	[illegible]	[illegible]
Liquid chlorine	" "	9	-	9	9	14	-	14	[illegible]
Chlorine gas	" "	16	-	16	16	[illegible]	-	[illegible]	[illegible]
Other chlorine products	" "	0.9	-	0.9	0.9	[illegible]	-	[illegible]	[illegible]
Soda ash	" "	15	-	15	15	34	-	34	34
Petroleum Products:									
Motor gasoline	kilolitres (000)	245	15	260	260	293	[illegible]	304	[illegible]
Aviation gasoline	" " "	11	28	39	39	30	[illegible]	40	[illegible]
Jet fuel	" " "	159	62	221	221	219	28	247	247
Kerosene	" " "	31		31	39	15	-	15	15
Diesel	" " "	154	16	170	[illegible]	119	[illegible]	121	321
Fuel oil	" " "	206	214	420	420	[illegible]	[illegible]	528	528
Lubricating oils	" " "	13	-	13	13	[illegible]	[illegible]	[illegible]	[illegible]
Asphalt	metric tons "	33	7	40	40	32	[illegible]	42	42
Solvents		10	-	10	10	[illegible]	-	12	12
Petro-chemicals:									
Polyester chips	metric tons	200	-	200	-	[illegible]	-	[illegible]	[illegible]
Caprolactam	" "	200	-	200	-	[illegible]	-	[illegible]	[illegible]
Plasticizers	" "	10,000	-	10,000	[illegible]	24,000	-	24,000	
Menthol	kilolitres	10,000	-	10,000	-	[illegible]	[illegible]	[illegible]	[illegible]

	Unit	1964 Demand Domestic	1964 Demand Export	1964 Demand Total	1964 Output actual	[illegible] Demand Domestic	[illegible] Demand Export	[illegible] Demand Total	[illegible] Output target
Plastics:									
Polyethylene	metric tons	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Polyvinyl chloride	" "	11,194	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Polystyrene	" "	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Urea formaldehyde glue	" "	-	-	-		[illegible]	[illegible]	[illegible]	[illegible]
Urea formaldehyde moulding powder	" "	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Phenol-formaldehyde glue	" "	-	-	-				[illegible]	[illegible]
Bakelite	" "	[illegible]	-	[illegible]	[illegible]	[illegible]	-	[illegible]	[illegible]
Pharmaceuticals:	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]			
Rubber Products:						[illegible]	[illegible]	[illegible]	[illegible]
Truck and automobile tires	sets [illegible]	[illegible]	[illegible]	[illegible]	[illegible]				
Motorcycle tires	" "	[illegible]	[illegible]		[illegible]				
Bicycle tires	millions	[illegible]	[illegible]	[illegible]	[illegible]				
Rubber canvas shoes	doz. [illegible]	[illegible]	[illegible]	4	4				
Rainboots and shoes	pairs [illegible]	[illegible]	[illegible]	[illegible]					
Synthetic Fibers:			finished and semi-finished				finished and semi-finished		
Rayon filament and staple (incl. ploynosic staple)	metric tons	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cellulose acetate (staple, filament and tow)	" "	[illegible]	-	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]
Polyamide fibers (nylon)	" "	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]
Polyester fibers (dacron)	" "	[illegible]	4[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
Polyacrylonitrile fibers (orlon)	" "	1,[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

	Unit	1964 Demand Domestic	1964 Demand Export (finished and semi-finished)	1964 Demand Total	1964 Output actual	1968 Demand Domestic	1968 Demand Export (finished and semi-finished)	1968 Demand Total	1968 Output target
Textiles:									
Cotton yarn	bales (000)	127	182	309	[illegible]	67	176	243	243
Cotton blended with man-made fiber yarn	" "	0	3	3	[illegible]	[illegible]	[illegible]	81	81
Regenerated fiber yarn (rayon)	" "	12	48	60	64	[illegible]	41	44	44
Regenerated fiber blended with synthetic fiber yarn	" "	11	-	11	11	[illegible]	[illegible]	[illegible]	[illegible]
Worsted yarn	lbs. "	1,659	1,417	4,076	4,076	[illegible]	[illegible]	5,800	5,800
Woolen yarn	" "	2,506	-	2,506	2,506	[illegible]	[illegible]	[illegible]	3,000
Wood Products and Paper:									
Plywood	sq. ft. millions	67	667	734	734	72	[illegible]	[illegible]	[illegible]
Paper and paper board	metric tons (000)	147	27	174	170	174	[illegible]	[illegible]	[illegible]
Bagasse	" " "	18	18	36	36	[illegible]	20	97	[illegible]
Wood chemical pulp	" " "			40	12			84	84
Non-metallic Mineral Products:									
Cement	" " "	1,457	893	2,350	2,355	2,360	[illegible]	3,560	3,560
Plate glass	standard cases "	290	248	538	582	400	800	1,200	1,200
Glassware	metric tons "			49	49			68	68
Steel Products:	" " "	441	70	511	339	666	120	786	536
Bar, shape and rail	" " "								(330)
Wire and products	" " "								(95)
Sheets, tinplate, and galvanized sheet	" " "								(35)
Plate	" " "								(20)
Pipe and fittings	" " "								(45)
Miscellaneous	" " "								(11)

	Unit	1964 Demand Domestic	1964 Demand Export	1964 Demand Total	1964 Output (actual)	1968 Demand Domestic	1968 Demand Export	1968 Demand Total	1968 Output (target)
Aluminum Products:									
Ingots	metric tons (000)	10.8	8.6	19.4	19.4	20	-	20	20
Sheet	" " "	5.5	2.5	8.0	8.0	9.5	8.5	18	18
Foil	" " "	0.7	0.08	0.78	0.76	0.9	2.9	2.9	2.9
Non-electrical Machinery:									
General machinery	" " "	52	24	76	60	78	40	118	94
Internal combustion engines	hp "	21	9	30	21	34	19	53	36
Power tillers	units "	2.2	-	2.2	1.3	4.0	0.4	4.4	4.2
Textile machinery	" "	1.5	0.4	1.9	1.4	2.0	1.5	[illegible]	[illegible]
Pumps	hp "	122	8	130	100	155	15	170	150
Printing presses	units	170	80	250	200	180	150	330	300
Chemical processing machinery	metric tons "	6.1	1.5	7.6	3.6	20	9	[illegible]	21
Electrical Equipment and Appliances:									
Motors	hp (000)	210	5	215	190	291	5	296	280
Transformers	kw "	500	-	500	180	560	20	580	380
Insulated wire	metres millions	85	0.5	85.5	81	98	3.5	101.5	100
Electric refrigerators	sets (000)	22.3	-	22.3	22	90	0.2	[illegible]	90
Fluorescent lamps	millions	1.7	0.7	2.4	2.9	2.5	[illegible]	[illegible]	[illegible]
Electric fans	sets (000)	220	30	250	250	270	40	310	[illegible]
Transistor radios	"	40	410	450	450	40	1,160	1,200	1,200
Television receivers	sets "	25	-	25	25	50	-	50	50
Watt-hour meters	"	150	35	185	213	130	30	160	160
Transportation Equipment:									
Automobiles	units (000)	4.3	-	4.3	1.8	12	-	[illegible]	11
Motorcycles	" "	40	-	40	35	48	3	[illegible]	[illegible]
Bicycles	" "	220	10	300	300	[illegible]	[illegible]	[illegible]	[illegible]
Shipbuilding	dwt. "	60	-	60	15	[illegible]	-	[illegible]	[illegible]

B. Priority of Sectors

The development of large-scale, heavy industries and the promotion of export-oriented industries will receive priority.

C. Other Sectoral Plans

The plan for industry describes the present status of the following industrial sectors and sub-sectors and outlines the measures that will be taken to develop them during the 1965 - 1968 period:

Sugar and Sugar Products

Present status: Sugar - the annual production of sugar exceeded 890,000 metric tons in 1957-59 and declined thereafter, due to the increased planting of competitive crops and the fall in the world market price of sugar. Production has picked up again since 1962. Export earnings from sugar have also followed this trend. Exports of sugar account for about 89% of the total production, although sugar's share in total exports has declined gradually from 50% since 1959. Foreign exchange earnings increased sharply in 1964 to $130 million (29% of total exports), due to the rise in world prices.

The industry is operated by a Government enterprise, the Taiwan Sugar Corporation (TSC), which owns 27 factories, with a daily grinding capacity of 57,000 metric tons of sugar cane.

Alcohol - the production of alcohol from sugar molasses has declined since the 1950s, owing to the increasing diversion of molasses to industrial uses. About two-thirds of the production of TSC is used by the Taiwan Tobacco and Wine Monopoly Bureau for blending alcoholic beverages, and the rest is used by TSC as fuel.

Yeast - the production of yeast by the Hsinying Yeast Plant of TSC (completed in 1957, with an annual production capacity of 12,000 metric tons of dried yeast has been below capacity, although sales promotion has enabled both export and domestic sales to increase. Exports are hampered by high production costs.

Measures for future development: Sugar - the implementation of the 10-year Equipment Replacement Plan will be completed, in order to improve quality and reduce costs. The plan was begun in 1958, but has only been implemented to the extent of 30%, due to lack of funds. Present capacity is deemed to be sufficient.

Alcohol - the use of molasses to produce alcohol is considered uneconomical.

Yeast - current production should match the demand for food yeast, created by the school lunch program and the wheat food promotion program. A project for manufacturing baking yeast will be studied and carried out.

Bagasse - depithing of bagasse will be carried out by the Taiwan Pulp and Paper Corporation in its mills.

Food Canning

Present status: Canned pineapple - the steady expansion of production and improvements in quality up to export standards have been due to Government assistance and policies, such as the establishment of factory standards, encouragement of plant improvement, the centralized supply of cans by the Taiwan Supply Bureau, and the unified purchase and distribution of fresh pineapples. More than 90% of the production is exported to the USA, Japan and Western Europe.

Canned mushrooms - the industry began in 1958, and the competitive position of the product in an expanding world market has steadily improved due to the lower costs in Taiwan. Exports account for 97% of production, principally to West Germany.

Other canned products - the canning of oranges and asparagus developed during the third Plan period, and production has tripled since 1960.

Measures for future development: Canned pineapple - the machinery and equipment will be modernized, and stainless steel construction will be adapted. Quality control will be introduced. Pineapple by-products, such as concentrated juice, pineapple skin for cattle feed, and sugar recovery will be produced.

Canned mushrooms - quality control will be enforced in all factories, and new markets will be opened up. The canning of mixed vegetables will be undertaken.

Other canned products - the orange and asparagus canning industries will be improved. The canning of pickled vegetables, and other dishes prepared according to Chinese receipes, will be undertaken.

Tobacco and Alcoholic Beverages

Present status: Production is principally for domestic consumption and is a monopoly, operated by the Taiwan Tobacco and Wine Bureau, which has continuously renewed and expanded its plants and equipment and improved the quality of its products. The profits from this Government-owned enterprise are an important source of Government revenue.

There are 10 wineries, breweries and distilleries, with an annual production capacity of 120 million litres, and 5 tobacco factories, with a total annual capacity of 1,600,000 cases.

Domestic consumption per capita of alcohol and tobacco has steadily increased, with the rise in incomes.

Measures for future development: Existing equipment will be renewed, fuller utilization of existing capacity will be encouraged, efficiency promoted, and costs reduced.

The production of white grape wine, Shoashing wine and beer, which enjoy a good market, will be increased, while the production of the lower grades will be reduced.

The establishment of malt-producing plants for fermentation of beer will be encouraged.

Quality control, in the production of tobacco, will be tightened.

New products, such as high grade pipe tobacco, and cigars, and high grade alcoholic beverages will be added.

Monosodium Glutamate (MSG)

Present status: The industry has shown very high rates of development, following the success of the studies that led to the use of the fermentation method in 1964.

There are 20 plants, the larger ones being Wei Chuan, China Fermentation, Wei Hsin and Tsin Tsin, which together account for 78% of the total crystallizing capacity of 1[illegible] metric tons in all 20 plants.

The domestic market has reached a saturation point at around 5,000 metric tons per year; but the export market has been considerably expanded, and brought in more than $7 million in export earnings in 1964.

Measures for future development: Research and development work in addition to studies for developing the synthesis of MSG and for improving the efficiency of the fermentation method, will be intensified.

The utilization of excess equipment to produce nutrients and/or pharmaceuticals by the fermentation process will be ensured.

The development of MSG-using industries, such as canned vegetables, fish and meat for export will be assisted.

New markets for MSG will be explored.

Other Agricultural Processing Industries

Present status: Sugar preserved fruits - production is mostly for export, which was stimulated during the third Plan period by a Government measure whereby taxes collected on sugar and salt used in preserved fruit for expert were refunded. Exports have increased from about 100 metric tons in 1950 to about 4,500 metric tons in 1964. The main products are preserved plums, olives, oranges and ginger.

Frozen food - this is a new industry, introduced in 1964, and the products packed in Taiwan include frozen peas, pineapple, asparagus, mushrooms and frozen fruit juice.

Pickled and dehydrated vegetables - the major items are salted vegetables, dried bamboo shoots, and dried fruits and vegetables which are exported mainly to Southeast Asian countries (annual exports in 1964 reached 28 metric tons of dried fruit, 1,590 metric tons of dried bamboo shoots, and ver: 3 [illegible], [illegible] salted vegetables. Most [illegible] is undertaken as a farm side line, and the quality is [illegible] [illegible] control.

Fruit juices - production is mainly for domestic consumption and includes orange juice, pineapple juice, guava juice, mixed juices, and concentrated juices.

Processing of meat and eggs - the products are frozen meat mainly for export, meat products such as ham, fried shredded pork, sausage and bacon mainly exported to Southeast Asia, and salted and preserved eggs mainly exported to the USA. The volume of production of these items has been steadily growing.

Measures for future development: Sugar preserved fruit - the acquisition of new equipment for improving efficiency and expanding production will be encouraged. The adoption of new processing methods, designed to preserve the original flavor and to adapt it to suit the tastes of foreign buyers, will be assisted. The use of food coloring and preservatives will be controlled. Improvement of packaging methods and designs will be promoted.

Frozen foods - standards for factories will be established and closer attention will be given to the selection of fresh raw materials. Strict factory sanitation conditions will be enforced and products will be subject to pre-export inspection.

Pickled and dehydrated vegetables - the selection of fresh vegetables for processing by the Farmers' Association will be assisted. Low temperature vegetable dehydration will be developed to preserve the original color and flavor (the early operation of a pilot plant for freeze dehydration is envisaged, although this method is costlier).

Fruit juices - the improvement of factory equipment will be assisted, and the use of harmful artificial coloring and flavoring will be prohibited. Attractive and convenient packaging will be developed. The production of concentrated juices will be developed.

Processing of meat, eggs and dairy products: a modern electric slaughter house will be constructed. Modern meat-processing plants, with refrigeration and steam cookers, will be established. Emphasis will be placed on sanitary inspection. Studies will be undertaken for improving processing techniques and the quality of products. Powdered milk plants will be established to reduce imports.

Chemical Fertilizers

Present status: The industry has been considerably expanded under previous Plans, in order to meet the requirements of agricultural development and to replace imports. With the exception of potash, which must be imported, domestic production of nitrogenous and phosphate fertilizers is sufficient to meet local requirements.

There are three fertiliser producers in Taiwan:

- the Taiwan Fertiliser Company (TFC); annual production capacity: 54[illegible] metric tons in terms of standard fertilisers; products: calcium cyanamide, calcium superphosphate, nitrophosphate, nitrochalk, urea, ammonium sulphate.
- the Kaohsiung Amonium Sulphate Corporation (KASC), which produces 1[illegible] metric tons annually.
- the Mobile China Allied Chemical Industries (MCAC); annual production: 1[illegible] metric tons of urea, 45,000 metric tons of anhydrous ammonia (supplied to the TFC).

Since the development of natural gas in Taiwan, the fertilizer industry has entered a new phase of development, which will enable it to supply domestic farmers at lower cost and to compete in the international market.

Measures for future development: Natural gas will be used for fertiliser production: the new project calls for the production of 454 T/D of amonia which will be converted to 300 T/D of urea, and 450 T/D of ammonium sulphate.

Air oxydation equipment will be installed in TFC's no. 7 plant.

N-P-K fertiliser will be produced from phosphoric acid in TFC's no. 3 plant.

A new sulphuric acid unit will be constructed in TPC's no. 3 plant.

Electrolysis by fuel oil will be replaced in TPC's no. 3 plant.

Phosphoric acid will be produced in TPC's no. 4 plant.

A 20,000 kw carbide electric furnace in TPC's no. 1 plant will be replaced.

A new sulphuric acid plant will be constructed by the KASC to increase ammonium sulphate production to 180,000 metric tons a year.

The Alkali-Chlorine Industry

Present status: With the development of the chlorine-consuming PVC industry, the demand for chlorine has exceeded the demand for caustic soda, which has had to be increasingly exported. This imbalance has been exactly the reverse of the situation in previous years.

There are 19 caustic soda-chlorine plants in Taiwan, of which the largest is the Government-owned Taiwan Alkali Company (2/3 of the total production).

The requirements of soda ash had to be met mostly by imports, until the establishment, during the second Plan, of the South East Soda Ash Manufacturing Company. There is one other producer: the Lee Yuan Soda Ash Co.

Measures for future development: The production of chlorine will be increased to meet increasing domestic needs and to export the surplus caustic soda.

Soda ash production will be expanded by 18,000 metric tons per year.

Petroleum Products

Present status: Most of the crude oil required for the industry is imported.

Production has increased in volume and variety, since the expansion and modernization in 1952 of the Chinese Petroleum Corporation's Kaohsiung Refinery.

Eighty per cent of the crude oil refined is consumed domestically. Exports of the surplus, especially of the heavier fuel oils which are in surplus, have been hampered by the establishment of refineries in other parts of Asia.

Measures for future development: The quality and supply of power fuel, and lubricating oils will be increased.

Raw materials to meet the development requirements of the petro-chemical industries will be developed.

A 5,000 B/D hydro desulfurization unit will be constructed in order to utilize distilled furnace oil from the cracking unit.

A 10,000 B/D hydro cracking unit to produce high grade motor gasoline and diesel oil will be installed.

Distillation facilities will be modernized and a 50,000 B/D topping unit will be installed.

An offshore monobuoy at Kaohsiung harbor for moving supertankers of deep draft and submarine pipelines will be installed, in order to lower shipping and loading costs.

The product distribution system will be strengthened.

Petro-Chemicals

Present status: The development of the industry was held up in previous Plans, due to a number of factors, and was confined to the implementation of only four projects: a sulphur recovery unit, an aromatic recovery unit, the urea-amonia plant of MCAC (a joint venture in [illegible]) of the Chinese Petroleum Corporation, Mobil Oil Company, and the MCAC), and a dodeyn benzene plant set up by the CPC.

The raw materials and intermediates supplied by the CPC are aromatics (benzene, toluene, xylene), olefins (ethylene, propylene and butadiene) and natural gas (a million cubic meters per day).

Measures for future development: It is proposed to develop the industry on the basis of [illegible]'s expanded refining capacity and the existing reserves of natural gas.

A petro-chemicals complex will be established to meet the requirements of plastics and synthetic fiber manufacturers.

The investment of private capital will be encouraged in the industry.

Projects to be implemented are:

- facilities for intermediates (naptha cracking to produce [illegible] - [illegible],[illegible] metric tons of ethylene per year; aromatics extraction to produce [illegible],[illegible] metric tons of aromatic chemicals a year).
- caprolactum (annual production capacity: [illegible],[illegible] metric tons).
- polyester chips (annual production capacity: [illegible],000 metric tons).
- plasticizers (annual production capacity: 20,000 metric tons).
- methanol (annual production capacity: 1[illegible],[illegible] metric tons).

Plastics

Present status: The manufacture of plastic articles has been developing rapidly, owing to their extensive uses and low costs. The demand for all kinds of plastic raw materials, including the use of PVC in housing construction, has been expanding.

Measures for future development: The plastic raw materials industry will be developed, using the intermediates of the petro-chemical industry.

The production of PVC for export will be expanded and the opportunities for domestic manufacture of plasticizers and stabilizers explored.

Synthetic resins and adhesives, which use natural gas as a raw material, will be produced.

The possibility of producing synthetic rubber and paint resin from raw materials for plastics will be investigated.

Improvement of the processing methods of plastic fabricators, in order to reduce costs, will be encouraged.

Pharmaceuticals

Present status: Prior to 1960, domestic demand depended mainly on imports, and local plants were engaged mainly in processing and repacking. The situation changed with the implementation of a number of Government measures which included:

- establishment of the "Standards for Pharmaceutical Plants in Taiwan" and the "Regulations for Control of Misbranded, Adulterated and Prohibited Drugs".
- a survey of factories, in accordance with the "Standards".
- the training of skilled personnel.
- enforcement of quality control.
- promotion of technical co-operation with foreign firms, and encouraging foreign firms to set up plants in Taiwan.
- protection of domestic industry by controlling the entry of certain drugs.

Since the adoption of these measures, the number of qualified plants rose from 45 in 1960 to [illegible] in 1964. Ten Japanese and US firms established operations in Taiwan, either directly or in co-operation with local firms. Production in the local factories has been expanded and diversified to include antibiotics. However, imports of drugs have not declined markedly (annual imports remaining around $12 million, mostly in preparations, and less than a third in materials).

Measures for future development: A new food and drug law will be promulgated and a new food and drug administration will be established.

Quality control will be applied.

The improvement of manufacturing methods, in order to increase efficiency, will be studied.

Production will be diversified and new drugs will be developed from medical herb extracts.

The use of the fermentation process in producing pharmaceutical materials will be promoted.

Rubber Products

Present status: Prior to 1960, the industry was characterized by the existence of a large number of small producers, who were not encouraged to modernize their facilities because of the oversupply and the vicious price competition among producers. Development of the industry began with the promotion of exports. Production has improved both in volume and quality.

Automobile tires are produced in technical cooperation with Japanese firms; however, overproduction exists as the export market has still to be fully developed.

The production of single tires was aimed originally at the domestic market, but now exports, which compete well in the world market, account for nearly half the output.

There has been marked improvement in all other rubber products.

Measures for future development: Truck and automobile tires - tighter quality control will be exercised, costs will be reduced, and imports of major materials such as tire cords, will be substituted for by domestic production.

Bicycle tires - the industry will be mechanized to meet the increasing demand and to strengthen export capability.

Rubber shoes - small factories will be encouraged to merge, in order to modernize the industry for export purposes.

Synthetic Fibers

Present status: This is a relatively new industry: the rayon filament plant of the China Man-Made Fiber Corporation was set up in 1957, and a nylon spinning plant and a dacron spinning plant, using imported raw materials, began production in 1964. Several other firms are still in the planning or construction stage.

Measures for future development: Production facilities for polynosic fiber will be installed.

Capacity for the production of polyamide and polyester fibers will be increased.

The manufacture of [illegible] fibers will be developed.

The application of polypropylene and other new fibers will be developed.

Intermediate and synthetic fiber raw material plants will be established in coordination with the development of the petrochemical industry.

Textiles

Present status: The development of the textile industry, whose raw material requirements depend almost entirely on imports, was initially aimed at meeting domestic demand. During the third plan period, as costs declined and quality improved, production for export began to develop. Textile exports in [illegible] amounted to over [illegible] million, or [illegible] of total exports, second only to sugar exports as an earner of foreign exchange.

Cotton spinning - there are [illegible] spindles, with an annual productive capacity of [illegible] bales of [illegible]'s yarn. Fifteen per cent of the spindles are of low efficiency and are to be replaced. To improve the quality of products, most mills have added combing equipment for finer yarn. There were [illegible] units in [illegible], with an annual capacity of [illegible] bales of [illegible]'s combed yarn. Mills are also planning to expand their blending equipment, in line with increasing demand for blended textiles in domestic and foreign markets.

Cotton weaving - there are [illegible] automatic looms, with an annual capacity of [illegible] million metres of fabrics. The total capacity is over [illegible] million metres, if the power looms in small weaving mills are included.

Man-made fiber textiles - [illegible],000 spindles (excluding converted cotton spindles), with an annual capacity of [illegible],000 bales of yarn are currently in operation.

Woolen textiles - production and sales have expanded with rising standards of living. Wool spinning facilities were expanded to [illegible] spindles in [illegible]: [illegible] spindles for worsted yarn, and [illegible] for woolen yarn, with an annual capacity of [illegible] million pounds of yarn.

Measures for future development: The manufacture of high quality blended products will be promoted.

Modern dyeing and finishing equipment will be introduced and processes improved.

Mill facilities will be improved, efficiency increased, and costs reduced.

Quality control will be tightened.

Technical training programs for employees will be implemented and management will be improved.

A trading agency will be organized to study market trends, in order to avoid concentration in particular export areas, to diversify export items, and to further explore foreign markets.

Plywood

Present status: Production increased rapidly during the third Plan period, due to strong export demand: seven new factories were established, and five expanded. Export proceeds in [illegible] reached $[illegible] million or [illegible]% of total exports.

There are [illegible] manufacturers with a total annual production capacity of [illegible] million square feet. The two largest producers are the [illegible]ee Chang Yung Lumber and Plywood Manufacturing Works Ltd. and the [illegible]in Shan Hao Plywood Corporation. Each of these producers has a monthly production capacity of [illegible] million square feet. Five other large companies have a monthly capacity of [illegible] million square feet.

Measures for future development: The use of local woods to substitute for imports of 'luan' logs will be promoted.

The export of prefabricated plywood products will be promoted.

Quality controls will be tightened and expanded.

The unification of export will be promoted, in order to prevent unhealthy competition between domestic manufacturers.

[illegible] increase [illegible] market [illegible] to ensure the supply [illegible]

[illegible] will be [illegible] meet the growing export demand.

Pulp and Paper

Recent statistics [illegible] has shown [illegible] growing demand, [illegible] the industry faces a number of difficulties. They are:

- difficulties in the procurement of raw materials such as bagasse, rice straw, wood and bamboo, owing to the development of competitive uses. The tendency has been to depend increasingly on imported raw materials.
- the industry's earnings in foreign exchange are entirely consumed in the [illegible]; its profits are meager, and its costs high.
- small paper mills have been set up, however, under the shelter of a protected market. There are a number of mills in operation, but their efficiency is low and high costs prevent the modernization of equipment and of processes.

Measures for future development: [illegible] will [illegible] the [illegible]

[illegible] utilization of more hardwood will be encouraged by promoting the installation of equipment for making [illegible] and [illegible] chemical and semi-chemical wood pulp.

Forest concessions will be extended to mills which have attained an economic scale of production.

A large wood pulp and paper board [illegible] in to manufacture newsprint [illegible]

Co-operation among exporters will be encouraged and exports expanded.

A Pulp and Paper Board Research Institute will be established to:

- improve production processes and study market trends.
- promote the manufacture of high grade paper in order to replace imports.

4. Taiwan

Cement

Present status: Production has increased 4 times since 19[illegible], from [illegible] metric tons to [illegible] in 1964, thus making a large quantity available for export.

The Taiwan Cement Corporation, with 4 plants and an annual capacity of [illegible] metric tons, accounts for [illegible] of current capacity. Nine other plants were established during previous 4-year periods, and their combined capacity was almost fully utilized in the 1964 production.

Export development is hampered by high freight and storage costs.

Measures for future development: Equipment will be improved, production costs lowered, and productivity and product quality raised.

Manufacturers will be encouraged to establish grinding plants and bulk storage silos in foreign countries.

Foreign markets will be expanded in co-ordination with the development of new routes for vessels flying the Chinese flag.

Pre-stressed and light weight concrete products will be developed to meet the demands of house construction.

Glass

Present status: Taiwan's demand for various glass products can be met entirely by domestic production, with the exception of a few high grade products. Only plate glass is exported, mainly to the United States, while other glass products are exported only in the form of containers for other export goods (about [illegible] metric tons annually).

The chief producers are:

- flat glass: The Hsinchu Window Glass Works, Inc., which operates three plants (total annual capacity of [illegible],000 standard cases).
- containers: The Bottle Manufacturing Works of the Government-owned Taiwan Tobacco and Wine Monopoly Bureau (annual capacity of [illegible],000 metric tons); and the Young Brothers Enterprise (production capacity: 1[illegible],000 metric tons a year).
- glass tubes: The Taiwan Fluorescent Lamp Corporation, and the China Electric Corporation.

Measures for future development: The production of flat glass will be expanded by [illegible] standard cases a year for the export market, and the quality of flat glass including figured glass, polished glass and tempered glass will be improved.

The quality of glass containers will be improved and their uses promoted.

A large-scale glass-sand processing plant will be established.

A fiber-glass plant will be established in [illegible], in co-ordination with the development of the electric, plastic and man-made fiber industries.

A plant to produce optical glass will be established.

The manufacture of glass instruments and glassware will be developed and improved.

Plants for making glass blocks and other construction materials will be established.

Research will be conducted to develop new glass products.

Iron and Steel

Present status: Annual production has increased from 40,000 metric tons in 1953 to 339,000 metric tons in 1964.

Production capacity:

- iron smelting: 100,000 m/t
- steel smelting: 280,000 m t
- steel rolling: 350,000 m t

There are more than 50 plants, but most of them merely refine scrap (two-thirds imported) into steel ingots, using electric furnaces, and process the ingots into a limited variety of products in small-size rolling mills. Many specialized kinds of steel products have to be imported.

Problem areas - low-cost power and the availability of skilled workers have contributed to rapid development, but production costs and quality are difficult to control, because of limited plant capacity and the low efficiency of existing facilities. The domestic market is oversupplied in certain products, but exports are difficult, owing to unstable production costs and low quality.

Measures for future development: Existing steel plants will be assisted in improving their management and technology, [illegible] modernize the industry, under economical [illegible] conditions.

The merger of the small steel plants will be encouraged and specialization promoted. Quality control will be tightened.

The development of new steel products for import substitution will be promoted.

An integrated iron and steel mill for the production of steel plate, skelp, sheets, tinplate and galvanized sheets, using local metallurgical coking coal and imported iron ores, will be established. If private investment is not immediately forthcoming to fully finance this project, the Government plans to contribute the balance and sell its shares to the public after the mill begins production in [illegible]. This project is planned in coordination with the planned development of the shipbuilding, food processing, machinery and electrical appliances industries.

Aluminum

Present status: Annual production has doubled between [illegible] and 1964, when the Government-owned Taiwan Aluminum Corporation (TAC), which is the only integrated refining and processing mill, completed its projects for expansion and modernization.

There are also about [illegible] small-scale factories in the private sector, engaged in processing aluminum products such as wire, cable, doors, windows, chairs, utensils, tubes, etc. The TAC has given technical assistance to these plants to develop uses for aluminum.

Measures for future development: The expansion and modernization of the refining industry will be continued, in view of projected increases of domestic and export demand.

An up-to-date hot-rolling mill will be established to produce high-strength aluminum alloy and high-grade plates and sheets.

The production of aluminum cans for the expanding food processing industry will be developed.

Exports of aluminum will be promoted in the form of sheets and other products, instead of ingots.

Non-electrical Machinery

Present status: No significant development was achieved in the third plan period, though progress still fell far short of the planned targets. The reasons were:

- the small scale of operations,
- the lack of specialization,
- outdated equipment and technology,
- the poor quality of the products.

The bulk of the machinery needed for the country's economic development has been imported. Growth has been achieved, however, in the domestic production of internal combustion engines, textile machinery, pumps, printing presses and chemical processing machinery to meet a large proportion of the country's needs.

Measures for future development: The assistance to major manufacturers of specialized machinery (Taiwan Machinery Manufacturing Corporation, Taiwan Shipbuilding Corporation, etc.) will be centralized.

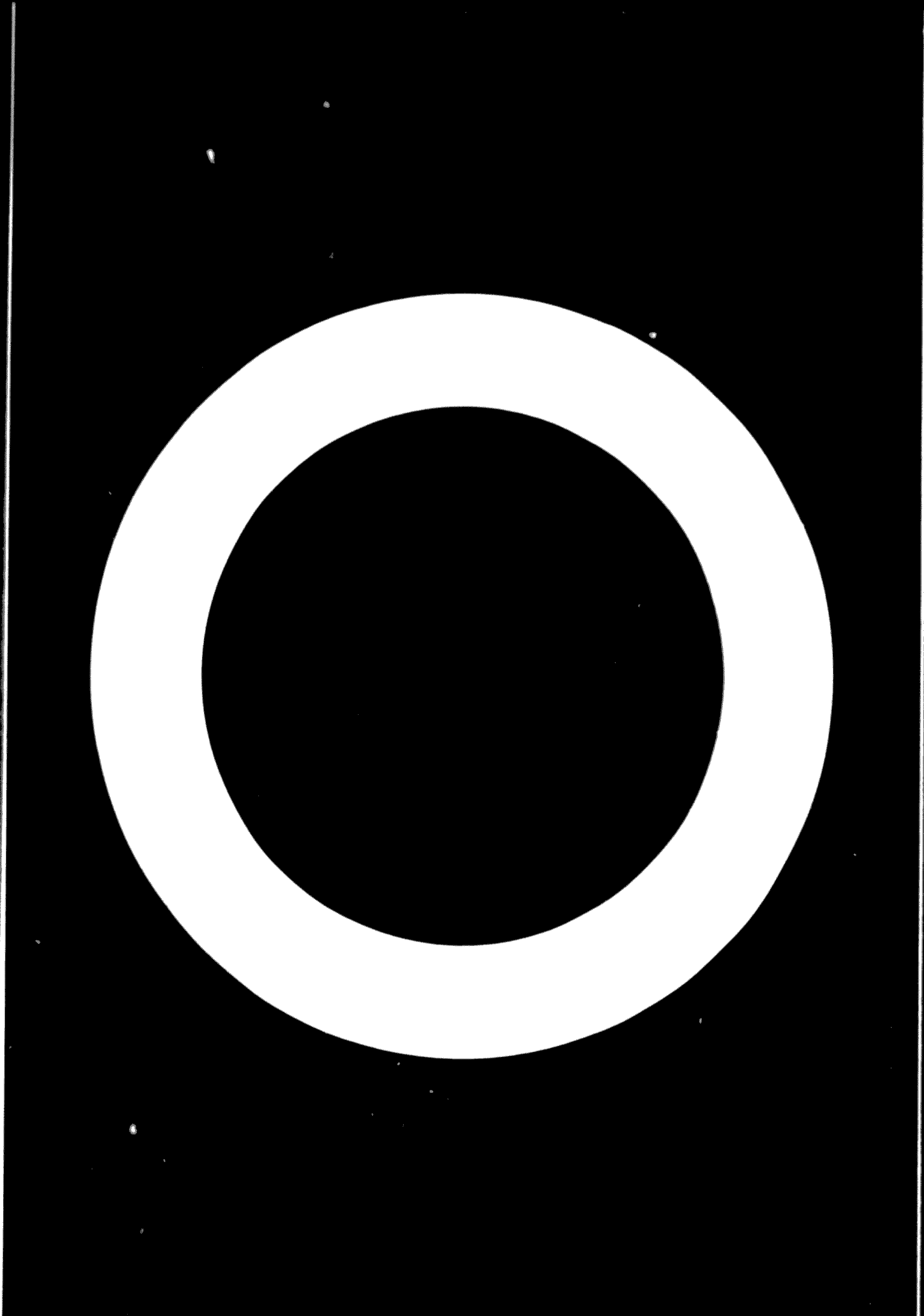
Specialization of manufacture will be encouraged through the establishment of central and satellite industry systems.

Centralized plants will be established for the manufacture of components like heavy castings and forgings, gears, tools and dies, in order to reduce wastage of investment resources.

Technical co-operation among manufacturers will be encouraged, and the introduction of improved technology, designs and management practices will be promoted.

The manufacture of precision machinery, such as small gasoline engines, gas compressors, water meters, watches and clocks, cigarette-making machines, machine tools, plastic processing machines, etc. will be developed.

Special machinery industries to meet the needs of regional development, such as agricultural machinery and machinery for the sugar, food processing and mining industries will be developed.



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Electrical Machinery and Appliances

Present status: Rapid and steady progress has been realized during the first Plan period, with the volume, variety and quality of products increasing from year to year.

There was a sharp rise of exports from this industry during the period of the Third Plan, mostly to countries in Southeast Asia, although the exports face strong competition from Hongkong and Japan.

Measures for future development: Plant and equipment for all industries in this sub-sector will be expanded and modernized except for fluorescent lamps, where present capacity is considered adequate.

Specialization and co-operation will be promoted between producers of components and appliance manufacturers, through the establishment of a central and satellite factories system.

Means of improving technological processes and developing new products will be studied, with the technical co-operation of leading foreign manufacturers.

The development of the electronics industry will be accelerated.

Transportation Equipment

Present status: Automobiles - are produced by the Yue Loong Motor Company Ltd., in co-operation with Japanese and US makers. The ratio of locally produced components has increased steadily and exceeds 60%. However, costs are high because of the small scale of production.

Motorcycles - this new industry developed since 1963, but it has expanded rapidly. The 14 producers in the industry are following a policy of increasing the ratio of locally produced components, in the assembly of their products.

Bicycles - most of the production of whole units is realized in small workshops engaged only in assembly. Cost is low, but the quality is questionable and uneven.

Shipbuilding - is undertaken by two main private firms. The Taiwan Shipbuilding Corporation has a capacity of: dry cargo vessels - 20,000 dwt.; tankers - 30,000 dwt. Taiwan Machinery Manufacturing Corporation has capacity to build various kinds of ships up to 5,000 dwt.

Measures for future development: Automobiles - plant and equipment and productive efficiency are to be improved in order to reduce costs. Quality will be improved and sales expanded.

Motorcycles - production methods and quality will be improved, and the use of imported components will be progressively eliminated.

Bicycles - quality control will be tightened, in order to favor production for export.

Shipbuilding - equipment and production techniques will be improved. A 15,000 dwt. class drydock will be built and eventually extended to up to [illegible]5,000 dwt. class. A 20,000 dwt. class floating dock will be built.

Handicrafts

Present status: Complete and systematic statistics on past production and sales of handicrafts are not available, so only items with an export record can be dealt with.

The value of exports increased from $2.4 million in 1956 to over $11 million in 1964, and the destination of exports expanded from 20 to 42 countries. The United States accounts for 57% of total exports.

There are 14 categories of exported handicrafts, and they include a total of more than 2,000 items. The categories are:

- embroideries and hand-made garments.
- bamboo and rattan articles.
- hat bodies.
- sisal and other botanic fiber products.
- dolls and toys.
- wooden furniture and wood carvings.
- drawn works.
- rugs and floor coverings.
- hair nets.
- handbags.
- porcelain and earthen ware.
- feather products.
- souvenir items.
- miscellaneous articles.

[illegible] Taiwan

The first four categories account for more than [illegible] of the total export value.

There are more than 10,000 production units engaged in the industry; most are small-scale home workers scattered all over the rural districts. Their products are almost entirely handmade and use local raw materials. (There has been recently a trend toward import of raw materials for processing and re-export).

The rapid expansion of the industry was largely due to the establishment of the Taiwan Handicraft Promotion Centre in 1956, which was made responsible for:

- expanding production and improving designs.
- improving the utilization of raw materials.
- initiating technical assistance and training projects.
- developing foreign markets for Taiwan's handicrafts.

Measures for future development: It is expected that the value of exports will increase 15% annually in the future, as it is believed that Western buyers are turning to Taiwan from Hongkong and Japan, where labor costs are increasing.

All development of the industry will aim at export expansion. Measures to be taken to promote the industry include:

- new products, such as gloves, hand-woven sweaters, and leather shoes will be developed.
- the design, quality and packing of products will be improved.
- mechanization will be introduced, in order to put the industry on a mass-production basis.
- co-ordination between the industry and other medium and small-scale industries will be improved.
- production centres will be established for the home and factory producers, with a view to centralizing raw material purchase and product export.
- technical training will be expanded.

- the processing of imported raw materials for re-export will be promoted, in order to increase employment opportunities.
- surveys of foreign markets will be conducted and local producers will be assisted in promoting exports.

V. PLANNED MANUFACTURING PROJECTS

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

The estimated amount of fixed capital investment required to create each new employment opportunity in the economy as a whole during the Plan period is $3,750. To create each new employment opportunity in manufacturing will require about $4,750.

The economy-wide annual rate of increase in labor productivity during the Plan period is estimated at 3.5%, but the rate in manufacturing is estimated to be as high as 5.5%.

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

The planning process in Taiwan consists of the following three stages:

- first, macro-economic projections are made for the Plan period.
- then, sectoral programs are formulated within the framework of the Plan.
- then, over-all individual projects are formulated.

Each operation is based on an extensive system of data collection and co-ordinated planning process. The data collection process is described in III of this Summary. The planning process is described below.

The Planning Process

Using the data collected on the previous 4 years, the coordinating agencies meet with other relevant bodies in both the public and private sectors to:

- review current conditions in each industry and predict future development trends.
- forecast aggregate domestic and export demand, in order to determine production goals for each industry.
- review the technical and economic feasibility of each project, with emphasis on comparing possible technological alternatives from the point of view of investment requirements, foreign exchange requirements for the initial outlay and the annual operation of the project, skilled labor requirements, and employment capacity.

After the specific study of each individual project, or industrial program, is completed, screening committees or panels are convened to:

- check on the co-ordination and the consistency of the separate programs and projects.
- review the current production capacity and rate of utilization of each industry, in the light of the preliminary production goals.
- sum up the individual projects and formulate the over-all sectoral program for industry.

The industrial program, thus formulated, is then turned over to the Third Division of the CIECD for further review and revision to ensure its consistency with the over-all development plan for the economy.

The production goals, investment targets and employment projections of either the industrial program, or of the over-all economic development plan, will be revised, according to whichever procedure is more feasible and conforms better to the general objectives of the Plan.

VIII. PROBLEM AREAS

Most of the new enterprises, owing to the small capital investments and the limited size of the domestic market, operate on only a small scale. Of the 21,000 factories operating in 1962, only 482 employed more than a hundred workers each, and only 46 employed more than a thousand workers.

Industrial equipment and production techniques are relatively obsolescent.

There is a lack of technological research and development.

There is too much reliance on government protection.

Management is largely family-oriented and tends to resist modernization and rationalization.

IX. PREVIOUS INDUSTRIAL GROWTH

Significant progress has been achieved, as a result of the implementation of the three Four-Year Plans and the concerted effort of all sectors of the economy:

- manufacturing output increased by [illegible]% since 195[illegible], with an average annual growth of 14%.
- industrial productivity rose by [illegible]% and industrial employment by 61%.
- most consumer goods are now supplied by domestic manufacturers.
- industrial exports rose by $[illegible] million, accounting for 40% of total exports in 1964, as against 4% in 195[illegible].

The rapid growth of industry was due mainly to large investments, which were encouraged by such factors as:

- the existence of a ready-made domestic market.
- Government protection of import-substituting industries.
- the preference accorded to the private sector for investment in new industries, relative to direct Government investment in them.
- Government sponsorship of, and assistance to, private industries requiring large capital expenditures and involving greater risks.
- the improvement of the investment climate, by a wide variety of measures including the relaxation of

controls and the simplification of administrative procedure, the granting of industrial loans, revision of legislation for the encouragement of foreign and overseas Chinese investments, and the enacting of a statute for Encouragement of Investment to provide tax incentives.

- the improvement and expansion of economic infra-structure.

Some of the characteristics of industrial growth in the initial Four-Year Plan periods were:

- the establishment of almost all branches of industry that did not require advanced technology and large-scale operation.
- the production of a wide range of basic import-substituting consumer goods, aimed at the satisfaction of final demand.
- the absence of a balanced industrial structure.

Some of the characteristics of development in more recent Four-Year Plan periods have been:

- the growth of industries producing intermediate and capital goods.
- the increasing interdependence of existing industries.
- the development of import-substituting industries, producing durable consumer goods.
- the increasing reliance on export markets by older established industries, producing basic consumer goods, such as food processing, textiles, plywood, cement, glass, and aluminum products.
- steady improvements in management and production methods.

SUMMARY OF THE 1969 - 1973 INDUSTRIAL DEVELOPMENT PLAN OF ECUADOR*

I. GOALS AND OBJECTIVES

A. Planned Growth:

	1966	1973	Average Annual Increase 1966-73
Manufacturing GDP/capita	$ 31.5	$ 50.0	6.[illegible]%
Total GDP/capita	$215	$265	3.1%
Population (000)	5,330**	6,730	****3.[illegible]%
***Manufacturing GDP ($ millions)	167	335	1[illegible].4%
Total GDP ($ millions)	1,148**	1,780	6.5%
Manufacturing % of Total GDP	15%	19%	

Exchange rate: US $1 = 18.18 Sucres

**from UN Monthly Bulletin of Statistics, July 196[illegible]

***includes cottage industries

****Plan does not indicate a rate, so the 196[illegible] - [illegible] actual rate is used.

B. Other Objectives

The objectives of the manufacturing sector are:

- to increase the manufacturing % of total GDP.
- to promote industries having a comparative advantage in international markets.
- to diversify and increase export production.
- to correct deficiencies due to the size of some establishments.
- t adapt the industrialization process to the availability of local factors of production.
- to promote industrial integration through the creation of industries complementary to those already existing .

General objectives for the whole economy are:

- to maintain a 5% average annual increase of exports.
- to increase employment at 2.8% per annum, so that 77% of the population will be economically active at the end of the period.

*Preliminary Draft of Industrial Program for 1969 - 1973. 138 pages.

ECUADOR

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Total planned gross investment from 1969 to 1973 will be $2,250 million, of which 23% or $526 million will be in manufacturing:

Average Annual Investment in the Manufacturing Sector
($ millions)

	Fixed Capital	Increase in Stocks	Financing Capital Formation	Total
1966 - 68	52.0	10.5	5.2	67.7
1969 - 73	79.3	18.1	7.8	105.2

Source of Funds for Investment in the Manufacturing Sector
(annual average in $ 000)

Domestic Sources:			
	Reserves	32	30%
	Non-distributed profits	10	10%
	Sub-total	42	40%
Foreign Sources:			
	Credit	42	40%
	Capital contribution	21	20%
	Sub-total	63	60%
All Sources:	TOTAL	105	100%

B. Strategy and Policy

Prior to the elaboration of new projects, present capacity utilization and productivity will be studied.

Investigations of the potential use of local natural resources will be promoted.

The restructuring of the manufacturing sector will favor the production of intermediate and capital goods, at the expense of consumer goods.

Major emphasis will be given to export production.

A special effort will be made in exporting to the Latin American Free Trade Area and other markets, according to the results of several market studies now under completion. Tariff policy will be used to channel investment into particular sectors, through complete or partial exemption from import duties.

An increasing proportion of exports from the agricultural sector will be in the form of manufactured or semi-manufactured goods.

An import-substitution policy will be pursued, although it will be of smaller importance than in the previous 5 years. Monetary and exchange rate policy will be used to orient import-substitution.

Marginal cottage industries will have to transform their production methods.

Increased production in the manufacturing sector will offer employment opportunities to labor coming from the cottage industries.

Fiscal policy will be used:

- to remove all obstacles which prevent further industrial development.
- to grant investment incentives.
- to prevent investment in marginal enterprises.

The following measures will be adopted to limit speculation and to channel investment resources to the industrial sector:

- mortgage revenues will be liable to income tax.
- a land tax will be instituted following a survey of land value and ownership.
- a tax will be imposed on the resale of private cars.
- free exchange rate markets will be eliminated.

To attract foreign investment:

- feasibility studies will be carried out, and priorities will be set.
- the advantages offered by Ecuador will be publicized.
- statutes regulating foreign investment will be clarified.

Labor policy will involve:

- the creation of employment and labor mobility offices in the main urban centres.
- labor training according to the needs of industrial development.
- the improvement of industrial security and hygiene.

[illegible]. <u>Institutions</u>

The 1957 Law on Industrial Development (Ley de Fomento Industrial) was revised in 196[illegible] and in 1964. Its objectives are:

- to attract domestic and foreign investment.
- to improve the balance of payments position, through further import-substitution and increased exports.
- to create employment opportunities.
- to encourage the use of local primary resources.

Credit for industrial investment will be made available largely through:

- the National Values Commission - Financial Corporation (Comisión Nacional de Valores - Corporación Financiera).
- the Ecuador Finance Corporation (COFIEC).
- the National Banking system.

The Central Bank will be responsible for medium and short-term credit, and the corporations will be responsible for long and medium-term credit.

The National Values Commission should:

- intervene directly in the establishment of firms and participate in their social capital.

- channel investment to top priority projects.
- facilitate the obtaining of credit by small firms.
- contribute to training in business administration.
- improve its project evaluation system in order to reduce delays.

Government policy will be primarily concerned with:

- the reform of the legal system regulating the establishment of financial institutions.
- the improvement of banking and commercial legislation.

The National Technological Institute (Instituto Nacional de Tecnologia) will carry out further technological research, in close co-operation with institutions concerned with planning, technical assistance, finance, and graduate education.

III. DEMAND PROJECTIONS AND DATA BASES

The objectives set in the Plan were calculated on the basis of:

- annual inquiries
- the 1965 Industrial Census
- the results of some feasibility studies.

1966 was chosen as the starting point of most of the projections which were made.

Import-substitution policy has been formulated on the basis of:

- data on imports of manufactured goods
- projections made of future import requirements.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

[illegible]ANS

Value Added by the Manufacturing Sector+
$ millions

	1968	[illegible]	1968-73 Total % Increase	Average Annual Increase
Food	43	[illegible]	66	[illegible]
Drinks	13	16	23	4%
Cigarettes and tobacco	1.5	2	33	6%
Textiles	[illegible]	26	[illegible]	[illegible]
Shoes and clothing	1.2	1.5	25	5%
Wood	3.5	6	71	11%
Furniture	2	[illegible]	[illegible]	[illegible]
Paper and cardboard	5.5	[illegible]	[illegible]	[illegible]
Printing	6	[illegible]	67	11%
Leather and hides	0.8	1.1	37	6%
Rubber products	5	7.5	50	8%
Chemicals	12	36	200	25%
Petroleum derivatives	10	16	60	10%
Non-metallic minerals	7	12	71	11%
Basic metals	0.7	6.6	843	55%
Mechanical metal	4.5	9.5	111	16%
Miscellaneous	3.3	5.5	166	11%
TOTAL	135	250	85	13%

+excludes cottage industries

B. Priority of Sectors

Changes in Manufacturing Structure++
(value added)

	1966	1973	Average Annual Increase
Consumer Goods	51%	44%	9%
Intermediate and Capital Goods	49%	56%	15%
TOTAL	100%	100%	13.2%

++excluding cottage industries

C. Other Sectoral Plans

Imports of manufactured goods will decrease by [illegible]%, and domestic production of manufactured goods will increase their contribution to domestic demand to 68.8%. Import-substitution will be most important in:

- petroleum derivatives
- paper and cardboard
- iron, steel and bronze
- plastic fibers
- steel lamination
- metallic structures
- flour, and yucca starch.

Import-substitution will be $71 million in 1973, compared to $6.7 million in 1969:

Cumulated Value of Import-substitution
($ 000)

	1969	1973
Food	40	5,000
Cigarettes	-	2,620
Textiles	800	3,800
Paper and cardboard	3,900	14,860
Leather and hides	-	170
Rubber products	-	200
Chemicals	750	6,960
Petroleum derivatives	-	18,700
Non-metallic minerals	60	1,490
Basic metals	250	7,690
Mechanical metals	860	9,170
TOTAL	6,660	70,660

Imports of manufactured goods will increase from $161 million in 1966 to $298 million in 1973:

Imports ($ 000)

	1966	1973	% change
Food	5,660	770	-86
Drink	560	1,110	98
Cigarettes	4,480	50	-99
Textiles	10,670	22,440	110

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	[illegible]	[illegible]	Change
[illegible]	1	1,[illegible]	[illegible]
[illegible]	4[illegible]	1,11[illegible]	1[illegible]
[illegible]	1	-	
Paper and cardboard	[illegible]	[illegible]	[illegible]
Printing	[illegible],4[illegible]	[illegible]	-1[illegible]
Leather and hides	[illegible]	[illegible]6[illegible]	[illegible]
Rubber products	[illegible]	[illegible]	-84
Chemicals	[illegible]	[illegible]	[illegible]
Petroleum derivatives	[illegible]	-	
Non-metallic minerals	4,[illegible]	[illegible]	[illegible]
Basic metals	[illegible],1[illegible]	1[illegible]	6
Metal products	[illegible]	[illegible]	1[illegible]
Miscellaneous	[illegible]	[illegible]	[illegible]
Total	1[illegible]	[illegible],640	[illegible]

[illegible] will increase to 9.8% of domestic production:

Exports by Industry

[illegible]

	1968	1973
Food	13,97[illegible]	39,300
Drink	1[illegible]	1,30[illegible]
Cigarettes and tobacco	1[illegible]	70[illegible]
Textiles	3[illegible]	[illegible]
Shoes and clothing	7[illegible]	2,[illegible]
Wood	[illegible],450	11,[illegible]
Furniture	20	60
Leather and hides	130	220
Chemicals	3,11[illegible]	8,950
Non-metallic minerals	-	1,010
Miscellaneous	130	330
Total	23,560	66,670

[illegible] industries, [illegible], and [illegible] are [illegible] of [illegible]:

[illegible]rts by Product

	[illegible]	[illegible]
[illegible]		[illegible]
[illegible] fish, fish [illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible] derivatives	[illegible]	[illegible]
[illegible] and [illegible], [illegible] marmalade	[illegible]	[illegible]
[illegible] and [illegible]		[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	-	[illegible]
Brew[illegible] malt	[illegible]	[illegible]
T[illegible] products, [illegible]	[illegible]	
[illegible], [illegible], etc.		[illegible]
Shoes, clothing, sombreros	[illegible]	[illegible]
Wood	[illegible]	11,[illegible]
Furniture	[illegible]	[illegible]
Pharmaceuticals	[illegible]	[illegible]
Pyrethrum extract	[illegible]	[illegible]
[illegible]	-	[illegible]
[illegible], [illegible], [illegible] and [illegible]-acetate	-	[illegible]
Total	[illegible]	64,68[illegible]

Employment in the manufacturing sector will change as follows:

	1968 No. of People Employed	%	197[illegible] No. of People Employed	%
Manufacturing	42,580	18%	68,400	[illegible]
Cottage industries	189,800	82%	185,600	[illegible]
All Manufacturing	232,600	100%	254,000	100%

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Manufacturing employment by sub-sector excluding cottage industries will increase as follows:

Employment by Industry

Number of People

	[illegible]	[illegible]
Food	[illegible]	[illegible]
Drinks	[illegible]	[illegible]
Cigarettes	[illegible]	[illegible]
Textiles	[illegible]	[illegible]
Shoes and clothing	[illegible]	[illegible]
Wood	1,598	[illegible]
Furniture	[illegible]	[illegible]
Paper and cardboard	[illegible]	[illegible]
Printing	[illegible]	[illegible]
Leather and hides	[illegible]	[illegible]
Rubber products	[illegible]	[illegible]
Chemicals	[illegible]	8,889
Petroleum derivatives	1,541	[illegible]
Non-metallic minerals	[illegible]	[illegible]
Basic metals	127	[illegible]
Mechanical metals	[illegible]	5,125
Miscellaneous	[illegible]	[illegible]
Total	[illegible]	[illegible]

Horizontal integration will be promoted in selected industries such as textiles and metallurgy.

V. PLANNED MANUFACTURING PROJECTS

One hundred seventy-one projects are included in the Plan, contributing $64 million to manufacturing GDP, and requiring a total investment of $163 million.

The main objectives of the planned projects are:

- to lead to a greater output per establishment.
- to invest capital at a much higher rate per plant and per person occupied.
- to increase annual average wages.
- to utilize domestic raw materials in a much larger proportion than imported ones.
- to attain a higher level of productivity.

[illegible]

[illegible]	1969 - 1973 *
fixed investment	[illegible]
[illegible]	[illegible]
gross output	[illegible]
value added	[illegible]
Materials and power consumption:	
domestic materials	[illegible]
imported materials	[illegible]
fuel and electric power	[illegible]
Other characteristics:	
employment number of people	[illegible]
wages and social security	[illegible]
average fixed investment per project	[illegible]
average fixed investment per person occupied	[illegible]
average annual wage per person occupied	[illegible]

* Dollars, unless otherwise indicated.

Average investment per establishment will exceed $90[illegible],[illegible] as compared to $36[illegible],[illegible] in the previous Plan.

Foreign loans will account for [illegible]% of the total required investment.

Sector	No. of firms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Food	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]		
Drink		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			[illegible]	
Tobacco		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]				[illegible]
Textiles		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]				
Shoes and clothing		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		
Wood and cork	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Wood furniture		[illegible]	[illegible]	[illegible]		[illegible]	[illegible]					
Paper and cardboard	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	
Printing		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				
Leather and hides		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					
Rubber	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	
Chemicals		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
Petroleum and carbon		[illegible]	6,430	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			
Non-metallic minerals	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
Basic metals	6	[illegible]	4,640	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	
Metallic products	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Electrical equipment	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		
Transport material	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]			[illegible]	[illegible]
TOTAL	[illegible]	100,050	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SUMMARY [illegible] INVENTORY BY [illegible] MANUFACTURING [illegible]

Project	Date of Completion	Location	Annual Capacity Quantity	Units	Total Investment $	Employment No. of People
Food: (6[illegible] projects)					[illegible]	[illegible]
cold storage room	[illegible]	Pichincha	[illegible]	[illegible]	[illegible]	
" " "	[illegible]	Loja	[illegible]		[illegible]	
" " "	[illegible]	Chimborazo	[illegible]		[illegible]	[illegible]
" " "	[illegible]	Manabi	[illegible]		[illegible]	
" " "	[illegible]	Carchi	[illegible]			
" " "	[illegible]	Cotopaxi	[illegible]			
" " "	[illegible]	Esmeraldas	[illegible]			
" " "	[illegible]	Los Rios	[illegible]			
storage room	[illegible]	Pastaza	6,[illegible]			
refrigeration network	[illegible]	Guayas	[illegible]			
"	[illegible]	Pichincha	[illegible]			
"	[illegible]	Tungurahua	[illegible]			
"		Azuay	[illegible]			
packing poultry		Pichincha	[illegible]			
" "	[illegible]	Guayas	[illegible]			
sausages	[illegible]	Azuay	[illegible]			
powdered milk	[illegible]	Cotopaxi				
milk regenerator	[illegible]	Manabi	[illegible]	[illegible] litres		
pasteurizing and milk regenerator	[illegible]	[illegible]	[illegible]			
" "			[illegible]			
concentrated fruit juice	[illegible]	[illegible]				
natural orange juice		[illegible]	[illegible]			
natural naranjilla juice	[illegible]	Tungurahua	[illegible]			

* [illegible] units are in metric tons, unless otherwise shown

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
canned vegetables		[illegible]chincha			
		[illegible]			
canned mushrooms and asparagus	[illegible]	[illegible]chincha			
tomato sauce and paste	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]			
marmelades and jellies	[illegible]	[illegible]ayas	[illegible]	[illegible]	
canned fish	[illegible]	[illegible]ayas	[illegible]	[illegible]	
"	[illegible]	[illegible]smeraldas	[illegible]	[illegible]	
processed [illegible] fat	[illegible]	[illegible]ichincha	[illegible]		
[illegible] oil	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
rape-seed oil extract	[illegible]	[illegible]	[illegible]	[illegible]	
palm-oil extract	[illegible]	[illegible]	[illegible]		[illegible]
oil extracts	[illegible]	[illegible]smeraldas	[illegible]	[illegible]	[illegible]
yucca flour	[illegible]	Pichincha	[illegible]	[illegible]	[illegible]
"	[illegible]	Los Rios	[illegible]		[illegible]
"	[illegible]	Manab[illegible]	[illegible]		[illegible]
yucca starch	[illegible]	Los Rios	[illegible]	[illegible]	[illegible]
cocoa derivatives	[illegible]	[illegible]uayas	[illegible]		
glucose	[illegible]	Manab[illegible]	[illegible]	[illegible]	
banana puree	[illegible]	[illegible] Oro	[illegible]	[illegible]	[illegible]
dehydrated bananas	1971	El Oro	[illegible]	[illegible]	[illegible]
coffee	[illegible]	Manabi	[illegible]	[illegible]	[illegible]
protein food	1970	Los Rios	[illegible]	[illegible]	[illegible]
baby food	1971	Pichincha	65	[illegible]	[illegible]

* All units are in metric tons, unless otherwise shown.

Project	Date of Completion	Location	Annual Capacity Quantity	Unit	Investment $	Employment
Food: (cont'd.)						
crushed dates	[illegible]	Carchi	[illegible]	*		
ice cubes	[illegible]	Manabi	[illegible]		[illegible]	
" "	[illegible]	Guayas	[illegible]		[illegible]	
" "	[illegible]	[illegible]	[illegible]			
" "	[illegible]	[illegible]	[illegible]		[illegible]	
tuna fish refrigeration	[illegible]	Manabi	[illegible]			
dehydrated fodder	[illegible]	Pichincha	[illegible]		[illegible]	
alfalfa flour	[illegible]	[illegible]	[illegible]		[illegible]	
balanced foods	[illegible]	[illegible]	[illegible]		[illegible]	
fish oil and flour	[illegible]	Guayas	[illegible]		[illegible]	
" " " "	[illegible]	[illegible]	[illegible]		[illegible]	
" " " "	[illegible]	Manabi	[illegible]		[illegible]	
shark industry	[illegible]	Guayas	[illegible]		[illegible]	
dehydrated soups	[illegible]	Guayas	[illegible]			[illegible]
Textiles: [illegible] products					[illegible]	
wool washing	[illegible]	[illegible]	[illegible]			
cotton ginning	[illegible]	[illegible]	[illegible]		[illegible]	
" "	[illegible]	Tungurahua				
printed cloth	[illegible]	Tungurahua	[illegible]	meters	[illegible]	
synthetic fiber cloth	[illegible]	Pichincha	[illegible]	meters	[illegible]	[illegible]
cabuya material	[illegible]	Manabi	[illegible]		[illegible]	
rope, thread, cloth	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
manila hemp	[illegible]	[illegible]	[illegible]			
sanitary textiles	[illegible]	[illegible]	[illegible]			

* All units are in metric tons, [illegible] shown.

Project	Date of completion	Location	Annual capacity*
Textiles: cont'd.			
sanitary textiles	[illegible]	Guayas	[illegible]
finished textiles	[illegible]	Pichincha	[illegible]
fishing nets	[illegible]	Manabí	[illegible]
Paper and Cardboard: [illegible] projects			
newspaper	[illegible]	Guayas	[illegible]
paper and cardboard	[illegible]	[illegible]	[illegible]
Kraft paper	[illegible]	Guayas	[illegible]
hemp paper	[illegible]	[illegible]	[illegible]
smooth cardboard	[illegible]	Guayas	[illegible]
wax paper containers	[illegible]	Guayas	[illegible]
Chemicals: (21 projects			
acetone-butanol-ethyl-acetate butyl-acetate-acetic acid	[illegible]	Guayas	[illegible]
citric acid	[illegible]	Guayas	[illegible]
soda	[illegible]	Guayas	[illegible]
chlorinated soda (Na[illegible])	[illegible]	[illegible]	[illegible]
aluminium sulphate	[illegible]	Guayas	[illegible]
ammonia	[illegible]	Guayas	[illegible]
castor oil	[illegible]	Manabí	[illegible]
glycerin and fatty acids	[illegible]	Guayas	[illegible]
essential oils and dyes	[illegible]	Pichincha	[illegible]
anti-biotics	[illegible]	Pichincha	[illegible]
urea	[illegible]	[illegible]	[illegible]
insecticides	[illegible]	Guayas	[illegible]

* All units are in metric tons, unless otherwise shown.

Project	Date of Completion	Location	Annual Capacity: Quantity	Annual Capacity: Units	Total Investment $ 000	Employment No. of People
Chemicals: (cont'd.)						
pyrethrum extract	197[illegible]	Cotopaxi	[illegible]	*	[illegible]	44
processed pyrethrum extract	197[illegible]	Cotopaxi	[illegible]		[illegible]	[illegible]
nylon textiles	[illegible]	Pichincha	[illegible]		[illegible]	[illegible]
rayon	[illegible]	Guayas	[illegible]		[illegible]	[illegible]
printing dyes	[illegible]	Pichincha	[illegible]		[illegible]	[illegible]
tanning extract	197[illegible]	Esmeraldas	[illegible]		[illegible]	[illegible]
papain	1969	Pastaza	[illegible]		[illegible]	[illegible]
composite PVC	1969	Guayas	[illegible]		[illegible]	[illegible]
acrilan sheets	197[illegible]	Pichincha	[illegible]		[illegible]	[illegible]
Petroleum and Carbon: (1 project)					[illegible]	[illegible]
oil refinery	1972	Pichincha	[illegible]		[illegible]	[illegible]
Non-metallic Minerals (15 projects)					[illegible]	[illegible]
pressed brick	1969	Pichincha	[illegible]		[illegible]	[illegible]
" "	1969	Azuay	[illegible]		[illegible]	[illegible]
fire-brick	[illegible]	Azuay	[illegible]		[illegible]	[illegible]
ampoules of pharmaceutical glass	[illegible]	Guayas	16,[illegible]		[illegible]	[illegible]
crystal	[illegible]	Guayas	[illegible]		[illegible]	[illegible]
glass	[illegible]	Guayas	[illegible]		[illegible]	[illegible]
insulating ceramics	[illegible]	Cotopaxi	[illegible]			[illegible]
china	[illegible]	Guayas	[illegible]		[illegible]	[illegible]
kaolin washers	[illegible]	Azuay	[illegible]		[illegible]	[illegible]
Portland cement	[illegible]	Pichincha	[illegible]		[illegible]	[illegible]
white cement	[illegible]	Canar	[illegible]		[illegible]	

* All units are in metric tons, unless otherwise shown.

Project	Date of Completion	Location	Annual Capacity: Quantity	Units	[illegible] Investment	[illegible]
Non-metallic Minerals: (cont'd.)						
hydrated lime	[illegible]	Pichincha	[illegible]	*	[illegible]	
tiles	[illegible]	Pichincha	[illegible]		[illegible]	[illegible]
asbestos cement tubes	[illegible]	Azuay	[illegible]		[illegible]	[illegible]
abrasive sandpaper and grindstone	[illegible]	Pichincha	[illegible]			
Basic Metals: (6 projects)					[illegible]	[illegible]
iron and steel works	[illegible]	Guayas	[illegible]		[illegible]	[illegible]
" " " "	[illegible]	Pichincha	[illegible]		[illegible]	[illegible]
special steel and iron bars	1973	Guayas	24,[illegible]		[illegible]	[illegible]
iron laminators	1971	Guayas	[illegible]		[illegible]	[illegible]
collapsible tubes	1969	Pichincha	[illegible]		[illegible]	[illegible]
bronze works	1964	Guayas	[illegible]		[illegible]	[illegible]
Metal Products: (13 projects)					[illegible]	[illegible]
metallic structures	1970	Pichincha	6,000		1,590	[illegible]
agricultural machines and other metallic structures	1972	Guayas	[illegible]		1,590	[illegible]
packages, casks, etc.	1971	Manabi	3,200		[illegible]	[illegible]
cutlery	1973	Guayas	[illegible]		[illegible]	[illegible]
hardware for buildings	1970	Guayas	250		[illegible]	[illegible]
" " "	1973	Pichincha	250		[illegible]	[illegible]
printing machines	1969	Pichincha	25		55	[illegible]
domestic utensils	1973	Pichincha	1,800		[illegible]	149
faucets, pumps	1973	Pichincha	460	[illegible]	460	[illegible]
forged steel and tools	1973	Pichincha	1,500		500	100

* All units are in metric tons, unless otherwise shown.

Project	Date of Completion	Location	Annual Capacity: Quantity	Annual Capacity: Units	Total Investment [illegible]	Employment No. of People
Metal Products: (cont'd.)						
matrices ?	[illegible]	Azuay	[illegible]	*	[illegible]	[illegible]
assembly of sewing machines and type-writers	1972	Pichincha	3,000		158	[illegible]
lanterns and press	1971	Pichincha	[illegible]		[illegible]	[illegible]
Electrical Equipment: (6 projects)					[illegible]	[illegible]
electric motors	[illegible]	Guayas	9,000		[illegible]	[illegible]
electric appliances	[illegible]	Guayas	[illegible]		[illegible]	[illegible]
electric piles	1969	Guayas	1,300		[illegible]	40
small electric pumps	[illegible]	Pichincha	28		[illegible]	[illegible]
electric utensils	[illegible]	Pichincha	47		[illegible]	[illegible]
batteries	1969	Guayas	[illegible]		[illegible]	[illegible]

* All units are in metric tons, unless otherwise shown

[illegible]

	Productivity				
	1966		1973		
	Number Employed	Value Added per man	Number Employed	Value Added per man	Increase in productivity
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] Industry	[illegible]	[illegible]	[illegible]	$ [illegible]	[illegible]
[illegible] Manufacturing	[illegible]	[illegible]	[illegible]	$1,[illegible]	[illegible]

[illegible] and technology will lead to greater investment in existing firms.

Fixed Capital to Output Ratios of all Manufacturing in [illegible] Versus Ratios of Projects Included in the 1969 - [illegible] Plan

Capital to Gross Output Ratio*

	196[illegible] - All Manufacturing	1969 - 1973 Planned Projects
Food	[illegible]	[illegible]
Drink	0.4[illegible]	0.9[illegible]
Tobacco	1.[illegible]1	4.01
Textiles	[illegible]	.5[illegible]
Shoes and clothing	0.61	2.74
Wood and cork	0.68	0.6[illegible]
Wood furniture	6.21	[illegible]
Paper and cardboard	[illegible]	0.41
Printing	0.44	0.89
Leather and hides	0.49	1.17
Rubber	0.60	0.61
Chemicals	0.69	0.36
Petroleum and carbon	0.28	0.26
Non-metallic minerals	0.39	0.36
Basic metals	0.46	0.42
Metallic products	0.46	0.70
Electric equipment	0.46	1.02
Transport material	-	1.50
Total	0.37	0.46

Over-all % increase = 24%.

* fixed capital as a per cent of gross output (not of value added)

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

The industrial development plan will be realized largely through the efforts and co-operation of:

- the Ministry of Industry and Commerce
- the National Planning Board (Junta Nacional de Planificación)
- the Development Centre (Centro de Desarrollo - CENDES)
- the National Values Commission (Comisión Nacional de Valores)
- the Ecuadorian Finance Corporation (Corporación Financiera Ecuatoriana - COFIEC)
- the National Banking system
- the Regional Economic Development Corporations (Corporaciones Regionales de Desarrollo Económico)
- the Industrial Chambers of Commerce (Cámaras Industriales).

The functions of the Ministry of Industry and Commerce are:

- to adapt legislation to the requirements of industrialization.
- to supervise the application of the Law on Industrial Development.

The structure of the Department of Industries must be improved.

The National Planning Board is responsible for feasibility studies and setting priorities.

The functions of the Development Centre are:

- to grant technical assistance.
- to promote industrialization.
- to prepare feasibility studies of specific projects.
- to attract investment to specific projects.

Particular attention will be paid by the Centre to questions of industrial productivity. It will co-ordinate its activities with those of other institutions.

Regional Economic Development corporations will operate in line with the general industrial program.

The National Planning Board and the Development Centre will co-operate with the Regional Corporations.

The Industrial Chambers of Commerce will bring about more discussion between public and private sectors.

To promote the industrial development program:

- discussions by ministries and by the private sector will take place.
- the National Planning Board will explain the development plans and projects to civil servants, in order to engage their active support.
- information about the Plan will be given freely to the private sector, whenever its role is of major importance.

To promote credit availability:

- the private sector will be advised, in detail, on all investment opportunities.
- advice will be given as to the form in which loan requests and project information should be given to financial institutions.
- co-operation will be established with international organizations.
- procedures to maintain an adequate credit flow must be established, through co-ordination between the Central Bank, the Monetary Board, and the national credit institutions.

Professional training will continue to be undertaken by the Ecuador Professional Training Services (Servicio Equatoriano de Capacitación Profesional, SECAP). In the short-run:

- labor should be trained abroad.
- teachers should be trained, in order to improve the quality of instruction in technical and professional institutes.
- foreign experts should be obtained to manage new firms and train local technicians.

[illegible]

[illegible] development w[illegible] ...[illegible]

- the size of th[illegible] market,
- [illegible] adequa[illegible] infra-structure,
- the availability [illegible] factors [illegible] production and transport fac[illegible]ies,
- the prices and wages prevailing in the economy,
- economic and social stability.

[illegible]. [illegible]IOUS INDUSTRIAL [illegible]

Value added by the manufacturing sector (excluding cottage industries) rose from $112 million in 1966 to $135 million in 1968; an increase of 20%.

[illegible]

[illegible]

a. [illegible]

	[illegible]	[illegible]	Average Annual Increase
Manufacturing GDP capita	$ [illegible]	$ [illegible]	[illegible]
Total GDP capita	$ [illegible]	$ 32[illegible]	[illegible]
Population [illegible]	[illegible]	[illegible]	[illegible]
Manufacturing GDP $ millions	[illegible]	260	[illegible]
Total GDP $ millions	[illegible]	1,[illegible]	[illegible]
Manufacturing % of Total GDP	1[illegible] %	25 %	

Exchange rate: [illegible] Colones = US $ 1.

Exports originating in the industrial sector will increase from $ 36 million in 1965 to $ [illegible] million in 1969.

Imports of goods and services will increase from $ 240 million to $ 303 million over the same period. Imports increases will largely be due to requirements of capital goods.

The balance of trade deficit will be reduced from -$ 39 million in 1965 to -$ 29 million in 1969.

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* Consejo Nacional de Planificación y Coordinación Económica: "Primer Plan de Desarrollo Económico y Social, 1965-1969". San Salvador, 1964. 2 vols. 1434 pp.

[illegible] Other Objectives

[illegible] specifically to the manufacturing sector [illegible]:

- To increase industrial production and accelerate economic development
- To utilize more of the country's natural resources
- To increase consumption per capita of manufactured goods
- To increase employment
- To increase exports of manufactured goods
- To substitute for imports by domestic production
- To integrate the economy with that of other Central American Common Market countries.

II. INVESTMENT, STRATEGY, POLICY, AND INSTITUTIONS

A. Investment

Total Gross Investment

	\$ millions 1965-1969	% of Total
Net investment	485	67
Depreciation	243	33
Total	728	100

Total investment will increase from 13 % of total GDP in 1964 to 16 % in 1969.

Source of Total Investment

	\$ millions 1965-1969	% of Total
Public domestic investment	166	23
Private domestic investment	434	60
Net foreign investment	128	17
Total	728	100

Private domestic and foreign investment will increase by 55 % from $ 70 million in 1964 [illegible] $ [illegible] million in 1969.

Approximately 47 % ($ 124 million) of public domestic investment will be allocated for infra-structural improvements.

Government loans to the private sector will amount to $ 137 million over the Plan period.

Total investment in manufacturing throughout the Plan period will be:

Investment in Manufacturing

	1965-1969 $ million
Fixed investment	208
Circulating capital	44
Land	13
Total	265

Total investment in manufacturing will be 36 % of the total investment in all sectors of the economy.

Source of Manufacturing Investment

	1965-1969 ($ million)	% of Total
Public Investment (INSAFI)	72	27
Private Investment		
Domestic	153	58
Foreign	40	15
Total	265	100

Government loans for industrial financing of the private sector will total $ 45 million over the period.

F. EL SALVADOR

B. Strategy and policy

Annual investment policy will be adapted to the short-term requirements of the economy.

Improvements of the country's infrastructure will stimulate private investment.

The development of cottage industries will be accelerated.

General economic policy will be designed:

- to assure the growth of the domestic market
- to finance sectors pursuing an import-substitution activity
- to promote the diversification of exports

Fiscal policy will be designed specifically

- to reduce excess private demand
- to promote import-substitution, by protecting the manufacturing sector from competition from countries outside the Central American Common Market.
- to promote production at full capacity
- to provide the financial resources required by the Plan.

C. Institutions

Administrative reform is required if the Plan is to be successfully implemented, this has become of particular importance in relation to project and programme formulation. Major improvements will be made in relation to organization, procedures, and personnel recruitment.

The following changes in public administration structure have recently taken place:

The restructure of the Central Reserve Bank

The establishment of the National Council of Planning and Economic Coordination (Consejo Nacional de Planificación y Coordinación Económica)

- The creation of Planning Divisions in several ministries

- The strengthening of the El Salvador Institute of Industrial Development (Instituto Salvadoreno de Fomento Industrial).

Monetary policy will function through the country's financial institutions:

- To control the expansion of credit for consumption purposes, particularly of imported goods. Selective and quantitative controls of banking deposits will be used

- To increase the operations of the Central Reserve Bank, in order to control the excess money supply, and form a capital market

- To extend the Central Bank's and commercial banks' operations to supply medium and long-term credit for agriculture and industry. Various discount, rediscount and guarantee systems will be used

- To streng hen financial intermediaries' credit possibilities to both agriculture and industry. Discriminatory regulations on capital, and interest rate policies will be used

- To diversify the financial system, in order to channel savings into the banking system.

Industrial estates will be built:

- to reduce the number, complexity and cost of problems to the individual firm

- to provide employment and economically stimulate the growth of neighbouring backward villages

- to provide housing for employees

- to avoid the geographic concentration of industrial zones.

INSAFI envisages the establishment of these estates at:

- Apopo (near San Salvador)
- Neon, the airport of Ilopango
- Acajutla
- San Miguel
- Santa Ana.

A total of $ 3 million of public funds have been allocated to industrial estates, beginning in 1966. (i.e., $ 300,000 per year.)

III. DEMAND PROJECTIONS AND DATA BASES

The Technical Office of the National Council of Planning and Economic Coordination will collect and analyse all statistical information from the Board of Statistics and Census and from other sources.

Statistical information should be compiled in direct relation to the requirements of economic development. In the industrial and mining sectors information is required on the:

- number of people employed in each industrial sector
- productivity per man-hour worked
- wage levels in each type of occupation
- costs of maintenance, production, and sales
- main characteristics of production
- domestic and imported inputs
- direct and indirect taxes, and capital gains taxes
- sources of finance in industry, both domestic and foreign
- projects and all data relevant to them.

A study must be made of the reliability of certain sources of information.

Investigations will be carried out

- to study concentration in industry, its causes and effects on migration, unemployment, wage rates and costs of living

- to study the influence of trade unions and other groups

- to compare and contrast public and private organizations and to study the relations between them

- to analyze unemployment and under-employment and their causes

- to evaluate the potential human resources available through increased vocational and professional training

- to analyze income-distribution, and the effects of the income tax policy, government and corporation transfers and the establishment of a minimum-wage rate

- to study the fiscal system

- to study the influence of certain pressure groups on the political system.

EL SALVADOR

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Manufacturing Output and Investment

	Output* ($ millions) 1965	1969	Average Annual Increase	Investment ($ millions) 1965 - 1969
Food	[illegible]	[illegible]	11%	41
Drink	1[illegible]	[illegible]1	8%	[illegible]
Tobacco	[illegible]	[illegible]	6%	[illegible]
Textiles	[illegible]	18	10%	41
Shoes and clothing	1[illegible]	[illegible]1	13%	24
Wood	1	[illegible]	5%	[illegible]
Furniture	1.5	3	19%	3.5
Paper and cardboard	1.5	6	15%	[illegible]
Printing	3	[illegible]	14%	1.[illegible]
Leather products	2	4	10%	1
Rubber products	1.[illegible]	4	14%	[illegible].5
Chemical products	1[illegible]	1[illegible]	17%	16.8
Petroleum products	8.5	11	7%	4.8
Non-metallic minerals	5	7	9%	17
Basic metals	0.5	[illegible]	21%	[illegible].5
Metal products	2	5	23%	6.[illegible]
Non-electrical equipment	1	4.5	46%	6
Electrical equipment and appliances	[illegible]	4	50%	[illegible].5
Transport material	3	5.3	15%	3
Miscellaneous	4	6	11%	[illegible]
Total	150	262	15%	265

* value added

Structure of Manufacturing

	% of Total Value Added 1964	1969
Traditional industries	74	68
Intermediate industries	18	20
Mechanical industries	4	8
Miscellaneous	4	4
Total	100	100

Growth of Manufacturing Output by Sector and by Product

Dairy Products

	Unit	1965	1969	% increase
Homogenised Milk	Litres	12,000	13,000	15
Cheese	Pounds	3,300	3,800	15
Cream	Litres	1,650	1,900	15
Butter	Litres	790	910	15
Ice Cream	Kilos of Powder Milk	440	490	11
Cottage Cheese	Pounds	310	360	16

Fruit and Vegetable Packing

	Unit	1965	1969	% increase
Nectars	Thousands of Tins	13,900	39,300	186
Juices	Boxes	6,300	7,600	20
Eatable oils	Tins	12,600	15,300	21
Jellies	Tins	63,400	77,100	21
Tinned Crustaceans	Tins	10,000	500,000	4,900

- Tropical fruit nectars will be exported.

Fish and Shell-Fish Packaging

	Unit	1965	1969	% increase
Gambas	Thousands of kilos	5,000	5,200	4
Prawn	" "	3,300	3,500	6
Fish	" "	3,700	7,700	108
Fish-flour	" "		2,500	-

- The production of gambas has successfully supplied an increasing foreign demand.
- The production of tuna fish for export will be studied.

Milling

	Unit	1965	1969	% increase
Maize	Thousands of quintals	2,100	2,400	14
Wheat flour	Tons	35,400	43,500	23
Rice (polished)	"	21,600	28,800	33
Rice	"	14,400	19,200	33
Wheat bran	"	13,700	16,900	23
Coarse wheat flour	"	3,100	3,300	22

(1 quintal = 45 kilos)

Baking

	Unit	1965	1969	% increase
Strong flour (for French bread)	Tons of Wheat flour	11,150	13,700	23
Sweet bread	"	15,900	19,600	23
Pastry and biscuits	"	7,650	9,300	22
Ice-cream cones etc.	"	1,600	1,950	22
Sandwich bread	"	3,200	3,900	22

Confectionery

	Unit	1965	1969	% increase
Sweets	Tons	1,200	1,900	58
Chicklet Chewing Gum	"	340	530	55

Sugar Refining

Domestic demand will completely be satisfied with locally refined sugar.

The supply of sugar for drinks, confectionary and other sub-sectors will be adequate.

Present sugar refining capacity is approximately 740,000 Quintals, and another refinery will be established towards 1969.

An increase of the sugar quota in international markets will be sought from the present 23,000 tons to 50,000 tons.

Other Food Products

	Unit	1965	1969	% increase
Margarine	Tons	1,400	2,450	75
Coconut oil	Gallons	11,450	16,800	47
Cotton oil	Thousands of Gallons	4,500	7,100	58
Linter	Tons	6,600	10,400	58
Vegetable butter	"	7,800	9,500	22
Cotton Seed	"	25,500	40,200	58
Starch	"	39	58	48
Ice	"	31,000	39,100	26
Syrup	Gallons	43,900	76,800	75
Food paste	Tons	860	1,170	36
Cattle and fowl products	"	34,400	83,900	144
Ground coffee	"	2,100	2,600	24
Coffee core	"	450	1,100	144
Maisena	Thousands of packets*	4,700	5,500	17

(Packets of 30 gms. each)

Food production (value added) will increase at an annual rate of 14 %.

Due to increase in productivity and more efficient use of inputs, the annual increase of gross output will be less than 14 %.

The value of food exports will increase at 12 % a year.

Beverages and Tobacco

	Unit	1965	1969	% increase
Pure alcohol	Thousands of Litres	2,000	2,500	25
Eau de vie	"	4,100	5,000	22
Wine	"	1,100	1,300	18
Beer	"	16,000	18,000	13
Soda water	Thousands of Bottles	60,200	67,700	12
Water	Demijohns (000)	390	440	13
Cigarettes	Packets (000)	55,400	62,400	13
Cigars	Thousands of Units	28,800	31,200	8
Home-made cigars	"	6,900	7,200	4

- The beverage production will increase at an annual rate of 8 %.
- The production of tobacco will increase at 4 % a year.
- Both industries will employ an extra 1,769 people by 1969.
- Improved quality will permit an increase of exports to $ 400,000 in 1969 and $ 960,000 in 1974.

Textile Industry

	Unit	1965	1969	% increase
Strong cloth	Metres (000)	9,000	16,000	78
Rugs	" "	18,600	33,700	81
Canvas	" "	320	590	84
Thin canvas	" "	270	490	81
Printed Cloth	" "	8,000	14,500	81
White cloth	" "	3,500	6,400	83
Towels	Thousands of Dozens	163,500	296,000	81
Blankets	"	7,300	13,200	81
Quilts	"	340	620	82

Textile Industry (cont'd)

	Unit	1965	1969	% increase
Crude thread	Thousands of Packets *	600	1,200	100
Coloured thread	"	290	600	107
Fabric	Thousands of Metres	860	1,550	81
Sacks (Jute-Kenaf Henequén)	Thousands	1,600	3,000	87

*(Each packet contains 10 lbs.)

- Value added by the textile industry will increase at an average annual rate of 20 %.
- The capital to output ratio will decrease from 0.45 in 1962 to 0.25 in 1969.
- Exports will increase from $ 6.4 million to 17.5 million in 1969.
- By 1969, textiles will contribute 7 % of total manufacturing GDP; in 1962, they contributed 7.6 %.

Shoes and Clothing

	$ Thousands	1965	1969	% increase
Value added	"	15,000	30,500	100
Exports	"	2,200	5,500	150
Imports	Increase of	800		-
Employment (No. of people)	Increase of 5,500			-

	Unit	1962	1969	% increase
Men's	pairs of shoes	817,000	1,208,000	48
Women's	"	803,500	1,179,000	46
Children's	"	330,200	489,000	48
Men's	Shirts	2,942,000	4,816,000	64
Men's	Trousers (pair)	1,355,000	2,230,000	65
Men's	Underwear (set)	3,260,000	5,339,000	64
Men's	Suits	30,000	50,000	67
Women's	Dresses	3,232,000	5,300,000	64

Wood and Furniture

- Value added will increase from $ [illegible].5 million in 1965 to $ 4.2 million in 1969.
- An extra 3,600 people will be employed.

Paper and Cardboard ($ Thousands)

	1962	1969	% increase
Value added	760	5,580	634
Exports	670	4,350	549
Imports	n.a.	n.a.	n.a.
Employment (No. of people)	415	2,246	442
Capital-output ratio	0.67	0.96	43

Printing ($ Thousands)

	1964	1969	% increase
Value added	2,665	5,165	93
Exports	70	1,472	2,100
Imports	892	1,707	191
Employment (No. of people)	2,429	4,243	74

Leather Products ($ Thousands)

	1962	1969	% increase
Value added	1,645	3,783	130
Exports	289	1,556	438
Imports	1,064	1,793	68
Employment (No. of people)	1,407	2,487	77
Capital-output ratio	3.9	2.9	-26

Rubber Products ($ Thousands)

	1962	1969	% increase
Value added	842	12,145	1,340
Exports	203	2,217	992
Imports	733	2,168	195
Employment (Number of people)	526	1,643	212
Capital-output ratio	0.7	0.69	-

Chemicals

($ Thousands Value Added)

	1964	1969	% increase
Essential products, including fertilizers	3,898	7,455	91
Oils and fats	125	957	666
Paint	670	1,641	145
Other chemicals	3,732	8,876	138

- Value added in all chemical production will increase at 17.5 % a year, from $ 8.4 million in 1964 to $ 19 million in 1969.

- The capital-output ratio will remain at approximately 0.48.

Petroleum

- Value added will increase at 8.5 % a year from $ 8 million in 1964 to $ 12 million in 1969.

- New products to be produced are lubricant oils and petro-chemicals, including plastics.

Non-Metallic Mineral Products ($ Thousands)

	1962	1969	% increase
Value added	3,520	6,886	95

[illegible]

Non-Metallic Mineral Products (cont'd)

	1962	1969	% increase
Exports	502	2,119	322
Imports	3,020	3,[illegible]6	13
Employment (Number of people)	[illegible],364	[illegible],41[illegible]	1

- The value added will increase due particularly to the production of:
  - glass
  - cement
  - concrete
  - asbestos sheets and tubes
  - ceramics.

Basic Metal Products, Machinery, and Repairs

(These include basic metallic products, non-basic metallic products, non electrical equipment and its repair, electrical equipment and appliances, and their repair, and transport equipment.)

($ Millions)

	1962	1969	% increase
Value added by the 5 sub-sectors	5	25	400
Exports	n.a.	15.5	-
Imports	n.a.	65	-
Employment (Number of people)	an increase of 15,000 people.		

Miscellaneous Manufactures ($ Millions)

	1962	1969	% increase
Value added	3	6.5	116
Exports	n.a.	n.a.	
Imports	n.a.	n.a.	
Employment (Number of people)	an increase of 650 people.		

Cottage Industries

($ millions of Value Added)

	1964	1969	% increase
Traditional cottage industries	40	40	[illegible]
Intermediate cottage industries	4	6	[illegible]
Mechanical cottage industries	4	6	[illegible]
Miscellaneous cottage industries	[illegible]	[illegible]	[illegible]

The cottage industries' contribution to the total Manufacturing GDP will decline from [illegible] % in 1964 to 25 % in 1969.

B. Priority of Sectors

Priority will be given to:

- intermediate industries
- machinery
- repair industries.

C. Other Sectoral Plans

Employment by the manufacturing sector will increase by 82,770 people, of which

- 55,108 will be employed by the traditional industries
- 27,662 will be employed by the intermediate and non-traditional industries.

Imports of intermediate goods will increase somewhat, at the expense of imports of traditional ones:

[illegible]

Structure of Imports of Manufactured Goods
(% of total)

	1964	1967
Traditional industries	[illegible]	26
Intermediate industries	33	41
Mechanical industries	[illegible]	27
Miscellaneous	[illegible]	6
	100	100

EXPORTS AND IMPO[illegible]

	[illegible]			[illegible]		
	($ Thousands)			($ Thousands)		
	[illegible]	[illegible]	% increase	[illegible]	[illegible]	% increase
Food	17,700	[illegible]	[illegible]	[illegible]	12,[illegible]	[illegible]
Drink	100	320		[illegible]	[illegible]	[illegible]
Tobacco	400	400	[illegible]	40	[illegible]	[illegible]
Textiles	7,640	[illegible]	[illegible]	[illegible]	20,[illegible]	[illegible]
Shoes and clothing	2,600	[illegible],440	[illegible]	[illegible]	4,[illegible]	[illegible]
Wood	–	–	–	[illegible]	[illegible]	[illegible]
Furniture	350	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Paper and cardboard	1,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Printing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Leather	400	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rubber	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chemical products	[illegible]	14,[illegible]	[illegible]4	[illegible]	[illegible]	[illegible]
Petroleum products	[illegible]	7,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Non-metallic minerals	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Iron and steel	20[illegible]	3,700	[illegible],780	7,[illegible]	10,[illegible]	[illegible]
Metallic industries	[illegible]	3,700	818	6,650	[illegible]	17
Machinery	560	1,360	143	16,[illegible]	[illegible]	[illegible]
Electric machinery and appliances	200	3,120	1,460	[illegible]	[illegible]	[illegible]
Transport material	80	3,480	4,[illegible]	[illegible]	[illegible]	[illegible]
Miscellaneous	360	760	110	[illegible]	[illegible]	[illegible]
Total	49,030	103,320	[illegible]	1[illegible]	[illegible]	[illegible]

Inventory of Possible Manufacturing Projects for the Period December 1964 - 1969

	New Enterprises		Expansion of Existing Enterprises		Total		Employment
	Number	Capital ($ Thousands)	Number	Capital ($ Thousands)	Number	Capital ($ Thousands)	Number of People
Food	25	10,100	24	10,2[illegible]0	49	2[illegible]	[illegible]
Drink	1	250	1	[illegible]	2	[illegible]	[illegible]
Tobacco	–	–	–	–	–	–	–
Textiles	17	10,700	1[illegible]	[illegible]	36	2[illegible]	[illegible]
Shoes and clothing	19	[illegible],300	11	1,440	30	[illegible]	[illegible]
Wood	4	[illegible]	2	[illegible]	6	[illegible]	[illegible]
Furniture	1	10	7	[illegible]	[illegible]	[illegible]	2[illegible]
Paper and cardboard	15	2,[illegible]		1,1[illegible]	2[illegible]	[illegible]	[illegible]
Printing	2	1[illegible]0	1	[illegible]	[illegible]	[illegible]	[illegible]
Leather	–	–	[illegible]	4[illegible]	[illegible]	4[illegible]	[illegible]
Rubber products	3	1[illegible]0	[illegible]	1,[illegible]	[illegible]	1,[illegible]	2[illegible]
Chemical products	20	[illegible]	1[illegible]	4,0[illegible]	3[illegible]	[illegible]	[illegible]
Petroleum products	–	–	–	–	–	–	–
Non-metallic minerals	3	[illegible]	3	[illegible]	11	[illegible]	[illegible]
Basic iron	17	[illegible],250	[illegible]	2,[illegible]	22	[illegible]	1,2[illegible]
Basic non-ferrous metals	13	6,2[illegible]0	[illegible]	[illegible]	2[illegible]	[illegible]	[illegible]
Non-electric equipment, repairs	[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
Electric equipment, repairs	1[illegible]	2,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Transport material	14	1[illegible],4[illegible]	–	–	[illegible]	[illegible]	[illegible]
Miscellaneous	22	[illegible],29[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	194	73,[illegible]05	12[illegible]	[illegible]	[illegible]	[illegible]	[illegible]2

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

The utilization of capacity will increase from 78 % to 89 % over the Plan period.

Factors of production will be used more efficiently.

Particular attention will be paid to providing an adequate supply of skilled labour and modern equipment.

Increased competition in the Central American Common Market will also induce productivity increases.

Altogether, these measures will serve to increase productivity at an average annual rate of 4.5 %.

The full utilization of estimated capacity is impossible to achieve due to the following reasons:

- Part of the manufacturing capacity is obsolete, and remains unused.
- Most plants and their equipment are designed so that the minimum average cost is obtained by operating at less than full capacity.
- Certain types of industries are dependent on seasonal factors, such as the availability of raw materials.
- Entrepreneurial ability and equipment quality varies among different firms in the same industry.
- An increase of capacity always precedes an increase of production; consequently, there is always some idle production capacity.
- Infant industries do not usually produce at close to full capacity until several years after they are established.

INSAFI will continue to help overcome the obstacles to increased productivity by:

- conducting studies of various industries
- granting technical assistance
- granting credits.

This will be particularly important in the case of food, cloth, leather, and rubber products.

Productivity, in terms of value added per man employed, is expected to increase as follows:

	$ Value Added per Man Occupied		
	1961	1969	% increase
Food	1,030	1,300	20
Drink	5,580	5,720	3
Tobacco	5,460	5,735	5
Textiles	445	780	75
Shoes and clothing	760	1,215	59
Wood	495	555	12
Furniture	410	570	39
Paper and cardboard	1,420	2,485	75
Printing	810	1,215	50
Leather and leather products	1,215	1,520	25
Rubber	1,400	2,520	80
Chemical products	1,020	1,840	80
Oil products*	430	57,575	1,340
Non-metallic minerals	670	1,270	90
Basic metals	1,190	1,910	60
Metallic products	540	920	70
Non-electric equipment	585	720	23
Electric equipment and appliances	715	1,000	40
Transport equipment	730	1,390	90
Miscellaneous	1,230	2,455	100
Average :	1,002	1,425	42 %

* excluding petroleum.

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

Certain tasks within the manufacturing sector are specifically assigned to a particular government agency:

Tasks	Responsible Government Agency
Coordination of the Industrial Programme	National Council of Planning and Economic Coordination (Consejo Nacional de Planificación y Coordinación Económica)
Advance control of the Industrial Programme	Technical Office of Planning and Economic Coordination - Industrial Sector (Oficina Tecnica de Planificación y Coordinación Economica - Sector Industrial)
Finance	INSAFI; the Central Bank
Project Formulation and Promotion	INSAFI; the Department of Promotion of the Ministry of Economics (Departamento de Promoción del Ministério de Economia)
Export Promotion	Sub-Secretary of Foreign Trade of the Ministry of Economics; INSAFI; the Central Bank
Domestic and Inter-American Transport system	Transport and Communication Board (Dirección-General de Transportes y Communicaciones)
Industrial Estates	INSAFI; CEL; Institute of Urban Housing; Ministry of Public Works (Instituto de Vivienda Urbana; Ministério de Obras Publicas)
Labour Training	Ministries of Labour and of Education; Industrial Technical Institute (Instituto technico Industrial); National Apprenticeship Council (Consejo Nacional de Aprendizaje)

Tasks (cont'd)	Responsible Government Agency
Improved Techniques in Cottage Industries	INSAFI; Ministry of Education and Culture.
Investigations of Industrial Statistics for Control of the Plan	Industrial Sector of the Central Bank; Board of Statistics and Census (Dirección-General de Estatística y Censo)
Fiscal Incentives	Ministry of Economics
Price and Quality Control of Finished Products	Ministry of Economics; INSAFI
Price and Quality Control of Imports	Ministry of Economics; INSAFI

The functions of the National Council of Planning and Economic Coordination are:

- to plan, coordinate, and direct the country's economic activities
- to improve the utilization of natural resources
- To prepare the annual Budget, together with the Ministry of Finance, by means of budget programming.

The functions of INSAFI are:

- to encourage the private sector to participate in the industrialization process
- to promote the initiation of new projects
- to establish industrial estates.

The reorganization of autonomous institutions will include the adaptation of their plans and programmes to the requirements of the Economic and Social Development Plan.

Coordination councils will be established to deal with interministerial activities, such as:

- planning of labour requirement
- community development.

Local Government will be reorganized, to deal more effectively with the local problems; a finance organization will be established in each of these areas.

Technical assistance will be made available especially for

- administration
- urban development
- project execution, control, and supervision
- budget programming.

An annual plan must be made, in close connection with the Government's budget, to determine:

- annual production
- the distribution of income between consumption and saving
- Governmental expenditure for projects approved by the legislature as part of the annual budget
- the objectives to be attained by macro-economic policy.

Top priority will be given to ensure that the country has the capacity to execute the plan.

In order that projects be successfully completed:

- detailed specifications must be developed
- detailed information on problems of project execution must be available
- adequately trained personnel must be available throughout the execution of a project

- The head of technical personnel must advise directly the director of the project

- Organizations must be sufficiently flexible, both to solve problems, and to accelerate project execution.

Three types of information will be supplied to the National Council of Planning and Economic Coordination, during a project's execution period:

- what is still required for completion, both in physical and financial terms

- Systematic information on the progress made, both in physical and financial terms

- An annex, indicating in a detailed fashion, the reasons for all delays which may have occured, and the solutions envisaged.

This information will permit the National Planning Council to identify general problem areas, and formulate general corrective measures to solve them. In addition, it will facilitate the application of specific measures to accelerate project execution. The project section of the National Council of Planning will be strengthened, in order to make adequate use of this information.

VIII. PROBLEM AREAS

The following obstacles prevent efficient production:

- the lack of skilled labour
- small markets
- the lack of financial resources
- Cottage industries, with relatively low productivity, are still of considerable importance in the production of food, shoes, and clothing.

[illegible]

IX. PREVIOUS ECONOMIC GROWTH

Total GDP increased from $ [illegible] million in [illegible] to $ [illegible]18 million in 196[illegible], at an average annual rate of 7 [illegible].

Exports of goods and services grew from $ [illegible] million to $ 150 million between 19[illegible] and 1963.

Imports of goods and services increased from $ [illegible] million to $ 147 million between 19[illegible] and 1963.

Manufacturing GDP grew from $ 102 million in 19[illegible] to $ 124 million in 1964, at an annual rate of [illegible] %.

The manufacturing % of total GDP increased from 15 % in 1950 to 17.5 % in 1963.

Output per man occupied in the manufacturing sector increased by 60 % between 1951 and 1962, whereas in the rest of the economy it increased by only 40 %.

Between 1951 and 1962, employment in the manufacturing sector increased by 1,330 people a year, while the national labour force increased by 24,700 people a year.

The capital-output ratio in industry declined from 1.19 in 1950 to 0.67 in 1962.

70 % or $ 8.5 million of the total investment in the manufacturing sector between 1950 and 1964 took place in:

- food
- textiles
- shoes and clothing
- chemical products
- non-metallic minerals.

The structure of manufacturing changed, as follows:

	Value Added 1951	1961
Traditional Industries	91 %	83 %
Intermediate Industries	4 %	10 %
Mechanical and other Industries	5 %	7 %
All Industries	100	100

[illegible]

[illegible]

A. [illegible]lanned [illegible]rowth:

	196[illegible]	196[illegible]	[illegible] Annual Increase
[illegible]anufacturing [illegible] capita	[illegible]	[illegible]	[illegible]
Total [illegible] capita	[illegible]	[illegible]	[illegible]
[illegible]pulation [illegible]	[illegible]	[illegible]	[illegible]
Manufacturing [illegible] millions [illegible]*	[illegible]	40.[illegible]	[illegible]
Total [illegible] millions)**	[illegible]	1,[illegible]	[illegible]
Manufacturing % of Total [illegible]	1.6[illegible]	[illegible].4[illegible]	

Exchange rate: [illegible] Ethiopian dollars

*Value added by the handicrafts and cottage industries is separately estimated and totals [illegible] million for 1962 and [illegible] million for [illegible].

**These are estimates and forecasts, which include non-monetary [illegible].

B. [illegible]ther [illegible]bjectives:

To increase the productive capacity of the economy, [illegible] diversify production, and to secure a better utilization of available resources.

To continue the development of agriculture as the leading economic activity, and to develop manufacturing industry in support of agriculture, particularly through:

- the expansion of processing industries in order to increase the demand for raw materials of agricultural origin.
- the development of industries supplying agriculture with improved tools and implements.

To create the pre-conditions for faster industrialization in the future by developing:

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* Second Five-Year Development Plan, 1963 - 1967, Addis Ababa, 1962. 363 pages.

- a diversified consumer goods industry, based on local raw materials, and import-substitution.
- an iron and steel complex (using local ores and other raw materials) as the basis for new metal products industries.
- a chemical industry using local minerals and wood, as well as by-products of the oil refinery.
- a building materials industry to meet the increased demand associated with the implementation of the investment program.

To change the existing technology by introducing modern machinery and equipment, and to raise the skill and productivity of labor.

To raise the saving and investment potential of the economy, with a view to realizing self-sustained development.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Total Planned Investment (1963 - 1967)

	$ millions	% share
In Manufacturing	127	19
In the Whole Economy	680	100

Source of Planned Investment

	$ millions	% share
Domestic resources:	458	67
- profits, depreciation reserves and private savings	168	25
- bank loans	80	12
- Government budget	112	16
- investment in kind	98	14
Foreign resources: (loans and grants-in-aid)	222	33
	680	100

Phasing of Investment in Manufacturing
1963 - 1967

Year	$ millions Investment	Primary Projects
1962 - 1963	[illegible]	Research, feasibility studies, design and preparation for construction.
1963 - 1964	[illegible]	Construction of projects in the food industry, leather and shoe industries, building and non-metallic minerals industries.
1964 - 1965	[illegible]	
1965 - 1966	[illegible]	Construction of steel mill, metal and electrical industries projects, sugar factory, shoe factory, cement, paper and viscose fashions.
1966 - 1967	[illegible]	
Total	1[illegible]	

About [illegible] million was spent before 1963 in connection with the preparatory work on manufacturing projects to be implemented during the 1963 - 1967 period; a further [illegible] million will be spent after 1967 for the completion of these projects, bringing the eventual total planned investment in them to $170 million.

7. Strategy and Policy

The present plan has been formulated within the framework of a twenty-year perspective plan. In order to achieve a better long-run allocation of reserves the perspective plan includes macro-economic projections and long-term sectoral development programs.

Investment during the present and subsequent plan periods will be allocated in accordance with the following principles:

- the bulk of investment will be directed to those productive sectors which will in the shortest time generate additional income and savings.
- the development of infra-structure, generally, will be closely related to the growth of productive sectors.

[illegible]

projects will be properly phased and integrated in sectoral plans so as to maximize the return.

Due consideration will be given to the factor-intensity aspects of a project.

- the economic and social costs of development will be minimized.

The program for the industrial sector will be [illegible] coordinated with the programs for agriculture, mining, transport and commerce, so as to achieve mutual stimulation and balanced growth.

The Government will assume the responsibility for the development programs considered to be of vital importance to the economy. But there will be no restrictions imposed on the private sector, and shares in public and semi-public enterprises will be sold to private investors.

The Government will undertake feasibility studies of projects to be implemented under the investment program.

The Government will encourage any kind of vocational training programs aimed at meeting the shortage of skilled manpower.

The Government will implement firm policies to increase domestic savings and to restrict consumption to levels consistent with a steady improvement in living standards.

The Government will promote foreign private investment in Ethiopia.

C. Institutions

The institutional framework of the economy, including the public administration and business organization, will be adjusted to meet the requirements of a developing economy.

[illegible] the [illegible] new investment [illegible] will [illegible] [illegible] enterprises.

A [illegible] bank, [illegible] the Government's [illegible] to finance new [illegible] enterprises.

The Government [illegible] agreements with more foreign Governments, in order to obtain sufficient foreign funds for the [illegible].

VI. [illegible]

VII. [illegible]

A. Planned Growth of Manufacturing [illegible]

Planned Production, Investment and Employment

	Gross Value of Production* $ millions 1962	1967	% of increase	Investment 1963 - 1967 $ millions	% share	[illegible]	[illegible]
Food industry	18.1	56.[illegible]	210	30.[illegible]	[illegible]	[illegible]	[illegible]
Beverages	3.9	6.[illegible]	[illegible]			[illegible]	[illegible]
Tobacco manufacturing	1.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Textile industry	15.6	35.5	[illegible]	13.	[illegible]	[illegible]	[illegible]
Leather and shoe industry	1.8	[illegible]	46[illegible]	4.4	3.4	1.	[illegible]
Wood products industry	1.2	[illegible]	[illegible]	1.	[illegible]	1.[illegible]	[illegible]
Building materials and non-metallic minerals industries	2.2	11.[illegible]	41[illegible]	14.[illegible]	11.[illegible]	1.[illegible]	[illegible]
Printing and publishing	0.5	[illegible].9	420	[illegible]	[illegible]	[illegible]	1.
Chemical industries	0.4	14.4	3,7[illegible]	38.5	[illegible]	-	1.[illegible]
Metal processing industries	-	4.[illegible]	-	[illegible].4	16.[illegible]	-	[illegible]
Miscellaneous industries	1.0	1.[illegible]	4[illegible]	5.[illegible]	4.[illegible]	1.4	1.[illegible]
Total	46.5	147.6	216	127	100	17.6	57.[illegible]

* not value added

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[illegible] rowth of [illegible]ajor [illegible]anufacturing [illegible]roducts

	Unit of output	19[illegible] actual	196[illegible] actual	19[illegible] planned
[illegible]:				
- [illegible] frozen	tons	[illegible]	[illegible]	[illegible]
- [illegible] canned	"	[illegible]	[illegible]	[illegible]
- [illegible]	"	[illegible]	[illegible]	[illegible]
- [illegible]	"	[illegible]	15[illegible]	[illegible]
- edible [illegible]	"	[illegible]	[illegible]	[illegible]
- [illegible]	"	[illegible]	[illegible]	[illegible]
- [illegible]	"	[illegible]	[illegible]	[illegible]
[illegible]everages:				
- [illegible]	hectolitres	41,[illegible]	67,[illegible]	[illegible]
- wine	"	1[illegible]	1[illegible]	[illegible]
[illegible]anufactured t[illegible]bacco:				
- cigarettes	[illegible]	[illegible]	37[illegible]	[illegible]
[illegible]extile industry:				
- cotton fabrics	1[illegible] m^2	[illegible]	21,[illegible]	74,[illegible]
- rayon fabrics	"	-	-	6,[illegible]
- bags	[illegible]	1,700	[illegible]	6,[illegible]
[illegible]hoes:				
- leather	pairs	[illegible]	[illegible]	2,150,000
- rubber; canvas	"	-	-	1,[illegible]
[illegible]ood products and furniture:				
- processed timber	m^3	16,3[illegible]	12,5[illegible]	20,000
- plywood	"	-	1,200	3,000
- furniture	value ($ 000)	14[illegible]	1[illegible]	520
- matches	1000 pcs.	11,8[illegible]	16,000	25,000
[illegible]on-metallic minerals:				
- glass bottles	(000)	3,8[illegible]	7,500	14,000
- cement	tons	26,860	29,000	210,000
- bricks	(000)	5,670	8,000	30,000
- mosaics	m^2	30,000	65,000	95,000

3. Priority of Sectors

Priority will be given to the development of:

- meat processing and other agricultural raw materials processing industries.

- the building materials industry.
- basic consumer goods industries.

Special attention will be given to the implementation of projects in the iron and steel and chemical products industries so that they will start production by the end of the plan period.

[illegible]. Other Sectoral Plans

Planned Growth of Manufactured Exports

	$ thousands	
	1962	1967
Food industry	3,[illegible]	[illegible]
Leather and shoe industry	-	[illegible]
Building materials and non-metallic minerals industries	[illegible]	1,[illegible]
Chemical industry	-	1,3[illegible]
Other manufactured exports	-	[illegible]
All Manufactured Exports	[illegible]	[illegible]
All Exports	[illegible]	[illegible]
Manufactured % of Total Exports	[illegible]	[illegible]

V. [illegible]

Planned Projects

	Number of Projects		
	to be Completed	New Projects	Total
Food industry:	3	26	29

- meat: several slaughter houses will be set up in cattle-raising regions to process 600,000 head of cattle annually, and to produce frozen and canned meat for export.
- fish products: a number of new plants will be erected on the Red Sea coast and in the lake areas to process 10,000 tons annually for domestic consumption and for export.

- coffee: a new plant will be built to produce 3,[illegible] tons of powdered coffee, half of which will be for export by 1967.

- other products: existing plants will be expanded and new plants built to increase the production of edible oil, sugar, flour, macaroni, egg products, milk products, canned fruits and vegetables.

	Number of Projects		
	to be Completed	New Projects	Total
Beverages:	1	[illegible]	3
Tobacco manufacturing:	1	1	[illegible]
Textiles industry:	6	9	15

Beverages:

- beer: a new brewery will be set up to meet increased consumption.

- an increase in production is planned for almost all other categories of beverages.

Tobacco manufacturing:

- the erection of a new cigarette factory is planned.

Textiles industry:

- cotton fabrics: new plants will be completed, and existing plants expanded to satisfy domestic needs.

- rayon fabrics: production will be started in the new factory.

- woolen fabrics: a new factory is planned to produce 27[illegible],000 blankets a year.

- flax products: a new factory is planned with a capacity of 500 tons a year.

- umbrellas: a new factory to produce 100,000 umbrellas yearly is planned.

- sacks and ropes: a new factory to produce 200,000 tons a year is planned.

- processed fiber: a factory will be built with a capacity of 1,000 tons a year.

- made-up clothing: a factory is planned to meet military and civilian requirements.

	Number of Projects		
	to be completed	New projects	Total
Leather and shoes industry:	1		
Wood products and furniture:	-	[illegible]	[illegible]
Non-metallic mineral products:	3	13	[illegible]

Leather and shoes industry:

- leather: production in existing plants will be expanded to [illegible] tons a year, and new plants to produce 7,5[illegible] tons annually will be set up in conjunction with the expansion of the meat industry.
- leather shoes: production will be expanded to [illegible] pairs annually in existing factories, and new plants will be set up to produce another [illegible] million pair annually. Promotion of exports is planned.
- rubber and canvas shoes: a new factory is planned.

Wood products and furniture:

- processed timber: existing capacity will be fully utilized, and a new sawmill constructed.
- plywood: production will be expanded.
- furniture: a new factory will be established.

Non-metallic mineral products:

- cement: a new factory in Addis Ababa will be completed (capacity: 70,000 tons a year) and another factory erected whose annual output of 150,000 tons is intended for export.
- bricks: new brickyards will be erected.
- ceramics: the capacity of existing plants will be expanded.
- refractory materials: a new plant will be established.
- electro-porcelain: a factory will be established.
- glass: expansion of existing factories is planned as well as a new factory to manufacture sheet glass, with a capacity of 1 million square feet a year.

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	Number of Projects		
	Since completed	New projects	Total
[illegible] and [illegible] industry:	[illegible]	1	
- expansion of existing plants is planned, as well as the construction of a large new plant.			
[illegible] industry:	[illegible]	[illegible]	

Extensive developments are planned. Among the new projects are:

Factories to produce:	Annual capacity
- [illegible]er oil	[illegible] tons
- viscose	1[illegible], [illegible] "
- caustic soda	[illegible], [illegible] "
- carbon bisulfide	[illegible], [illegible] "
- sulphuric acid	[illegible], [illegible] "
- s[illegible]	[illegible], [illegible] "
- tanning materials ([illegible] plants)	[illegible], [illegible] "
- pharmaceuticals ([illegible] plants)	
- plastic products	
- fertilizers	
- [illegible]	
- paint	
- tires	

In addition, a petroleum refinery, with an initial annual refining capacity of 5[illegible],[illegible] tons of crude oil, will be constructed.

	Since completed	New projects	Total
Basic metals and metal products:	1	15	16

Extensive developments are planned. Among the new projects are:

- Akaki iron works (expansion)
- a steel plant (annual capacity: 80,000 tons) to use domestic supplies of iron ore.
- a metal processing plant
- an aluminum-ware factory
- a metal construction plant
- a household appliances factory

[illegible]

	Number of projects	
	To be completed	New projects

[illegible]

- an [illegible] implement factory
- a tractor assembly [illegible]
- a car battery factory
- an electric [illegible] plant
- an electric equipment factory
- a ship repairing yard

Other manufacturing projects: [illegible]

All Manufacturing Projects [illegible]

Of the [illegible] projects, [illegible] are expected to be [illegible] the Plan period. They will involve a [illegible] million and an investment during the Plan [illegible]. The remaining [illegible] projects will be completed after the Plan and will require a further investment of [illegible] million for their completion.

VI. [illegible] AND [illegible]

VII. ORGANIZATION AND MACHINERY FOR PLANNING AND IMPLEMENTATION

The primary responsibility for the formulation of major development policies is assumed by the Planning Board, which is presided over by the Emperor and is composed of the Crown Prince, the members of the Crown Council, the Prime Minister and the other Ministers of the Crown.

The Executive Body of the Planning Board is presided over by the Prime Minister and consists of those Ministers of the Crown who are directly concerned with the implementation of development programs, as well as the Governor of the State Bank of Ethiopia. The Executive Body gives instructions to the Ministries, the Planning Office, and other Government and private agencies for the elaboration of economic surveys, and of annual plans and other plans. It is also responsible for plan implementation and co-ordination.

[illegible] Planning Board and [illegible] the Office of the Planning Board [illegible] unit staffed [illegible] aspects of planning [illegible] Central Statistical Office [illegible] of various Ministries [illegible] University, the [illegible] the following [illegible]:

- the preparation of the annual and medium-term plans.
- the evaluation of plan implementation.
- [illegible] economic research.
- the organization of training courses.

A Planning Board Technical Co-ordination Committee, composed of the Executive Secretary of the Office [illegible] and the executive heads of the Planning Units, reviews the proposals and recommendations of the Office prior to their [illegible] to the Executive [illegible] of the Planning Board.

Planning and plan implementation in the Ministries and in other Government Agencies is the responsibility of [illegible] Planning Units, which co-operate closely with the Planning Board. In addition, there are six Standing Committees whose members represent Ministries and Agencies in the development sector, as well as the Planning Board Office, and which are responsible for inter-Ministerial co-ordination. They include:

- the Planning and Investment Committee
- the Finance and Credit Committee
- the Trade Committee
- the Social Development Committee
- the Land Reform and Settlement Committee
- the Legislation Committee.

are indicated in the plan, and [illegible]

[illegible]

[illegible] survey [illegible] with the [illegible] ... available to the public and private sectors.

An industrial [illegible] service will be set up [illegible] the Ministry of Commerce and Industry to furnish [illegible] information to domestic and foreign investors.

[illegible]

Existing statistical data are not adequate for planning.

There is a shortage of industrial raw materials and power.

There is a scarcity of domestic capital resources.

There is a lack of entrepreneurship.

[illegible]

[illegible]

. PREVIOUS [illegible]

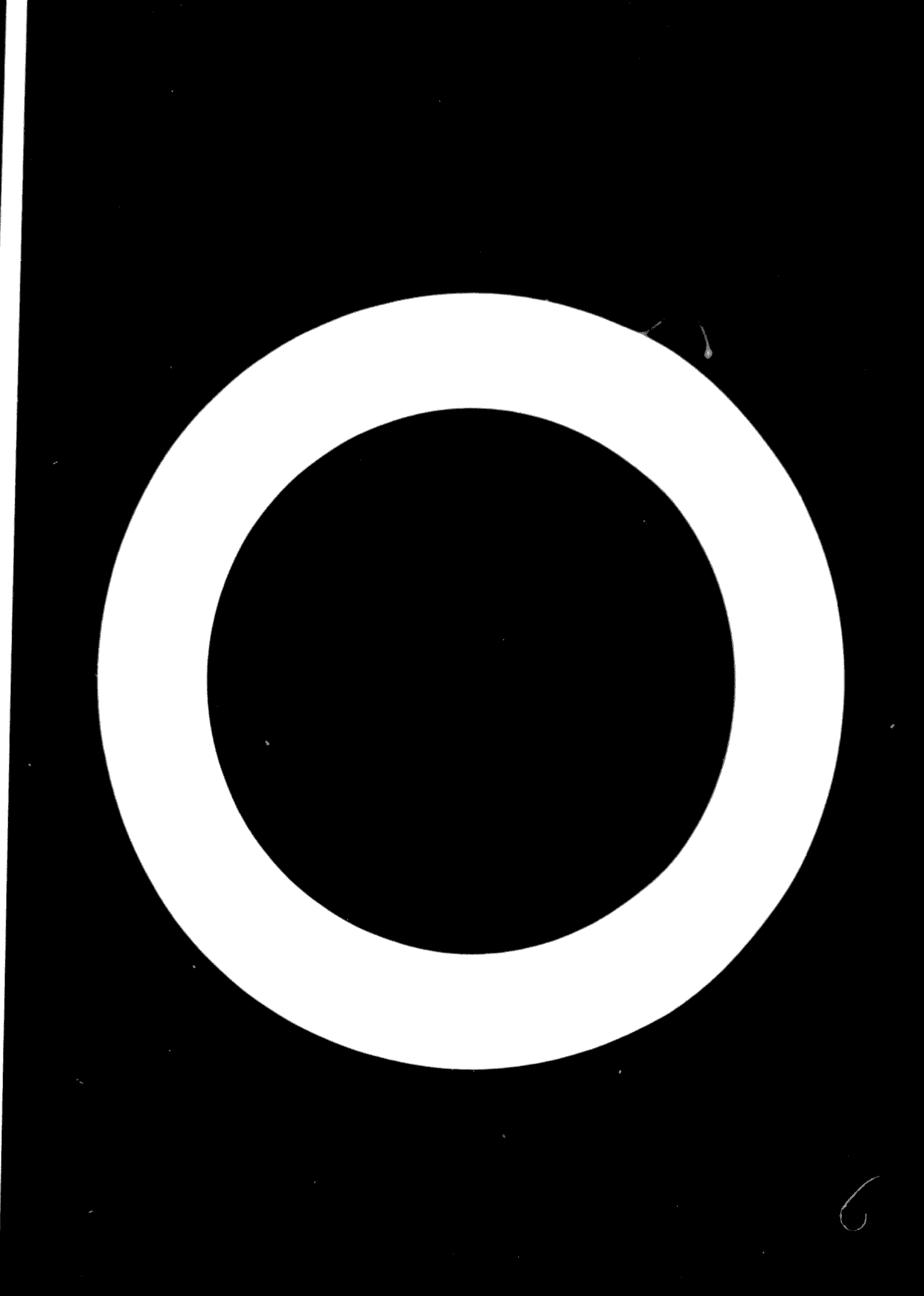
	$ millions	
	[illegible]	[illegible]
Manufacturing GDP per capita	[illegible]	[illegible]
Total GDP per capita	[illegible]	[illegible]
Population [illegible]	[illegible]	[illegible]
Manufacturing GDP ($ millions)*	[illegible]	1[illegible]
Total GDP ($ millions)	[illegible]	[illegible]
Manufacturing % of Total GDP	[illegible]	[illegible]

*Does not include value added by the handicrafts and cottage industries, estimates for which are [illegible] million for 1957 and [illegible] million for 196[illegible].

A new factor in Ethiopia's economy is the development of the manufacturing industry, which was accelerated during the First Five-Year Plan (1957 - 196[illegible]) by a volume of investment which exceeded the Plan targets in a number of manufacturing sectors, as well as globally. The main feature in this development has been the expansion of industries processing local raw materials into domestic consumer goods such as foods and beverages, manufactured tobacco, textiles and to a smaller extent, building materials, wood products and shoes. These industries absorbed 90% of new investments and have contributed to the gradual reduction in the imports of basic consumer goods. The planned investment program for the chemical and metal products industries, on the other hand, fell far short of realization.

	Gross Value of Production				Investment			Em[illegible]	
	[illegible] Actual	[illegible] Planned	[illegible] Actual	% fulfilment	Planned	Actual	% fulfilment	[illegible]	[illegible]
Food industry	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Beverages	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tobacco manufacturing	[illegible]		[illegible]	[illegible]				[illegible]	[illegible]
Textile industry	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
Leather and shoe industry	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Wood products industry	[illegible]	[illegible]	[illegible]		[illegible]			[illegible]	[illegible]
Building materials and non-metallic minerals industries	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Printing and publishing	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]
Chemical industries	–	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]
Metal processing industry	–	[illegible]	–			[illegible]	[illegible]	–	–
Miscellaneous industries	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	–	–
All Manufacturing:	[illegible]	70,200	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* [illegible]



[illegible]

[illegible] engage the participation of trade unions in the elaboration and implementation of plans.

To improve the economic condition of backward regions.

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* Centre of Planning and Economic Development: "Draft of the Five-Year Economic Development Plan, 1966 - 1970", Athens, 1965. [illegible] pages.

[illegible]

INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

[illegible]

[illegible]

[illegible]

	[illegible]	[illegible]
Food, beverages, tobacco	[illegible]	[illegible]
Textiles	[illegible]	[illegible]
Clothing and footwear	[illegible]	[illegible]
Wood products and furniture	[illegible]	[illegible]
Paper and printing	[illegible]	[illegible]
Non-metallic minerals	[illegible]	[illegible]
Metal products and machinery	[illegible]	[illegible]
Rubber, chemicals and petroleum products	[illegible]	[illegible]
Basic metals	[illegible]	[illegible]
Transport equipment	[illegible]	[illegible]
Miscellaneous	[illegible]	[illegible]
Total Manufacturing	1,1??	[illegible]
	(increase: 1?	

B. Strategy and Policy

Strategies and policies to attain the objectives set for the manufacturing sector include the following:

- significant efforts will be made to raise both the quantity and quality of the factors of production.
- the industrial infra-structure will be completed.
- a favorable industrial environment will be created for private business initiative.
- competition will be strengthened in the domestic market.

- policies [illegible] of foreign [illegible] will [illegible] to establish [illegible] branch of manufacturing.

  foreign competition will [illegible] the introduction of new methods in business administration and [illegible] zation.

- tariff protection will be drastically reduced in the case of industries which have secured a satisfactory competitive position.

Specific policies have been elaborated [illegible] with:

- wages and working conditions,
- overtime work and remuneration,
- systems of work remuneration,
- technical education,
- repatriation of emigrants.

Managerial talent will be significantly improved.

Larger and more efficient business units will be created; the following measures will be applied to achieve this:

- the corporate form of business will be encouraged, generally.
- fiscal and credit policy will encourage family firms to change into incorporated companies with adequate share capital.

Policies will grant incentives:

- to establish new industrial firms.
- to decentralize industrial activity by aiding provincial industries.
- to promote the export of industrial products.

In order to improve the organization of distribution and marketing, policy measures will encourage:

- the promotion of dynamic foreign trade enterprises.
- advertizing.
- the standardisation of products and improvement of quality.

Strategies and policies which will promote exports are:

- co-operation will be actively sought with the European Economic Community.
- import policy will be used as an instrument to promote exports to countries having bilateral agreements with Greece.
- measures will be taken to encourage industrial and commercial firms to conduct market research studies, and to use modern marketing techniques at home and abroad.
- the State will participate in the establishment of a mechanism for insurance against export risks.

Institutions

An organization for the Promotion of Exports will be established by the State to promote and co-ordinate export efforts.

Industrial estates will be built at Athens, Salonika, Patras, Kavalla, and Heraklion.

A National Research Council will be established to co-ordinate and develop scientific research.

Legislation on incorporated companies will be amended so as to protect minority interests.

A Capital Market Committee will be set up to regulate the functioning of the Stock Exchange to co-ordinate new issues of shares and bonds. New forms of stock exchange securities will be introduced, and the founding of Mutual Funds will be encouraged.

Commercial banks will continue to attract the greater part of domestic savings: by 1970, 210 billion will be channelled through the banking system as a whole. Measures will be applied to encourage commercial banks' activity in long-term financing.

The industrial development banks will ... the commercial banks in granting long-term industrial credit.

Of great importance will be encouraging ... the banking sector.

Quantitative and qualitative credit controls will continue to be used.

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... TATA ...

4. Planned Growth of Manufacturing Sectors

Growth of Output

	Average Annual Rate (1966-70)
Food, drink, tobacco	6 - 8%
Textiles	[illegible] - 9%
Clothing and footwear	6 - [illegible]
Wood products and furniture	[illegible]
Paper and printing	1[illegible] - 11
Non-metallic minerals	11 - 1[illegible]
Metal products and machinery	1[illegible] - 11%
Rubber, chemicals and petroleum products	16 - 18%
Basic metals	18%
Transport equipment	15%
Miscellaneous	17%
All Manufacturing	1[illegible] - 12%

B. Priority of Sectors

GREECE

[illegible]

[illegible] available [illegible] will [illegible] [illegible] current [illegible] development [illegible] projects.

[illegible] objectives [illegible]:

- to provide a solution [illegible] the undesirable [illegible] between private and co-operative enterprises.
- to promote the [illegible] of [illegible], in order to attain [illegible] of [illegible] [illegible].
- [illegible] the production of [illegible].
- to develop the animal food [illegible] industry.

[illegible] will be standardized.

The renewal of [illegible] and equipment [illegible] will [illegible] the [illegible] themselves.

Textiles: Exports of cotton textiles will increase at [illegible] per year [illegible] to the [illegible] Economic Community.

Woolen textiles will [illegible] to increasing domestic demand.

Other textile industries will experience [illegible] rate of growth, particularly [illegible] fibers.

Clothing: Rates of growth are expected [illegible].

Exports will [illegible] Economic Community.

Leather: [illegible] raw materials [illegible].

The organization [illegible] will be modernized.

Exports will increase [illegible] plan's duration period.

Leather Industries: The supply of raw materials must [illegible].

Fur processing has very good [illegible] export industry.

Wood: Policies will be designed to improve the [illegible] and the quality of furniture produced.

Wood production for industrial use must be co-ordinated with the forest exploitation program.

Paper and Printing: The demand for paper will grow at fast rates over the next five years.

The possibility of producing new paper products will be explored.

The Government will promote the development of domestic raw materials for pulp-making.

Rubber: Raw materials will be imported.

Tariff protection and a favorable domestic demand will promote the growth of tire production.

Rubber (cont'd.): Domestically produced synthetic rubber will be made available in the near future.

Over-all performance will be improved.

A technical assistance program will assist small industries.

[illegible] products: Domestic demand will continue to grow rapidly.

Rationalization of production will be achieved through mergers and the creation of new firms.

Chemicals: Self-sufficiency in fertilizers will be achieved.

Basic chemicals, at internationally competitive prices, will be produced.

Petro-chemicals: Domestic and foreign demand are expected to increase in the future.

The technical know-how of foreign firms will be sought.

Special training programs will be instituted to provide technical personnel.

Other Chemical Industries: The prospects for pharmaceutical industries are encouraging.

Production of turpentine, colophony, and soap will be slow or will decline.

Petroleum Products: Domestic requirements of petroleum products will be satisfied for the next few years; demand will be approximately [illegible] million tons in 197[illegible].

Non-metallic Minerals: Future growth is dependent on the country's building and construction activities.

New lines of products will be developed.

The cement industry will expand considerably, in response to increased domestic demand.

Glass, porcelain, and clay products will increase their exports.

[illegible], will [illegible] [illegible]ended, since [illegible]

unnecessarily is made available [illegible].

[illegible]

[illegible] necessary.

[illegible]

[illegible] requirements [illegible].

[illegible]

[illegible]

[illegible]:

- [illegible] parts and accessories used by producers are heavily taxed when imported.
- [illegible] production costs are dependent on future steel prices.
- [illegible] small firms are inefficient.

[illegible]: [illegible] will be continued.

There is a potential for the assembly of [illegible] for domestic and export [illegible].

[illegible] will [illegible] transit [illegible] and repairing into [illegible] manufacturing.

[illegible]: [illegible] employment will increase [illegible] and [illegible], at an average annual rate of [illegible]. The number of people employed will [illegible] from [illegible] in [illegible] to [illegible] in [illegible].

[illegible]

[illegible]. [illegible] and [illegible]: [illegible] and pasteurization plants will be established.

Modern, [illegible] cheese factories will be established.

[illegible]

	[illegible]	[illegible]
[illegible] textiles:		
- number of spindles	[illegible]	[illegible]
- number of looms	[illegible]	[illegible]
[illegible] textiles:		
- number of spindles	[illegible]	24[illegible]
- number of looms	3,[illegible]	[illegible]

[illegible] Industries: A number of new tanneries for sheep and goat skins will be established.

A number of leather goods plants will be established.

[illegible]: In the long run, industrial complexes will be established to integrate all stages of wood [illegible] in the principal forests of the country.

Paper and Printing: Existing production units will be expanded.

A pulp and paper mill has recently been established at Larissa.

A [illegible] complex will be established at Salonika.

Rubber products: Recent tariff increases will permit the existing automobile tire plant to achieve full capacity production.

A second tire plant will be established [illegible] 1[illegible].

Chemicals: A first complex of petro-chemical industries has been established at Salonika.

Existing fertilizer plants, together with those under construction, will supply most of the domestic demand [illegible] tons in 1[illegible].

Petro-chemicals: The Government has granted a foreign group the right to establish the country's second oil refinery and a series of petro-chemical industries. Products will include:

- ethylene
- tetramethyl lead
- ethyl chloride
- ethylene dichloride
- vinyl chloride
- polyvinyl chloride
- polyvinyl acetate
- hexane and aliphatic solvents.

Investment required for the project is estimated to be [illegible] million to [illegible] million, and further development will require an additional [illegible] million. The execution of projects at Salonika will be co-ordinated with the chemical complex projected at Missolonghi.

Other Chemical Industries: A caustic soda chlorine industrial complex will be established to supply intermediate products to the petro-chemical and other industries.

Metal Industries: The establishment of new plants to produce new products depends on the results of various studies being undertaken by the Government.

Metal Products and Machinery: Existing plants will be expanded and new ones established to produce:

- pipes and tubes
- wirework and cables
- castings
- aluminum products
- boilers and heater apparatus
- household utensils, and appliances
- tin cans and containers
- electrical and communication supplies and equipment.

Transport Equipment: The construction of railway cars at the Hellenic Industrial Development Bank's plant is currently under study.

New ship-building and repair facilities will be constructed.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

Output per person employed will increase by [illegible] between [illegible] and [illegible].

The capital-labor ratio will increase by [illegible] between [illegible] and [illegible].

The capital-output ratio will increase by 2.5% between [illegible] and [illegible].

VII. ORGANIZATION AND SYSTEM FOR PLANNING AND IMPLEMENTATION

Government departments should be re-organized to:

- correspond to each sector of Government activity.

- ensure the rational distribution and [illegible] of functions [illegible] decision-making [illegible];
- [illegible] procedures.
- modernize [illegible] methods.

Better training [illegible] should be [illegible].

Friendly relations [illegible] civil servants and [illegible] should [illegible].

III. [illegible]

There are still a large number of small firms, [illegible] which use handicraft methods of production.

The high production costs in manufacturing are directly linked to very low labor productivity.

Capacity is under-utilized.

Other sectors on which manufacturing is dependent are often inadequate.

Technology is inadequate, and there is a low rate of technical renovation.

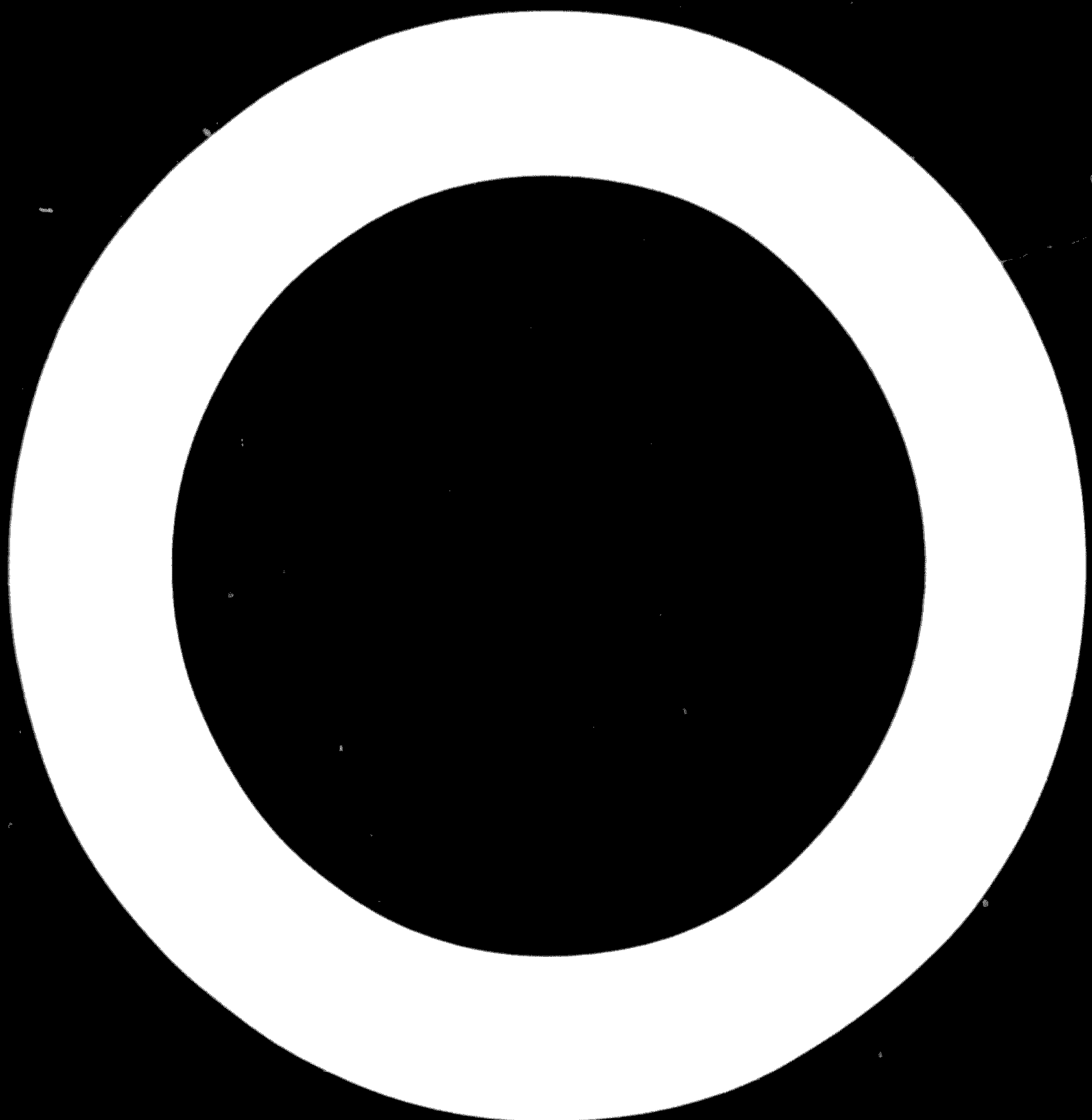
Public investment has been inadequate to improve infrastructural facilities.

Standards of organizational methods and of business administration are low.

Monopolistic practices still exist to a very considerable degree.

IV. PREVIOUS INDUSTRIAL GROWTH

Industry failed to significantly increase its share of the domestic market, or its exports, between 1954 and 1964.



[illegible] A

SUMMARY [illegible] INDUSTRIAL [illegible] PLAN [illegible] A *

I. [illegible] A[illegible] AN[illegible] OBJECTIVES

A. Planned Growth

	[illegible]	[illegible]	[illegible]	Average Annual Increase [illegible]
Manufacturing [illegible] capita	$ [illegible]	$ [illegible]	$ [illegible]	[illegible]
Total [illegible] capita	$ [illegible]	$ [illegible]	$ [illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	
Manufacturing [illegible] $ millions	[illegible]	[illegible]	[illegible]	[illegible]
Total [illegible] $ millions	[illegible]	[illegible]	[illegible]	
Manufacturing % of Total [illegible]	[illegible]	[illegible]	[illegible]	

Exchange rate: [illegible] = $1

B. Other Objectives

To start a dynamic industrialization process.

To further import-substitution.

To make optimum use of the Central American Common Market.

To improve the economic and social infra-structure.

To develop agriculture.

To improve health, housing and education conditions.

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* CONSEJO NACIONAL DE ECONOMÍA: "Programa Nacional de Desarollo Económico y Social de Honduras, 1965-69 - Versión Preliminar", Tegucigalpa, 1965. 363 pp.

[illegible]

[illegible]. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment:

	[illegible] $ millions	[illegible] Total
Total Investment:	[illegible]	[illegible]
Foreign capital goods	[illegible]	[illegible]
Domestic	[illegible]	[illegible]

Public investment in the manufacturing sector will amount to $[illegible] million during the [illegible] period.

Investment as a % of GDP:	[illegible]	[illegible]
GDP ($ millions	4[illegible]	[illegible]4[illegible]
Total Investment as % of GDP:	15%	20%
Public	5%	[illegible]
Private	10%	[illegible]

Public investment will increase its share of total investment from [illegible]% during 1964-[illegible], to 4[illegible]% during 1969-74.

Public investment will increase at an average annual rate of 1[illegible]%; private investment at only [illegible]%.

B. Strategy and Policy

Policies to encourage the following activities should be given priority:

- Completion of the investigations into the value, extent, and ownership of land.
- Analysis of sea resources.
- Geological research.
- Investigation of the possibility of developing water power.

C. Institutions

In order to promote savings, which are now insufficient:

- The fiscal system must be reorganized.
- Expenditure policy must be more austere.
- A stock market must be created.
- The banking system must be improved.

III. DEMAND PROJECTIONS AND DATA BASES

Projections are given for:

Production

Consumption

Investment: Private and Public, Domestic and Foreign

Balance of Payments

The future GDP is calculated, using a national income equation which involves a multiplier.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

B. Priority of Sectors

Emphasis will be placed on the development of the following industries:

Paper and cellulose

Chemicals

Non-metallic minerals

To a lesser extent, on metallurgy and machinery

C. Other Sectoral Plans: Growth of Exports ($ millions)

	1965	1969	1974	1965–1974 Average Annual Increase
Foodstuffs	4.5	10.5	20.5	18 %
Tobacco	0.3	1.2	1.9	22 %
Shoes, clothing	0.9	1.5	2.5	12 %
Wood, cork	9.3	15.5	29	14 %
Chemicals	1.9	4.1	6.5	15 %

(cont'd.)	1965	1969	1974	1965-1974 Average Annual Increase
Non-metallic minerals	0.5	2.3	4.5	20 %
Basic metallurgy (steel prod.)	-	4.0	12.5	
Textiles	0.4	1.4	2.5	22.5%
Petroleum, carbon	-	1.5	3.8	
Paper, cellulose	-	1.5	12	
Others	1.0	2.7	15	35 %
TOTAL	16.5	43.5	115	24 %

Exports by the manufacturing sector are expected to increase their share in total exports from 18% in 1965 to 35% in 1969 and 53% in 1974.

Imports of industrial goods will increase at 6.7% per annum, from $100 million in 1965 to $179 million in 1974.

V. PLANNED MANUFACTURING PROJECTS

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

Productivity in the manufacturing sector, as measured by dollars per person employed, is planned to increase at an average rate of 4.6% a year, as follows:

1964 - $1,030
1969 - $1,290
1974 - $1,620

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

The Planning System:

The central planning offices should be placed under the direct control of the country's Executive Branch.

Planning must be based on prior definition of governmental policy.

The President of the Republic should decide which of the alternative economic policies formulated by the planners should be used.

The task of planning must be decentralized.

Legal reform is required, in particular, a definition of the rights and obligations under the new law on the Planning System, is needed.

The Planning System will include the following sectoral departments, which will work under the direction of the Central Planning Office:

Industry
Transport
Agriculture
Communications
Housing
Health
Education
Money and credit

The functions of these departments will be:

To draw up plans (medium and long-term).

To formulate and control the execution of annual budget programmes.

To study and evaluate projects.

The functions of the Central Bank are to be linked with those of the Central Planning Office, the Budget Office, and a new department concerned with Financial Studies. In addition, a new department is to be created to deal with Regional Planning.

The Budget Syste :

In view of the reorganizamization of the Planning System, a new law is required, covering the whole public sector, to enhance co-ordination.

Administrative reforms must cover:

- the fiscal system
- the civil service
- purchases and supplies.

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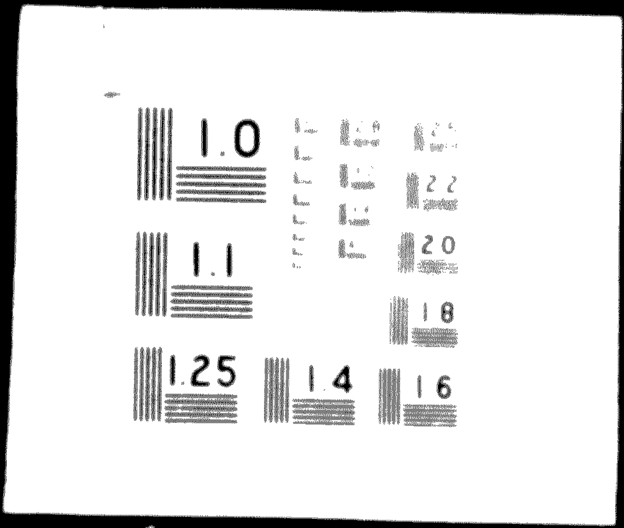


HONDURAS

Statistics:

These should be organized in accordance with the needs of the statisticians who will be using them, taking into consideration the type and form in which the statistics are currently received.

Governmental reforms:

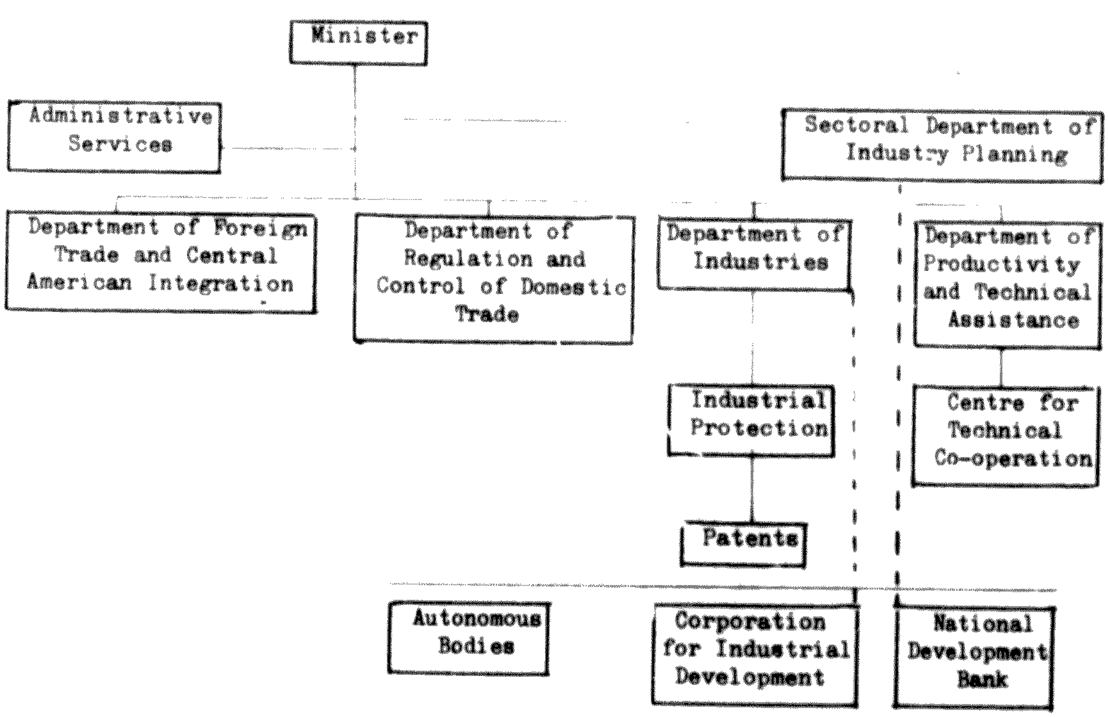
The following reforms should be undertaken:

- the creation of a Ministry of Industry and Commerce.
- a reorganization of the Ministry of Economics and Finance.
- a reorganization of the Ministry of National Resources.
- a reorganization of the Ministry of Communications and Public Works.

The new Ministry of Industry and Commerce should include:

- a Department of Industry (Industrial Policy).
- a Department of Productivity and Technical Assistance.

STRUCTURE OF PROPOSED MINISTRY OF INDUSTRY AND COMMERCE



Program Formulation:

In the mechanics of program formulation:

- adequately trained personnel are required to make plans as scientific as possible.
- emphasis should be placed on the specialization of personnel in transport, in industry and in agriculture.

VIII. PROBLEM AREAS

There are weak connections between the export sector and the rest of the economy.

There is a chronic balance-of-payments deficit.

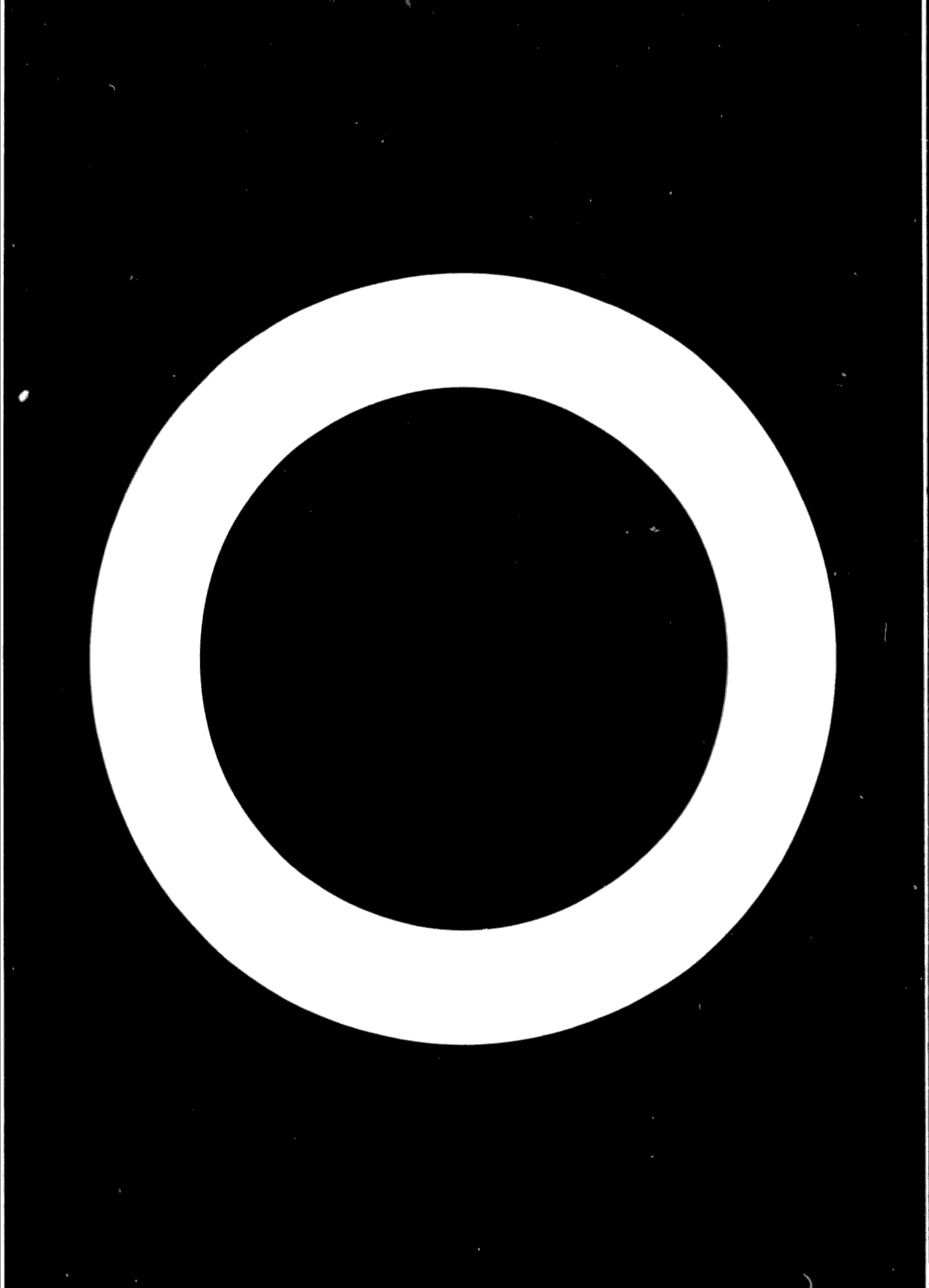
The public sector has been passive in economic development, particularly in relation to capital accumulation.

IX. PREVIOUS INDUSTRIAL GROWTH

The industrial sector has been growing at 7.5% per annum since 1950. The largest growth rates occurred precisely during those years in which the capacity to import was also at its highest level.

No significant structural changes have taken place; per capita GDP remains the lowest in Central America.

Development in the non-agricultural sectors has been insufficient to absorb the increase in the labor force.



SUMMARY OF THE 1969 - 1974 [illegible]*

I. [illegible]

A. Planned Growth:

	[illegible]	[illegible]	Average Annual [illegible]
Manufacturing NDP per capita	[illegible]	[illegible]	[illegible]
Total NDP per capita	[illegible]	[illegible]	[illegible]
Population ([illegible])	[illegible] 11,	[illegible]	[illegible]
Manufacturing NDP [illegible] millions	[illegible]	[illegible]	[illegible]
Total NDP [illegible] millions	[illegible]	[illegible]	[illegible]
Manufacturing % of Total NDP	15	[illegible]	

Exchange rate: [illegible] Indian [illegible]

B. Other Objectives:

To correct imbalances in the industrial structure and to secure the maximum utilization of already installed capacity.

To expand industrial capacity to levels required to meet the increasing domestic demand for essential goods, to substitute for imports, and to promote exports.

To build new industries or create the bases for new industries.

To complete investments in relation to which commitments have already been made.

To promote the dispersal of industries outside the established centres, in order to meet the requirements of non-farm employment.

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* Fourth Five-Year Plan, 1969 - 1974, Draft, Planning Commission, Government of India, New Delhi, 1969. 357 pages.

The objectives for village and small-scale industries are:

- to improve production techniques and efficiency, as well as product quality.
- to promote decentralization and dispersal of industries.
- to promote agro-based industries.

II. [illegible] STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Planned Investment in Development (1969 - 1974)
([illegible] millions)

	Public*	Private*	Total	[illegible]
In Manufacturing:				
- in large and medium-scale industries	3,010	2,850**	5,860	
- in village and small industries	390	665	1,055	3
Total:	3,400	3,515**	6,915	21
In the Whole Economy:	19,200	13,300***	32,500	100

* Public investment includes operating capital expenditures; private investment refers to investment in fixed capital only.

** Includes an unidentifiable allocation for mineral development.

*** Exclusive of transfers of public funds.

State Investment in Manufacturing (1969 - 1974)
([illegible] millions)

State	In Large-Scale and Medium-Scale Industry	In Small-Scale industry
Andhra Pradesh	11.3	11.3
Assam	15.4	9.9
Bihar	7.2	8.6
Gugarat	12.0	4.6
Haryana	5.3	6.6
Jammu and Kashmir	4.3	5.1
Kerala	16.0	13.3

State Investment in Manufacturing (1969 - 1974)
(Rs millions)

State (cont'd.)	In Large-Scale and Medium-Scale Industry	In Small-Scale Industry
Madhya Pradesh	[illegible]	8.[illegible]
Maharashtra	16.[illegible]	1[illegible]
Mysore	12.	11.
Nagaland	6.	.[illegible]
Orissa	13.1	[illegible]
Punjab	1[illegible].[illegible]	11.3
Rajasthan	[illegible].6	1.3
Tamil Nadu	17.3	3.3
Uttar Pradesh	31.6	26.8
West Bengal	15.3	1[illegible].6
All States:	2[illegible]5	149

Sources of Total Investment in the Economy (1969 - 1974)
(Rs millions)

Public Sector:	Centre	States	Total
1. Budgetary resources other than negotiated loans from LIC and state enterprises market borrowings:	9,157.3	1,485.3	10,642.6
- balance from current revenues at 1968-69 rates of taxation	3,140.0	133.3*	3,273.3
- surplus of public enterprises at 1968-69 fares:			
= freights and tariffs	1,566.6	740.0	2,306.6
= railways	353.3	-	353.3
= others	1,213.3	740.0	1,953.3
- retained profits of Reserve Bank	177.3	42.6**	219.9
- market borrowings of central and state governments (net)	1,000.0	554.6	1,554.6
- small savings	365.3	701.3	1,066.6
- annuity deposits, compulsory deposits, prize bonds and gold bonds	-138.6	-	-138.6
- state provident funds	457.3	396.0	853.3
- miscellaneous capital receipts (net)	2,589.3	-1,082.6+	3,671.9+

INDIA

Public Sector:	Centre	States	Total
1. Loans from LIC and state enterprises market borrowings (gross):	-	[illegible]	457.3
- LIC loans to the state governments for housing and water supply	-	128.	128.
- market borrowings of state enterprises	-	154.6	154.6
- LIC loans to state enterprises	-	174.7	174.7
2. Budgetary receipts corresponding to external assistance (net):	[illegible]	-	[illegible]
- other than PL 480	[illegible]**	-	[illegible]945.3**
- PL 480 assistance	[illegible]	-	[illegible]
3. Total budgetary resources (1 + 2 + 3)	[illegible]	1,942.6	[illegible]
4. Additional resource mobilization	[illegible],133.3***	1,478.6	3,611.9
5. Deficit financing	1,133.3	-	1,133.3
7. Aggregate resources (4 + 5 + 6)	15,776.[illegible]	3,422.3	19,198.3
8. Assistance for state plans	-4,666.[illegible]	4,666.[illegible]	-
Net planned public resources: (7 + 8)	11,110.[illegible]	[illegible]	19,198.[illegible]

Private Sector:		million
1.	Private savings	18,533
	- corporate savings	2,480
	- household and co-operative savings	16,053
2.	Central and state government draft on private savings	5,240
3.	Private savings available for private investment (1 + 2)	13,293
	- gross loans and investment from abroad	400
	- repayment of foreign loans	360
4.	Net inflow of foreign funds	40***
	Total private resources available for investment (3 + 4)	13,333

* This estimate pertains to four States only and assumes that other States will balance their non-Plan revenue budgets.

** Reserve [illegible] State Government [illegible] tion in share [illegible] of [illegible].

* Inclusive of [illegible] contribution of [illegible] and loan repayments by State Governments' [illegible].

++ Net of loan repayments only. Interest payments have been allowed for in calculating the balance from current revenues.

+++ Net of States' share.

*** Net of loan repayments only. Interest payments [illegible] been taken into account under item 1.

I. Strategy and Policy

The Industrial Policy Resolution of 1956 will [illegible] govern industrial development. This policy specifies [illegible]

- the programs in the public sector are related to high priority fields, [illegible] fill the gaps in the industrial structure.
- industries which will, under normal market incentives, develop in the private and co-operative sectors are not to be included in the public sector.

The existing system of industrial licensing will be reviewed, and administrative controls on industries, which rely largely on domestic resources, will be relaxed as follows:

- all basic strategic industries, involving significant investments or foreign exchange requirements, will be carefully planned and subjected to licensing procedures, irrespective of whether they are in the public or private sectors.
- industries, whose requirements of foreign exchange for the purchase of capital equipment do not exceed a proposed ceiling of 10% of the total value of the equipment, may be exempted from licensing unless the maintenance imports component is high. The release of foreign exchange and the importation of capital goods will, however, continue to be regulated by the Capital Goods Committee.
- industries which do not require foreign exchange allocations for capital goods or raw materials imports will be exempted from the requirements of industrial licensing.

Production targets will be fixed only for a limited number of high priority projects, and full provisions will be made for finance, supplies and other facilities in order to ensure the fulfillment of these targets. For projects in other industries, estimates of capital requirements and of production have been made, in consultation with industrial organizations and other interests, without fixing targets.

The channelling of investment in desired directions, and the maintenance of equilibrium between supply and demand, will be increasingly sought through fiscal and institutional (credit) policies.

Physical and distribution controls will be kept under review and discarded in areas where conditions become favourable.

The concentration of industrial power and the creation of monopolies will be discouraged. Measures include:

- new units in relatively common industries, such as those for the production of consumer goods, will not be allowed to be set up by the large industrial houses; instead, these houses will be encouraged to invest in more technologically challenging ventures.
- credit policies of financial houses will be oriented so as to prevent an undue concentration of the available financial resources from being directed to the larger industrial houses, and so as to ensure that funds for financing non-priority industries will not be made available to these houses.
- the capital contribution of the larger industrial houses in an externally-financed project will be proportionately higher than the contribution of medium-scale or new entrepreneurs to such a project.
- when public financial institutions, such as the Life Insurance Corporation, have substantial share-holdings in a company, they will be encouraged to exercise their full rights in the matter of appointment of representatives to the Board of Directors.

[illegible]

[illegible] modern, technically-advanced [illegible] industries [illegible]

- [illegible] small-scale industries.
- the [illegible] development of small enterprises as ancillaries to [illegible] industries [illegible] and as [illegible] industries [illegible].
- the [illegible] of parts [illegible] small industries from [illegible] licensed to large industries.

[illegible] of assistance to small industries, [illegible] mainly by State Governments and the administrations of Union Territories, such as:

- credit facilities under the State-Aid-to-Industries Act and Rules;
- technical assistance, and the provision of training and of common service facilities;
- accommodation in industrial estates;

will be expanded and supplemented by Central Government programs for industrial extension services, for research and for the supply of machines on hire-purchase terms.

In sanctioning loans under the State-Aid-to-Industries Acts and Rules, it is envisaged that State Governments will give preference to the requirements of entrepreneurs in semi-urban and rural areas, and to enterprises engaged in production for export, to handicraft artisans, and to industrial co-operatives.

Loans will be extended to the state co-operative banks for financing 22 broad groups of small-scale industries, as well as traditional village and handicrafts industries.

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[illegible] terms by the National Small Industries Corporations [illegible] will [illegible].

[illegible] for [illegible] small-scale industries.

Industrial studies of the [illegible] and large-scale enterprises, respectively, [illegible] will be undertaken [illegible] of an [illegible] character [illegible].

Financial support will be extended for [illegible] of the traditional village industries, and [illegible] for the progressive improvement of techniques as recommended by the Khadi and Village Industries Committee.

The co-operative form of organization will be encouraged, wherever appropriate, for adoption by small industries and traditional village and handicrafts industries.

The [illegible] rural industries programme, in which progress has been [illegible], will be [illegible] successful [illegible] will be continued.

The programme for industrial estates will be consolidated with sites, primarily outside urban areas, selected on the basis of techno-economic surveys.

Export promotion services, such as the study of market trends abroad, testing, quality-marking, pre-shipment inspection, and publicity will be expanded; preference will be given in the provision of credit and supply of raw materials to the units engaged in manufacturing export products.

[illegible] disperse..

[illegible]

[illegible]

[illegible]

[illegible] of the local services.

[illegible] research [illegible] of [illegible] particularly [illegible]:

- the [illegible] research [illegible] to the practical needs of industry.
- the undertaking of pilot plant studies with a view to testing the processes developed in the laboratories, for utilization by industry.

C. Institutions

A Foreign Investment Board has been set up which will:

- identify the areas in which foreign collaboration in industrial enterprise is required.

- streamline the procedures for acceptance or rejection of proposals for foreign collaboration.

The Small-Scale Industries Development Organization and the Small Industries Service Institutes will be strengthened with technical staff and provided with the requisite equipment for promoting the programs in this sector. The State Industries Directorates and the States' Small Industries Corporation will also be strengthened.

The Khadi and village industries program is implemented directly by the Khadi and Village Industries Commission and by the State Boards of these industries.

III. DEMAND PROJECTIONS AND DATA BASES

The collection of statistics for the Annual Surveys of Industries will be improved by:

- the individual enumeration of those factories which use power and employ 50 or more workers and of all factories which employ 100 or more workers, whether or not they use power.
- an annual census for smaller factories in five selected groups of industries, and a periodic enumeration of other smaller industries.
- **the collection, on a sample basis,** for all states, of data relating to non-household factory units, which employ fewer than 5 workers.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Selected Key Manufactures

		1968-69 Year (estimates)		1973-74 Year (targets)	
	Unit	Capacity	Production	Capacity	Production
Iron and steel:					
- Steel ingots	tons (millions)	9	6.5	12	10.8
- Finished steel	" "	6.9	4.6	9	8.1
- Pig iron for sale	" "	1.2	1.2	4.2	3.8
- Alloy and special steel	" (000)	50	43	294	270

	[illegible] Year estimates			[illegible] Year Targets	
	Unit	Capacity	Production	Capacity	Production
Non-ferrous metals:					
- Aluminium	[illegible]	[illegible]	[illegible]		
- Copper	" "	[illegible]	[illegible]	[illegible]	[illegible]
- Zinc	" "	[illegible]	[illegible]	[illegible]	
Metallurgical and other heavy equipment	" "	[illegible]			
Coal and other mining machinery	" "	[illegible]	[illegible]		
Heavy fabricated machinery for fertilizer and chemical production	" "	-	-		
Chemical machinery	$ millions			[illegible]	[illegible]
Dumpers and scrapers	no.	-	-	[illegible]	[illegible]
Tractors:					
- crawler and wheeled	no.	-	-	[illegible]	[illegible]
- agricultural	no. (000)	[illegible]	14	[illegible]	[illegible]
Fertilizers:					
- Nitrogenous	tons (000)	1,024	[illegible]	[illegible]	[illegible]
- Phosphatic	" "	421	[illegible]	[illegible]	[illegible]
Pesticides:					
- BHC	" "	26.5	12	[illegible]	[illegible]
- DDT	" "	2.8	[illegible]	[illegible]	[illegible]
Heavy chemicals:					
- Caustic soda	" "	400	314	560	500
- Soda ash	" "	430	390	650	500
- Sulphuric acid	" "	1,900	1,020	4,000	3,500
Petro-chemical fiber intermediates:					
- Caprolactam	" "	-	-	23	23
- DMT	" "	-	-	23	20
- Acrylonitrile	" "	-	-	16	16
Synthetic rubber	" "	30	26	70	70
Newsprint	" "	30	30	165	150
Drugs and pharmaceuticals	$ millions	-	313	-	333
Petroleum refining capacity in terms of crude	tons (millions)	17	16	28-29	26
Other Selected Manufactures					
Industrial machinery:					
- Cotton textile machinery	$ millions	53	23		60
- Cement machinery	"	31	12		25
- Sugar machinery	"	28	16		28
- Paper machinery	"	8	3		18

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	1968-69 Year (estimates)			1973-74 Year (targets)
	Unit	Capacity	Production	Production
Steel castings and forgings:				
- Castings	tons (000)	[illegible]	[illegible]	[illegible]
- Forgings	" "	[illegible]	4[illegible]	[illegible]
Cranes	" "	[illegible]	[illegible]	[illegible]
Machine tools	$ millions	[illegible]	[illegible]	[illegible]
Ball and roller bearings	no. (million)	[illegible]	[illegible]	[illegible]
Heavy pumps and compressors	tons (000)			[illegible]
Seamless pipes	" "			90
Gas cylinders	" "			45
Power tillers	no. (000)	[illegible]	[illegible].5	60
Power driven pumps	" "	[illegible]	[illegible]	[illegible]
Diesel engines (stat.)	" "	150	1[illegible]	150
Commercial vehicles	" "	[illegible]	35	85
Motorcycles, scooters, mopeds	" "	160	72	210
Bicycles	" "	[illegible]	1,800	3,200
Sewing machines	" "	450	400	600
Electric fans	no. (million)	1.6	1.5	3
Dry batteries	" "	400	400	600
Storage batteries	no. (000)	855	875	1,800
Radio receivers	" "	-	1,300	2,500
Electric transformers:				
- Above 33 kv	kva (million)	5.4	3.5	6.4
- 33 kv and below	" "	5.7	4	4.6
Electric motors:				
- Above 200 hp	hp (million)	1	0.1	0.7
- 200 hp and below	" "	2.5	2	2.7
ACSR conductors	tons (000)	103	70	125
Dry core cables	metres (000)	8,000	5,000	16,000
Paper and paper board	tons (000)	750	640	960
Cement	tons (million)	14.5	12.5	18
Automobile tires	no. (million)	3.4	3.3	6
Bicycle tires	" "	21.6	24	35
Oxygen gas	cu. metres (million)	62	35	50
Dyestuffs	tons (000)	12	7.3	14
Glass	" "	610	350	450
Refractories	" "	1,300	700	1,250
Soap	" "	-	217	250

	1968-69 Year (estimates)			1973-74 Year (targets)
	Unit	Capacity	Production	Production
Leather footwear	pairs (million)		18.2	[illegible]
Paints and varnishes	tons (000)	106	90	[illegible]
Petro-chemicals, thermo plastics:				
- PVC	" "	32	25	[illegible]
- Polyethylene	" "	32	20	[illegible]
- Polystyrene	" "	17.5	8	[illegible]
- Polypropylene	" "			[illegible]
Cotton textiles:				
- Yarn	kgs (million)	-	950	1,15[illegible]
- Cloth	metres (million)	-	4,400	5,100
- Rayon filament	tons (000)	-	51	[illegible]4
- Staple fiber	" "	-	60	[illegible]
Synthetic fiber:				
- Nylon filament	" "	6.8	6.5	[illegible]
- Polyester filament	" "	4.5	4.5	1[illegible]
- Acrylic fiber	" "			1[illegible]
- PVA fiber	" "			10
Man-made fiber fabrics	metres (million)		975	1,500
Jute manufactures	tons (000)	1,500	1,300	1,500
Woollen cloth	metres (million)	34.6	10	[illegible]
Sugar	tons (million)	3.6	2.9	4.[illegible]
Vanaspati	tons (000)	650	450	600

Production of Traditional and Village Manufactures

	1967-68 Year (estimates)	1963-74 Year (targets)
Handloom and powerloom products:		
- Cloth production (million metres)	3,350	4,250
- Value of exports ($ thousands)	12,000	20,000
Sericulture:		
- Exports of silk fabrics and waste ($ thousands)	5,330	9,330
Coir products:		
- Value of exports ($ thousands)	17,300	22,650
Handicrafts:		
- Sales through public emporia ($ thousands)	5,330	13,350
- Value of exports ($ thousands)	73,300	97,300

	[illegible] year estimates			[illegible] 4 year targets
	Unit	Capacity	Production	Production
[illegible] castings and forgings:				
Castings	tons (000)	[illegible]		[illegible]
Forgings	" "	[illegible]	[illegible]	[illegible]
Tractors	" "			
Machine tools	$ millions	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] million	[illegible]	[illegible]	[illegible]
[illegible]				
[illegible]	tons (000)			[illegible]
[illegible]	" "			[illegible]
[illegible]				[illegible]
Power [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Power [illegible]	"	[illegible]	[illegible]	[illegible]
Diesel engines stat.	" "	[illegible]	[illegible]	[illegible]
Commercial vehicles	" "	[illegible]	[illegible]	[illegible]
Motor cycles, scooters, mopeds	"	[illegible]		[illegible]
Bicycles	" "	[illegible]	1,[illegible]	[illegible]
Sewing machines	"	450	400	[illegible]
Electric fans	(million)	1.6	1.5	[illegible]
Dry batteries	"	400	40[illegible]	[illegible]
Storage batteries	[illegible]	[illegible]	[illegible]	[illegible],800
Radio receivers	"	–	1,500	[illegible],500
Electric transformers:				
Above [illegible]	[illegible] million)	5.4	[illegible]	[illegible].4
[illegible] and below	" "	[illegible]	4	[illegible]
Electric motors:				
Above 200 hp	hp million	1	0.1	0.[illegible]
200 hp and below	" "	2.[illegible]	[illegible]	[illegible]
ACSR conductors	tons (000)	103	70	125
Dry core cables	metres (000)	[illegible],000	5,000	16,000
Paper and paper board	tons (000)	75[illegible]	[illegible]	460
Cement	tons (million)	14.5	12.[illegible]	18
Automobile tires	no. (million)	3.4	3.3	6
Bicycle tires	" "	21.6	24	35
Oxygen gas	cu. metres million)	67	35	50
Dyestuffs	tons (000)	12	[illegible]	14
Glass	" "	610	350	450
Refractories	" "	1,300	700	1,250
Soap	" "	–	217	250

	1968-69 Year (estimates)			19[illegible]-74 Year (targets)
	Unit	Capacity	Production	Production
Leather footwear	pairs (million)		18.2	[illegible]
Paints and varnishes	tons (000)	10[illegible]	[illegible]	4[illegible]
Petro-chemicals, thermo plastics:				
- PVC	" "	[illegible]	[illegible]	[illegible]
- Polyethylene	" "	[illegible]	[illegible]	[illegible]
- Polystyrene	" "	17.5	[illegible]	[illegible]
- Polypropylene	" "			[illegible]
Cotton textiles:				
- Yarn	kgs (million)	-	[illegible]	[illegible]
- Cloth	metres (million)	-	4,400	[illegible],100
- Rayon filament	tons (000)	-	51	[illegible]4
- Staple fiber	" "	-	60	[illegible]
Synthetic fiber:				
- Nylon filament	" "	6.8	6.[illegible]	[illegible]
- Polyester filament	" "	4.5	4.5	1[illegible]
- Acrylic fiber	" "			1[illegible]
- PVA fiber	" "			1
Man-made fiber fabrics	metres (million)		9[illegible]	[illegible]
Jute manufactures	tons (000)	1,500	1,[illegible]	[illegible]
Woollen cloth	metres (million)	34.6	1[illegible]	[illegible]
Sugar	tons (million)		[illegible].9	4.[illegible]
Vanaspati	tons (000)	650	450	6[illegible]

Production of Traditional and Village Manufactures

	1967-68 Year (estimates)	1963-74 Year targets
Handloom and powerloom products:		
- Cloth production (million metres)	3,35[illegible]	4,[illegible]
- Value of exports ($ thousands)	12,000	[illegible]
Sericulture:		
- Exports of silk fabrics and waste ($ thousands)	5,330	9,330
Coir products:		
- Value of exports ($ thousands)	17,300	22,650
Handicrafts:		
- Sales through public emporia ($ thousands)	5,330	13,350
- Value of exports ($ thousands)	73,300	97,300

. Priority of Sectors

All industries in the public sector, and those industries for which production targets have been established, relate to high priority areas. The emphasis is on promoting:

- import-substitution,
- export expansion,
- intermediate and capital goods production.

. Other Sectoral Plans

Central Government Investment Program for Large and Medium-scale Industries (1969 - 1974)
(Rs millions)

Industry Group	Continuing Schemes	New Projects	Total
Basic metals industries	91	[illegible]	1,115
Machinery and engineering industries	134	[illegible]	204
Fertilizers and pesticides	[illegible]	[illegible]	645
Intermediates	79	167	246
Consumer goods	7	42	49
Other products	[illegible]	[illegible]	143
Total	1,758	1,044	2,802

Public Sector Investment Program for Village and Small Industries (1969 - 1974)

	Centre	Centrally Sponsored	States and Union Territories	Total
Small-scale industries	45.3	-	90.3	135.6
Industrial estates	-	-	24.2	24.2
Handlooms	6.0	-	38.2	57.2
Powerlooms			13.0	
Khadi and village industries	126.7	-	1.9	128.6
Sericulture	2.7	-	12.5	15.2
Coir industry	2.0	-	3.5	5.5
Handicrafts	10.7	-	8.7	19.4
Rural industries projects	-	6.0	-	6.0
Collection of statistics	-	0.8	-	0.8
Total	193	7	193	393

Projected Industrial [illegible]
([illegible] millions)

	[illegible] Year	[illegible]	[illegible]
Metals, including [illegible] ferrous iron and [illegible]	2[illegible]	[illegible]	[illegible]
Metal products, machinery and transport equipment	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible] and [illegible]	[illegible]	[illegible]	[illegible]
Others	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible] imports	[illegible]	[illegible]	[illegible]

[illegible] of domestic requirements of [illegible] [illegible] was estimated as:

[illegible]	[illegible]	[illegible]	[illegible]
Alloy and special steel	[illegible]	[illegible]	[illegible]
Aluminum	[illegible]	[illegible]	[illegible]
Copper	[illegible]	[illegible]	[illegible]
Machinery and components	[illegible]	[illegible]	[illegible]
Finished fertilizers	[illegible]	[illegible]	[illegible]

Projected Manufactured Exports
([illegible] millions)

	1967-6[illegible] Year	1973-74 Year	[illegible] Year
Cotton textiles and jute manufactures	[illegible]	4[illegible]	[illegible]
All other manufactures	[illegible]	[illegible]	[illegible]
Total	[illegible]	1,[illegible]	[illegible]
Manufactured exports as % of all exports	[illegible]	[illegible]	[illegible]

The main growth of manufactured exports will be in metals and metal products (including machinery, equipment and engineering goods) and in chemicals and allied products; the growth of traditional textile and manufactured jute exports is expected to be slow.

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V. [illegible]

Projects in the Central Government Program

	Location	Estimated Investment ($ millions)
Basic Metals:		[illegible]
Continued Projects -		[illegible]
Bokaro steel plant	Bokaro	[illegible]
Expansion of Rourkela steel plant - 1st stage	Rourkela	[illegible]
Expansion of Bhilai steel plant - 2nd stage	Bhilai	11.
Expansion of Durgapur steel plant - 1st stage	Durgapur	[illegible]
Alloy, tool and stainless steel plant	Durgapur	[illegible]
Mysore iron and steel works (conversion to alloy steel)	Bhadravati	[illegible]
Khetri copper project (including Kolihan copper project and fertilizer plant)	Khetri	[illegible]
Korba aluminum project	Korba	[illegible]
Koyna aluminum project	Koyna	
New Projects -		[illegible]
Expansion of Bhilai steel plant - 3rd stage	Bhilai	[illegible]
Bokaro 5th converter and continuing action on expansion	Bokaro	[illegible]
Plate mill		[illegible]
Technological improvements (for all plants)		[illegible]
Additional capacity for steel		26.7
Balancing equipment (for all plants)		26.7
Finishing facilities for production, diversification (for all plants)		
Doubling the capacity of the zinc smelter	Debari	6.7
Gujarat alumina plant (central share)		1.3

[illegible] A

	[illegible]	[illegible]
Machinery [illegible] Industries:		
Continued projects -		[illegible]
Heavy electricals [illegible]: steam turbo-generators, transformers and traction [illegible]		[illegible]
Bharat Heavy Electricals Ltd.	[illegible]	[illegible]
Bharat Heavy Electricals Ltd. [illegible]	Hardwar	[illegible]
Bharat Heavy Electricals Ltd. [illegible] turbines	[illegible]chandra[illegible]	[illegible]
Bharat Heavy Electricals Ltd. [illegible] switchgear project	[illegible]chandra[illegible]	[illegible]
Machine Tool Corporation	[illegible]	[illegible]
Heavy machine building plant	Ranchi	[illegible]
Heavy machine tool plant	Ranchi	[illegible]
Mining and Allied Machinery Corporation	Durgapur	[illegible]
Bharat heavy plate and vessels project	Vishakhapatnam	[illegible]
Hindustan Cables Ltd.:	[illegible]narayanpur	
- expansion of dry core cables		[illegible]
- manufacture of aluminum sheathed cables		[illegible]
- manufacture of copper ply cables		[illegible]
- coaxial cables type [illegible]		[illegible]
Instrumentation Ltd.	Kotah	[illegible]
Hindustan Machine Tools:	Bangalore	
- presses		[illegible]
- printing machines		[illegible]
Hindustan Shipyard dry dock	Vishakhapatnam	[illegible]
Hindustan Shipyard expansion		1[illegible]
Hindustan Shipyard subsidy		[illegible]
New Projects -		[illegible]
Agricultural tractors	not yet decided	[illegible]
Pumps and compressors project	" " "	[illegible]
Gas cylinders project	" " "	[illegible]
Diversification of national instruments	Jadavpur	[illegible].7

[illegible]

	Location	[illegible] Investment [illegible] millions
New projects contd.		
Expansion and diversification of [illegible]	Trichy	[illegible]
Expansion and diversification of [illegible]	Ramachandrapuram	[illegible]
Feasibility studies relating to advance action for the Fifth Plan		[illegible]
Seamless pipes		[illegible]
Second shipyard	Cochin	[illegible]
Fertilizers and Pesticides:		[illegible]
Continued Projects -		[illegible]
[illegible] - 4th state expansion	Alwaye	[illegible]
Cochin fertilizers	Cochin	[illegible]
Madras fertilizers	Madras	[illegible]
Expansion of Trombay fertilizers	Trombay	[illegible]
Durgapur fertilizers	Durgapur	29.[illegible]
Sindri fertilizers:	Sindri	
- rationalization scheme		[illegible]
- naptha gasification		[illegible]
Expansion of Namrup fertilizers	Namrup	35.3
Barauni fertilizers	Barauni	45.3
Kanpur fertilizers Government share	Kanpur	[illegible]
Hindustan insecticides	Delhi and Alwaye	[illegible]
New projects -		155.0
Additional fertilizer capacity		150.0
Hindustan insecticides		5.0
Intermediate Chemicals:		246.4
Continued Projects -		79.0
Triveni structurals	Allahabad	1.1
Expansion of [illegible] mills	Nepanagar	6.2
Travancore titanium products (central share)	Alwaye	2.5
Foundry forge plant	Ranchi	34.9
Sulphuric acid project of Sindri fertilizers	Sindri	0.5
Gujarat aromatic project	Koyali	21.8
Hindustan Organic Chemicals	Panvel	11.9

	Location	[illegible] Investment [illegible]
New [illegible] projects -		[illegible]
[illegible] paper, [illegible] and newsprint schemes		[illegible]
[illegible] corporation including continuing schemes		[illegible]
[illegible] works		[illegible]
Expansion of raw film project	Ooty	[illegible]
[illegible] expansion and diversification of [illegible] steel products	[illegible]	[illegible]
[illegible] naphtha cracker:	[illegible]	
- manufacture of ethylene propylene		[illegible]
- benzene extraction		[illegible]
- butadiene (including synthetic rubber)		[illegible]
Fertilizer Corporation of India:	Trombay	
- addition of balancing equipment to methanol plant		[illegible]
- methylamines plant		[illegible]
- manufacture of other amines and ethylenediamine		[illegible]
[illegible] alcohols	Barauni	
Barauni aromatic project	Barauni	
Investment on manufacture of intermediates to commence production in the Fifth Plan:	Barauni	13.3
- caprolactam		
- new olefines complex		
- methanol		
Consumer Goods:		49.3
Continued Projects -		7.0
Security paper mill	Hoshanagabad	1.1
New alkaloid factory	Neemuch	1.4
Hindustan Antibiotics	Pimpri	1.5
Indian Drugs and Pharmaceuticals	Hyderabad, Rishikesh and Guindry	2.5
Ophthalmic glass project	Durgapur	0.6

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	Location	1969 - 1974 Investment [illegible] millions
New Projects -		1[illegible].[illegible]
Printing press for bank note paper		[illegible]
Printing press for postal stationery		
Hindustan Machine Tools watch factory		[illegible].[illegible]
Take over of British India Corporation Cooper Allen		1.[illegible]
Footwear and tannery plant		[illegible].[illegible]
National Textile Corporation takeover and reconstruction and modernization of sick, but viable, textile mills.		[illegible].[illegible]
Other Projects: (incl. related non-manufacturing projects		34[illegible].
Continued Projects -		33[illegible].4
Central engineering and design bureau of HSL		1.[illegible]
Housing for Nasik press and Bombay and Calcutta mints	Nasik, Bombay and Calcutta	
Loans to institutional financial agencies		[illegible].1
Township of Heavy Engineering Corporation		[illegible].1
Township of Hindustan cables		.5
NIDC		1.4
New Projects -		4.6
NPC		0.3
ISI		0.9
Two consortia for power and industrial projects		0.7
Central Machine Tools Institute, Bangalore	Bangalore	2.7

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

A major objective of the Plan is to secure the maximum utilization of the considerable capacity installed in a large number of industries during the previous plan period. (See Table under Section IV. - A for the estimated shortfalls in production in 1968-69).

[illegible]

An Administrative Reforms Commission is taking [illegible] review the existing machinery for planning and programme implementation; a large number of its recommendations are under consideration by the Government.

The Five-Year Plan constitutes the basis of the Annual Operating Plans, and planning at the Central Government level will be supplemented and completed by planning at the State and District levels. It is proposed to improve and strengthen the planning organization at all levels.

Formulation of the Five-Year Plan

The 1969 - 1974 Plan was prepared in the following four stages:

1) Basic data were collected and analyzed, existing programs were reviewed, priorities were established, and tasks were spelled out.

On the basis of data supplied by the States, [illegible] steering groups, [illegible] planning/working groups, [illegible] sub-groups, and a panel each on Welfare of Backward Classes, Social Welfare, Small-Scale Industries and Cottage Industries were set up at the Centre to undertake studies in depth and formulate proposals on the size, content and strategy of sectoral programs.

2) The objectives and strategy of the Plan were then laid down in a document prepared by the Planning Commission ("Approach to the Fourth Five-Year Plan"). These were endorsed by the National Development Council, after which the Planning Commission issued guidelines to the Central Ministries and State Governments for the formulation of their Plans.

The concrete and quantitative aspects of the Plan were then determined by the Planning Commission in consultation with State Governments, the Administrations of the Union Territories, and the Central Ministries. The criteria for the allocation of Central assistance to States were decided upon by the Committee of State Chief Ministers of the National Development Council.

In the final state, the programs formulated by the State Governments and Central Ministries for the longer period, as well as for the first year of the Plan, were considered at a series of meetings with Central and State authorities and administrators.

VIII. PROBLEM AREAS

The objective of achieving speedy self-sufficiency involves a rapid expansion of industries producing capital equipment, metals, petroleum products and chemicals for the supply of which the economy's dependence on imports is especially large. In view of the capital-intensiveness of these industries, and the large proportion of investment resources that are allocated to them, it is imperative that these investment programs be subjected to close scrutiny and that they be efficiently implemented, in order to avoid excessive costs to the economy in view of the alternative investment opportunities which are foregone.

The increasing unemployment of workers in the traditional industries, under the impact of the diffusion of modern capital-intensive technology.

The dispersal of industries and the diffusion of industrialization outside the established industrial centres is hard to achieve.

Developing appropriate relationships between public sector enterprises and the legislative and executive organs of the Government to ensure:

- that the management of the enterprise has sufficient initiative and operational autonomy to enable it to run the enterprise along business and commercial lines.
- sufficient supervision of the performance of these enterprises by Parliament and the Departments of Government to promote and safeguard the public interest.

The development of a cadre of trained professional managers with expertise in the fields of financial, production, personnel and marketing management, to staff the higher-level administration posts in the public sector enterprises. The present system, whereby officers from the general administrative services are appointed for short periods, is highly unsatisfactory and does not provide for consistency and continuity in management policy.

II. PREVIOUS INDUSTRIAL GROWTH

Industrial development was markedly uneven in the period since 19[illegible]. The annual rates of growth of industrial output were:

1961-62	8.2% (base year 196[illegible])
1962-63	9.6%
1963-64	9.2%
1964-65	8.3%
1965-66	4.3%
1966-67	1.7%
1967-68	0.3%
1968-69 (estimate)	6 %

The decline in the growth rate of industry, beginning in 1965, was mainly due to slow rates of growth in the food, textiles, metals, and machinery industries, aggravated by the hostilities of 1965 and by two successive droughts. Connected factors were:

- the shortage of raw materials and components arising from the pause in foreign aid in 1965.
- the decline in savings, investments and purchasing power due to the two bad agricultural years.
- the shortage of raw materials of agricultural origin.
- depressed domestic demand, especially in the capital goods industries, and considerable underutilization of capacity.

In some cases where production is considerably below installed capacity, the low level of production reflected the level of the current demand; in others, such as steel and fertilizers, it was due to low productive efficiency.

The large public sector investments in manufacturing projects have contributed significantly to the strengthening of the industrial structure, but the overall performance of these ventures has not been satisfactory. The principal weaknesses were:

- the large increases in the original estimates of investment requirements.
- delays in completion schedules.
- substantial underutilisation of installed capacity.
- reliance on budgetary support to meet the cash losses of enterprises, which belied the initial expectation that they would provide a significant contribution to future development from their own internal resources.

Positive factors in industrial growth were:

- the significant addition to capacity as a result of the completion of projects already initiated; in a wide range of industries, it will be possible to achieve substantially higher levels of production merely by utilising existing capacity.
- the realization of virtual self-sufficiency in the supply of transport equipment and rolling stock.

the diversification of the industrial structure, particularly in the fields of heavy engineering and machine-building industries, which will permit the further expansion of capacity in [illegible] industries,

- the [illegible] of design and engineering [illegible].

- the [illegible] development [illegible] industries [illegible], and construction of [illegible].

- the determined effort to find external markets for manufactured goods, [illegible] of the increased domestic demand [illegible].

[illegible] measures taken [illegible] the [illegible] conditions included:

- the provision of institutional finance [illegible] and the establishment of new financial institutions [illegible]:

  - the Unit Trust of India [illegible] the savings of middle [illegible] into risk capital investment.

  - [illegible] Industrial Development [illegible] co-ordinate the activities of [illegible] agencies and to provide [illegible] financial assistance.

  - a scheme for providing [illegible] facilities for the purchase of plant and equipment.

- the liberalization of administrative controls such as:

  - the raising in [illegible] of the exemption limit for obtaining a licence under the Industries (Development and Regulations) Act from 133 thousand (Rs. 1 million) to 333 thousand (Rs. 2.5 million), in order to encourage the growth of medium-scale industries.

  - measures to streamline and expedite the procedures for the licensing of raw materials and capital goods imports, for the issue of capital, and for the approval of foreign collaboration agreements.

  - exemption from licensing procedures of existing units wishing to expand or diversify their production by up to 25% of their licenced capacity.

  - the relaxation of price and distribution controls on an ever larger number of products.

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(e) the dispersal of industries into backward areas by means of such measures as:

- exemptions from capital gains tax for industries moving out of metropolitan areas.
- the establishment of prepared industrial sites by several State Governments.

the establishment of several State Industrial Development Corporations to promote industrial expansion and [illegible] private sector [illegible].

Growth of Output of Key Manufactures

	Unit		Production 1960-61	Production 1965-66
Iron and Steel:				
- Steel ingots	tons	millions	[illegible]	
- Finished steel	"	"	2.39	[illegible]
- Pig iron for sale	"	"	1.1	[illegible]
Alloy and special steel	"	"	–	[illegible]
Aluminium	"	"	18.	[illegible]
Copper			[illegible]	[illegible]
Zinc	"	"	–	
Metallurgical and other heavy equipment machinery	"	"		[illegible]
Coal machinery and other mining machinery	"	"		[illegible]
Heavy fabricated machinery for fertilisers and chemicals	"	"	–	–
Chemical machinery			–	–
Dumpers and scrapers		no.	–	–
Crawler tractors and wheeled tractors		"	–	
Agricultural tractors	nos.	(000)	negl.	[illegible]
Fertilisers:				
- nitrogenous	tons	"	101	232
- phosphatic	"	"	53	123
Pesticides:				
- B. H. C.	"	"	4	7.4
- D. D. T.	"	"	2.8	2.7

	Unit		Production 1970-71	1965-66
Heavy chemicals:				
- Caustic soda	tons		[illegible]	
- Soda ash		[illegible]	[illegible]	
- Sulphuric acid				
Petro-chemicals fiber intermediates:				
- Caprolactam			-	
[illegible]				
- Acrylonitrile		[illegible]		
Synthetic rubber				
Newsprint		[illegible]	[illegible]	
Drugs and pharmaceuticals				
Petroleum:				
- Production of crude	millions		[illegible]	
- Refining capacity in terms of crude throughput			-	

Growth of output of other manufactures

Industrial machinery:				
- Cotton textile machinery				
- Cement machinery				
- Sugar machinery		[illegible]		
- Paper machinery				
Steel castings and forgings:				
- Steel castings	tons	[illegible]	54	[illegible]
- Steel forgings	"	"	35	[illegible]
Cranes (excluding mobile)	"	"	2	[illegible]
Machine tools		[illegible]		
Ball and roller bearings	nos.	(millions)	3.2	[illegible]
Heavy pumps and compressors	tons	(000)	-	-
Seamless pipes	"	"	-	-
Gas cylinders	"	"	-	-
Power tillers	nos.	"	-	-
Power driven pumps	"	"	109	244

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	Unit	Production [illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
Sewing machines		[illegible]	[illegible]
Electric fans	millions	[illegible]	[illegible]
[illegible]		[illegible]	
[illegible]	[illegible]	[illegible]	
[illegible]			
[illegible]			
[illegible]	[illegible] millions	[illegible]	[illegible]
[illegible] and [illegible]		[illegible]	
Electric motors:			
[illegible]	[illegible]		[illegible]
[illegible] and below	[illegible]	[illegible]	[illegible]
[illegible] conductors	tons (000)	[illegible]	[illegible]
[illegible] cables	metres [illegible]	[illegible]	[illegible]
Paper and paper board	tons	[illegible]	[illegible]
Cement	millions	[illegible]	[illegible]
Automobile tyres	nos.	[illegible]	[illegible]
Cycle tyres		[illegible]	[illegible]
Oxygen gas	cu. metres	[illegible]	[illegible]
Dyestuffs	tons [illegible]	[illegible]	[illegible]
Glass	" "	[illegible]	[illegible]
Refractories	" "	967	[illegible]
Soap	" "	144.[illegible]	[illegible]
Leather footwear	pairs (millions)	9.[illegible]	10
Paints and varnishes	tons (000)	52.6	68
Petro-chemicals thermo plastics:			
- PVC	" "		12.2
- Polyethylene	" "	9.5	13.5
- Polystyrene	" "		5.6
- Polypropylene	" "		-
Cotton textiles:			
- Cotton yarn	kgs. (millions)	801	907
- Cotton cloth (mill sections	metres "	4,649	4,401

		[illegible]	[illegible]	[illegible]
[illegible]	tons			
staple fiber			[illegible]	
Synthetic fibers				
Nylon filament, nylon tire cord and other industrial yarn				
Polyester filament and staple				
Acrylic fiber				
Man-made fiber fabrics	metres millions	[illegible]		
Jute manufactures	tons		[illegible]	
Woolen cloth	metres millions	[illegible]		[illegible]
Paper	tons			
Newsprint		[illegible]		[illegible]

Growth of Village Industries and Small Industries

Small-Scale Industries

These have grown significantly over the decade

	[illegible]	[illegible]
Number of units registered with the Small Industries Directorate	[illegible]	
Industrial co-operatives:	[illegible]	
- membership millions	[illegible]	
- value of sales ($ millions	[illegible]	[illegible]
Machines supplied on hire-purchase terms ($ millions	[illegible]	
Sales to Central Government ($ millions		[illegible]

There have also been significant improvements in the quality of the products supplied by these industries, as reflected in the increased variety of items produced to the standards and specifications presented by the defense services, railways and several large-scale industries. These items include parts and components used in the manufacture of:

- bicycles
- automobiles
- machine tools

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[illegible]

[illegible]

[illegible] integrated [illegible] on [illegible] integrated planning and market [illegible] and [illegible] shortage of raw materials.

[illegible]

[illegible]

[illegible]	[illegible] million [illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]			[illegible] million weavers
[illegible]		[illegible]	[illegible]

[illegible] reached [illegible] million in [illegible]; the decline was due to the fall in the demand for "bleeding madras".

[illegible] and Village Industries

The programme of expansion fell far short of original intentions:

- [illegible] -

[illegible]

- [illegible] ... tons
- [illegible] ... tons
- [illegible] ... sari, tons
- [illegible] gur, tons
- [illegible] leather, [illegible]
- [illegible] oil and soap, tons
- handmade paper, tons
- employment*
  - full time, persons
  - part time, persons

* refers to production and employment only in those centres which were assisted by the Khadi and Village Industries Commission.

Sericulture

The program was directed toward cost reduction and the promotion of marketing and exports:

	[illegible]	[illegible]
Production of raw silk, kgs. (millions)	1.49	[illegible]
Value of exports, fabrics and waste ([illegible])	1,8[illegible]6	[illegible]
Employment (part time), millions	[illegible]	[illegible]

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[illegible]

	1960-61	1965-66
[illegible]		
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]		

Handicrafts
($ millions)

	1960-61	1965-66	estimates 1967-68
Gross output	[illegible]	[illegible]	n. a.
Value added	[illegible]	[illegible]	n. a.
Annual sales through public emporia	[illegible]	[illegible]	[illegible]
Value of exports	[illegible]	[illegible]	[illegible]

Rural Industries Projects

A centrally-sponsored scheme for intensive development of small industries in rural areas was initiated in 1962-63. Forty-five areas in the States and some Union Territories, each covering [illegible] to [illegible] Development Blocks with a population of [illegible] thousand, were initially selected for development; [illegible] more areas near large-scale projects at Durgapur, Bhilai, Bhadravati and Ranchi were added in 1965. Progress on about a third of these projects was encouraging.

SUMMARY OF THE 1965 - 1969 INDUSTRIAL DEVELOPMENT PLAN OF IRAQ*

I. GOALS AND OBJECTIVES

A. Planned Growth

	1964	1969	Average Annual Increase
Manufacturing GDP/capita	$ 27	$ 42	9.7
Total GDP/capita	$228	$305	6 [illegible]
Population (000)	7,250	8,000	[illegible].0%
**Manufacturing GDP ($ millions)	196	335	11.[illegible]
**Total GDP ($ millions)	1,660	2,450	8.[illegible]
Manufacturing % of Total GDP	11.8%	13.6%	

Exchange rate: 0.3571 Iraqi dinars = US $1

**GDP was substantially underestimated in 19[illegible]; reported 1964 GDP was substantially greater than these figures.

B. Other Objectives

To achieve balanced growth in the economic structure by diversifying production.

To reduce the dependence of the economy on oil revenues as a source of foreign exchange and income.

To promote the expansion of exports, other than oil, and to substitute domestic production for imports.

To give first priority to developing the agricultural and manufacturing sectors.

To expand the scope of productive employment. It is estimated that the implementation of the Plan will eventually lead to the creation of 261,000 more jobs of which 41,000 will be in industry.

*The Five-Year Economic Plan 1965 - 1969, Law No. 87 of 1965, May 11, 1965. The Weekly Gazette of the Republic of Iraq, Baghdad, December 1, 1965. 90 pages

To raise the standard of living, especially among the low-income groups, and in the economically backward regions.

To realize a more equitable distribution of income.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment: Planned Total Investment (all sectors excluding foreign investment in petroleum)

	$ millions	% of Total
Government	1,790	78
Private	505	22
TOTAL	2,295	100

In addition, a further investment, not exceeding 12% of the above total, will be financed by foreign loans.

Planned Allocation of Government Investment (including the proceeds of foreign loans)

	$ millions
To the manufacturing industry	305
To all sectors	1,870
Manufacturing % of Total	16%

These allocations are for specific projects, within the framework of the Plan, which are to be financed by a budget (Government Central Investments) which is separate from the normal operating budget of the Government.

B. Strategy and Policy

The choice of productive projects and their capacities will be made with a view to accelerating the country's economic integration with neighboring Arab countries.

A broader geographical distribution of investment will be encouraged in order to bridge the existing gaps in per capita incomes of urban, rural, and economically backward regions.

Fiscal, monetary and commercial policy will be used to make the rise in national expenditures consistent with the rise in total production available for domestic consumption, thus avoiding excessive price and wage inflation.

The increase in the rate of private consumption will be held lower than the rate of increase of national income so that there will be an expansion in the saving and investment capacity of the economy.

In order to increase employment to the maximum extent, all new projects will attempt, whenever possible, to apply such intermediate technology as will use relatively small amounts of capital and a relatively large amount of labor.

Social welfare and wage policies will be geared to the Plan targets of increasing investment, production and employment.

The increased investment in health and education should eventually lead to an increase in labor productivity.

Around $7 million of the Government investment in the manufacturing industry is set apart for the establishment of a number of Industrial Vocational Training Courses and a Centre for Industrial Administration Development.

C. <u>Institutions</u>

Integration and co-ordination require that the chief planning agency (The Economic Planning Board set up by the Law of 1964) participate in enacting and controlling the implementation of the economic laws and decisions.

For purposes of reconciling the economic and social objectives of the Plan, the central planning agency is to replace the pricing mechanism, amend it, or rectify its defects, in order to realize:

- an optimum allocation of resources between savings and consumption.
- an optimum distribution of savings between the various sectors.
- a stable economy by reducing short-term economic fluctuations.
- an equitable distribution of the national income among citizens, to ensure social justice.

The Government's fiscal decisions relating to the ordinary budget will be co-ordinated with the Plan objectives, so as to direct a high proportion of resources to capital formation, to reduce economic fluctuations that interfere with the development process, and to reduce the unequal distribution of income.

III. DEMAND PROJECTIONS AND DATA BASES

Both the income elasticity of demand for several important commodities and the production targets of the various sectors were estimated, in order to ensure co-ordination between supply and demand.

In setting the growth target of approximately 12% a year for the manufacturing sector, the industrial experience of the 1953 - 1963 decade, showing an equivalent annual of growth, was taken into account.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

B. Priority of Sectors

C. Other Sectoral Plans

7. PLANNED MANUFACTURING [illegible]

	Total Cost	Direct Government Investment
Chemical Industry:		
Petro-chemical projects	[illegible]	[illegible]
Rayon factory (Hilla)	4,[illegible]	[illegible]
Fine textile factory (Hindiya)	36,4[illegible]	[illegible]
Paper and pulp factory (Basrah)	46,[illegible]	[illegible]
Sulphur recovery factory (Kirkuk)	[illegible]	[illegible]
Fertilizers factory (Basrah)	[illegible]	[illegible]
Tires and tubes factory	[illegible]	[illegible]
	243,700	133,[illegible]
Pharmaceutical Industry:		
Factory at Samara	19,200	[illegible]
Food Industry:		
Sugar factory	8,400	2,900
Expansion of Mosul sugar factory	7,000	5,900
Bakeries projects	2,500	2,500
Dates and animal fodder projects	4,200	4,200
	22,400	15,400
Construction Industry:		
Ceramic factory (Ramadi)	7,000	6,700
Glass factory (Ramadi)	9,100	9,000
	16,100	15,700
Electrical Industry:		
Electro-technical projects	6,400	1,400
Electric bulb factory	3,700	2,800
	10,100	4,200
Metals Industry:		
Iron and steel plant	72,800	20,100
Agricultural implements factory (Iskandariya)	28,800	16,200
Geological equipment repair shop	460	200
	102,100	36,500

Textile Industry:	Total Cost ($ [illegible])	Direct Government Investment ($ [illegible])
Cotton textile factory Kut	[illegible]	[illegible]
Cotton textile factory Nasiriya	11,80[illegible]	[illegible]
Rayon textile factory Hilla	[illegible]	[illegible]
Knitting and hosiery factory Kut	[illegible]	[illegible]
Expansion of Mosul textile factory	4,80[illegible]	[illegible],4[illegible]
	[illegible]	[illegible]

Miscellaneous Industrial Projects: including FAO salt works, woolen textile factory, tractors and vehicles assembly, pressed timber, starch, laboratories of the Specifications and Measurements Corporation, and studies of industrial surveys	[illegible]	[illegible]
Planned Projects in All Manufacturing Industries:	523,7[illegible]	86,[illegible]

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

The investment plan to achieve the production target for manufacturing industry as a whole is based on an anticipated decline of the capital coefficient from 4 to about 3.6, due to rising labor productivity, increased efficiency of administration, and the development of production techniques in general.

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

The ultimate planning authority is the Economic Planning Board, which has unlimited powers to decide on all matters connected with the implementation of the Plan.

The execution of each project under the Plan is entrusted to the relevant Ministry (manufacturing projects by the Ministry of Industry, etc.).

Each Ministry has a [illegible] planning bureau wh[illegible] deals with matters [illegible] connected with the setting [illegible] of the [illegible] implementation.

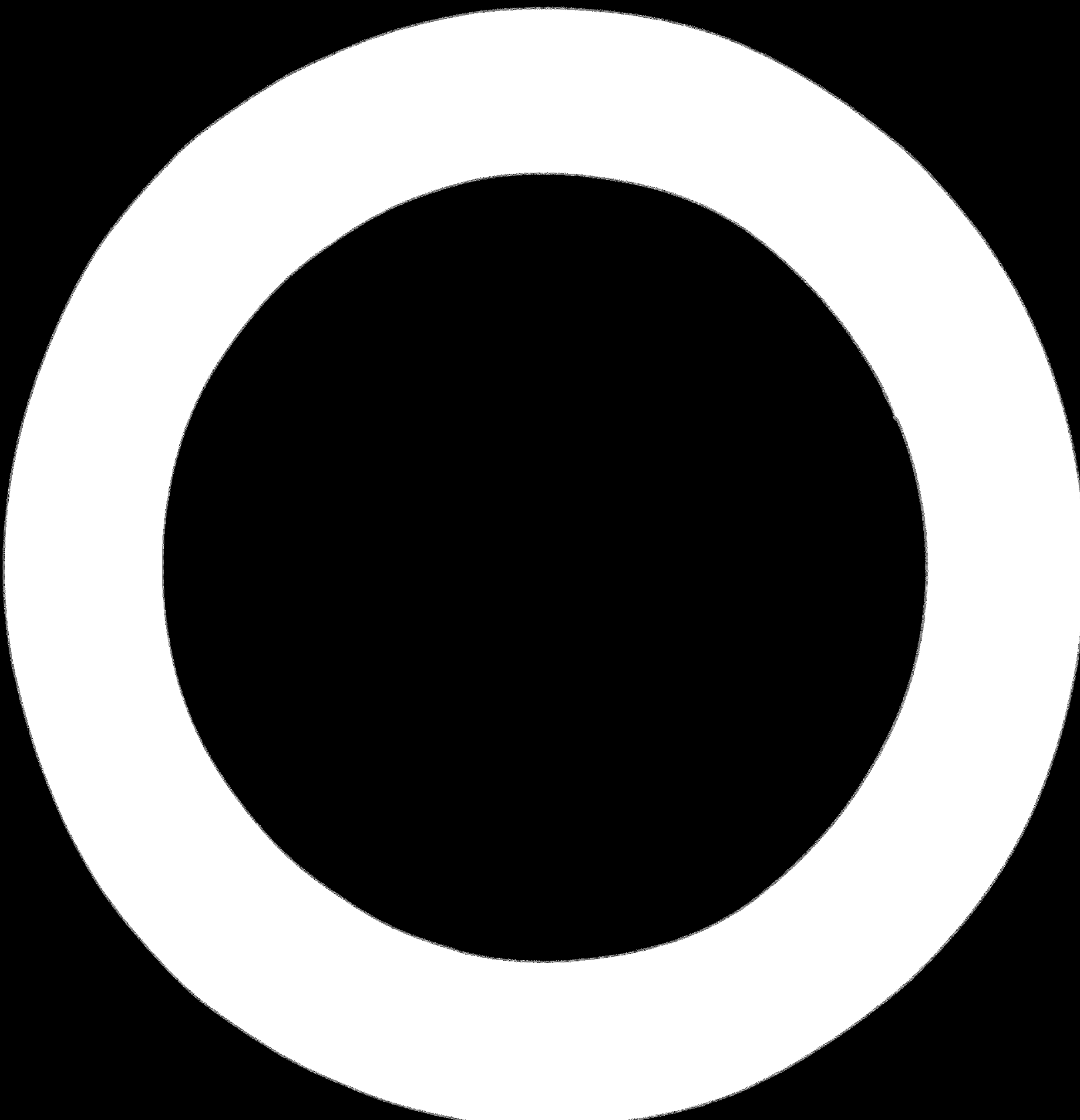
[illegible]rdinary [illegible]overnment expenditure [illegible] Ministry [illegible] will be separated fr[illegible] expenditure under the [illegible] budget [illegible]overnment [illegible] investments [illegible] Ministry [illegible]

[illegible] [illegible] AREA

To reconcile the [illegible] of maximum employment with the priority [illegible] of increased production [illegible] in this case is narrow as most of the projects already under way use advanced capital-intensive technology.

[illegible] [illegible] INDUSTRIA[illegible] [illegible]

The national income accounts contained in the [illegible] the years [illegible] indicate that the industrial se[illegible] grew at an average annual rate of about [illegible].



Objectives

To increase [illegible]

To greatly [illegible]

To reduce the dependence upon budget support

To reduce the level of unemployment

---

* The Development Board: "Seven Year Programme for Economic Development, 1964-1970".
Amman, 1966. 360 pp.

[illegible]

Strategy and Policy

In order to reduce the country's dependence on exports, priority will be given to the development of manufacturing, which will be encouraged by:

- conducting feasibility studies.
- training technical and business personnel.
- providing more industrial credit.

The formation of new [illegible] will be [illegible] promoted.

The [illegible] of [illegible] will [illegible].

[illegible] concessions may be granted [illegible].

[illegible]

[illegible] management [illegible] service

[illegible] profitable [illegible]

[illegible]

[illegible]

[illegible] Monetary and [illegible] throughout the Plan.

An Industry Advisory [illegible] Ministry of National Economy [illegible] technical services available to industry.

The Industrial Development Fund is the [illegible] credit to new and expanding industries. [illegible] capital will be provided by the Industrial Development Bank, to be established during the Plan period.

An Industry Directorate, to be established within the Ministry of National Economy, will:

[illegible]

[illegible] weights and measures and [illegible]

[illegible] used for food products.

to spot-check advertised specifications of products against their actual specifications.

to establish quality standards for exports.

The Customs and Excise Department will be reorganised to [illegible] procedures.

[illegible]

[illegible]

[illegible]

[illegible]

Relevant data [illegible] industrial survey. In addition, [illegible]

- National income
- Imports and exports
- Manpower
- Industry

Continued improvements in collection and processing will be made to provide the data required by decision-makers.

A statistical training centre will be established in the Department of Statistics, with the aid of a foreign consultant. Additional mechanical equipment will be purchased, additional staff will be recruited, and an industrial census will be undertaken.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

[illegible]

[illegible]riority of [illegible]ectors

The f[illegible]llowing sectors will undergo faster development [illegible] the [illegible]:

- [illegible]eramics
- [illegible]
- [illegible]
- [illegible]
- [illegible]otton and woollen textiles
- food [illegible]anning and [illegible]airy products.

Other [illegible]ectoral Plans

Employment in Industry	1963	1970
[illegible]ained Managers and [illegible]ssistant Managers	319	[illegible]
Sales Managers	71	113
Plant Superintendants	443	[illegible]
Graduate Accountants (including Cost Accountants)	177	[illegible]
Chartered Accountants	-	12
Certified Public Accountants	124	163
Book-keepers	921	1,212
Engineers and Chemists	691	909
Draftsmen	195	256
Electricians and Mechanics	2,339	3,760
Clerks	1,506	1,980
Labourers	29,193	38,314
Total	35,979	47,407

(Industrial employment will increase by 32 %.)

V. PLANNED MANUFACTURING PROJECTS

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

Budgeting procedures are of prime importance in planning and implementation. In the future, there will be annual discussions of the budget and of the revisions of the annual programme of the USA's development grants for the next fiscal year.

The functions of the Jordan Development Board are:

- to prepare a long-run plan, in collaboration with the Ministries.
- to obtain financial and technical support from other nations, and from the UN, in order to implement the Plan.
- to discuss the annual budget with the Budget Department to ensure Plan implementation.
- to review, with the Ministries, the progress made in Plan implementation.
- to conduct studies on the state of the economy and to identify major trends.
- to conduct feasibility studies.
- to place contracts for projects which have not been assigned to any particular Ministry.
- to conduct geological studies.

The Board is composed of key cabinet members.

Plan elaboration includes the participation of:

- Government officials
- Businessmen
- Agriculturalists
- Technical experts.

The Planning Process in Jordan

The Government sets the goals.

A senior Planning Officer is appointed in each Ministry; he is usually also the Budget Officer and is in close contact with the Budget Department of the Ministry of Finance.

In the Jordan Development Board, each of the 12 economists specialises in one sector of the economy, and collaborates with the Planning Officer concerned.

The Development Board holds staff meetings to review each sectoral programme, placing special emphasis on the inter-relationship between the programmes.

The sectoral programmes are then assembled in aggregate form and revisions are made.

Budget allocations are made; these may involve re-drafting certain sectoral programmes.

The Planning Department of the Development Board studies the Plan chapter by chapter.

The sectoral programmes are sent to the Ministries for further comments.

Further amendments may be required.

The Plan is then ready for approval by the Government.

VIII. PROBLEM AREAS

IX. PREVIOUS INDUSTRIAL GROWTH

SUMMARY OF THE 1966 - 1970 INDUSTRIAL DEVELOPMENT PLAN OF KENYA*

I. GOALS AND OBJECTIVES

A. Planned Growth:

	1964	1970	Average Annual Increase
Manufacturing GDP/capita	$ 9.0	$ 11.[illegible]	4.8%
Total GDP/capita	$86	$104	[illegible]
Population (000)	9,100	10,900	[illegible].1%
Manufacturing GDP ($ millions)*	[illegible]	13[illegible]	[illegible]
Total GDP ($ millions)*	[illegible]	1,[illegible]	[illegible]
Manufacturing % of Total GDP	10.5%	11.5%	

Exchange rate: US $1 = 0.[illegible] East African Pounds

*includes estimated non-monetary GDP of $19[illegible] million (1964) and $233 million (1970).

B. Other Objectives:

To develop more basic industries and investment goods industries.

To diversify the export structure.

To stimulate the growth of domestic savings so as to reduce the dependence on foreign capital for investment and to promote the domestic ownership of resources.

To promote Africanization of the economy.

To strengthem and expand the monetary sector.

To increase employment opportunities. Total reported employment in all sectors except agriculture is projected to increase from 435,000 in 1964 to 585,000 in 1970. Employment in manufacturing will rise from 61,000 to 80,000, contributing 12.6% of the total increase.

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* Development Plan, 1966 - 1970, Nairobi, 1966. 384 pages.

KENYA

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Total Planned Fixed Capital Investment in Development (1965/66-1969/70)

($ millions)

	Central Government	Local Government	Other Public and Semi-Public: EACSO*	Other Public and Semi-Public: Others	Private	Total
Manufacturing	0.7	-	-	2.4	148	151
Whole Economy	200	56	65	84	505	910

* East African Common Services Organization

Source of Fixed Capital Investment (1965/66-1969/70)

($ millions)

	Central Government	Local Government	Other Public and Semi-Public	Private	Total
Domestic Sources	30	56	62	295	443
External Sources	170	-	87	210	467
	200	56	149	505	910

The domestic resources of "Other Public and Semi-Public" investing bodies include some financial contributions by the Central Government. The total investment in development does not include Central Government expenditures on land transfer and development in the former scheduled areas, to be financed entirely with foreign aid funds ($40 million).

B. Strategy and Policy

Projects incorporated in the Development Plan have been critically examined with a view to ensuring that they will:

- enhance the skills and experience of the people.
- enable the participation of Kenyans in management, technical and professional tasks.
- provide increasing opportunities for domestic participation in the ownership of resources.
- spread development evenly throughout the economy.

The expansion of the co-operative form of organization will be promoted, and self-help will be encouraged.

Education, vocational training and apprenticeship opportunities will be considerably expanded.

Government planning for the private sector will be aimed at identifying opportunities and priorities for investment, carrying out feasibility studies of selected projects, and encouraging by every other means at its disposal a strong, active and dynamic private sector.

Private investment in industry, whether local or foreign, will be encouraged, in accordance with the following criteria:

- the profitability of the investment project.
- the likely efficiency and competitiveness of the enterprise, after a reasonably short period of protection and support.
- the short-run and long-run effects of the project, in terms of foreign exchange savings.
- the contribution of the project toward increasing employment.
- the effect of the project on the development of other sectors of the economy.
- location of the enterprise outside of established industrial and urban centres.

A project that has been evaluated in accordance with the above criteria will be accorded protection, if necessary, against foreign competition by means of customs tariffs, duty refunds on imported raw materials, and quantitative restrictions on competing imports. Favorable tax policies will also be pursued.

The provisions of the Foreign Investments Protection Act of 1964 will be applied to safeguard the rights of foreign investors.

Any proposed foreign investment that contributes significantly to development will get an Approved Status Certificate, issued by the Treasury, which entitles the owner to repatriate his profits and capital, irrespective of any exchange restrictions that might otherwise apply.

The planned development of industry is on the basis of the home market and of established foreign outlets. The government will pursue efforts to bring about closer economic co-operation between the countries of East Africa, in order to be able to plan industrial development on the basis of a wider market.

. Institutions

Financial assistance will be accorded by the Government to industrial projects considered necessary for the economy, mainly through the agency of the Development Finance Company of Kenya (DFCK - loans to aid direct participation in large-scale enterprises), and the Industrial and Commercial Development Corporation (ICDC - financial participation and technical and commercial extension services to small and medium-scale enterprises).

By 1966 the DFCK had invested in 13 manufacturing projects and had made preliminary investigations for participation in 20 more.

Five industrial estates will be set up at Nairobi, Eldoret, Kisumu, Mombasa and Nakuru, with financial and technical assistance provided by the ICDC.

The ICDC will also partly finance a program of investment in small and medium-scale enterprises, to be established in conjunction with the private sector.

Government investment in manufacturing industries, or in facilities for such industries, in the form of direct investments, equity participation and loans will be channelled through the following institutions:

	1965 [illegible] $ millions
Development Finance Company of Kenya	[illegible]
Industrial and Commercial Development Corporation:	
- investment in individual enterprises	[illegible]
- industrial estates	[illegible]
Agricultural Development Corporation	
- investment in factories	[illegible]
	[illegible]

A Management Training and Advisory Centre will be set up in Nairobi, with the Government contributing $4[illegible] and the United Nations Special Fund contributing $67[illegible].

Technical assistance will be sought from the United Nations in developing a National Industrial Vocational Training Scheme, consisting of:

- a National Council of Industrial Vocational Training, and supporting Trade Committees.
- an executive agency (the Controller of Industrial Vocational training and Trade Testing) which will assist managements in providing on-the-job training.
- a National Industrial Vocational Training Centre to train instructors, foremen and apprentices.

The total estimated cost of the Scheme is $1.73 million, with the Government contributing about 35% and the United Nations Special Fund about 65%. It is still under negotiation, but is expected to be implemented in part during the Plan period, with a total cost to the Government of about $280,000.

The activities of the Small Industry Research and Training Centre at Nakuru will be expanded.

The Export Promotion Council will undertake a substantial campaign to help firms develop export markets.

DEMAND PROJECTIONS AND DATA BASES

The projected growth of GDP over the Plan period has been estimated by adding up the targets for increased output of each sector of the economy. The alternative method of forecasting, which consists of dividing the amount of investment to be undertaken during the Plan period by the capital output ratio was used merely as a broad check, as the ratio itself is highly unstable and difficult to measure.

The specific demand for industrial products was determined on the basis of the domestic market and established foreign markets for Kenyan products.

PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors:

	Value Added ($ millions)		Average Annual
	1964	1970	Growth
Food processing industry	12.84	28.[illegible]	14 %
Beverages and tobacco	11.8	14.4	[illegible].5%
Textiles, clothing, footwear	6.8	15.[illegible]	15 %
Wood, paper products, printing	11.0	19.6	[illegible] %
Rubber, chemicals, petro-chemicals	12.7	27.7	8 %
Non-metallic mineral products	4.8		
Metals and associated industries	8.2	13.4	7 %
Miscellaneous industry	0.8		
Handicrafts, small industries	13.5	16.2	3 %
Total	83	135	8.5%

B. Priority of Sectors

Priority will be accorded to the development of those processing industries which will contribute to the growth of the agricultural and fisheries sectors.

[illegible]ther [illegible] [illegible]

Planned Investment and Increase [illegible] Annual [illegible]

	Net Investment $ [illegible]	[illegible] increase* $	[illegible] increase
[illegible] processing:			
meat products	[illegible]	[illegible]	[illegible]
dairy products	[illegible]	[illegible]	[illegible]
grain milling	[illegible]	[illegible]	[illegible]
sugar	[illegible]	[illegible]	[illegible]
fruits, vegetables and miscellaneous foods	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]
Beverages and tobacco	[illegible]	[illegible]	[illegible]
Textiles, clothing, cordage	14,[illegible]	[illegible]	[illegible]
Shoes, leather	[illegible],24[illegible]	[illegible]	[illegible]
Pulp and paper	[illegible]	4,[illegible]	[illegible]
Other wood products	[illegible]	[illegible]4	[illegible]
Printing	[illegible],800	[illegible]	[illegible]
Chemicals and chemical products, and non-metallic mineral products	2[illegible],20[illegible]	[illegible],4[illegible]	[illegible]
Metals and associated industries	16,[illegible]	[illegible]	[illegible]
Total	95,095	44,[illegible]	[illegible]

* value added

V. PLANNED MANUFACTURING PROJECTS

Projects under Review by the Industrial and Commercial Development Corporation

	Estimated Investment ($ 000)
Food industries	1,400
fish processing, vegetable factories, plum canning, rice processing, chicken feed concentrates, bakeries	
Textiles, clothing, fibers	1,400
handloom weaving, woolen products, jute sacks and bags	

[illegible]

	Estimated investment £ [illegible]
[illegible] leather, hides and skins	[illegible]
Saw[illegible] and wood products	[illegible]
saw [illegible], [illegible] products, wood [illegible] ings, orange boxes, plywood, chipboard, straw board and sisal board	
Paper products	[illegible]
Chemicals and other products	[illegible]
pharmaceutical products, castor [illegible], synthetic resins, [illegible], starches, acids, alcohol	
Non-metallic mineral products	[illegible]
asbestos cement pipes, wall tiles, sanitary household ceramics, industrial minerals, diatomite, glass beads	
Metals and associated industries	[illegible]
metal containers, battery containers, tin canning, wire drawing units, various assembly and repair operations	
Miscellaneous products	[illegible]
Total Investment	[illegible]

<u>Manufacturing Projects Considered Economically Feasible for Kenya</u>

Food processing

- fish processing
- meat packaging
- ceral products, breakfast foods
- dehydration and canning of fruit and vegetables (including tomato puree, paste and concentrate, passion fruit, mangoes and nuts)
- confectionery

Textiles

- cotton, woollen and synthetic textiles
  fibres, rayon
- canvas, towelling, blankets, etc.

Clothing

- shirts, skirts, blouses, outer garments,
  knitwear, socks, underwear, plastic rainwears

Leather

- tanning, prepared sheepskins and
  leather products

Wood products

- hardboard, plaster boards, furniture

Chemicals

- industrial alcohol, sulphuric acid, vegetable
  oils, pharmaceuticals, fertilizers

Non-metallic mineral products

- asbestos cement products, roofing cladding,
  downpipes, guttering, pressure pipes, processing
  of common minerals for filters and scourers,
  diatomite, rock wool, insulation board

Metal products and machinery

- agricultural equipment: simple draw-bar tools,
  tractor-mounted and self-propelled equipment,
  trailers, sisal and cotton processing machinery,
  tractor assembly
- building hardware
- castings: iron and non ferous pumps
- diesel engines assembly
- enamelware: road and advertising signs, etc.
- gas equipment: domestic gas burners, cookers,
  gas cylinders, refrigerators
- hand tools: pangas, screw drivers, hand trowels
  and forks
- holloware: aluminum, brass, stainless steel
- motor vehicle assembly: load carriers, four-
  wheel-drive vehicles, motorcycles, scooters

Electrical goods

fractional horse power electric motors

refrigerators

Miscellaneous products

tooth brushes, paint brushes

insulated materials: moulded pipe lagging

plastic goods: bottles, buttons, zip fasteners

polystyrene housewares, vacuum flasks, gramophone records

rubber tyres and tubes

PVC building material substitutes

pencils

suitcases

Private investment in these industries will be encouraged by the Government, which will also undertake, whenever possible, market surveys and feasibility studies of individual industries for the benefit of potential investors.

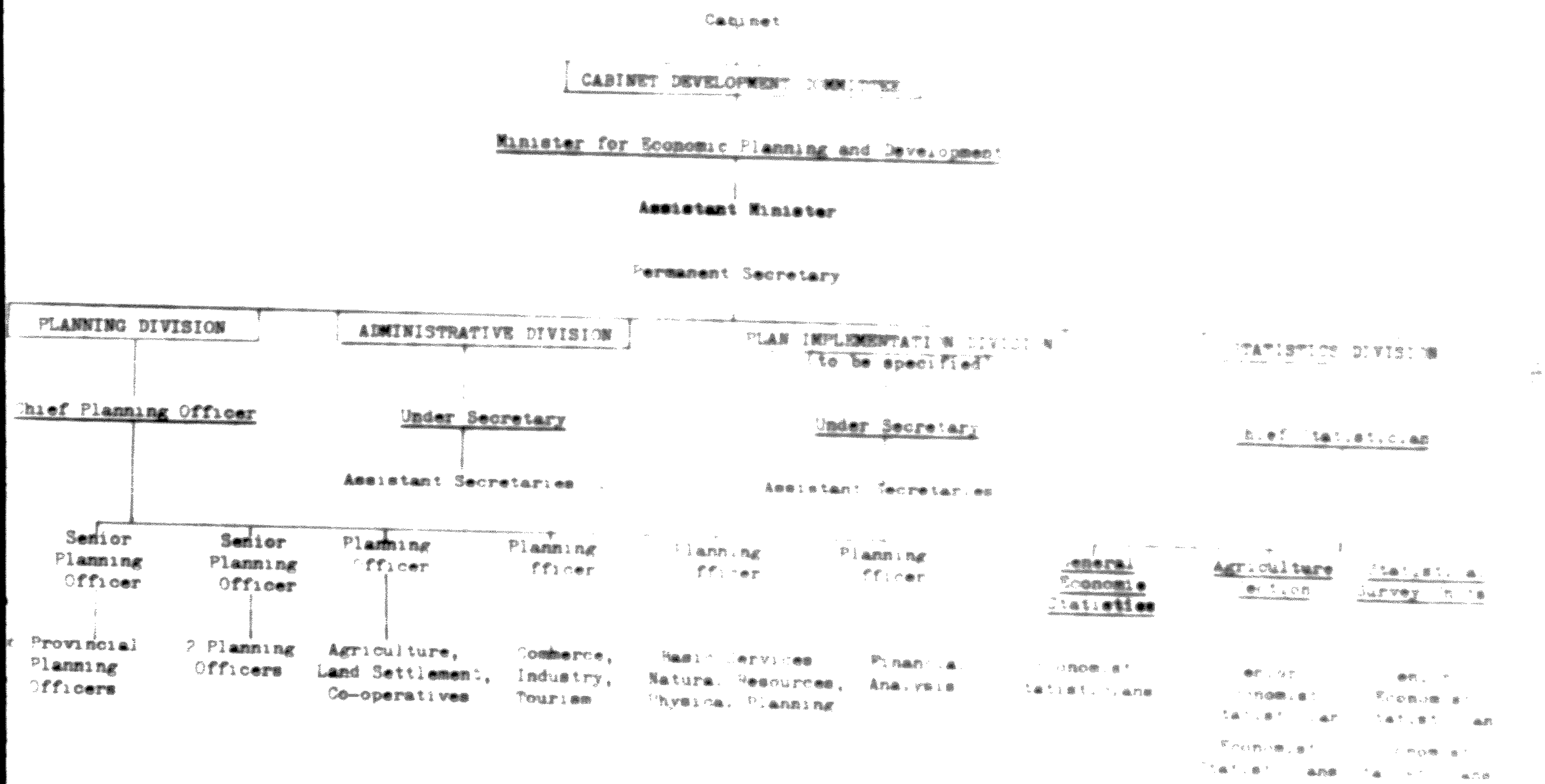
[illegible] PRODUCTIVITY AND CAPACITY UTILIZATION

[illegible] ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

The establishment of planning and development policies is the responsibility of the Cabinet, acting upon the recommendations of its Development Committee. The Development Committee consists of the Minister for Economic Planning and Development (Chairman), the Minister of Finance (Vice-Chairman), and all other Ministers whose portfolios are closely related to economic development. Secretarial duties are shared by the President's office and by the Planning and Development Ministry. (See the diagram of the Planning Organization on the next page)

The principal functions of the Administrative Division of the Planning Ministry are:

THE PLANNING ORGANIZATION IN KENYA



- to manage technical assistance.
- to maintain liaison with Parliament and the public.
- to co-ordinate international economic matters.
- to maintain close co-operation with the Ministries of Finance and Foreign Affairs and the President's office.

The Statistics Division collects, correlates, analyses and publishes all the statistical data gathered by the Kenya government, and works in close co-operation with a number of industries and agencies.

The major burden of planning and of the co-ordination of implementation falls on the Chief Planning Officer and his staff in the Planning Division. The Planning Division:

- advises the Cabinet Committee on development strategy and policy.
- surpervises the sectoral planning of the different Ministries, and sets the targets within the framework of the broad policies and objectives.
- works closely with the provincial and district organisations on matters of planning and implementation.

A new Plan Implementation Division will be established to:

- maintain up-to-date records and progress reports on major products.
- ensure effective implementation of the Plan in all sectors, and take prompt remedial action when difficulties arise.
- report on the impact of the Plan on economic and social development in general.

Planning units in the other Ministries will be strengthened, and new units established, wherever necessary, to work in close co-operation with the Planning Ministry.

Provincial and District Development Committees, composed of Government officials and a Provincial Planning Officer as Secretary, will be established. Each of these Committees will have a Development Advisory Committee, which includes in its membership various political leaders and prominent local citizens.

VIII. PROBLEM AREAS

There is a shortage of domestic capital funds, the Plan has to rely heavily on external sources for financing both private and public sector development enterprises.

There is a shortage of trained and experienced manpower. The estimated additional demand for, and supply of, high and middle-level manpower during the Plan period are as follows:

	Vacant Positions (1964)	New Positions by 1970	Replacement Requirements by 1970	Total Additional Requirement by 1970	Estimated Additional Supply by 1970	Shortage by 1970
Professional and top management	700	3,000	1,900	5,600	4,600	1,000
Technical and semi-professional	9,300	9,000	5,400	23,700	19,000	4,700
Skilled office workers	1,400	7,900	8,500	17,800	1,800*	16,000*
Skilled craftsmen	500	3,500	3,200	7,200	2,200*	5,000*
Semi-skilled manual workers	100	1,600	1,000	2,700	300*	2,400*

*only the known supply, resulting from formal training schemes which produce fully competent workers, has been included. The shortages in these categories are expected to be met during the Plan period by up-grading workers, and through informal training.

IX. PREVIOUS INDUSTRIAL GROWTH

Growth of the Economy

	1954	1964	Average Annual Increase
Manufacturing GDP/capita	$ 5.9	$ 9.0	4.3%
Total GDP/capita	$65	$86	2.9%
Population (000)	6,800	9,100	3.0%
Manufacturing GDP ($ millions)	40	82	7.4%

KENYA

(cont'd.)	1954	1964	Average Annual Increase
Total GDP ($ millions)+	443	787	5.[illegible]
Manufacturing % of Total GDP	[illegible]	10.5%	

+includes estimated non-monetary GDP of $128 million (1954) and $1[illegible] million (1964)

Growth of Manufacturing GDP

	1954	1964
	($ millions)	
Food industry	2.3	12.8
Beverages and tobacco	1.9	11.8
Textiles, clothing, footwear and leather	0.8	6.8
Wood and paper products, and printing industry	2.6	11.[illegible]
Rubber and chemical products	2.0	12.7
Non-metallic mineral products	1.2	3.3
Metals and associated industries	2.0	8.2
Miscellaneous industry	0.3	0.8
Handicraft, small industry	1.0	13.5
	14.1	80.9

The general pattern of growth in manufacturing has been one of rapid growth in those industries that produce consumer goods, with considerably less progress shown by the more basic industries, with the exception of metals and associated industries.

The factors that have slowed down the growth of certain industries in recent years are:

- the embargo on trade with South Africa.
- the imposition of trade restrictions in the East African Common Market, under the Kampala Agreement.
- the severe reduction in construction activity.

The presence of infra-structure and industrial facilities, which are both diversified and extensive in comparison with many other developing countries, has facilitated growth.

SUMMARY OF THE 1967-1971 INDUSTRIAL DEVELOPMENT PLAN OF THE REPUBLIC OF KOREA*

I. GOALS AND OBJECTIVES

A. Planned Growth

	1965	1971	Average Annual Increase
Industrial GDP/capita	$ 21.0	$ 34.5	8.6 %
Total GDP/capita	$ 98	$ 128	4.6 %
Population (000)	28,500	32,500	2.2 %
Industrial GDP* ($ millions)	605	1,120	10.8 %
Total GDP ($ millions	2,800	4,150	6.8 %
Industrial % of total GDP	22 %	27 %	

Exchange rate: 270 Won = US$ 1.

* Includes Mining and Manufacturing.

B. Other Objectives

To broaden the basis for accelerated and diversified industrialisation

To raise the level of technology and productivity

To increase the value of exports

To raise the level of employment

To attain self-sufficiency in food

To control population increases, through family planning.

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* Government of the Republic of Korea: "The Second Five-Year Development Plan, 1967-1971".

Seoul, July 1966. 240 pp.

[illegible]

II. [illegible]

A. [illegible]

[illegible]

Source of Total [illegible] Investment [illegible]

	$ millions	% of total
Domestic savings	[illegible]	[illegible]
Foreign savings	[illegible]	[illegible]
Total	[illegible]	[illegible]

Investment in [illegible] manufacturing will total $ [illegible] million between [illegible] ([illegible] of total investment).

B. Strategy and Policy

Industrialization will be promoted through:

- the expansion of exports
- the expansion of consumer goods industries
- the development of capital goods industries.

Efforts will be made to promote technology as a means of strengthening the competitive position of domestic products in world markets. Better technology will enable productivity and quality to be improved.

Policy, particularly investment, will be directed towards:

- the attainment of self-sustaining growth
- the establishment of a broad industrial base.

The Government will promote cooperation between large and small industries.

Temporary tariff, tax and financial measures will be necessary to develop import-substitution and export industries.

Employment opportunities will be made available, particularly in the industrial sector, to absorb the increase in the labour force.

Small industries will be encouraged, particularly when they can contribute to import-substitution and to increased exports. The following specific policies will be applied:

- Funds will be made available for plant expansion and for working capital
- Technical assistance will be provided
- The supply of raw materials will be improved
- Market protection will be provided against unfair competition from large enterprises.

C. Institutions

An increasing proportion of total domestic savings will come from the government:

	Rates of Saving (% of Total GDP)	
	1965	1971
Government	0.6	5.8
Private	5.5	3.6
Total Domestic	6.1	14.4

III. DEMAND PROJECTIONS AND DATA BASES

The allocation of investment funds in industry will be calculated according to new methods which have been made possible by greatly improved data.

A potential investment will be considered, using demand projections for a whole series of industries.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Gross Output ($ millions)*

	1965	1971	% increase
Food, drink and tobacco	460	717	56
Textiles	470	911	94
Lumber and plywood	79	139	76
Paper and paper products	63	111	75
Chemicals	113	289	156
Chemical fertilizers	16	85	431
Petroleum and coal products	90	164	[illegible]
Cement	22	50	124
Ceramics, clay, stone	42	97	131
Metal industry	129	313	143
Machinery	126	275	118
Other manufacturing	130	360	100
Total manufacturing	1,790	3,501	95 %

* Not value added.

Estimated Output of Selected New Products in 1971

	Tons
Viscose staple fibre	9,900
Polyacrylic fibre	13,200
Polyester fibre	6,600
Chemical pulp	97,500
Soda ash	100,000
Ethylene	60,000
Benzene	25,000
Aluminium ingots	15,000
Xylene	6,000
Toluene	4,000
PVC	44,200

Estimated Output of Selected New Products in 1971 (cont'd.

	Tons
Polyethylene	15,000
Polystyrene	12,000
Phosphate fertilizers	[illegible]
Potash fertilizers	[illegible]

Planned Output of Major Products

	Unit	1965	1971	increase
Cotton yarn	metric tons (000)	66	92	[illegible]
Nylon yarn	" " "	1.5	10	[illegible]
Plywood	sq. feet (millions	[illegible]	1,[illegible]	[illegible]
Kraft paper	metric tons (000)	[illegible]	[illegible]	[illegible]
Petroleum products	barrels (000	10,[illegible]	35,[illegible]	[illegible]
Fertilizer (nitrogeneous element	metric tons (000	75	375	400%
Cement	" " "	1,615	4,5[illegible]	[illegible]
Flat glass	c/s (000)	520	1,100	[illegible]
Steel products	metric tons (000)	265	685	158%
Electric motors	hp (000)	290	720	148%
Wires and cables	metric tons (000)	4,920	20,000	306%
Current transformer	Kva (000)	350	825	136%
Automobiles	units (000)	1.5	24.5	1,645%
Internal combustion engines	" "	11	45	309%
Shipbuilding capacity	gross tons (000)	64	150	134%

B. Priority of Sectors

Heavy industries will increase their share of total production from 28% in 1965 to 34% in 1971.

[illegible]. Other Sectoral Plans

Employment in mining and manufacturing will increase from [illegible] in 1965 to 1,500,000 by 1971.

Food

The development of this industry will be closely coordinated with agricultural policies.

Geographical dispersion is possible, since most plants are small-sized and located close to raw material supplies.

Textiles

Exports will be up-graded by exporting mixed cotton textile fabrics, instead of pure cotton cloth.

Basic Chemicals

Import-substitution will be completed, in the case of caustic soda and soda ash, by the end of the Plan period.

Ceramic, Clay and Stone Products

Particular emphasis will be placed on the production of fire-proof refractory bricks for the iron and steel industry.

Machinery

Foreign assistance will be required to supply technical know-how and to develop an adequate pool of trained labour.

Import substitution will take place at an increasingly faster rate.

Small and Medium Industries

Emphasis will be placed on those industries having backward linkage relations to the major projects of the Plan.

Self-sustained growth will be promoted:

- through the growth of export industries
- through supplying adequate funds to buy new equipment
- through improving technology and management.

A balanced growth will be promoted, with small and medium industries producing parts, and large industries assembling these parts into finished products.

Cooperative activities will be encouraged.

Decentralization will be promoted, through the construction of industrial estates.

V. PLANNED MANUFACTURING PROJECTS

Food Processing

Existing plants will be expanded, particularly those concerned with the drying, freezing, and canning of fish.

Starch plants will be constructed to exploit large harvests of sweet potatoes.

Potato bran plants will be built.

New fruit storage facilities will be built.

Textiles

New textile printing plants will be built, in order to improve the quality of exported textile fabrics.

Pulp and Paper

The construction of a chemical pulp plant with an annual capacity of 90,000 metric tons has been proposed.

Basic Chemicals

Nitric acid and methanol production [illegible] to utilize the excess ammonia produced by the new fertilizer plant.

Chemicals Fertilisers

Three new fertilizer plants will be completed in the near future.

Anticipated requirements for phosphate and potash fertilizer will be met in part, by the erection of several [illegible]-scale plants.

Petro-Chemicals

The capacity of the Ulsan Oil Refinery is being expanded from 35,000 to 55,000 barrels a day.

A second oil refinery will be constructed, with a capacity of 60,000 barrels per day.

A naphtha cracking plant will be constructed with an approximate annual capacity of 60,000 metric tons. It will constitute the first plant of a projected petro-chemical complex. The complex will ultimately produce:

- PVC
- Polyethylene
- Polystyrene
- Caprolactum
- PVA
- Ethylene glycol
- Acrylonitrile.

Cement

A large-scale plant with a capacity of 2 million metric tons per year will be constructed.

Existing plants will be expanded.

Ceramics, Clay and Stone Products

New plants will satisfy domestic demand for tiles and high tension insulators.

New plants will produce tableware and sanitary ware for export.

Metal Processing

An integrated steel plant with a capacity of [illegible] metric tons will be constructed.

An aluminium refining plant will be built with a capacity of 15,000 metric tons.

The existing zinc refinery will be expanded to produce 9,600 tons annually.

A special steels plant and a ferro-alloy plant will be constructed.

Machinery

New plants and the expansion of existing facilities will produce:

- Industrial machinery
- Metal-working machinery
- Textile machinery
- Heavy agricultural equipment
- Automobiles
- Ships
- Other transport equipment.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

Output per man working in mining and manufacturing will increase from $ 2,360 in 1965 to $ 2,800 in 1971.

The Government will actively promote the rationalization of the operations of smaller industries.

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

A comparative study will be made of potential projects.

The elaboration of project selection criteria will be finalized and implemented during the Plan period. They will be based on:

- demand projections,
- technical and economic feasibility studies,
- final detailed feasibility studies.

The economic criteria for project selection will include:

- projections of inter-industry demand,
- calculations of both commercial and social rates of return,
- employment creation effects,
- foreign exchange earnings potential,
- stimulus to the growth of domestic supplying industries.

VIII. PROBLEM AREAS

The domestic savings rate continues to be low, in relation to the rising investment requirements. The degree of dependence on foreign capital therefore remains considerably large.

The balance of payments will continue to be in a relatively difficult position.

There is a shortage of power.

Social overhead requirements have recently presented some problems in relation to:

- transportation capacity,
- education, health and medical facilities.

The demographic problem remains a very real one.

National defense remains an important problem, since expenditures account for 30 % of the Government Budget.

The economic gap between rural and urban areas must be closed.

Food imports have been increasing, in spite of increased agricultural production.

II. PREVIOUS INDUSTRIAL GROWTH

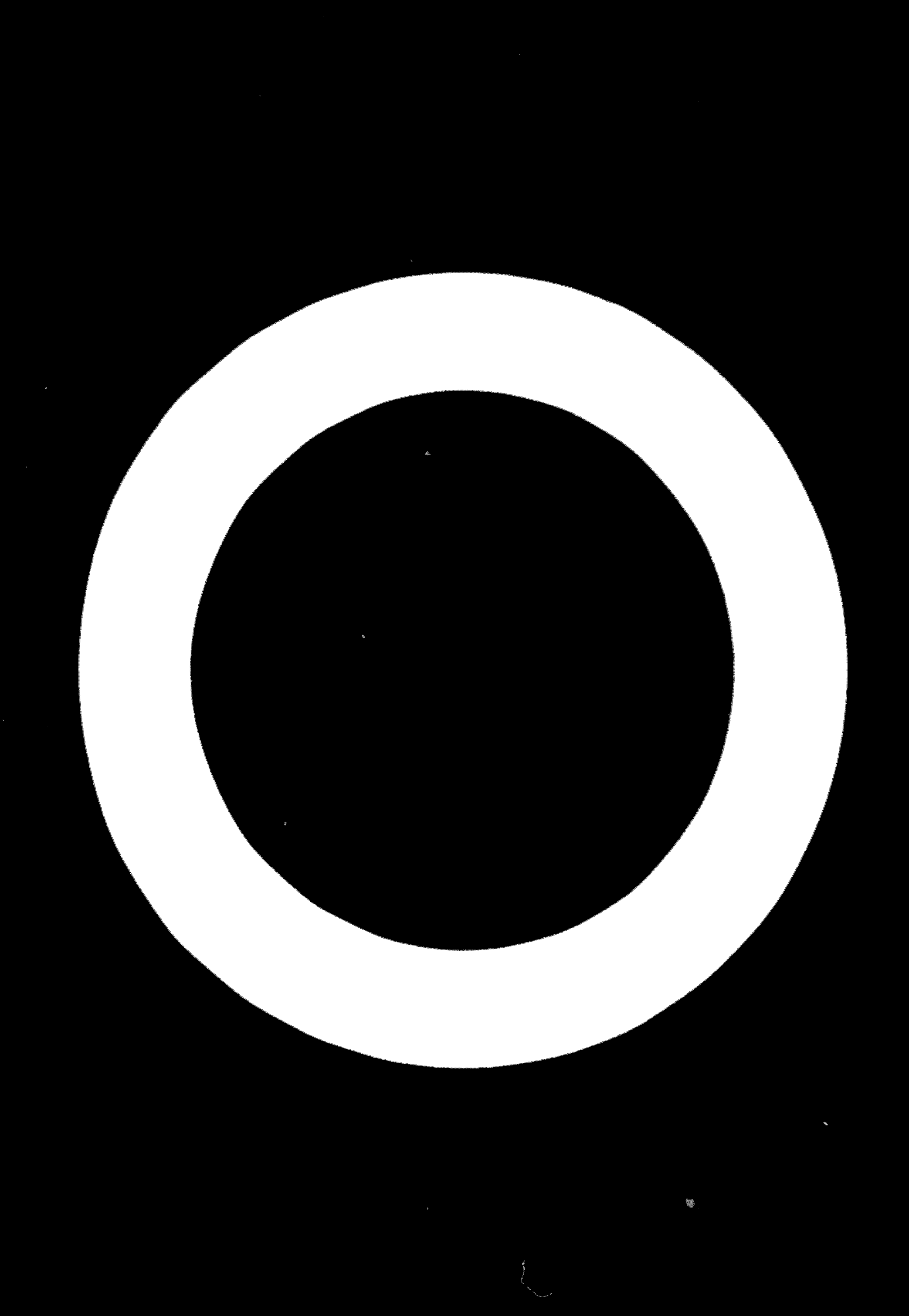
The manufacturing sector increased its production at an average annual rate of 14 % during the 1962-1965 period.

The largest growth rates were registered in:

Transportation machinery	36 %
Electrical machinery	31 %
Glass and clay products	23 %
Chemicals	15 %
Paper and paper products	12 %.

The manufacturing sector accounted for 23 % of total fixed investment during the 1962-1965 period.

Fertilizer, cement and oil refining facilities were important in the production of import-substitutes.



are:

- to raise the level ... [illegible] ... and quality.

- to develop the ... [illegible]

- to raise industrial ... [illegible] ... Libyan products can compete with foreign products in the domestic and foreign markets.

- to promote the domestic consumption of ... industrial products.

*Five-Year Economic and Social Development Plan, 1963 – 1968, Ministry of Planning and Development, Tripoli, 1963. 153 pages.

[illegible]BYA

[illegible]

[illegible]

[illegible]

	[illegible]	[illegible]
In[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]

	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
	[illegible]

[illegible] investment in manufacturing will [illegible] and will be for the provision of:

	[illegible] millions
industrial estates	[illegible]
training in industry	[illegible]
industrial research centre	[illegible]
industrial credits	14.[illegible]
TOTAL	[illegible]

[illegible]. Strategy and Policy

Libyan industry will be encouraged to establish new enterprises and develop existing ones.

State intervention to assist and support infant industrial enterprises will be necessary in the initial states, due to the limited base from which Libyan industry has to develop.

[illegible]

- [illegible]
- [illegible]
- [illegible]

The technical departments of the Government will assist private industry in finding [illegible], and the results of market and [illegible] taken by the State will be made available [illegible] entrepreneurs.

Industrial estates, providing a complex of facilities and services, including workshops, warehouses, administration buildings, vocational training centres, power stations and public amenities will be established in different parts of the country as Government investments.

An on-the-job training program for workers, foremen and managers in selected industries will be initiated with the assistance of instructors recruited from abroad.

Where private enterprise is unwilling to assume the initial risk of establishing an industry considered to be of essential importance to the economy, the Government will invest directly in it, with or without private participation, with the ultimate objective of selling the industry to the private sector.

The Government will adopt a free import policy:

- to ensure an adequate supply of goods for development purposes.
- to meet rising consumer demand and so avoid price inflation.

LIBYA

C. Institutions

A special organization in the Ministry of Industry, representing the competent Government departments, businessmen and workers, will be set up to prepare the general policy for the industrial estates. The policy to be drawn up will relate to the basis for selecting beneficiaries, the determination of industries to be included in the estates, rental rates, building specifications, and methods of providing services. The organization will also assist in the management of the estates.

An Industrial Development Organization which will undertake financing, provide technical aid, and assist in marketing has been established to help with private and public industry.

III. [illegible]

Steps will be taken to improve and expand the [illegible] of statistical data necessary for development planning.

IV. [illegible]

A. Planned Growth of Manufacturing Sectors

. Priority of Sectors

. Other Sectoral Plans

[illegible]

[illegible]

The productive efficiency of the farmers and laborers will be improved.

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

A National Planning Council, composed of the Prime Minister (Chairman) and the Ministers of Planning and Development (Vice-Chairman), Finance and Economy, Petroleum Affairs, Agriculture, and Industry, will be established. The Council will exercise the central responsibility for planning and will determine policy, while the Ministry of Planning and Development will prepare, implement, supervise and control the execution of development programs under the Plan.

The drawing up of an annual order of priority for the execution of projects will be subject to scrutiny and endorsement by the Ministry of Planning and Development, and the National Planning Council.

Funds allocated for projects will not be released before a work plan, based on complete information and statistical data, and adequately justified, is approved by the Ministry of Planning and Development.

The Ministry will appoint consultants to study projects before execution.

A training program for the staff of the Ministry of Planning and Development is envisaged, in order to secure efficient supervision of the planning and implementation of projects.

VIII. PROBLEM AREAS

The rapid growth of the commercial sector relative to the other sectors of the economy has led to:

- wage and price inflation.
- the overburdening of the farmer and unskilled worker.
- the widening of income gaps between different classes of the population.

LIBYA

- economic and social instability.
- an increase in demand for consumer goods, which is not matched by an increase in domestic production.

Industrialization is hampered by the considerable shortage of qualified technical personnel.

[illegible]

SUMMARY OF THE 1966 – 1970 INDUSTRIAL DEVELOPMENT PLAN OF MALAYSIA*

I. GOALS AND OBJECTIVES

A. Planned Growth:

	[illegible]	[illegible]	Average Annual Increase
Total Manufacturing GDP per capita	$ [illegible]	–	–
West Malaysia only	$ [illegible]	$ [illegible]	[illegible]
Total GDP per capita	$ [illegible]	$ [illegible]	[illegible]
Total Population (000)	[illegible]	[illegible]	[illegible]
West Malaysia only	[illegible]	[illegible]	[illegible]
Total Manufacturing GDP ($ millions)	[illegible]	–	–
West Malaysia only	[illegible]	[illegible]	[illegible]
Total GDP ($ millions)	[illegible]	[illegible]	[illegible]
West Malaysia only	[illegible]	–	–
Manufacturing % of Total GDP	[illegible]	–	
West Malaysia only	[illegible]		

Exchange rate: US $1 = [illegible] Malaysian Dollars

B. Other Objectives:

To reduce the nation's dependence on rubber and tin by diversifying production in agriculture and in industry.

To provide electric power, transport and communication services adequate to keep ahead of new demands.

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* The First Malaysian Plan, 1966 – 1970, Kuala Lumpur, 1965, includes both East and West Malaysia. 189 pages.

To generate employment opportunities at a rate sufficient to provide productive work for new entrants to the labor force and to reduce unemployment. The realization of the growth targets is expected to provide 460,000 new jobs (80,000 in Eastern Malaysia) of which 36,000 will be in manufacturing.

To increase the well-being of Malaysia's rural inhabitants and other low-income groups by raising their productivity and income-earning capacity.

To provide steady increases in levels of income and consumption per capita.

To establish an effective programme of family planning in order to control the rate of population growth.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

1966 - 1970 Planned Investment in Development

	$-millions	% of Total
Government	1,165	37
Private	2,010	63
	3,175	100

These totals include foreign loans and grants expected to be made available to the public sector for development financing ($ 620 million), and private foreign investment of $ 325 million.

Private sector investment is expected to be the dynamic element in promoting growth and the emergence of an industrial economy.

The planned government development expenditure is aimed at providing the economic and social infrastructure which will stimulate private investment.

Planned government expenditures for industrial development amount only to 3.3 % of the total government investment, and are allocated to:

	$ thousands
Malaysian Industrial Development Finance Ltd.	[illegible]
Majlis Amanah Ra'ayat (MARA)	[illegible]
Federal Industrial Development Authority *	[illegible]
Borneo Development Corporation Ltd.	[illegible]
Industrial Estates	[illegible]
National Institute of Scientific & Industrial Research	[illegible]
National Productivity Centre	[illegible]
Standards Institute	[illegible]
	[illegible]

B. Strategy and Policy

The operational role in the industrial sector will be left largely in the hands of private investors.

The Government will continue to provide incentives for private investment in industry, consistent with the national interest, and it is expected that foreign private investors will participate actively in the diversification of the economy by investing in industry.

Major attention will be given to the imposition of tariffs to protect infant industries, and to the establishment of common tariff arrangements for the whole of Malaysia. However, in the interests of productive efficiency and to minimise the cost of industrialisation to the domestic consumer, no more protection will be accorded than is necessary.

Tax incentives, in the form of income tax relief for pioneer industries and initial income tax allowances for capital investment by all business enterprises, will continue to be provided.

Foreign entrepreneurs will be accorded the same incentives as local industrialists, and the security of foreign investment will be guaranteed through the adoption of the following measures:

- the signing of investment guarantee agreements with other countries
- Malaysia's accession to the World-Bank-sponsored Convention on International Investment Disputes
- the unrestricted repatriation of capital and remittance of profits and dividends, within the Sterling Area.
- Nominal controls on remittances to countries outside the Sterling Area.
- Agreements with a number of capital-exporting countries to provide relief from double taxation.

Fiscal and monetary policies will be geared to promoting stable economic growth.

Public consumption expenditures will be severely limited, in order to maintain the level of public savings, to forestall inflationary problems, and to avoid imposing a strain on the balance of payments.

The Government will adopt and maintain financial policies which will encourage private investment and maintain an adequate flow of savings into domestic production.

The Government will encourage broadly-based participation in industrial development by providing facilities and opportunities for those who have too little capital or skills to participate effectively in industrial development.

The Government will promote the infrastructure of the economy so that adequate power, water, transport and communications facilities are available for industrial development.

The Government will encourage the development of technology which will maximise the use of the country's [illegible] and labour resources and economise on scarce capital.

The Government will ensure that the development of the educational system is geared to create the [illegible] requirements needed to establish and operate [illegible].

C. Institutions

An allocation of $ [illegible] has been earmarked in the plan for the development of industrial estates, with [illegible] to basic utilities.

An autonomous Malaysian Standards Institute will be set up to ensure that the specifications of domestic [illegible] as well as of imported, manufactured articles meet the particular requirements of the domestic market in the way of [illegible] and quality.

The National Productivity Centre will intensify its work of training supervisory and managerial personnel at all levels with the particular objective of making industry more efficient, lowering costs, and improving the quality of output. Consultancy services and training in upgrading marketing and sales practices will be provided.

The various technical and apprenticeship training pro-

programmes, including the Central Apprenticeship Board and the Industrial Training Institute, will continue to be expanded in order to provide a wide range of trained personnel for industrial expansion.

A National Institute of Scientific and Industrial Research will be established to provide technical support for industrial enterprises and to study the possibilities of greater use of a range of materials available locally.

Medium and long-term credit will continue to be provided, mainly by Malaysian Industrial Development Finance Ltd., whose resources have been enlarged to about $ [illegible] million, and by the Borneo Development Corporation Ltd. to meet the needs of industrialists in the Borneo States.

Malaysian Industrial Development Finance Ltd. will expand and strengthen its capacity to provide technical and management services to its clients, as well as to undertake [illegible] projects.

Financial and technical assistance will be furnished to small-scale industries by:

- the Majlis Amanah Ra'ayat (MARA) and the Bank Bumiputra to deal with small entrepreneurs;
- the rural co-operative movement (for the establishment and operation of industries for the processing of agricultural products);
- Malayan Industrial Estates Ltd., a subsidiary of MIDFL (to build factories for sale on credit terms to small industrialists).

A substantial allocation of funds of nearly $ 23 million has been made to MARA to enable it to assist the Bumiputra to play their part in industry. Its principal activities will be:

- education and training

- the provision of technical and financial assistance.

- participation in direct or joint ventures with local and overseas concerns with a view to ultimately transferring such enterprises, or MARA's share in them, to the Bumiputra themselves.

- the purchasing of raw materials and finished products in bulk for sale to small producers whenever such bulk purchases lower costs and ensure regular supplies.

- The purchase of shares reserved for the Bumiputra in pioneer, and other, companies and holding them until they can be sold to the Bumiputra.

III. DEMAND PROJECTIONS AND DATA GAPS

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

The immediate opportunities for the manufacturing sector are expected to be principally in the domestic production of those consumer goods which are at present imported. These currently amount to about [illegible] of all manufactured consumer goods, or roughly $ [illegible] million of imports a year.

It is expected that as the expansion of consumer goods industries takes place, opportunities will also arise for the establishment of intermediate and producer goods industries, supplying materials required by the consumer goods industries.

B. Priority of Sectors

To attain the target growth rate of 10 % per annum for manufacturing industry, it is expected that the following major groups of industries will generate annual output increases of 10 % or more:

- base metals and machinery
- chemicals and chemical products
- wood products
- rubber products
- food and beverages

C. Other Industrial Plans

V. PLANNED MANUFACTURING PROJECTS

The major projects that will be completed by 19[illegible] include:

- an iron and steel mill
- a pulp and paper plant
- a chemical complex
- a petro-chemical plant to be constructed by one of the oil refineries to supply some of the input requirements of the chemical complex
- a jute mill
- textile mills
- sugar refineries
- flour mills
- motor vehicle assembly plants

In addition, studies are also being prepared on the feasibility of investment in dairy products, animal feed, tapioca starch, leather tanning, and forest industries products, by a well-known international firm of industrial consultants, for the use of interested entrepreneurs.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

The ultimate responsibility for planning in Malaysia rests with the Federal Cabinet. The National Development Planning Committee (NDPC), whose Chairman is appointed by the Cabinet, is responsible for the formulation, implementation, progress evaluation, and revision of development plans. The NDPC includes the Governor of the Bank Negara Malaysia (Central Bank) and representatives from the Treasury, the Ministry of Commerce and Industry, the Ministry of National and Rural Development, the Economic Planning Unit (EPU) of the Prime Minister's Department, the Department of Statistics, and representatives from Sabah and Sarawak. The Economic Planning Unit provides the secretariat services to the NDPC and measures have been taken to strengthen the technical competence of the EPU staff with the aim of creating a specialised organization within the government fully capable of formulating and implementing development plans.

The major Federal Ministries and the State Governments have been directed to establish their own planning and research sections whose work will complement the technical development planning work of the Economic Planning Unit. In addition, the Government is setting up an Advisory Committee to the NDPC, composed of representatives from private enterprise, employer's associations and the trade unions, to serve as a channel of communication with the private sector and to advise on the development of the private sector.

An effective technique for reporting and controlling operations related to development in Malaysia has been evolved, in the form of a National Operations Room, which is attached to the Office of the Deputy Prime Minister. The Operations Room stores complete and up-to-date progress

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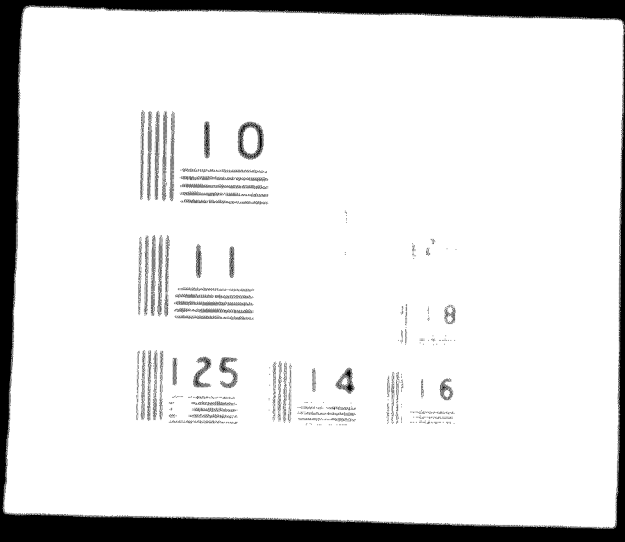


[illegible]

[illegible] improvements in the methods of [illegible] are also envisaged.

The annual phasing of public sector development expenditure will be undertaken in the course of the preparation of the annual development budgets.

[illegible] APPROACH

The mobilizing of financial resources for public and private investment.

The serious shortage of trained and skilled manpower. Development programmes have had to be trimmed to more modest proportions, as the personnel required to implement the projects are not available.

The rapid rate of growth of population [illegible] to provide [illegible] income levels [illegible] services.

Export earnings from tin and rubber are not likely to rise during the plan period, so diversification of the economy is a major necessity.

The promotion of rapid growth through a higher rate of investment will impose a strain on the balance of payments, unless new agricultural and industrial exports make up for the slow growth of traditional exports.

The 1966-1970 target for private long-term capital flows from abroad is $ 32[illegible] million, which is lower than the amount received in 1961-1965. The importance of domestic sources of investment financing will have to increase correspondingly.

IX. PREVIOUS INDUSTRIAL GROWTH

	1960	1965	Average Annual Growth
Manufacturing GDP/capita	$ 18.3	$ 26.5	7.7 %
Total GDP/capita	$ 240	$ 270	2.4 %
Population (000)	8,100	9,400	3.0 %
Manufacturing GDP ($ - millions)	148	250	11.0 %
Total GDP ($-millions)	1,940	2,550	5.6 %
Manufacturing GDP as % of Total	8 %	10 %	

Exchange rate: 1 $ US = 3.06 Malaysian dollars.

[illegible] growth rates were achieved [illegible] and a [illegible] rate [illegible] volume. Growth was due mainly [illegible] demand for output and to a sub- [illegible] rate of investment. The steady [illegible] in the growth of manufacturing have been [illegible]:

- the maintenance of political and financial stability in the country.

- the provision of an adequate physical infra-structure, especially in Malaya.

- the provision of tax relief to industries accorded pioneer status.

- the establishment of 7 new industrial estates, for both light and heavy industry.

The fastest rates of growth were realized in the production of manufactured tobacco, chemicals, machinery, metal products, non-metallic mineral products, and in the basic metals industry where the average annual rate of growth was [illegible]%. The major new projects implemented were:

- oil refineries (2)
- cement factories (3)
- factories making asbestos cement products (2)
- textile mills (2)
- an aluminium rolling mill
- a metal box factory
- a tire factory
- a synthetic detergents factory
- a factory producing monosodium glutamate
- a sugar refinery
- condensed milk factories (3)
- breweries (2)
- a cigarette factory

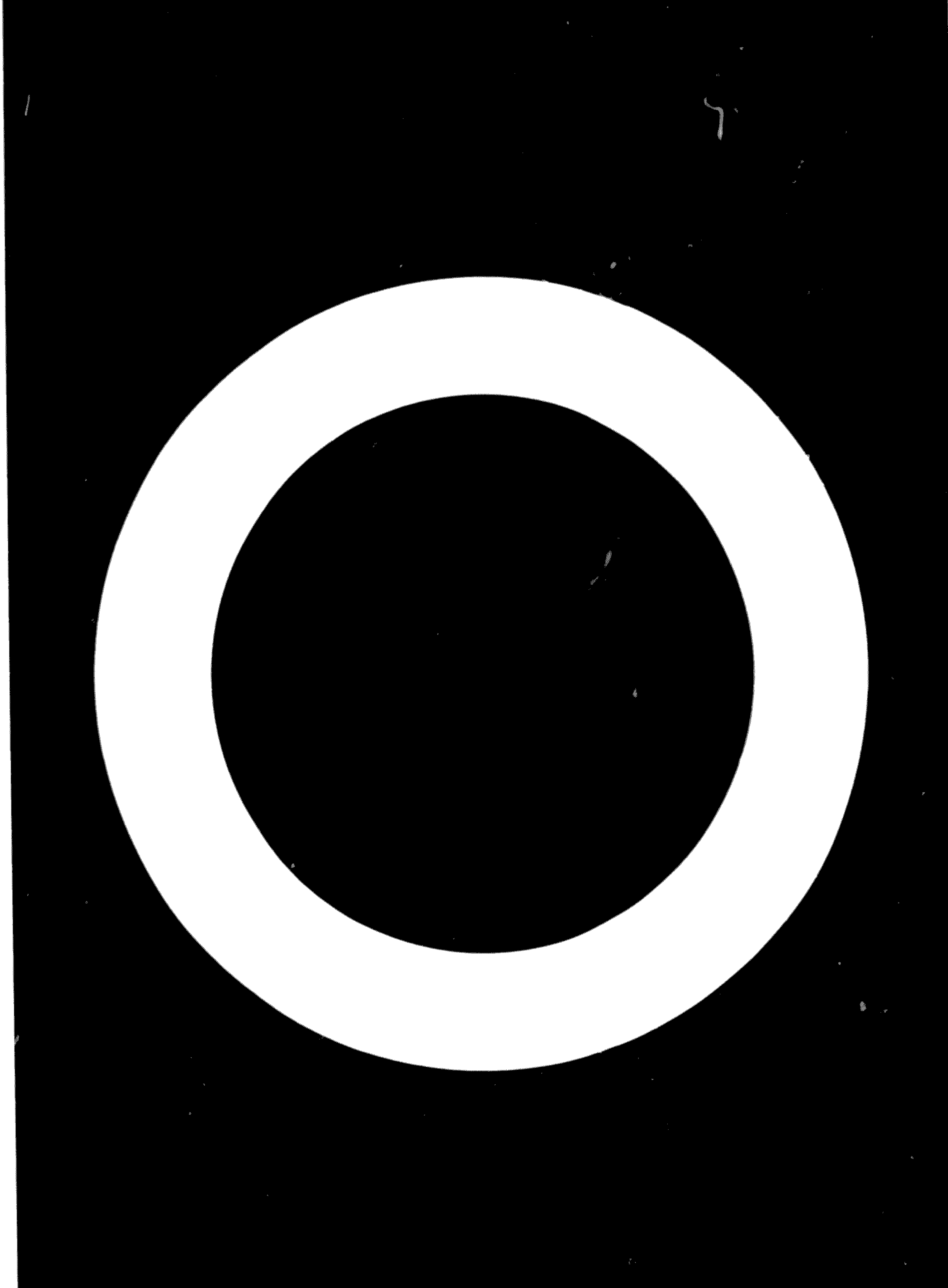
Most of these factories will have sufficient capacity not only to satisfy domestic demand but to provide an exportable surplus as well.

[illegible] hundred [illegible]

[illegible]

[illegible]

[illegible] was [illegible]



[illegible]

Investment

[illegible] Government Investment in [illegible]

In Manufacturing:

Grants and loans to private sector

- for purchase of machinery

- for factory construction

Government-owned enterprises: factory construction

Development Plan for the Maltese Islands, [illegible] pages.

[illegible]

[illegible]

- [illegible] with interest- [illegible] possible.
- [illegible] investment relative [illegible] by means of a sys- [illegible] grants and loans to [illegible].

[illegible] protective tariff policy will be continued, but [illegible] ensure efficiency and competi[illegible].

[illegible] will be encouraged.

[illegible] to promote the re-invest[illegible].

[illegible]

[illegible] trial development.

[illegible]

It is [illegible] foster domestic exports.

III. [illegible]

IV. [illegible]

A. Planned Growth of Manufacturing Sectors

B. Priority of Sectors

C. Other Sectoral Plans

V. PLANNED MANUFACTURING PROJECTS

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

VIII. PROBLEM AREAS

An emigration rate of about 7,500 persons a year is anticipated for the Plan period. However, as the emigrants tend to be from the more skilled and enterprising part of the population, the loss in skilled manpower that this represents will be more than twice as great as the anticipated supply of trained manpower from the technical institutes and apprenticeship schemes.

[illegible]

[illegible]

[illegible]

- the provision of [illegible] grants and [illegible],

- the provision of services [illegible] and [illegible] forms of [illegible] enterprise.

- tax [illegible].

[illegible] administered by the Department of [illegible] with [illegible] Alberta [illegible] Industries [illegible] Industrial Development Board. Some of their functions will be transferred to the proposed Industrial Development Corporation.

SUMMARY OF THE 1965-1970 INDUSTRIAL DEVELOPMENT PLAN OF PAKISTAN*

I. GOALS AND OBJECTIVES

A. Planned Growth

The Third Five-Year Plan (1965 - 1970)

	1964-65	1969-70	Average Annual Increase
Manufacturing GDP/capita	$ 9.7	$ 13.8	7.3 %
Total GDP/capita	$ 81	$ 98	3.8 %
Population (000)	112,400	127,400	2.6 %
Manufacturing GDP ($ millions)	1,090	1,760	10.1 %
Total GDP ($ millions)	9,100	12,500	6.5 %
Manufacturing % of total GDP	12 %	14 %	

Exchange rate: US$ 1 = 4.76 Pakistan rupees

The Perspective Plan (1965 - 1985)

	1965	1985	
Manufacturing GDP/capita	$ 9.7	$ 41.0	7.5 %
Total GDP/capita	$ 81	$ 196	4.5 %
Population (000)	112,400	186,600	2.6 %
Manufacturing GDP ($ millions)	1,090	7,660	10.2 %
Total GDP ($ millions)	9,100	36,600	7.2 %
Manufacturing % of total GDP	11 %	21 %	

Exchange rate: US$ 1 = 4.76 Pakistan rupees

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* The Third Five-Year Plan 1965 - 1970, Karachi, 1965. 517 pp.

[illegible]

[illegible]

	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

[illegible]

[illegible] imports [illegible]

	[illegible] millions
[illegible] imports:	
[illegible] goods	[illegible]
[illegible] materials for capital goods, and [illegible]	[illegible]
Total	[illegible]
Other imports:	
Consumer goods and raw materials for consumer goods	[illegible]
[illegible]	[illegible]
[illegible] imports and payments	[illegible]

[illegible] import requirements have been estimated in relation [illegible] production targets of the plan, on the basis of input-output [illegible]. Adjustments of these estimates have been made:

- on the basis of import-substitution targets included in the industrial program.
- in the light of assumptions that the demand for certain consumer goods would be restrained through appropriate fiscal and import policies.

[illegible]

[illegible]

To reduce the degree of inter-regional and intraregional economic disparity.

To strengthen the balance of payments and progressively reduce the volume of foreign aid requirements.

To consolidate earlier efforts at import-substitution of consumer goods.

To expand the capacity of domestic consumer goods industries to meet the needs of wage-earners with growing disposable incomes.

To develop basic industries for the manufacture of producer goods so that the needs of further industrialization can be met from the country's own capacity.

To increase exports at a faster rate (9.5 per annum than the rate of increase of GNP (6.5 per annum), with manufactured goods assuming progressively greater importance in the export structure.

To economize on the use of foreign exchange by developing a technology appropriate to the resource endowment of the country.

The Perspective Plan (19[illegible] - 19[illegible])

To quadruple the GNP by [illegible], with manufacturing as the key means of accelerating the overall rate of growth of the economy.

To double per capita GNP by [illegible].

To achieve full employment by [illegible].

To realize parity in per-capita incomes between West and East Pakistan.

To eliminate dependence on foreign assistance by increasing domestic savings and exports, and by import-substitution.

II. INVESTMENT, STRATEGY, POLICY, AND INSTITUTIONS

A. Investment

Planned Investment in Development (1966 - 197[illegible])

($ millions)

	Government	Private	Total
In all sectors	6,300	4,620	10,920
In manufacturing industry	938	1,743	2,681
Investment in manufacturing as [illegible] of all investment	14 [illegible]	37 [illegible]	24

Source of Investment in Development (1966 - 1970)

($ millions)

	Government	Private	Total	%
Domestic resources	3,465	3,990	7,455	68
External resources	2,835	630	3,465	32
	6,300	4,620	10,920	100

[illegible]

Regional Distribution of Investment in Manufacturing

	$ millions Government	Private	Total
East Pakistan	655	[illegible]	[illegible]
West Pakistan	288	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]

The planned investment emphasizes selectivity, because of meager resources. It concentrates on a number of "growth-points" in the economy, with a view to spreading development, without sacrificing efficiency.

Investment is allocated among the various sectors according to the following criteria:

- the likely contribution of the sector toward attaining the Plan's objectives
- the sector's past performance and its potential for future growth
- the investment's likely impact on the growth of domestic savings and investment
- the effect on the internal consistency of the development programme.

One fourth of the total investment in development is allocated to manufacturing, as this sector is expected to play a leading role in accelerating the overall rate of growth of the economy. This expectation is based on the following considerations:

- that the high growth rates registered in the industrial sector in the past will continue
- that the high marginal rates of savings generated by the manufacturing industry (especially in the private sector), and the high rate of re-investment of manufacturing profits, will continue
- the assumption that industry is the sector which is most likely to spread new productive techniques and attitudes through the rest of the economy

- that the manufacturing sector possesses a strong potential to strengthen the balance of payments, by increasing exports and by substituting for imports.

Planned 1966 - 1970 Investment in Manufacturing

	public sector	private sector	Total
		$ millions	
Direct Investment:			
Food manufacture	41.2	123.9	165.1
Beverages		2.1	2.1
Tobacco manufactures		10.5	10.5
Textiles	16.2	504.0	520.2
Footwear and apparel		10.5	10.5
Manufactures of wood and cork	25.4	4.6	30.0
Furniture and fixtures		8.4	8.4
Paper and paper products	101.6	31.5	133.1
Printing and publishing	2.7	6.7	9.4
Leather and leather goods		8.2	8.2
Rubber products		10.5	10.5
Chemical industry	214.6	94.1	308.7
Products of petroleum, coal and gas		42.0	42.0
Petro-chemical industry	38.8	134.6	173.4
Non-metallic mineral products	67.4	138.4	205.8
Basic metal industry	91.1	233.5	324.6
Metal products industry	2.3	94.5	96.8
Machinery (excluding electrical machinery)	83.4	75.6	159.0
Electrical machinery, apparatus and appliances	35.3	47.5	82.8
Transport equipment	38.0	77.5	115.5
Miscellaneous industries	8.8	84.4	93.2
Total direct investment	766	1,743	2,509

Indirect Investment:

Industrial estates	39.6
Training	8.0
Scientific and industrial research	26.9
Small industries promotional programme	97.3
Total indirect investment	172

Total Direct and Indirect Investment	938	1,743	2,681

The distribution of investment within the manufacturing sector has been determined by the need to

- balance industrial growth by avoiding excess capacity and bottle-necks
- utilize efficiently the existing resources, and increase productivity
- develop industries yielding a high rate of return on capital
- encourage industries using labour-intensive technology for maximizing employment, where this is compatible with high productivity
- develop industries having export potential
- develop and expand industries producing goods for import-substitution.

B. Strategy and Policy

The two major elements of the industrial strategy will be:

- a shift from the production of import-substituting consumer goods to the production of capital goods, whenever the domestic demand for specific capital goods is deemed to be large enough.
- the setting up and expansion of export-oriented industry, based on studies to determine industries with potential export capabilities and the required diversion of investment and skills to those industries.

Commercial policies will be modified in order to favour the rapid growth of capital goods industries and those with an export potential.

Planned import requirements have been classified into two categories - development imports (capital goods and raw materials for capital goods industries) and non-development imports (consumer goods and raw materials for consumer goods industries). Priority will be accorded to development imports.

The tariff structure will be revised to encourage capital goods industries and to ensure optimum efficiency of domestic consumer goods industries.

The shift from direct controls on imports to indirect controls will be intensified.

The items on the free import list will be examined, revised and extended where necessary to secure a full and effective use of the country's development potential.

Policies to encourage the development of export-oriented manufacturing industry include:

- the maintenance and strengthening of export incentives, such as the export bonus scheme, the export credit guarantee scheme, the pay-as-you-earn scheme, and fiscal concessions to exporters
- the sanctioning, on a priority basis, of new industrial units with an export potential
- adequate provision for obtaining the raw materials needed by export-oriented industries
- the efficient implementation of institutional arrangements for encouraging exports
- the development of market outlets abroad
- the intensification of current efforts to encourage and diversify trade through UNCTAD, GATT, RCD and through other bilateral and multilateral arrangements.

The efficiency of the industrial sector, generally, will be stressed in order to increase output and create exportable surpluses whenever possible.

Major reliance will be placed on the private sector for undertaking the bulk of industrial investment.

The role of the government will be to provide infra-structure and create a suitable climate for private investment in manufacturing industry.

Direct government investment through the Industrial Development Corporation, and other government-sponsored bodies, is proposed only where private capital is not forthcoming, or a joint venture cannot be organized, as is the case in:

- the promotion of industrialization in East Pakistan
- the setting up of capital goods and fertilizer industries considered vital to long-term development objectives.

Policy measures to stimulate the private sector to invest in manufacturing industry include:

- the provision of suitable industrial land
- the provision of infra-structure by the government in areas where industries are planned to be established
- the provision of advisory services by the Industrial Advisory Centre, for the drawing up of industrial projects
- the development of competent local consulting firms
- the formation of a pool of trained managers (Managerial Service), for employment by industry
- the simplification and standardization of procedures for sanctioning private investment in industry
- the exemption, as much as possible, of local private investors from the requirements of prior sanctions by governmental agencies
- the extension of institutional credit (Industrial Development Bank of Pakistan and others), with the particular objectives of broadening the base of industrial ownership and of meeting the special requirements of private investment in East Pakistan.
- the organization of an efficient Industrial Information Service.

Foreign investment will continue to be encouraged in industrial projects involving sophisticated technical know-how and managerial skills.

Policies governing the location of industry will be pragmatic and rational, depending on the nature of the industry, but subject to two general considerations

- consistency with the major Plan objective of eliminating economic disparity between East and West Pakistan
- the indirect benefits of dispersing industries throughout the country.

The labour-intensive programmes will be emphasized in order to realize the employment targets.

The pace of applied industrial research will be accelerated, with private industry co-operating with government to ensure that Pakistan keeps up with external developments that may be used to advantage.

The government is firmly committed to maintaining reasonable price stability.

C. Institutions

Controls on the import of capital goods for new industries will be exercised through the Industrial Investments Schedule.

The institutional framework for export promotion must be strengthened.

A separate Division for Scientific and Technological Research has been set up within the Council of Scientific and Industrial Research, and the facilities of the Council will be expanded to undertake research in a number of new fields.

The effort made by the Pakistan Standards Institution to establish standard specifications for various manufactured products will be continued and intensified.

Laboratory facilities for testing will be provided to assist industry in quality control.

It is proposed to strengthen technical schools and promote technical training within industrial units, private as well as public:

- institutes for technical education will be expanded and improved
- training programmes for key personnel in projects for heavy industries will be established
- training in the field of management will be emphasized with courses in business administration organized at Karachi and Dacca
- the Government will support private efforts to establish an Institute of Management which will organize in-service training programmes for existing management.

The Small Industries Corporations in each province will provide the following government-financed services:

Technical and Management Services:

- small industries service centres will provide advisory service and demonstrations on technical processes and on the use and improvement of equipment, training in business management, research in the use of indigenous materials and surveys of industrial prospects. Rural industries centres, which will also assist in training rural industrial officers, are being set up, with foreign assistance, in each province.
- small industries extension services will serve areas where such industries are, or can be, concentrated.
- pilot projects will be set up to demonstrate the possibilities of new industries on an experimental basis
- a provincial design centre will undertake research on industrial design and on handicrafts, collaborating closely with existing arts and crafts institutions.

Commercial Services

- production facilities, including common facilities centres, mobile common facilities units, and small industrial estates will be developed by the Small Industries Corporations and transferred to private and cooperative enterprise as soon as possible.

- supply and marketing services, including sales and display centres to market small industries' products, and inspection to ensure standard and quality products, the supply of materials and equipment, especially imported equipment to be sold to small industries, will be developed.

- credit services, including loans for modernization and extension and for purchases of raw materials, will be provided. The co-operation of existing financial institutions will be enlisted, but direct credit - such as to finance the purchase of equipment on a hire-purchase basis - will also be provided by the Corporations.

It is planned to mobilize savings from sectors other than industry, which has been the major contributor to the growth of domestic savings in the past.

It is planned to increase government's fiscal contributions to development expenditure.

The projected marginal rate of savings of 22 % is identical with that realized during the Second Plan, while average savings are expected to rise from 10 % of GNP in 1964-65 to 13.6 % in 1969-70.

III. DEMAND PROJECTIONS AND DATA BASES

An input-output table for industries is being prepared to serve as a guide in the implementation of a balanced plan and to ensure that the import bill for industrial raw materials does not outstrip the foreign exchange savings derived through import-substitution.

The preparation of the Industrial Investment Schedule will be improved by new procedures applying input-output analysis.

The production targets derived therefrom will be translated into investment targets, which in turn will be related to financial sanctions expressed in the Schedule.

The balance-of-payments was projected for the [illegible] - [illegible] period and export and import-substitution targets were determined from it.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Industry	Unit of Output*	Average Annual Output* 1964-65	Average Annual Output* [illegible]
Food:			
Wheat and grain milling	tons ([illegible])	[illegible]	[illegible]
Rice milling	" "	[illegible]	[illegible]
Canned and preserved fruits and vegetables	" "	[illegible]	n.a.
- expansion of the industry to exploit internal and external markets is planned. Investment: $ 5 million			
Export earnings: ($-000)		71	[illegible]
Canned and preserved fish (additional capacity of 45,000 tons is planned; research for production of fish liver oil for export will be undertaken)		n.a.	n.a.
Biscuits and Confectionary (expansion is planned.	tons (000)	23.5	n.a.
Export earnings: ($-000)		188	524
Processed and blended tea	lbs.(mil.)	63	73.5
Export volume:	lbs.(mil.)	n.a.	10
White sugar	tons (000)	312	640
Edible oils (mainly vegetable ghee)	" "	90	140
Tobacco:			
Cigarettes	millions	18,500	30,000

* Either rated capacity or actual output.

Industry (cont'd)	Unit of Output*	Average Annual Output* 1964-65	1970
Textiles:			
Cotton yarn (it is planned to create an exportable surplus of 100 million lbs. of yarn and 300 million yards of cloth by 1970. An investment of £ 105 million is planned to promote industries producing specialized textiles, laces and tapes, to modernize the hosiery and knitted goods industries, and for dyeing, printing and fabric finishing facilities. Special attention will be given to the problems of the handlooms sectors, under the Small Industries Programme)	lbs.(mil.)	520	720
Woolens (the already sanctioned capacity of 59,462 spindles and 452 looms will be adequate for Plan requirements, if used. Facilities will be provided for the balancing and modernization of existing capacity and its fuller utilization, especially units using indigenous raw wool and those supplying yarn to the carpet industry)		n.a.	n.a.
Synthetic fibers (have adequate capacity already to meet the Plan target of 3 yards per capita by 1970, but its utilization depends on imports of synthetic yarn. A viscose rayon plant and an acetate rayon plant will be set up to enable the industry to utilize its capacity. Modernization and expansion of the finishing facilities for synthetic fiber, cloth are also planned)		n.a.	n.a.

* Either rated capacity or actual output.

Industry (cont'd.)	Unit of Output*	Average Annual Output* 1964-65	1970
(Textiles)			
Hessian and sacking - jute	tons (000)	331	800
Broad loom products - jute (these constitute Pakistan's most important exports. Investment: $ 238 million. Export volume: 600 to 700 thousand tons (1970)	" "	10	120
Export earnings: ($-millions)		73.5	168
Footwear (this is a labour-intensive industry, with mostly small units employing traditional production methods. It is fully equipped to meet domestic requirements and to export.	pairs (000)	48,000	58,000
Export earnings: ($-millions)		2.0	4.1
Wood and Wood Products:			
Wood processing capacity (investment: $ 3.2 million. Value of production to rise to $ 6 million by 1970)	tons (000)	58	n.a.
Plywood	sq.ft.(000)	1,500	7,000
Tea chests (it is proposed to develop new industries, based on cane and bamboo, and to create a cork manufacturing industry, with an investment of $ 1 million)	nos.(000)	700	1,250
Paper and Board:			
Writing, printing and packaging paper (the feasibility of developing an additional capacity of 50,000 tons beyond the Plan target is being explored. 50 % of the total cost of this additional capacity has been provided for)	tons (000)	47	100
Newsprint and mechanical paper	" "	42	100
Board	" "	27	100

* Either rated capacity or actual output.

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Industries (Cont'd.)	Unit of Output *	Average Annual Output * 1964-65	1970
Printing, Publishing, and Allied Industries:		n.a.	n.a.
(these provide the third largest industrial employment. They require balancing and modernization, and the installation of new capacity to keep pace with the spread of education and the increased demand for publications)			
Leather and Leather Products:		n.a.	n.a.
(the existing tanning industry can meet the internal demand, but it is planned to expand and modernize production for the export market. Investment: $ 7 million. The production of a wide range of new leather goods is planned. Investment: $ 3.2 million. Export earnings: ($-millions)		6.3	12.6
Rubber Products:			
Bicycle tires and tubes	nos.(000)	3,500	4,000
Tires and tubes for mechanical vehicles	nos.(000)	594	1,269
Retreading capacity (Investment: $ 5.2 million)	" "	56	630
Chemical Industries:			
Nitrogenous fertilizers (in terms of ammonium sulphate)	tons (000)	550	2,500
Phosphate fertilizers (in terms of triple superphosphate. (Investment in fertilizers: $ 294 million)	" "	7	550
Soda ash	" "	28	172
Caustic soda	" "	65	90
Sulphuric acid	" "	177	600
Dyes	" "	0.3	1.3

* Either rated capacity or actual output.

Industries (Cont'd.)	Unit of Output*	Average Annual Output* 1964-65	Average Annual Output* 1970
Chemical Industries			
Insecticides and pesticides (additional capacity will be created in the light of a current survey of Plan requirements)		n.a.	n.a.
Heavy water (possibilities of manufacture as a by-product in the natural gas fertilizer factories are being investigated. Investment: $ 3.1 million.)			
Pharmaceuticals, Antibiotics and Fine Chemicals:			
(manufacture of drugs from indigenous raw materials and imported intermediates by the private sector, preferably in collaboration with foreign firms of repute, will be encouraged)			
Petroleum Products:			
Refining capacity (the planned capacity is estimated to meet the full national requirement of petroleum products, lubricants, and greases, asphalt and bitumen. The marketing of products of the refineries at Karachi (2) and Chittagong (1) will be expanded).	tons(millions)	2.5	4.[illegible]
Petro-chemical Industries:			
Plastics and resins	tons (000)	-	94,000
Synthetic rubber	" "	-	35,000
Synthetic fibers	" "	-	18,000
Insecticides	" "	-	12,000
Other products	" "	-	167,000
Non-metallic Mineral Products:			
Cement	" "	2,000	6,000
High grade refractory bricks (the setting up of capacity for their production will be favoured)		n.a.	n.a.

* Either rated capacity or actual output.

(Industries Cont'd.)	Unit of Output*	Average Annual Output* 1964-65	1970
10. Metals:			
Steel	ingot tons (000)	-	1,200
Special steels (a project to provide special and alloy steels for the engineering industries has been sanctioned in the private sector)		n.a.	n.a.
Aluminium and copper (the possibility of economic production from recently established deposits of bauxite and copper ore will be explored)			
Metal Products:			
Agricultural tools and implements (improvement of the quality of these tools, made generally in crude form by small industries throughout the country, is planned. Investment: $ 8.4 million)			
Steel structures	tons (000)	negligible	200
Galvanized pipes and fittings	" "	74.0	99
Cast iron pipes and fittings	" "	20.6	n.a.
Steel wire	" "	26	46
Non-ferrous wire	" "	3.7	8
Cutlery (based largely on imported raw materials. Value of output $ 2 million (1964) Investment: $ 3.5 million) Export earnings: ($-millions)		0.9	2.0
Hand tools (expansion of production is planned. Investment: $ 6.3 million)			
Gas, water and steam meters (non-electrical) (Investment: $ 3 million)	nos.(000)	40	300
Metal containers and drums	" (mil.)	100	200

* Either rated capacity or actual output.

(Industries Cont'd.)	Unit of Output*	Average Annual Output* 1964-65	1970
(Metal Products)			
Aluminium and enamelled utensils and domestic hardware (expansion is planned. Export earnings to rise to $ 0.5 million by 1970. Investment: $ 4.8 million.)	tons (000)	12	n.a.
Electrical Machinery:			
(sizeable capacity has been sanctioned in the private sector for the production of air-conditioners, refrigerators, dry cells and battery accumulators, electric lamps and accessories, fittings, measuring instruments, motors, fans, switch gears, and transformers.)			
(the production of heavy electrical machinery is being planned for the government-financed sector. Total value of production in 1970 will be $ 25.2 million.)			
Wires and cables	tons (000)	4	35
Radio receivers (no sanctions for the assembly of receivers will be given. The production of components and parts is envisaged.)			
(the assembly of television sets with imported components will be encouraged.)			
Transport Equipment:			
Trucks and buses (additional capacity will be needed for the progressive assembly of trucks, bus engines and chassis.)			
Passenger cars (the manufacture of one or two standard vehicles conforming to national requirements will be started.)			
Jeeps (production will be expanded to meet the country's requirements)	nos.	2,500	

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* Either rated capacity or actual output.

Industries (cont'd.	Unit of Output*	Average Annual Output* 1964-65	1970
(Transport Equipment)			
Motor-cycles, scooters and tri-wheelers	nos.	7,000	
(expansion will be undertaken only where new capacity will provide greater scope for the local manufacture of components)			
Bicycles			
(existing manufacturing units will be modernized to promote exports. No increase in production is planned)			
Ship-building and Ship Repair:			
(the expansion of ship-building facilities at the Karachi Shipyard and Engineering Works, and at the Chittagong Shipyard which is to be completed during the period, is planned.)			
(private boat building and repair yards in East Pakistan will be encouraged and the local production of diesel engines for mechanizing inland transport will be assisted.)			
Miscellaneous Industries:			
Building materials and components			
(specific industries will be encouraged to produce standard components of good quality)			
Jute baling	nos.(mil.)	7	7.8
(export volume: 3.3 million units. Investment: $ 1.7 million)			

* Either rated capacity or actual output.

Industries (cont'd.)	Unit of Output*	Average Annual Output* 1964-65	1970
(Miscellaneous Industries)			
Cotton ginning (mechanization of the industry will be continued)			
Surgical, medical and dental equipment	$-millions	2.[illegible]	[illegible].3
(Investment: $ 4.3 million, Export earnings:	" "	0.5	5.[illegible]
Sport goods	" "	4.1	7.[illegible]
(Investment: $ 3.4 million, Export earnings:	" "	4.0	6.3
Conversion of city refuse to organic manure (a study is in progress to determine feasibility of this process in large cities)			
Agricultural and industrial waste conversion (projects to manufacture paper from bagasse, grasses and bamboo are being considered.)			

* Either rated capacity or actual production.

B. Priority of Sectors

Priority is given to the development of the capital goods industry and of industries producing manufactured goods for export.

C. Other Sectoral Plans

The Small Industries Promotional Programme proposes to:

- adapt small industries to changing technological, economic and social conditions.

- encourage the processing of indigenous raw materials
- encourage the production of agricultural implements and equipment
- create additional employment opportunities
- modernize such existing small industry units as have sound economic prospects
- encourage the growth of cottage industries in rural areas, generally, and in particular where resources and markets are available.
- preserve and promote traditional arts and crafts
- bring about a closer relationship between the small industries and the larger industries, through the production of spares, accessories or components for large-scale industry, or through providing facilities for the maintenance and repair of equipment in use in large-scale industries and in other sectors
- encourage new small and medium-size industries by fostering sub-contracting, with some large-scale industries buying systematically from smaller units.

Small industries are defined as those using no motive power or with fixed assets other than land, valued at not more than $ 53,000.

V. PLANNED MANUFACTURING PROJECTS

Nearly 5,000 major manufacturing projects in both public and private sectors are planned. Some of the major projects planned for the government-financed sectors are:

- a machine-tool factory in West Pakistan to produce lathes, milling machines, shapers, transmission gears and rear axles for trucks and automobiles, textile spinning machinery and textile machine spares. Cost: $ 24 million.
- a heavy-machinery complex in West Pakistan to produce mechanical parts of diesel and electric locomotives, railway wagons, wheels and axles, road-building equipment, machinery for tube-wells and for cement factories, equipment for fertiliser factories, refineries and petrochemical industries, boilers and heat exchangers, and machinery for chemical industries and food industries. Investment: $ 45 million.

- a machine-tool and machinery complex in East Pakistan at a cost of $ 50 million.

- petro-chemical factories. A production programme has been prepared, based on the availability of large reserves of natural gas and the by-products of the petroleum refineries. Detailed projects for the implementation of petro-chemical development in the form of various complexes will be carried out on the basis of systematic market research and development studies. Adjustments relating to the kind and quantities of petro-chemicals to be produced in Pakistan will be made, following the outcome of negotiations with Iran and Turkey for mutually profitable collaboration in this sector of industry.

The full impact of this investment in heavy industries and in petro-chemicals is expected to be felt in the fourth, and in subsequent, Plan periods.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

The projected increase in labour productivity in large-scale manufacturing is 4.7 % per annum.

Capital per worker is expected to increase from $ 1,100 in 1964-65 to $ 1,800 by 1970.

A separate productivity wing will be organized within the Pakistan Industrial Technical Assistance Centre, from which teams of experts will be formed to conduct surveys and productivity studies of various industrial sectors and to advise industry on:

- improving production methods
- the institution of controls, procedures and techniques for reducing ineffective time
- reducing wastage of materials
- improving machinery and equipment utilization
- reducing worker fatigue
- improving the quality of products
- reducing costs and increasing overall productivity of investment.

Foreign experts will be called upon to advise on productivity problems, and arrangements will be made to train local personnel in this field.

VII. ORGANIZATION AND PROCEDURES FOR PLANNING AND IMPLEMENTATION

At the national government level:

- the supreme economic body is the National Economic Council, headed by the President of Pakistan, and including representation of the national and provincial governments at ministerial level.
- the Planning Commission, which is a division of the President's Secretariat, is the chief instrument of the Council in the formulation of national plans. Its Deputy Chairman has the status of a national government minister, and is also head of the Economic Affairs Division, which is primarily responsible for negotiating and administering foreign aid.
- the planning process is dovetailed with the formulation of economic policies, through the Planning Commission's representation on decision-making bodies within various ministries and departments.

Planning cells have been set up in some of the ministries to co-ordinate the preparation of detailed programmes for the national plans, assess the manpower and training requirements of the programmes, and determine the needs for materials and equipment to be procured to implement programmes.

A Projects Division in the President's Secretariat, under the supervision of the Deputy Chairman of the Planning Commission, has been set up in order to evaluate the progress of the Five-Year Plans and of industrial national government projects, and to meet the need for adequate project preparation.

Following the transfer of developmental responsibilities in a number of sectors from the national to the provincial governments under the new Constitution, suitable adjustments to the procedures for planning and implementation have been proposed in order to bring them into line with the decentralisation policies.

At the provincial government level:

- the Planning and Development Departments, responsible for co-ordinating provincial plans and ensuring their proper implementation, have been strengthened.

- planning cells staffed by technicians and accountants have been set up in some departments to facilitate the preparation of feasible projects and maintain liaison with the Provincial Planning and Development Departments.

- decentralization of planning and development operations has been pushed further through the use of "Basic Democracies" institutions for initiating and executing projects.

The annual investment targets for the public sector will be set out in Annual Development Programmes proposed by the government for sub-sectors and individual industries. Those for the private sector will be set out in the Industrial Investments Schedule. The broad targets in the Plan will be annually reviewed and adjusted.

The implementation of the Industrial Development Programme will require the preparation of 4 to 5 thousand major projects. Steps will be taken to encourage private consulting firms, which will be called upon mainly to undertake this task, to equip themselves for the preparation of specific projects, in association with consultants from abroad.

Urgent action will be taken to remove precedural bottle-necks in the implementation of projects, such as the licensing of imported materials.

Standing arrangements are necessary to ensure that the administrative machinery in the country is constantly geared to the requirements of a rapidly expanding development programme.

The expansion of the role of the public sector in several key sectors, as in the field of heavy industry, requires substantial strengthening and improvement of the workings of the public corporations and departments concerned with implementation.

High priority will be given to encouraging a systematic flow of current information about industry among financing institutions, the representative bodies of commerce and industry, the organizations concerned with assisting in project formulation, and the government agencies responsible for the formulation of industrial plans and their implementation.

A National Industries Directory (up-dated at least once a year) providing information regarding existing industries, their location and production capacities, will be published.

VIII. PROBLEM AREAS

In Industry

The high rates of growth of output in manufacturing, stimulated by a highly protected market, have tended to mask the basic problems of the relative inefficiency of the industrial sector, the lack of appropriate technology and technical skills, and the absence of any definite relationship between industrial programming and market demand.

The costs of many industrial products have not fallen after a decade of industrial experience, and many industries are still unable to compete in the international market, without special government incentives.

The sellers' market in industrial products has led to very little attention being given to the improvement of the quality of industrial products.

Imported inputs have predominated in the installation and operation of manufacturing capacity, and very little research has gone into the possible utilization of alternative locally-available raw materials, and technological adaptation.

There is inadequate planning machinery for:

- the evaluation of progress on current projects, so that timely remedial action can be taken where weaknesses exist

- the evaluation of projects after their completion, to see whether the pre-determined programme objectives have been met

- the co-ordination of the implementation of projects in one sector with the implementation of complementary projects in other sectors.

In Supporting Infra-structure

Economic and social infra-structure, though strengthened in most parts of West Pakistan, continues to be inadequate in East Pakistan.

Financial institutions, despite their growth in the urban areas, have made no impact in the rural areas.

Transport continues to be a bottle-neck, inhibiting harmonious economic development.

The demand for power is continually moving ahead of the sharp increases in power-generating capacity.

The investments in education have not been sufficiently geared to the manpower requirements of future development.

The reservoir of technical skills, built up after 15 years of industrial growth, is insufficient to support the next phase of development.

In Related Social Development

Rapid industrialisation, based on the re-investment of corporate profits, has led to the concentration of economic power in the hands of a small class of dynamic entrepreneurs. A whole range of policies have been adopted to remedy this situation. The problem is to balance the policies favouring economic democracy with policies whereby full play is given to the initiative and dynamism of private enterprise in the interests of economic development.

Growth has not made any impact on the backlog of unemployment affecting 1/5 of the labour force.

Rapid urbanization has created problems relating to the provision of adequate facilities for urban dwellers.

IX. PREVIOUS INDUSTRIAL GROWTH

Growth of Gross National Product

	Gross National Product ($ millions-1959 prices)			Average Annual Growth Rate (%)		Share of Sector in GNP (%)	
	1949-50	1959-60	1964-65	1949-50 to 1959-60	1959-60 to 1964-65	1949-50	1964-65
Manufacturing industry	300	615	930	7.4	8.6	5.8	11.0
- large-scale	(72)	(330)	(605)	(16.3)	(13.0)	(1.4)	(7.1)
- small-scale	(228)	(285)	(325)	(2.3)	(2.6)	(4.4)	(3.9)
Agriculture	3,080	3,520	4,170	1.3	3.5	60.0	49.1
All other	1,750	2,465	3,400	3.5	6.7	34.2	39.9
GNP (factor cost of 1959)	5,130	6,600	8,500	2.5	5.2	100	100
Population (mil.)	78.8	98.9	112.4	2.3	2.6		
GNP per capita	$ 65	$ 67	$ 76	0.2	2.5		

Features (1950 - 1965)

Manufacturing industry has been the leading sector in the economy: the average growth rate of large-scale industry has been as high as 15 % a year, since a start was made from a very low base.

The high rates of growth in manufacturing industry have had no significant impact on the overall growth rate because of the small weight of this sector in the total GNP.

The divergent growth rates of the various sectors have led to a pronounced structural change in the economy, with the percentage share of agriculture in the total GNP falling from 60 % to 49.1 %, and the share of manufacturing industry rising. It is expected that as the relative weight of large-scale industry increases, this will have a positive influence on the aggregate rate of growth.

The relatively low growth rates in agriculture exercised an adverse influence on overall growth, as continuation of the pace of industrial development had to depend on the expansion of the domestic market (especially in the rural areas), after the major import-substitution possibilities for consumer goods were exhausted.

Policy Measures favouring Industrial Growth (19[illegible] - [illegible])

Higher growth rates of industry were stimulated in the 1950's by policies entailing a transfer of income from the agricultural to the industrial sector, such as the reserving of foreign exchange earned primarily by the agricultural sector for the use of industry; compulsory government procurement of food grains, at low prices, to subsidize the cost of living of the urban industrial workers; and generous tax concessions to industry, without corresponding concessions to agriculture.

Import policy was to meet liberalized to meet the growing requirements of industries.

Tariff protection was granted to selected industries.

Incentives, such as the "export bonus scheme" and the "export credit guarantee scheme", were provided to stimulate industrial production for export.

Tax holidays of 4 to 6 years were granted to new industries.

Price and distribution controls were relaxed.

Credit facilities were provided, both in local and foreign currencies, through the Industrial Development Bank of Pakistan, the Pakistan Industrial Credit and Investment Corporations, and other institutions.

A National Investment Trust was created to channel savings into industrial investment.

Basic facilities, such as industrial land, water, and power were provided through the establishment of industrial estates at different locations.

A number of technical institutes were established to supply skilled manpower.

Guarantees and facilities for profit and capital remittances abroad were provided, in order to create a favourable climate for private foreign investment.

Investment treaties and agreements to avoid double taxation were concluded with a number of capital exporting countries.

Effects of Industrial Growth 1950 - 196[illegible]

Foreign exchange earnings from the export of manufactured goods have increased from [illegible] % of total exports in 1951 to 29 % in 1964-65. The share of traditional raw materials in total exports has, correspondingly, fallen.

The proportion of consumer goods imports declined sharply from [illegible] % in 1951 to 2[illegible] % in 1964-65, and so did imports of raw materials for the production of consumer goods (from 27 % to [illegible] %). This trend reflects both the import substitution of consumer goods through the growth of domestic industrial capacity and the priority accorded imports for capital goods.

The import of capital goods and raw materials for capital goods has increased from 27 % of the total value of imports in 1951 to 64 % in 1964-65, reflecting the development orientation given to the import structure.

The urban population has increased from 9.9 % of the total population in 1950 to 14.7 % of the total in 1964-65. In absolute terms, the urban population has doubled during the period.

The increase in jobs in the non-agricultural sector has proceeded at a much faster rate than the increase in the agricultural sector.

The increase in industrialization and trade has also been reflected in the growth of financial institutions. Bank credit increased from $ 105 million in 1951 to about $ 1,260 million in 1964.

[illegible]

[illegible]

A. [illegible]

Manufacturing [illegible]*	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
Population	[illegible]	[illegible]	[illegible]
Manufacturing [illegible] millions	[illegible]	[illegible]	[illegible]
[illegible] millions	[illegible]	[illegible]	[illegible]
Manufacturing [illegible] of total [illegible]	[illegible]	[illegible]	[illegible]

Exchange rate: [illegible]

[illegible] figures were not available [illegible] preliminary version of the [illegible], and UN reported figures [illegible] are shown.

B. [illegible]

The objectives [illegible] the manufacturing sector are:

- to achieve an optimum development of manufacturing,
- to eliminate all obstacles preventing the efficient use of resources,
- to maximize benefits accruing from the country's geographic situation,
- to realize projects whose commercial rate of return is considered to be only marginal, but which will significantly benefit the economy in other ways.

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* DIRECCIÓN GENERAL DE PLANIFICACIÓN Y ADMINISTRACIÓN: "Programa de Desarollo Económica y Social 1963 - 1970", Versión Preliminar, Panama, 1963. 935 pages.

[illegible] Regional Public Investment in Industry during [illegible]

	Industrial Projects	Industrial Estates	Industrial Financing	Total
[illegible]	-	[illegible]	[illegible]	[illegible]
Central	-	1,[illegible]	4,[illegible]	5,[illegible]
[illegible]	-	1,[illegible]	[illegible]	4,[illegible]
[illegible]	[illegible]	[illegible]	-	1,[illegible]
[illegible]	1,[illegible]	4,[illegible]	10,[illegible]	[illegible]

[illegible]

[illegible]

- [illegible]

- [illegible]

[illegible]

- [illegible]

- [illegible]

- [illegible]

- [illegible] investment [illegible]

- [illegible]

- administration [illegible] simplified [illegible] enterprise.

[illegible]

- the dependence of the industrial sector on local factors of production will be eliminated.

- a free trade relationship will be established with the Central American Common Market over the next 5 years.

- industries will be encouraged to establish themselves in the Metropolitan Region, where financial facilities, water, power and skilled labor are available.

To realize highly desirable projects which are considered to yield only marginal rates of return:

- a plan for public investment in the manufacturing sector has been drawn up.

- labor will be trained by the State, in order to satisfy the requirements of priority manufacturing and mining projects.

The Government will make detailed feasibility studies of:

- industries exporting to the US and other industrialized countries.
- industries concerned solely with the domestic market.
- industries exporting goods to neighbouring countries.

Incentives will be given to industry according to [illegible]:

- the ratio of the firm's value to the [illegible].
- the revenue needed by the Government.
- the cost involved, in terms of the higher prices consumers must pay for goods produced by protected domestic firms.

These incentives will only be available to industries producing less than [illegible] of the total domestic consumption of their particular products.

. Institutions

The Government will take action to strengthen the Centre for Industrial Development (Centro de Desarrollo Industrial).

An office will be created in 1964 to diffuse information on the country's industrial potential. This will include the [illegible] of specific projects, and should provide potential investors with a better knowledge of the investment possibilities in the manufacturing sector.

An Industrial Promotion Centre will be set up in New York in 1964. It will operate in close contact with the Centre for Industrial Development to publicize the advantages offered by Panama for the realization of specific projects.

The cost of the publicizing campaign, at home and abroad during the 1964 - 1970 period, is estimated at $4 million.

There is no modern banking and credit system. In order to channel funds efficiently to different sectors of the economy, the Government will create a Superintendency of Credit Institutions to coordinate all credit operations. The Government has created [illegible] credit institutions since [illegible].

A financial institution - Industrial Development, S.A. (Desarrollo Industrial, S.A. or DISA) - will be created, drawing funds in equal amounts from the public and private sectors ([illegible] million each). By 197[illegible] approximately $[illegible] million in loans or credit will be available through DISA to the manufacturing industries, and to those activities directly related to industrial development.

III. DEMAND PROJECTIONS AND DATA BASES

Estimates of investment requirements were made, using two alternative methods:

- a multiplier model using labor force employed, capital and land used, and technology, as variables determining GDP.
- the capital-output ratio.

The results obtained with both methods were practically identical.

Regional planning has been undertaken systematically. The following table gives information on the studies made, their cost, and the agency responsible for them:

Data Bases:	Estimated Cost	Responsible Agency
Aerial photographs	$ 80,000	Cartography Board, in co-operation with the Ministry of Agriculture, the Agrarian Reform Commission, the Ministry of Finance and Treasury, and the Institute of Hydraulic Resources and Electrification.
Basic maps of regions	$ 50,000	
Basic maps of urban centres	$ 25,000	
Localization maps	$ 10,000	
Natural resources	$200,000	
Land value and ownership map	$500,000	Ministry of Finance and Treasury
Supplementary census of proprietors, labor force, and agricultural establishments	$500,000	Board of Statistics and Census
Sub-total	$1,365,000	

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	Estimated Cost	Responsible Agency
Investigation Methods:		
Regional planning model	$[illegible],000	Board of Planning and Administration
Cost and benefit analysis model	$[illegible],000	Board of Planning and Administration
Sub-total	$[illegible]	
Planning Projects:		
Administration of regional planning investigations	$[illegible]	Board of Planning and Administration
Development of courses on methods of regional planning	$[illegible]	Board of Planning and Administration
Feasibility studies of industrial estates	$[illegible]	Centre for Industrial Development and Institute of Economic Development
Industrial feasibility studies	$[illegible]	" " " "
Cost-benefit studies	$[illegible]	Board of Planning and Administration, Ministry of Public Works, Ministry of Agriculture, Institute of Economic Development, and Institute of Hydraulic Resources and Electrification
Studies of new industrial centres, remodelling existing towns	$[illegible]	Board of Planning and Administration
Domestic transport system	$[illegible]	Board of Planning and Administration, and the Highways, Airports and Harbour Commission
Tourism feasibility studies	$[illegible]	Board of Planning and Administration, and the Tourist Institute of Panama
Agriculture feasibility studies	$1[illegible]0,000	Ministry of Agriculture, and Institute of Economic Development
Sub-total	$505,000	
Political Science:		
Investigations into public administration	$100,000	Board of Planning and Administration
Investigations into the policy formulation machinery	$ 15,000	Board of Planning and Administration
Sub-total	$115,000	
Grand Total	$2,385,000	

III. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Sectoral projections had not been finalized in time to be included in the preliminary version of the [illegible] Plan.

B. Priority of Sectors

C. Other Sectoral Plans

IV. PLANNED MANUFACTURING PROJECTS

Analyses of specific projects are not included in the preliminary version of the [illegible] Plan.

V. PRODUCTIVITY AND CAPACITY UTILIZATION

VI. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

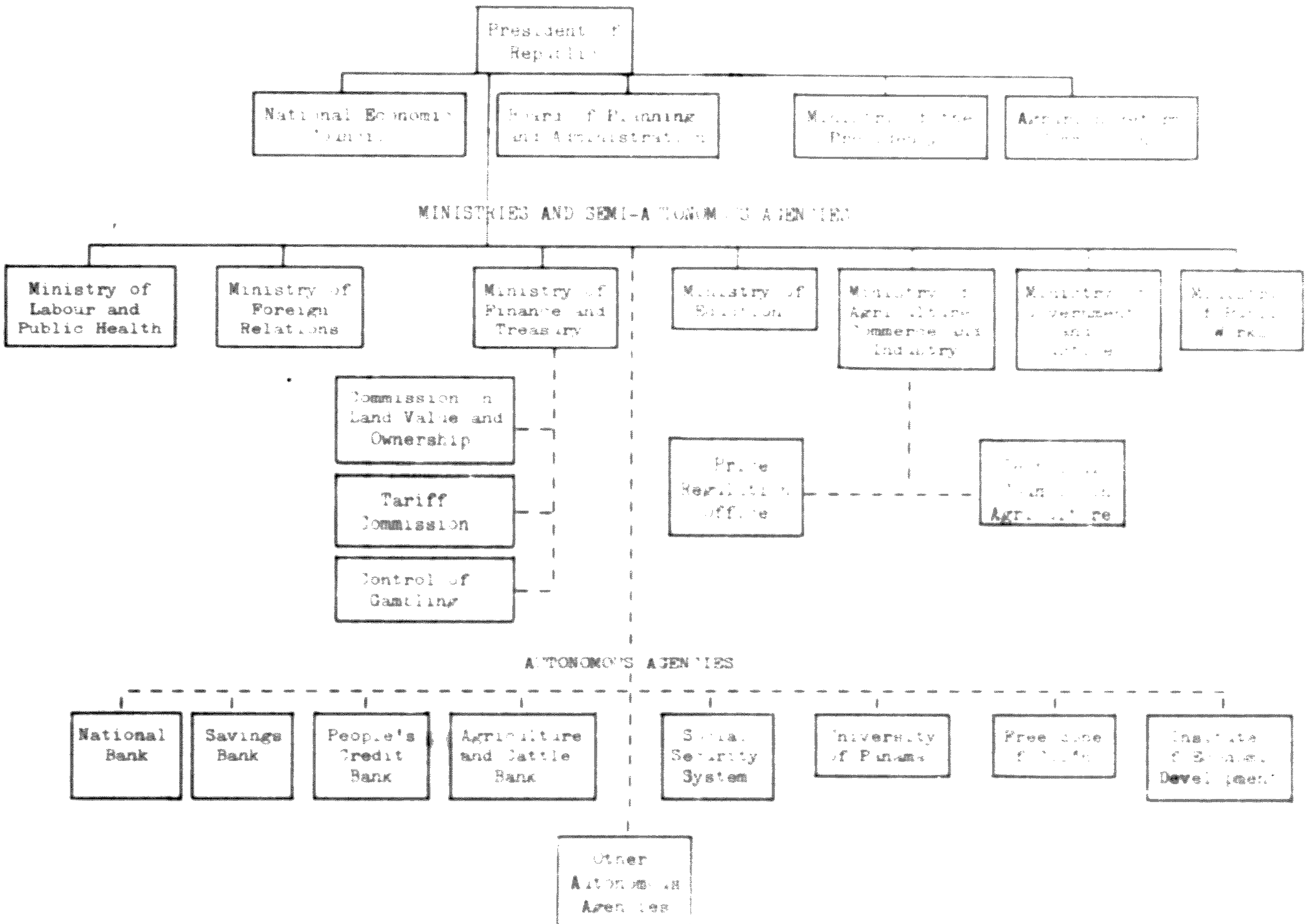
A new system, to be in operation by 197[illegible], will cover all administrative levels, guaranteeing co-ordination. Studies of the new administrative structure are still in the process of completion. In the new structure, all parts of the Plan will be under the final responsibility of one governmental agency. This should considerably improve the implementation of the Plan.

Present Administrative Structure

(refer to the "Present Government Structure" chart)

The Executive branch discharges its development responsibilities through the Ministry of the Presidency and the Board of Planning and Administration (Direción-General de Planificación y Administración). The Board of Planning and Administration consists of four departments: Planning, Budget, Administrative Organization, and Personnel Administration:

PRESENT GOVERNMENT STRUCTURE*



* Incomplete; emphasis here is placed on institutions of importance to industrial development.

- the Planning Department's functions are to prepare plans promoting greater efficiency in matters of development, population distribution, and the use of land.
- the Budget Department's functions are to formulate and orient the national budget according to the long and short-range plans of the Planning Department.
- the Administrative Organization Department's functions are to formulate plans for the improvement of organization and methods, in relation to the future administrative system.
- the Personnel Administration Department is concerned with the use of scientific personnel methods. It regulates methods of selection and the rights and obligations of the Civil Service.

The various ministries are concerned with the execution of Government policies. It has often been the case that:

- direction and control of programs are inadequate.
- excessive centralization of decision-making within the Executive Branch has led to delays and bottle-necks.
- commissions carry out regular Government programs, when they should only be used for semi-judicial, regulatory and advisory functions.
- civil servants often have more employees under their supervision than they can cope with efficiently, and co-ordination suffers.
- advisory units are insufficiently organized and lack technicians.
- there is a lack of co-ordination and co-operation between ministries.
- there are discrepancies between the tasks carried out by ministries, and those which have been set by law.
- systems of budgets, payments and accounting often are anachromistic - leading to excessive paper work, unnecessary controls, and costly delays in the Plan's execution.
- authority within the hierarchical system is not well defined.

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The Ministry of Finance and Treasury is responsible for:

- surveillance of trade subject to tariffs.
- inspection and surveillance of national goods, services and taxation.
- operation and control of [illegible], public markets and alcohol plants.

The Ministry of Agriculture, Commerce and Industry is concerned (outside of the agricultural sector) with:

- the regulation of industrial development.
- the promotion and control of industry.
- fisheries and connected industries.

Within the Ministry is the Board of Industries (Dirección General de Industrias), which is charged with carrying out the following functions:

- administering and controlling fiscal incentives to industry.
- stimulating investments and promoting production.

The Centre for Industrial Development (Centro de Desarollo Industrial) is directly responsible to the Ministry of Agriculture, Commerce, and Industry. Prior to [illegible] it was part of the Institute of Economic Development (Instituto de Fomento Nacional).

Autonomous agencies established to carry out specific functions include the following ones related to industry:

- Institute of Economic Development (Instituto de Fomento Económico)
- Institute of Hydraulic Resources and Electrification (Instituto de Recursos Hidraylicos y Electrificación)
- Coffee Institute of Panama (Instituto Panameño del Café)
- Cattle Institute (Instituto Ganadero)
- Panama National Bank (Banco Nacional de Panamá)
- People's Credit Bank (Banco de Credito Popular)
- Savings Bank (Caja de Ahorros)

There are several [illegible] autonomous agencies [illegible] with ministries. Of importance [illegible] the Commission of [illegible] Highways, [illegible] Caminos, Aeropuertos, [illegible].

[illegible] Administrative [illegible]
refer to the [illegible] and Government [illegible]

The major area of change [illegible] of [illegible] areas. [illegible] sector [illegible] ministries and [illegible] decentralized [illegible] has made reform necessary, [illegible] coordination. To make this [illegible]

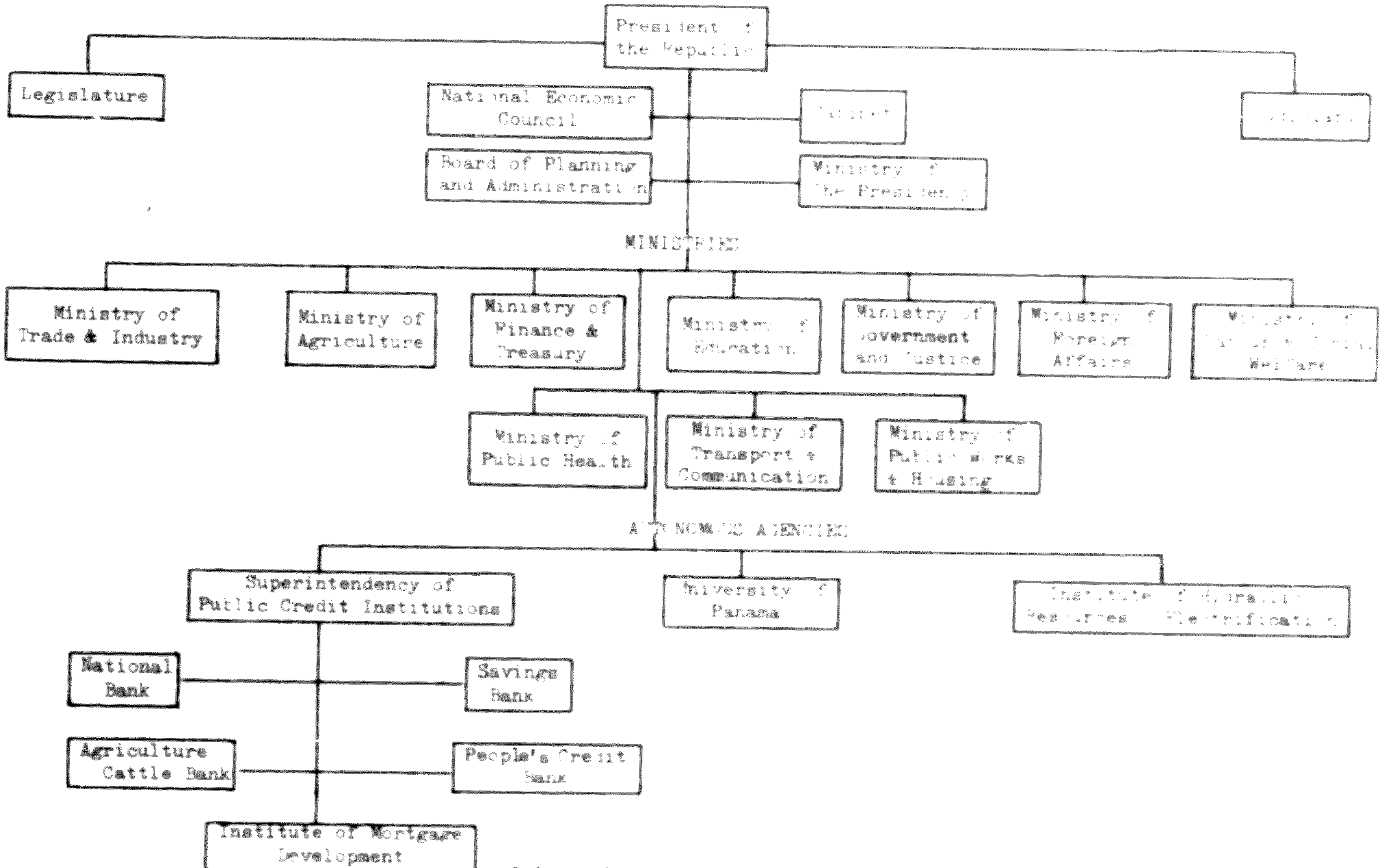
- to reform those decentralized [illegible] carrying out [illegible]. Autonomous agencies will [illegible] the following three:
  - the University of Panama;
  - the Institute of [illegible] Resources and Electrification;
  - the Superintendency of [illegible] Credit Institutions.
- to re-organize the existing ministries, and to increase their number from [illegible].
- to create a Politico-Economic Cabinet, composed of the President of the Republic, ministries and the directors of autonomous agencies (except the University of Panama).
- to completely reform the budget system so that it becomes a means of control over the entire public sector. A "Program-Budget" system will be adopted on an annual basis.
- to establish a Technical Secretariat and an Advisory Committee under the Politico-Economic Cabinet. An Economic Cabinet will also be created, although its decisions and those made by the Politico-Economic [illegible] will overlap increasingly.

The proposed Technical Secretariat will be primarily concerned with:

- the implementation of the Plan.
- the implementation of the Program-Budget.
- the daily decisions of the Economic Cabinet.

It will be formed by the Board of Planning and Administration,

PROPOSED GOVERNMENT ... *



* Incomplete; emphasis here is placed on institutions ... industrial development

[illegible] Administrative [illegible] Economic Council [illegible] channel [illegible] private sector [illegible] and programs.

The functions of the proposed new [illegible] Industries will be:

- to formulate programs for the creation, development, [illegible] of industries, [illegible] factors of production.
- to establish, [illegible] enterprises.
- to conduct [illegible] the [illegible] trade.
- to operate [illegible] particularly the free trade zones [illegible] Colón.
- to formulate information, advisory, promotional and other services [illegible] for firms and individuals engaged in trade.

The Superintendence of Public Credit Institutions [illegible] partly compensate for the absence of an adequate [illegible] credit system. It will co-ordinate the operations of the [illegible] public credit institutions.

VIII. PROBLEM AREAS

The main problems in the short-run are:

- the lack of foreign exchange earnings.
- unemployment.
- the lack of financial resources.
- the inadequacy of the fiscal system.

The main problems in the long-run are:

- the status of the Canal Zone.
- a high marginal propensity to hoard, so that investment is always insufficient.

PANAMA

- the under-utilization [illegible] of human resources, [illegible] of Panama [illegible];
- the deficient educational system, [illegible] of the [illegible];
- deficient health and hygiene [illegible] leading to under-nourishment.

[illegible]

Manufacturing [illegible] per capita increased at an average annual rate of [illegible] from [illegible], while [illegible] increased from [illegible] at an average annual rate of [illegible].

[illegible] rose at an average of [illegible] and [illegible], and at [illegible] per annum between [illegible] and [illegible].

The following table shows the changing importance of the [illegible] main manufacturing industries:

	1945	[illegible]
Food	[illegible]	[illegible]
Drink	4[illegible]	[illegible]
Clothing	[illegible]	[illegible]
Building materials		[illegible]
	1[illegible]	100[illegible]

Investment in industrial equipment rose from [illegible] million in [illegible] to 28 million in 196[illegible].

SUMMARY OF THE 1967 - 1970 INDUSTRIAL DEVELOPMENT PLAN OF PERU*

I. GOALS AND OBJECTIVES

A. Planned Growth:

	1966	1970	Average Annual Increase
Manufacturing GDP/capita	$ [illegible]	$[illegible]	[illegible]
Total GDP/capita	$40[illegible]	$44[illegible]	[illegible]
Population (000)	[illegible]	[illegible]	[illegible]**
Manufacturing GDP ($ millions)	[illegible]***	[illegible]	[illegible]
Total GDP ($ millions)	4,[illegible]	[illegible]	[illegible]
Manufacturing % of Total GDP	[illegible]	[illegible]	

Exchange rate: [illegible] $1 = [illegible] Soles

*From the UN Monthly Bulletin of Statistics, July 1969

**Plan does not indicate a rate, so the [illegible] - 1966 reported actual rate is used.

***Excludes artisan and semi-manufacturing output (about 10% of total manufacturing plus handicrafts output)

B. Other Objectives:

To increase production.

To raise the level of employment.

To reduce the economy's vulnerability to world price fluctuations.

To improve income distribution.

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* Instituto Nacional de Planificacion: "Plan de Desarollo Economico y social, 1967 - 1970", Lima, 1967, 4 volumes with supplements. 2,734 pages.

Note: This Summary was prepared from an incomplete microfilm edition of the Plan; the estimated number of pages included in the microfilm edition is 2,000.

[illegible]

	Sources	Sources	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	12,000	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible] incentives will be granted to promote re-investment in manufacturing, particularly in industries in which productivity is high.

Information on the results of feasibility studies will be made available, particularly to the private sector.

The Government will increase its participation in the development of basic industries, through direct investment.

Agreements will be concluded with other countries to realize specific projects on basic industries.

Import substitution will be pursued, whenever local production of goods can fully supply the domestic market.

Benefits and incentives awarded to enterprises will be subject to their using a maximum of domestic inputs.

Decentralization will be effected, through the creation and promotion of selected industrial zones:

- specific localization programs will be elaborated for each industry.
- the Government will improve the facilities available for the establishment of industries.
- preference will be given in granting credit to industries establishing themselves in the selected zones.
- tax exemptions will favor industries in the selected zones.
- packaging and the transformation of foodstuffs will be promoted in industrial zones located in areas of agricultural production.

The following measures will be applied to selected manufacturing industries:

- tariff protection will be granted to infant industries.
- tariff rates will be changed at certain intervals.
- the Government will control product quality, through the establishment of certain minimum requirements.

The following measures will be taken to increase the export of manufactured goods:

- trade agreements will be concluded with other countries.
- Government funds will be used to promote technological studies.
- priority will be given by the Industrial Bank to export-oriented industries.
- special systems will be designed to promote exports.

[illegible]. <u>Institutions</u>

The Industrial Bank and the Bank of Agricultural Development (Banco de Fomento Agropecuário) will increase their operations by approximately 50%.

Priority will be given to the requirements of basic industries and to fixed capital investment.

Private savings will increase from 1[illegible]% in 1967 to 14.[illegible]% in 19[illegible].

A capital market will be developed.

Legislation pertaining to limited responsibility corporations will be reformed.

The National Institute of Industrial Promotion (Instituto Nacional de Promoción Industrial) will diffuse information on investment opportunities.

III. DEMAND PROJECTIONS AND DATA BASES

Detailed studies have been made in every sector of the economy.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. <u>Planned Growth of Manufacturing Sectors</u>

Manufacturing GDP is expected to grow at an average annual rate of 9% from 1967 to 1970.

B. <u>Priority of Sectors</u>

Priority is to be given to the production of intermediate goods, in order to favor industrial integration and the modernization of agriculture.

[illegible]

[illegible] total employment.

[illegible]

[illegible]

[illegible]	[illegible]		Intermediate [illegible]		[illegible]		[illegible]	
	[illegible]	[illegible]	No. of projects	[illegible]	No. of [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Food Dehydrating Plant

Location: [illegible]ingo, Department of Arequipa

Responsible Agency: Board of Rehabilitation [illegible] Department of Areq[illegible]

Objectives:

- to dehydrate vegetables, garlic and onions.
- to increase export production: [illegible]0% of garlic production and 60% of onion production.
- to further import-substitution.

Characteristics and Capacity:

Cold drying process, followed by intense heat ([illegible] to 750° C) to remove frozen water without any further transformation. It is enough to add water to the dehydrated product to render it fresh again. Capacity: 669 tons per year of dehydrated garlic; 352 tons per year of dehydrated onions.

Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Studies	10	-	10
Construction	340	100	440
Machinery and equipment	-	1,365	1,365
Other	40	55	95
Total	390	1,520	1,910

PERU

Sources of Finance: $ 000

	In Domestic Currency	In Foreign Currency	Total
Own resources	55	-	55
Stahlunion-Germany	335	1,530	1,865
Total	390	1,530	1,9[illegible]

Status of the Project: in execution. Expenditures:

1965 - $1.1 million

1966 - $765,000 (estimate)

Plan of Execution:

Work was initiated in April 1965, and will be terminated in 1966. Operations will start in 1967.

Justification of Investment Requirements: world demand will continue to increase.

Production in the Department of Arequipa accounted for 1% of the world supply of dehydrated onions and 16% of the world supply of garlic.

Cold Storage Room - Lima and Arequipa

Location: Department of Arequipa

Responsible Agency: Board of Rehabilitation Development of Arequipa

Objectives:

- to change the present system of supplying meat to the markets of Lima and Arequipa.

Characteristics and Capacity:

Main plant at Arequipa. Cold storage room at Lima. Purchasing centre at PUNO. Refrigeration trucks will ensure an efficient transport system. Daily capacity at Arequipa:

350 head of cattle
1,200 sheep
100 pigs

Refrigeration room capacity: 15 tons at Arequipa
20 tons at Lima.

Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Studies	0	20	20
Construction	480	0	480
Machinery and equipment	120	1,000	1,120
Total	600	1,020	1,620

Financing will take place through loans from private enterprises.

Phasing of Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
1967	125	100	225
1968	125	100	225
1969	125	100	225
1970	125	100	225
Total	500	400	900

Status of the Project: in execution. Expenditures:
$355,000 in 1966
$375,000 from 1971 to 1972 (estimated).

Plan of Execution:

Work was initiated in 1966 and will be concluded in 1972.

Justification of Investment Requirements:

More efficient use of the potentially available meat supply will be made. Unnecessary intermediaries, which have hitherto increased the cost of the products, will be eliminated. Transport costs will be reduced through the introduction of a new system.

Cold Storage Room at Callao

Location: Constitutional Province of Callao

Responsible Agency: National Supplies Corporation
(Corporación Nacional de Abastecimentos)

PERU

Objectives:

- to supply cattle, sheep and pork to the Lima metropolitan area.
- to store and distribute meat.

Characteristics and Capacity:

Capacity per 8-hour day: 800 head of cattle
200 sheep
400 pigs

Cold storage room capacity: 2,000 tons

Investment: $ 000

	In Domestic Currency	In Foreign Currency	Total
Studies	75	0	75
Construction	1,865	0	1,865
Machinery and equipment	225	895	1,120
Other	670	0	670
Total	2,835	895	3,730

Sources of Finance: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Treasury	745	-	745
Foreign loan	2,090	895	2,985
Total	2,835	895	3,790

Phasing of Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
1967	1,540	440	1,980
1968	670	190	860
1969	495	140	635
1970	0	0	0
Total	2,705	770	3,475

Status of the Project: market studies are currently being made. All studies will be completed at the beginning of 1967.

Plan of Execution:

Construction work will start in July [illegible], and will consist of 3 stages, due for completion in [illegible]. Expenditure: 1966 - $1.5 million, of which $[illegible] are allocated for the purchase of land and to conduct studies.

Justification of Investment Requirements:

The existing cold storage room, which was financially and hygienically unsound, must be replaced.

Cold Storage Room at Piura

Location: Department of Piura

Responsible Agency: National Supplies Corporation.

Objectives:

- to supply cattle, sheep and pig meat to the Departments of Tumbes and Piura.
- to store and distribute fresh and processed meat.

Characteristics and Capacity:

Capacity per 8-hour day: 150 - 200 head of cattle
150 sheep
100 pigs
300 goats

Storage capacity: 500 tons.

Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Studies	25	0	25
Construction	345	0	345
Machinery and equipment	150	450	600
Other	260	0	260
Total	780	450	1,230

Sources of Finance: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Treasury	0	0	0
Transfers	135	0	135
Foreign loans	645	450	1,095
Total	780	450	1,230

Phasing of Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
1967	430	270	700
1968	195	125	320
1969	115	70	185
Total	740	465	1,205

Status of the Project: market studies are in the process of completion. A preliminary project on architecture and equipment is being made. All studies will be completed in June 1967.

Plan of Execution:

The first of three stages will be initiated in September 1967, and the project will be completed in 1969. Full capacity operation will be reached in 1969.

Justification of Investment Requirements:

The meat supply in the region is precarious. Health conditions have been impaired, due to the lack of hygiene in the meat distribution system.

Cold Storage Room of Iquitos

Location: Department of Loreto

Responsible Agency: National Supplies Corporation

Objectives:

- to supply meat to the Iquitos region.
- to store and distribute meats.

Characteristics and Capacity:

Capacity per 8-hour day: 150 head of cattle;
150 pigs will be included per day.

Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Studies	25	0	25
Construction	345	0	345
Machinery and equipment	150	450	600
Other	260	0	260
Total	780	450	1,230

Sources of Finance: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
Treasury	0		
Transfers	135	-	135
Foreign loan	645	45[illegible]	1,[illegible]
Total	780	4[illegible]	[illegible]

Phasing of Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
1967	430	27[illegible]	[illegible]
1968	195	125	[illegible]
1969	115	[illegible]	185
Total	740	46[illegible]	1,[illegible]

Status of the Project: market and commercialization studies have been completed. Preliminary architectural projects are being conducted by CONAP. All studies will be completed by June 19[illegible].

Plan of Execution:

The first of three phases will be started on September 1, 1967. All work will be completed by 1969.

Justification of Investment Requirements:

Meat supply is deficient in an area which has a population of 100,000 people.

Cold Storage of Fowl at Lima

Location: Department of Lima

Responsible Agency: National Supplies Corporation

Objectives:

- to supply food in guaranteed hygienic condition.
- to improve distribution.

Characteristics and Capacity:

Capacity: 1,500 chickens per hour; refrigeration capacity: 900 kgs. of meat per 10 hours.

Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Studies	20	-	20
Construction	130	-	130
Machinery and equipment	45	180	225
Other	160	-	160
Total	355	180	535

Sources of Finance: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Treasury	110	0	110
Foreign loan	245	180	425
Total	355	180	535

Phasing of Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
1967	335	165	500

Status of the Project: the engineering project has been elaborated. Management studies are being conducted. Land has been acquired. Financial arrangements are advancing satisfactorily.

Plan of Execution:

The whole project will be realized in 1967.

Justification of Investment Requirements:

The rationalization of fowl meat production is essential.

Fish Storage

Location: Department of Ica and Lambayeque

Responsible Agency: National Supplies Corporation

Objectives:

- to promote an adequate supply of, and the commercialization of, fish in hygienic condition.

Characteristics and Capacity:

Processing plants will be constructed to clean, fillet and freeze fish. Capacity: 25 tons per plant.

Investment: ($ [illegible]000)

	In Domestic Currency	In Foreign Currency	Total
Studies	15	0	15
Construction	305	0	305
Machinery and equipment	[illegible]	1,515	1,515
Other			
Total	320	1,515	1,835

Sources of Finance: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Treasury	320	0	320
Loans	0	1,515	1,515
Total	320	1,515	1,835

Phasing of Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
1967	160	760	920
1968	160	760	920
Total	320	1,520	1,840

Status of the Project: location studies have been concluded. Engineering studies will be made in 1966 and concluded in 1967.

Plan of Execution:

The first stage will be concluded in 1967. The second stage will be concluded in 1968.

Justification of Investment Requirements:

The condition of fish deteriorates very fast, from the time it is caught, and immediate storage is required.

Zinc Refinery and Triple Superphosphate Plant

Location: Monturita Pampa, Department of Lima

Responsible Agency: Metallurgical Centre of Peru, and the Mining Bank

Objectives: processing of natural resources which are currently exported in the form of raw materials.

PERU

Characteristics and Capacity:

The industrial complex will be composed of:

- an electrolytic zinc refinery.
- a sulphuric acid plant.
- a superphosphates factory.

The production of acid will be used by the superphosphates factory. Production capacity: [illegible] tons of refined zinc per year; [illegible] tons of triple superphosphates per year.

Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Studies	150	300	450
Construction	[illegible]	945	3,150
Machinery and equipment	500	12,960	13,460
Other	8,810	3,225	12,035
Total	11,665	17,430	29,095

Sources of Finance: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Treasury	3,085	920	4,005
Own funds	3,220	955	4,175
Loans	5,360	15,555	20,915
Total	11,665	17,430	29,095

Phasing of Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
1967	2,000	6,215	8,215
1968	4,310	5,240	9,550
1969	2,405	4,370	6,775
1970	2,415	1,695	4,110
Total	11,130	17,520	28,650

Status of the Project: a series of interrupted studies were carried out at first. A feasibility study by Parsons-Jurden of New York has been concluded more recently, and found to be satisfactory. The costs of the studies made to date amount to $450,000.

Plan of Execution:

The Mining Bank will [illegible] financial resources [illegible] complete and improve various studies, and to justify the aid requested from the Inter-American Development Bank. No date has been fixed for the initiation of construction. The planned phasing of investment indicates that work [illegible] start in the second half of [illegible], and be concluded [illegible].

Justification of Investment Requirements:

There has been a steady increase in demand [illegible] by the industrialized countries, particularly the USA, [illegible], USSR, West Germany and France. Sulphuric acid, a by-product of zinc refining, will be used for the production of triple superphosphate, which is currently being imported in increasingly greater quantities.

Recommended Additional Studies:

It is recommended that complementary studies be carried out on:

- the strategy and organization to be adopted by the firm, in order to enter a market which is highly cartelized.
- the size and localization of the plant, particularly in view of the toxic gasses which will be present.
- the choice of technology to be used, in view of the modifications introduced by the Hydro-electric Centre of Mantaró.
- the possible complementary investment requirements to ensure the efficiency of the plant.
- the analysis of future needs for managers, and the training of experts and technicians.

Transportation Equipment for Fertilizers

Location: Constitutional Province of Callao

Responsible Agency: National Fertilizer Corporation (ENFER)

Objectives:

- to ensure the efficient transport of guano and synthetic fertilizers throughout the country.

Characteristics and Capacity:

8 FIAT trucks of 5 tons each

20 FIAT trucks of 12 tons each

20 FIAT trailers of 12 tons each.

[illegible]

	In Domestic Currency	In Foreign Currency	Total
[illegible]	[illegible]	[illegible]	[illegible]
Machinery and equipment	[illegible]	[illegible]	[illegible]
Other	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

[illegible] Investment ($ [illegible])

	In Domestic Currency	In Foreign Currency	Total
Treasury	[illegible]	[illegible]	[illegible]
Own resources	[illegible]	[illegible]	[illegible]
[illegible]		16	16
Total	[illegible]	[illegible]	[illegible]

[illegible] Investment ($ [illegible])

	In Domestic Currency	In Foreign Currency	Total
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]			
Total		344	[illegible]

Status of the Project: until 1986, expenditure on the acquisition of trucks totaled $[illegible].

Justification of Investment Requirements:

The improvement of the distribution system of fertilizers is required.

Northern Industrial Complex (Fertilizer Plant)

Location: Paita or Sullana

Responsible Agency: National Fertilizer Corporation (CONFER)

Objectives:

- to produce ammonia and urea for use as fertilizers.

[illegible]

[illegible] and [illegible]:

[illegible] equipment [illegible] sea water, [illegible] treatment and [illegible] unit [illegible] steam turbine [illegible] generate [illegible] power for the plant. [illegible] per day [illegible] converted into [illegible] tons per day [illegible].

Investment: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
[illegible]	[illegible]		[illegible]
Construction	[illegible]		[illegible]
Machinery and equipment		[illegible],290	[illegible]
Other	[illegible]		[illegible]
Total	[illegible]	[illegible]	[illegible]

Sources of Finance: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
Treasury			
Own resources	105		[illegible]
Loans	[illegible],4[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

Phasing of Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
1967	[illegible]	[illegible]	
1968	315	[illegible]	[illegible],340
1969	945	6,[illegible]	[illegible]
1970	945	6,[illegible]	[illegible]
Total	2,205	14,175	16,380

Status of the Project: the Government is now studying the project.

Plan of Execution:

The following time-schedule will most probably be followed:

- work will start in 19[illegible].
- the installation of the plant and gas tubing will take approximately 4[illegible] months.
- water supply installation will take 1[illegible] months.
- construction of personnel housing will take 4[illegible] months.
- work will be concluded in 19[illegible].

Justification of Investment Requirements:

Demand for fertilizers has been increasing. Fertilizer imports should be reduced. The market for nitrogenous fertilizers needs to be stabilized.

La Pampilla Petroleum Refinery

Location: near Ventanilla, Department of Lima

Responsible Agency: Empresa Petrolera Fiscal

Objective:

- to establish a plant to refine petroleum and its derivatives.
- to produce gasoline of high octane content ([illegible] and [illegible]4), kerosene and diesel oil, nos. [illegible], 1, [illegible] and [illegible].

Characteristics and Capacity:

The refinery will include:

- a combined unit for distilling.
- a combined unit for de-sulphurizing and catalytic reforming.
- a cracking unit.

Capacity: [illegible],000 barrels a day.

Investment: $ 000

	In Domestic Currency	In Foreign Currency	Total
Studies	0	140	140
Construction	7,430	3,180	10,610
Machinery and equipment		1,115	1,115
Other	995	100	1,095
Total	8,425	4,535	12,960

This will be financed in domestic and foreign currency by the Marubeniiida Co. Ltd.

DRW

Phasing of Investment: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
[illegible]	[illegible]	[illegible]	[illegible]

Status of the Project: [illegible] of the work has been completed.

Plan of Execution:

The project will be completed over the next year. Expenditure during [illegible] will total $ [illegible] million.

Justification of Investment Requirements:

Petroleum products account for [illegible] of GNP. Demand has been increasing at an annual rate of [illegible], so that excess demand would be [illegible],000 barrels per day in [illegible], and [illegible] barrels per day in [illegible]. In spite of the necessity of importing inputs, the operation of the firm will still be economically efficient.

Further Studies Required:

- up-to-date studies must be available, regarding the supply of inputs.
- commercialization policy must be defined as soon as possible.
- a publicity campaign must be planned.
- sources of finance for sales organization are required.

Lubricant Plant of La Pampilla

Location: annex to the La Pampilla Refinery

Responsible Agency: Empresa Petrolera Fiscal E. P. F.

Objectives:

- to produce different types of lubricants.

Characteristics and Capacity:

Deparaffining and refining of crude oil. Capacity: 2,000 barrels per day.

Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Studies	n. a.	n. a.	n. a.
Construction	12,865	5,510	18,375
Machinery and equipment	0	370	370
Other	0	920	920
Total	12,865	6,800	19,665

Phasing of Investment: ($ [illegible])

	Domestic Currency	In Foreign Currency	Total
[illegible]			
[illegible]			
[illegible]			
[illegible]	5,4[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

Status of the Project: under study

Plan of Execution:

Work will be initiated in [illegible]. The project will be completed in [illegible]. Expenditures during [illegible] are estimated at $ [illegible] million.

Justification of Investment Requirements:

The demand for lubricants has been steadily increasing. Import-substitution will permit saving of foreign exchange.

La Selva Refinery

Location: Pucallpa, Department of Loreto

Responsible Agency: Empresa Petrolera Fiscal

Objectives:

- to produce petroleum derivatives to supply the region of La Selva.

Characteristics and Capacity:

Atmospheric distilling and coking plant, using crude oil from Petrolera [illegible]riente and Ganso Azul companies. Eighty-four and [illegible] octane kerosene, diesel oil, and coke will be produced. Capacity: [illegible] barrels per day.

Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Studies	n. a.	n. a.	n. a.
Construction	2,100	900	3,000
Machinery and equipment	0	2,000	2,000
Other	0	500	500
Total	2,100	3,400	5,500

The domestic and foreign currency required will be obtained through the contraction of debts.

Phasing of Investment: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
[illegible]			
1968			
1969			
[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

Status of the Project: In the preliminary stages [illegible]

Plan of Execution:

Work is scheduled to start in [illegible] and [illegible] at the end of [illegible]. The refinery is expected [illegible] operational in [illegible]. Expenditure during [illegible] is estimated at $ [illegible] million.

Justification of Investment Requirements:

Demand will increase rapidly in the future, due to the Plan Vial for major highway construction in the area. The quality of products of the existing [illegible] and [illegible] plants of the Ganzo Azul Company must be improved.

Refinery of the South (Refineria del Sur)

Location: Matarani, Department of Arequipa

Responsible Agency: Empresa Petrolera Fiscal

Objectives:

- to produce high grade octane.
- to satisfy demand in southern Peru.
- to promote the development of the Departments constituting southern Peru.

Characteristics and Capacity:

Atmospheric distillation, catalytic reformation of naphtha, and a gas recuperating unit. Crude oil (high and low API) will be used. Eighty-four and 95 grade octane gasoline, kerosene, diesel oil nos. 2, 4, and fuel oil no. 6 will be produced. Capacity: 15,000 barrels per day.

Investment: $ 000

	In Domestic Currency	In Foreign Currency	Total
Studies	n. a.	n. a.	n. a.
Construction	2,180	930	3,110
Machinery and equipment	0	4,035	4,035
Other	445	300	745
Total	2,625	5,265	7,890

Domestic and foreign currency will be obtained through the contraction of debts.

Phasing of Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
1967	0	0	0
1968	0	0	0
1969	1,130	3,270	4,400
1970	1,120	1,500	2,620
Total	2,250	4,770	7,020

Status of the Project: technological and economic feasibility studies are being carried out.

Plan of Execution:

Construction will start in 1969, and will be concluded in mid-1971. Expenditures during 1971 are estimated at $875,000.

Justification of Investment Requirements:

The future industrial and agricultural development of this region will require increased sources of energy. The construction of the refinery will contribute to the decentralization of the petroleum refining industry. Employment opportunities will be increased.

Cement Plant

Location: Yura, Department of Arequipa

Responsible Agency: Board of Rehabilitation and Development of Arequipa

Objectives:

- to supply the markets of the Departments of Moquegua and Tacna.

Characteristics and Capacity:

Roads will be constructed between the factory and the quarries. A railway will connect the factory with the southern railways (Ferrocarriles del Sur). Capacity: 50,500 tons per year. During the first year, the factory will work at [illegible]% capacity. Production efficiency will be maximized when operating at 90% capacity.

Investment: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Studies	n. a.	n. a.	n. a.
Construction	2,030	870	2,900
Machinery and equipment	0	5,650	5,650
Other	0	0	-
Total	2,030	6,520	8,550

The investment will be entirely supplied by Krupp-Germany.

Status of the Project: in execution. Expenditures in 1965 totaled $5 million. Estimated expenditure in 1966 is $3.5 million.

Plan of Execution:

Work was initiated in 1964, and will be concluded in 1966.

Justification of Investment Requirements:

A market study made in 1963 justifies the need for a current factory. Local production will eliminate heavy transport costs from Lima which is 1,000 kms distant.

Industrial Estate

Location: Southeast of Cuzco

Responsible Agency: the Reconstruction and Development Corporation of Cuzco (Corporación de Reconstrucción y Fomento de Cuzco)

Objectives:

- to create an industrial estate to permit the expansion of existing firms on new sites.
- to encourage the establishment of new firms.

Characteristics and Capacity:

Fourty-seven hectars will be occupied and divided into lots. The necessary infra-structure will be supplied, including water and electric power.

[illegible]

Investment: $ '000

	In Domestic Currency	In Foreign Currency	Total
Studies	n. a.	n. a.	n. a.
Construction	50	0	50
Machinery and equipment	45	0	45
Other	110	0	110
Total	205	0	205

The total investment will be financed through loans.

Phasing of Investment: $ '000

	In Domestic Currency	In Foreign Currency	Total
1967	60	0	60
1968	40	0	40
1969	30	0	30
1970	20	0	20
Total	150	0	150

Status of the Project: certain studies are being carried out. Work has been initiated on the first stage. Expenditures during 1966 are expected to amount to $50,000. Costs of the subsequent stages have not yet been determined.

Plan of Execution:

1966 - 1970: first stage, rendering 10 hectars ready for use, of which:

- in 1966: 2 - 5 hectars
- in 1967: 3 "
- in 1968: 2 "
- in 1969: 1 - 5 "
- in 1970: 1 "

No time schedule has been drawn up for the remaining stages.

Justification of Investment Requirements:

Cuzco is situated in a narrow valley, making the expansion of firms difficult. New sites must, therefore, be made available. An investigation was made among industrialists in Cuzco to determine the demand for an industrial estate: 10 hectars will be required within 5 years.

Industrial Estate

Location: Ica, on the Pan-American Highway

Responsible Agency: the Reconstruction and Development Corporation of Ica

Objectives:

- to re-locate industries,
- to provide facilities for the establishment of new industries.

Characteristics and Capacity:

Seventeen hectares will be occupied, [illegible] of which will be divided into [illegible] lots of [illegible] square metres each. All the necessary infra-structure will be supplied.

Investment: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
Studies	n. a.	n. a.	n. a.
Construction	[illegible]		[illegible]
Machinery and equipment	11		[illegible]
Other	4		[illegible]
Total	[illegible]		[illegible]

The corporation will contribute from its own funds, and the remaining investment will be obtained through loans.

Phasing of Investment: yet to be determined.

Status of the Project: studies were made in 196[illegible].

Plan of Execution: yet to be determined.

Justification of Investment Requirements:

The industrial estate will promote the development of small industries. The processing of agricultural products will be encouraged through the presence of the industrial estate. The proximity of Lima will stimulate the food processing industries. Employment opportunities will be increased for the neighboring communities. The economic development of the region will be accelerated.

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Industrial Estate

Location: Northeast of Tacna, in the Department of Tacna

Responsible Agency: Economic Development Corporation of Tacna [illegible]

Objectives:

- To create an industrial estate in a strategic position, in relation to the markets of Chile, Bolivia and southern Peru.
- To promote the economic development of the Department of Tacna.

Characteristics and Capacity:

[illegible] hectares will be occupied by the estate.

Investment: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
Studies	[illegible]		
Construction	1,130		1,1[illegible]
Machinery and equipment	56[illegible]		56[illegible]
Other	5[illegible]		5[illegible]
Total	1,7[illegible]		1,7[illegible]

This will be entirely financed by the Treasury.

Phasing of Investment: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
1967	485	0	485
1968	485	0	485
1969	0	0	0
1970	0	0	0
Total	970		970

Status of the Project: work was initiated in 1965, during which $192,000 was spent. An expenditure of $375,000 is forecast for 1966.

Plan of Execution: work will be completed in 1968.

Justification of Investment Requirements:

Employment opportunities will be increased, particularly due to immigration from the Altiplano.

[illegible]

Industrial Estate

Location: [illegible], in the Department of [illegible]

Responsible Agency: the Puno Corporation of Development and of Economic and Social Promotion (Corporación de Fomento y Promoción Social y Económica de Puno - [illegible])

Objectives:

- To provide facilities for the expansion of existing firms, and for the establishment of new ones.
- To raise income earned by the local population.
- To provide new employment opportunities, and thereby increase labor productivity.

Characteristics and Capacity:

Thirty hectares will be acquired, [illegible] hectares of which will be divided into lots.

Investment: ($ [illegible])

	In Domestic Currency	In Foreign Currency	Total
Studies			
Construction*	[illegible]		[illegible]
Machinery and equipment	[illegible]		[illegible]
Other costs stages II, III	[illegible]		[illegible]
Total	[illegible]		[illegible]

* these figures apply only to stage [illegible]

Sources of Finance: ($ 000)

	In Domestic Currency	In Foreign Currency	Total
Treasury	0	0	[illegible]
Own resources	295		295
Loans	635		635
Total	930	0	930

Phasing of Investment: yet to be determined.

Status of the Project: location and demand studies were initiated in 1964. No further progress had been made due to the opposition of the Provincial Council of San Roman to the acquisition of land.

[illegible]

[illegible]

[illegible]

Three stages are envisaged:

(1) The farm will first be available, [illegible] which will be divided into small plots, and [illegible] large plots.

(2) The farm [illegible] will [illegible] be made available.

(3) The farm [illegible] will then be available.

[illegible] the farm will [illegible]

[illegible]

[illegible]

[illegible] investment [illegible] remarks

The demand for new and better [illegible] will be satisfied. [illegible] Migration away from the region will be arrested, through the creation of greater employment [illegible] will be required. These include:

- [illegible]
- [illegible]
- potato starch
- [illegible] fruits
- meat [illegible]
- construction materials
- exploitation of the resources available in Lake Titicaca area.

Industrial Estate

Location: [illegible], Department of Arequipa

Responsible Agency: Board of Rehabilitation [illegible]

Objectives:

- to establish factories processing raw materials required by the local market.
- to promote the economic development of Arequipa.

Characteristics and capacity:

Multi-purpose buildings will be built. All services will be available. A railway will connect the estate to the main railway lines. Capacity: [illegible] hectares will be used.

Investment [illegible]

	In domestic currency	In foreign currency	Total
[illegible]			
[illegible]			
Machinery [illegible]			
[illegible]			
[illegible]			
Total			

[illegible]

	In domestic currency	In foreign currency	Total
Treasury			
[illegible]			
Loans			
Total			

Phasing of investment: [illegible]

	In domestic currency	In foreign currency	Total
[illegible]	[illegible]		[illegible]
[illegible]	[illegible]		[illegible]
[illegible]	[illegible]		[illegible]
[illegible]	[illegible]		[illegible]
Total	[illegible]	[illegible]	[illegible]

Status of the Project: In execution. Expenditures made until [illegible] amounted to $4[illegible]. Estimated expenditure in [illegible] is $[illegible]. During the period [illegible] - 1985, a total of $[illegible] will be spent.

Plan of Execution:

- 1965 - 1969: [illegible] hectare
- 197[illegible] - 197[illegible]: 14 additional hectare
- 1980 - 1985: [illegible] additional hectare

Justification of Investment Requirements:

The decentralization of industry away from Lima and Callao will be furthered. The estate will satisfy demand from southern Peru for such facilities. The estate will encourage the establishment of new industries. Employment opportunities will be increased.

[illegible]

[illegible] Department of Ancash

[illegible] Agency [illegible] Chimbote [illegible]
[illegible] Siderurgica de Chimbote, S. A.

[illegible]

[illegible] the [illegible]

To further the integration of the existing steel plant.

[illegible]

Blast furnace capacity [illegible] tons per year [illegible] iron. [illegible] tons per year [illegible] steel. [illegible] per year.

Investment: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible] $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

[illegible] Investments: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
[illegible]	[illegible]		[illegible]

Status of the Project: [illegible]

[illegible]

[illegible] of Execution:

The [illegible] was made [illegible] have been made. [illegible] ready [illegible].

Justification of [illegible] requirements:

Demand has been increasing [illegible]. Market studies carried [illegible] and [illegible] of the plant [illegible] necessary [illegible].

[illegible] of Existing [illegible]

Location: [illegible], Department of An[illegible]

Responsible Agency: S[illegible]A

Objectives:

- to increase the yearly capacity from the present [illegible] tons to [illegible] tons
- to further the integration of the steel [illegible]

Characteristics and capacity:

Additional production due to the expansion will be as follows:

- bars for concrete: [illegible] tons a year
- wire: [illegible] tons a year
- electrode wires: [illegible] tons a year
- bars [illegible]: [illegible] tons a year
- [illegible] moulds: [illegible] tons a year
- medium moulds: [illegible] tons a year

Investment: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
Studies	n. a.	n. a.	n. a.
Construction	[illegible]	[illegible]	[illegible]
Machinery and equipment		[illegible]	[illegible]
Other		[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

... forms part of the steel plant's integration ... import substitution will save foreign exchange. Employment opportunities will be increased.

[illegible]8A Steel Plant Harbor

Location: Chimbote, Department of Ancash

Responsible Agency: [illegible]

Objectives:

- to serve exclusively the needs of the steel plant.
- to further the integration of the steel plant.

Characteristics and Capacity:

Dock: [illegible] metres long. A pier approximately parallel to the existing dock. A transport system will be built from the harbor to the steel plant. Capacity: [illegible] tons of cargo per year.

Investment: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
Studies			
Construction	[illegible]	[illegible]	[illegible]
Machinery and equipment			
Other			
Total	[illegible]	[illegible]	[illegible]

This will be entirely financed by [illegible] Germany.

Phasing of Investment: $ [illegible]

	In Domestic Currency	In Foreign Currency	Total
[illegible]	[illegible]	[illegible]	[illegible]

Status of the Project: In execution. Expenditures [illegible] will amount to $ [illegible]

Plan of Execution:

Work started in January [illegible], and will be completed in [illegible]. The first stage includes [illegible] in length.

Justification of Investment Requirements:

It had become necessary for the [illegible] to have its [illegible] docks, to ensure its efficient operation. Congestion [illegible] other docks will be reduced.

Smooth Laminated Steel Sheet Plant

Location: Chimbote, Department of Ancash

Responsible Agency: SOGESA

Objectives:

- to further the integration of the steel plant.

Characteristics and Capacity:

One laminating unit to produce semi-finished and finished steel sheets. One cold and one hot laminating unit to produce coil. Capacity to produce laminated sheets will be increased to 250,000 tons per year, plus: 150,000 tons per year of finished products; and 60,000 tons per year of semi-finished products.

	Domestic Currency	Foreign Currency	Total
	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

	Domestic Currency	Foreign Currency	Total
[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible] Investments [illegible]

	Domestic Currency	Foreign Currency	Total
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

Status [illegible] the [illegible] will be [illegible] [illegible].

[illegible] Execution:

Equipment will be installed from the beginning of [illegible], and completed in mid-[illegible], depending on the [illegible] of the project.

Justification of Investment Requirements:

The project constitutes an essential part of the integration of the steel plant. Its multiplier effect through the economy will be reflected in increased manufacturing GDP. Foreign exchange will be saved.

Other Projects

Additional projects will continue to be appraised, in order to systematize the comparative analysis of alternate uses of the country's available resources.

[illegible]

Project Preparation and Approval.

The National Planning System will establish specific norms and instructions for each sector and type of project envisaged.

The National Planning Institute (Instituto Nacional de Planificación) will prepare instruction documents.

[illegible]

[illegible] consultants [illegible]

[illegible] of the [illegible]

[illegible] whose [illegible] feasibility studies have [illegible]

[illegible]

[illegible] whenever feasibility studies have been [illegible] expected.

A fund [illegible] investment [illegible] was created in [illegible]. This fund will work within the [illegible] the National [illegible] with the [illegible] Annual [illegible] to finance [illegible]

[illegible]

[illegible]

[illegible]

[illegible] expand the production of import substitutes [illegible] terms of finished, intermediate, and [illegible] goods.

To provide incentives and [illegible] domestic industry.

---

*Annex A to the State of the Nation Message of President D. Macapagal: "A Proposed Five-Year Integrated Program for Socio-Economic Development, 1963 - 1967," January 1962. 92 pages.

[illegible] measures will [illegible] guarantee [illegible] industries, particularly [illegible] heavy industries.

[illegible]tection will be given to domestic industry by:

- increasing tariffs on imports to provide a reasonable margin of preference to domestic products.
- imposing duties on foreign products which have benefited from export subsidies.
- eliminating cases of market disruption.

[illegible]

institutions.

An Institute for Industrial Research [illegible]

[illegible] quality [illegible]
materials.

[illegible]

III. [illegible]

[illegible] the manufacture of [illegible] powerplant, [illegible] will [illegible] over a [illegible] year period.

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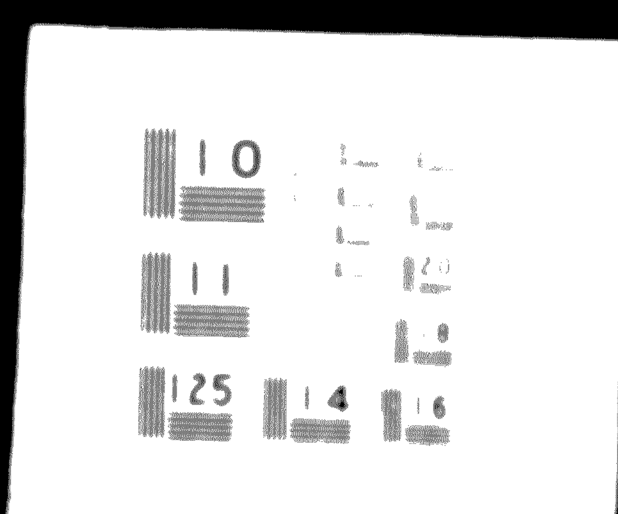

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] lands.

- the [illegible] and [illegible]

[illegible] and industries [illegible] will be transferred to the Department of Commerce and Industry, which will become a Board of Trade.

An Industrial Promotion Agency will be established to assist in project elaboration.

[illegible]

[illegible] INDUSTRIAL [illegible]

Total GDP increased at 6% per annum during the 1950s.

The manufacturing sector experienced the fastest growth rate, 11% a year during the 1950s.

[illegible]

SUMMARY OF THE 1969-1972 INDUSTRIAL DEVELOPMENT PLAN OF PUERTO RICO*

I. GOALS AND OBJECTIVES

A. Planned Growth*

	1965	1972	Average annual Increase
Manufacturing GDP capita	2?0	-	-
Total GDP capita	1,210	-	-
Population (000)	2,630	-	-
Manufacturing GDP ($ millions)	730	-	-
Total GDP ($ millions)	3,180	-	-
Manufacturing % of total GDP	23 %	-	-

* Figures not available in the Plan; taken from the UN Monthly Bulletin of Statistics, July 1969.

B. Other Objectives

To maximise output from the natural resources available.

To achieve an equitable income distribution.

To continue to raise the standard of living.

---

* Junta de Planificación: "Programa Económico de cuatro Anos - anos fiscales 1969-1972".
San Juan, 1968. 210 pp.

I. INVESTMENT, STRATEGY, POLICY, AND INSTITUTIONS

A. Investment

Planned government investment in all sectors of the economy will total $ 1,[illegible] million over the 1969-1972 period.

Government investment in the industrial sector will total $ 17[illegible] million over the same period.

Sources and Destination of Direct Government Investment in Industry

($ millions)

Destination	1969	1970	1971	1972	Total
Capital investment in industrial estates, tourist facilities, shares, and bonds	37	52	33	56	178
Total	37	52	33	56	178
Sources					
Resources of the Industrial Development Company	32	48	28	50	158
State contribution (General Fund - Fundo General)	5	4	5	6	20
Total	37	52	33	56	178

B. Strategy and Policy

Domestically owned capital will play a larger role in the industrialization process.

A policy of decentralization will be followed.

A Programme of Industrial Incentives will be instituted to encourage the establishment of plants in relatively [illegible] areas of the country. For this purpose [illegible] have been defined:

- the metropolitan area of San Juan
- the region of the central mountain range, [illegible] Aguadilla and [illegible]
- the Caribbean coast
- the northern coastal area, excluding San Juan and part of the eastern zone.

These regions have been defined according to the employment needs of manufacturing and the difficulties encountered in establishing firms in each region.

Incentives will be given to those projects considered to be of the utmost importance to Puerto Rico, independently of their geographic location, investment required, and employment offered. The projects include:

- agricultural industrialisation
- the processing of local raw materials
- the production of basic materials which might attract other manufacturing enterprises
- heavy industry
- the diffusion of complex technological "know-how" to local labourers.

The Economic Development Administration has instituted a programme to mobilize domestic capital resources; two aspects are of major importance:

- Incentives will be granted to finance certain initial expenditures
- Credit will be made available with flexible terms.

Particular attention will be given to unemployment, scientific research, and tourist facilities.

By [illegible], [illegible] jobs will have been made available in the industrial sector.

New firms, established with domestic capital, or through Puerto Rican entrepreneurial initiative, will qualify for a $[illegible] grant for each job they directly create.

Particular attention will be paid to increasing competition from the Virgin Islands, Jamaica, and elsewhere.

A campaign, requiring approximately $[illegible].9 million, to promote the sale of Puerto Rican rum will be continued in the United States.

C. Institutions

The Administration of Economic Development (Administración de Fomento Económico) is responsible for promoting industrial development. It will also guide and give incentives to private enterprise to create new industries.

The Industrial Development Company (Compañía de Fomento Industrial), created in 1942, is responsible for financing industrial development and doing scientific and technological research.

The functions of the Industrial Development Laboratory are: (Laboratorio Industrial de Fomento)

- to carry out research into the development of local raw materials and new industrial processes
- to promote research in chemical engineering, biochemistry, organic chemistry, geology, and minerology.
- to diffuse technological information.

The Centre for Mining and Metallurgy (Centro de Mineralogía y Metalurgia) will study alloying methods and new mining techniques.

A Centre for Science and Technology (Centro para las Ciencias y Tecnología) will be established.

The functions of the Institute for the Development of Marine Resources (Instituto de Desarrollo de Recursos Marinos) with the aid of the US Geological Survey are:

- to study marine sedimentation
- to study marine topography, the direction and speed of currents, etc.
- to investigate the possibilities of obtaining minerals from the sea and the commercialisation of fish.

The Puerto Rican Library of Science and Technology (Biblioteca Puertorriqueña de Ciencia y Tecnología) will consist of 1 million volumes. It will use the most modern computer systems to localise information.

III. DEMAND PROJECTIONS AND DATA BASES

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

B. Priority of Sectors

C. Other Sectoral Plans

[illegible]

[illegible] by the end of the Plan period, they will create [illegible] extra [illegible] jobs. The total number of factories in operation will then be [illegible] employed by [illegible] people.

Physical Requirements of Factories

	[illegible]			
	Government	Private Enterprise	Total	Total in existence by [illegible]
Industrial Estates (acres)	[illegible]	[illegible]	[illegible]	[illegible]
Industrial Building (in millions of sq.ft.)	[illegible]	[illegible]	[illegible]	[illegible]

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

VIII. PROBLEM AREAS

IX. PREVIOUS INDUSTRIAL GROWTH

[illegible]

[illegible]

1. [illegible]

A. [illegible]

	[illegible]	[illegible]	[illegible] annual increase
Manufacturing [illegible] capita	[illegible]	[illegible]	[illegible]
Total [illegible] capita	[illegible]	[illegible]	[illegible]
Population	[illegible]	[illegible]	[illegible]
Manufacturing [illegible] millions	[illegible]	[illegible]	[illegible]
Total [illegible] millions	[illegible]	[illegible]	
Manufacturing [illegible] of Total [illegible]	** [illegible]	[illegible]	

Exchange rate: [illegible] pesetas

**from [illegible]: Yearbook of National Accounts Statistics, [illegible]

B. Other Objectives

To improve price-quality relationships.

To attain an equitable income distribution.

To maintain competitiveness in the economy.

To diversify exports.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Investment as a % of total GDP will be increased.

The investment of foreign capital in Spain will be encouraged.

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*Comisaría del Plan de Desarollo: "Plan de Desarollo Económico y Social, 1964 - 1967", Madrid, 1963. 494 pages.

Comisaría del Plan de Desarollo Económico y Social: "Productividad", Madrid, 1964. 268 pages.

SPAIN

Total planned public investment will be [illegible] million over the [illegible]-year period.

Investment priorities will be set according to the following criteria:

- the expected rate of return
- the employment opportunities created
- the effect on the balance of payments
- the effect on the country's backward regions.

Government investment in the manufacturing sector will amount to [illegible]1,[illegible]80 million over the period.

[illegible]. Strategy and Policy

Industrialization will be more dependent on the evolution of agriculture, education, and transport systems.

Distortions in the existing market mechanism will be corrected.

Structural changes in production sectors will be effected to allocate resources more efficiently.

Mergers between firms will be encouraged.

Special attention will be given to the problems of small and medium enterprises.

Complete freedom of production, investment, establishment, etc. will continue to be given to the private sector.

Firms will be encouraged to participate in the State's research and development programs.

Significant efforts will be made to improve education and scientific research.

Imports will increase at 5.5% annually, and exports at 11% annually over the Plan period.

C. Institutions

The financial system will be made sufficiently flexible to attract domestic savings.

The capital market will be improved.

The Institute of Medium and Long-Term Credit (Instituto de Credito a Medio y Largo Plazo) will ensure the efficient use of financial resources.

III. DEMAND PROJECTIONS AND DATA BASES

The National Statistics Institute (Instituto Nacional de Estadistica) will collect new information. This will be done in co-ordination with other data compiling agencies.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Food and Beverages:

- meat: Meat supply will increase [illegible] over the period. $40 million will be invested.
- dairy products: Production will increase to satisfy domestic demand. $35 million will be invested.
- preserved vegetables: Domestic demand will be supplied through domestic production, which will increase from 165,000 tons in 1964 to 266,000 tons in 1967. In addition, exports will increase from 142,000 tons to 236,000 tons. $50 million will be invested.
- preserved fish: Production will increase by 61% and exports by 135%. Production for domestic consumption will increase at a slower rate.
- dietetic products: Domestic demand will increase by 35%. $37 million will be invested in dietetic products and in bakery products.
- sugar: Consumption per capita will approximately double over the period. $52 million will be invested.
- olive oil: Aggregate demand will increase by approximately 39%. A total of $42 million will be invested to increase the production of oils and fats.

[illegible]

[illegible]

[illegible] the [illegible] external [illegible] commerce [illegible]

[illegible] will increase at [illegible] a year, a growth rate which considerably exceeds that of domestic demand. A total of [illegible] million will be invested in [illegible] and non-alcoholic beverage [illegible].

- [illegible] production will increase from [illegible] million will be invested in the manufacture [illegible] products.
- Prepared animal feeds: Investment will [illegible] million.
- Miscellaneous foods: Investment will [illegible]

Investment in food and beverage [illegible] million over the period.

[illegible]	Growth of Output: [illegible] Index 1961 = 1[illegible]	Growth of Output: Average Annual Growth Rate 1964 - 1967	Investment 1964-1967 millions
Cotton	11[illegible]	[illegible]	[illegible]
Wool	11[illegible]	[illegible]	[illegible]
Silk	1[illegible]	[illegible]	[illegible]
Linen	145	7.5%	[illegible]
Hemp	1[illegible]	-	[illegible]
Jute and Spanish grass	128	3.5	
Sisal and Manila hemp	1[illegible]	[illegible].5	[illegible]
Fibers	136	6.5	14
Clothing	214	16.5	33
Hosiery and knitted fabrics	176	12	[illegible]
TOTAL	143	7.5	331

Textile exports will increase by [illegible] between 1961 and 1967.

Leather Products:

Shoes	146	7.5%	17
Tanning	133	6	12
Other leather products	166	11.5%	5
TOTAL	144	7.5%	34

Exports will increase by 250% between 1961 and 1967.

[illegible]

[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]		
Other		
TOTAL		

[illegible]

[illegible]		
[illegible]		
Footwear	[illegible]	[illegible]
Miscellaneous articles	[illegible]	[illegible]
TOTAL	[illegible]	[illegible]

Exports will increase by [illegible] between [illegible] and [illegible].

[illegible]: Exports will increase by [illegible] between [illegible] and [illegible].

Chemicals, Fertilizers and Paper:

	Growth of output ($ millions) 1964	1967	Total investment 1964 - 1967 ($ millions)
Chemicals: organic	614	[illegible]	[illegible]
inorganic	210	263	[illegible]
Fertilizers	114	144	[illegible]
Pharmaceuticals	128	156	[illegible]
Paper	157	184	[illegible]
TOTAL	1,223	1,470	[illegible]

Value of output will increase by [illegible]%.

	Growth of Output ($ millions)		Investment 1964-1967 ($ millions)
	1964	1967	
[illegible]			
[illegible]		[illegible]	[illegible]
Asbestos cement sheeting	[illegible]		
[illegible]	[illegible]		
Ceramics		[illegible]	
Glass [illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]			
Sanitary products		[illegible]	[illegible]
Refractory products	[illegible]	[illegible]	
Plaster	[illegible]	[illegible]	
TOTAL	4[illegible]	[illegible]	[illegible]

Value of output will increase by [illegible]%.

Non-ferrous Metals:

Main serv[illegible]: metal products, electrical equipment and appliances, watches.

Value of output will increase from [illegible] million in 1964 to $[illegible] million in 1967, at an annual rate of [illegible]. A total of $[illegible] million will be invested.

	Growth of Output of Major Products ($ millions)		Investment 1964-1967 ($ millions)
	1964	1967	
Aluminum	28	41	28
Zinc	19	21	5
Copper: blister	17	29	24
electrolytic	42	48	
transformed	88	123	
Lead	14	19	5
TOTAL	208	281	62

Cottage Industries:

Future growth will be realized due, in part, to an investment of $16.6 million. Approximately $165 will be allocated to each of 100,000 production units.

[illegible]

[illegible]

Food:

- Bakery products: The industry will be restructured; the total number of firms in operation ([illegible]) is excessive. Increased domestic demand for biscuits will be supplied by foreign firms, which are far more competitive.

Textiles:

- The industry will be restructured. Co-operation among firms must take place, both in production and in commercialization.

Leather Products:

- Co-operation among firms, modernization, and sales promotion will assure future growth.

Wood and Cork Products:

- Expansion will take place, largely due to co-operation in sales promotion and through improving productivity.

- Cork production requires both restructuring and relocation.

Rubber Products:

- Rubber shoe production will use better quality inputs. Mergers of firms will be encouraged.

Toys:

- Production costs will be reduced.

Chemicals, Fertilizers, and Paper:

- These industries will be restructured, rather than expanded. Production capacity is sufficient to satisfy the next four year's needs.

- Quality will be rigorously controlled.

- Exports will be increased, partly to compensate for the high import requirements.

- Technical studies will be in closer contact with the industry's requirements.

Cement:

- Special market studies are being conducted by the State to analyze the requirements of each region.

Asbestos Cement Sheeting:

- No specific measures will be taken, due to the expansion projected for the future and the efficiency of the firms.

SPAIN

Cement Derivatives:

- Special action will be taken to control quality.

Ceramics:

- Rationalization of production will be carried out, together with product standardisation.
- Quality will be rigorously controlled.
- Supply will adapt itself to changes in demand.

Glass:

- Equipment and installations are already sufficiently modern to ensure a high level of productivity.
- production must increase considerably to satisfy a growing demand.

Refractory Material:

- Installations will be modernised.
- Production will be rationalized.

Plaster:

- Firms will have to pay more attention to problems of costs and quality.

Machinery:

- Productivity must be raised in order to meet foreign competition.
- Structural changes will be made.
- Exports will be increased through:
  - adequate financing of export production.
  - increased trade contracts abroad, particularly by small and medium-sized firms.
  - production in collaboration with foreign enterprises.
- Market studies will be carried out in order to continually adapt supply to the specific requirements of demand.

Iron and Steel:

- The following measures will be applied:
  - Consumption of raw materials and power will be reduced where possible.
  - Labor productivity will be increased.
  - methods, equipment and products will be rationalized and perfected.
  - Quality control will be rigorously enforced.
  - Modern research methods of selection and preparation of raw materials will be introduced.
  - Maintenance and repair services will be organized.
  - There will be greater collaboration between iron and steel firms and national research institutes.

- Market studies will be conducted.
- A Steel Information Centre will be established to promote the utilization of iron.

Aluminum:

- Imports of this metal weigh heavily on the balance of payments, and will, therefore, be reduced.
- Exports will be increased.
- The cost of electric power will have to be lowered to a level comparable to that in Norway, Canada and the USA.

Cottage Industries:

- Improved production techniques will be publicized.
- A new distribution network will be set up to supply raw materials and collect finished products for sale.
- Market studies will be conducted at home and abroad.
- A Cottage Industries Statute (Estatuto de la Artesania) will define the limits of this sub-sector.
- Future growth is dependent upon undertaking the following:

	$ millions
Promotion of artisan training	5.0
Development and creation of co-operatives	0.8
Studies on design and technological improvement	[illegible]
Sales promotion	3.4
Credit	2.0
	12.0

V. PLANNED MANUFACTURING PROJECTS

Non-ferrous metals:

An aluminum plant will be established with an annual capacity of 160,000 tons. Investment will total $25 million. Spain will encourage participation in the financing by multinational aluminum enterprises.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

Overall productivity in manufacturing will increase at an average annual rate of 5.5% over the Plan period.

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The following measures will be taken:

- professional training will be encouraged.
- general education will be improved.
- equipment will be modernized.
- technology will be improved.
- production methods will be rationalized.
- capital and labor mobility will be increased to ensure efficient resource allocation.

Special emphasis will be placed on the study and application of:

- management and organization techniques
- technology.

Special emphasis will be placed on:

- diffusing information (Centres, short courses, seminars, publications).
- conducting research in a systematic manner.
- training people in scientific and technological fields.
- providing adequate information on the availability of jobs and the supply of skilled and unskilled labor.

Fiscal policy will be used:

- to stimulate the quest for profits.
- to permit rapid and anticipated debt repayment.
- to favor private savings and self-financing by enterprises.
- to ease trading activities.
- to maintain income differentials where justified and where they may have a stimulating effect.
- to favor research, by not increasing the costs of acquiring the necessary material.
- to orient demand through the use of sales taxes, toward high productivity activities.

Tariff policy will be used to grant protection only to infant industries.

Commercial policy will be used:

- to permit a smooth flow of imports.
- to maintain a high degree of competition in markets.
- to promote standardization.
- to create an efficient quality control mechanism.
- to improve information by holding fairs and exhibitions.
- to promote the improvement of the transport system.

Productivity in various manufacturing industries, in terms of the average value added (GDP), per worker man-hour is estimated as follows:

Industry	Productivity (average $ value added per worker man-hour)	Employees (total number of)	Employees Per Establishment (average number)
Food Industries:			
Preparation of whales	1.40	130	65
oils and fats	1.30	13,500	12
sugar factories and refineries	1.00	27,000	540
chocolates	0.90	6,200	[illegible]
grain mill products	0.80	16,500	13
coffee roasting	0.80	22,000	12
canning and processing of fruits and vegetables	0.60	37,000	53
pastes and industrial flour	0.50	100	6
All Food:	0.90	122,000	21

(Degree of correlation between size of establishments and productivity: r = 0.75)

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Industry	Productivity (average $ value added per worker man-hour)	Employees (total number of)	Employees Per Establishment (average number)
Beverage Industries:			
malt liquors and malt	1.60	[illegible],700	[illegible]
alcoholic liqueurs	1.50	7,500	5
industrial alcohol	1.50	1,500	4[illegible]
wine industries	1.10	4,800	6
mineral water (medicinal)	0.50	800	16
soft drinks and carbonated waters	0.55	15,000	40
All Beverages	1.10	38,000	6

(Degree of correlation between size of establishment and productivity: r = 0.42)

Industry	Productivity	Employees	Employees Per Establishment
Textiles Industries:			
silk, rayon, and synthetic fibers	0.70	24,800	63
diverse fibers	0.70	41,900	143
wool	0.60	43,000	86
cotton	0.50	130,000	113
wool washing and preparation	0.50	15,700	105
regenerated fibers	0.30	12,000	60
All Textiles	0.60	237,000	100

(Degree of correlation between size of establishment and productivity: r = 0.39)

Industry	Productivity	Employees	Employees Per Establishment
Wood and Cork Industries:			
plywood	0.70	5,000	38
cork industries	0.60	6,100	23
wood processing	0.50	100,600	4
casks and barrels	0.40	1,800	5
brushes	0.40	1,800	8
All Wood and Cork	0.50	115,300	5

(Degree of correlation between size of establishment and productivity not available)

Industry	Productivity (average value added per worker man-hour)	Employees (total number of)	Employees Per Establishment (average number)
Construction Materials, Glass, and Ceramics Industries:			
asbestos cement	0.80	2,800	133
glass	0.60	15,900	151
refractories	0.50	6,300	54
abrasives	.50	1,400	[illegible]
glass products	0.40	6,500	[illegible]
porcelain, china	.40	9,400	42
stone	0.30	10,000	[illegible]
construction materials (structural clay products)	0.30	38,300	7
tiles	0.30	6,400	55
cement products	0.30	23,000	8
All Construction Materials, Glass, and Ceramics	0.40	118,700	12

(Degree of correlation between size of establishment and productivity: r = 0.75)

Industry	Productivity	Employees	Employees Per Establishment
Chemical Industries:			
basic chemicals	1.40	58,800	35
pharmaceuticals	1.40	21,000	28
photographic materials	1.30	1,300	325
artificial and synthetic fibers	1.20	11,100	1,388
distilling of natural resins	1.10	1,000	14
matches	1.10	820	164
gas production and distribution	1.00	5,300	140
plastic goods	1.00	14,600	20
carbon hydrates and glue	0.90	2,300	11
rubber products	0.90	21,800	37
vegetable extract	0.80	500	36
wax and paraffin	0.70	1,900	5
ice production	0.50	4,800	4

SPAIN

Industry	Productivity (average $ value added per worker man-hour)	Employees (total number of	Employees per Establishment (average
Chemical Industries (cont'd.)			
Dye	0.4[illegible]	3,[illegible]	[illegible]
pyrotechnicals	.3[illegible]	[illegible]	[illegible]
All Chemicals	1,[illegible]	[illegible]	[illegible]

(Degree of correlation between size of establishment and productivity: r = .3[illegible])

Industry	Productivity	Employees	Employees per Establishment
Metal Products Industries (including jewels and trinkets)			
All Metal Products	[illegible]	[illegible]	[illegible]

Degree of correlation between size of establishment and productivity not available.

VII. ORGANIZATION AND METHODS OF PLANNING AND IMPLEMENTATION

Plan Commissions for each major industry will:

- study investment requirements.
- collect information on future requirements.
- establish inventories of projects in each industry.
- set investment priorities.

The Plan will be reviewed periodically throughout its duration.

VIII. PROBLEM AREAS

Industry is characterized by enterprises which are often too small to operate efficiently.

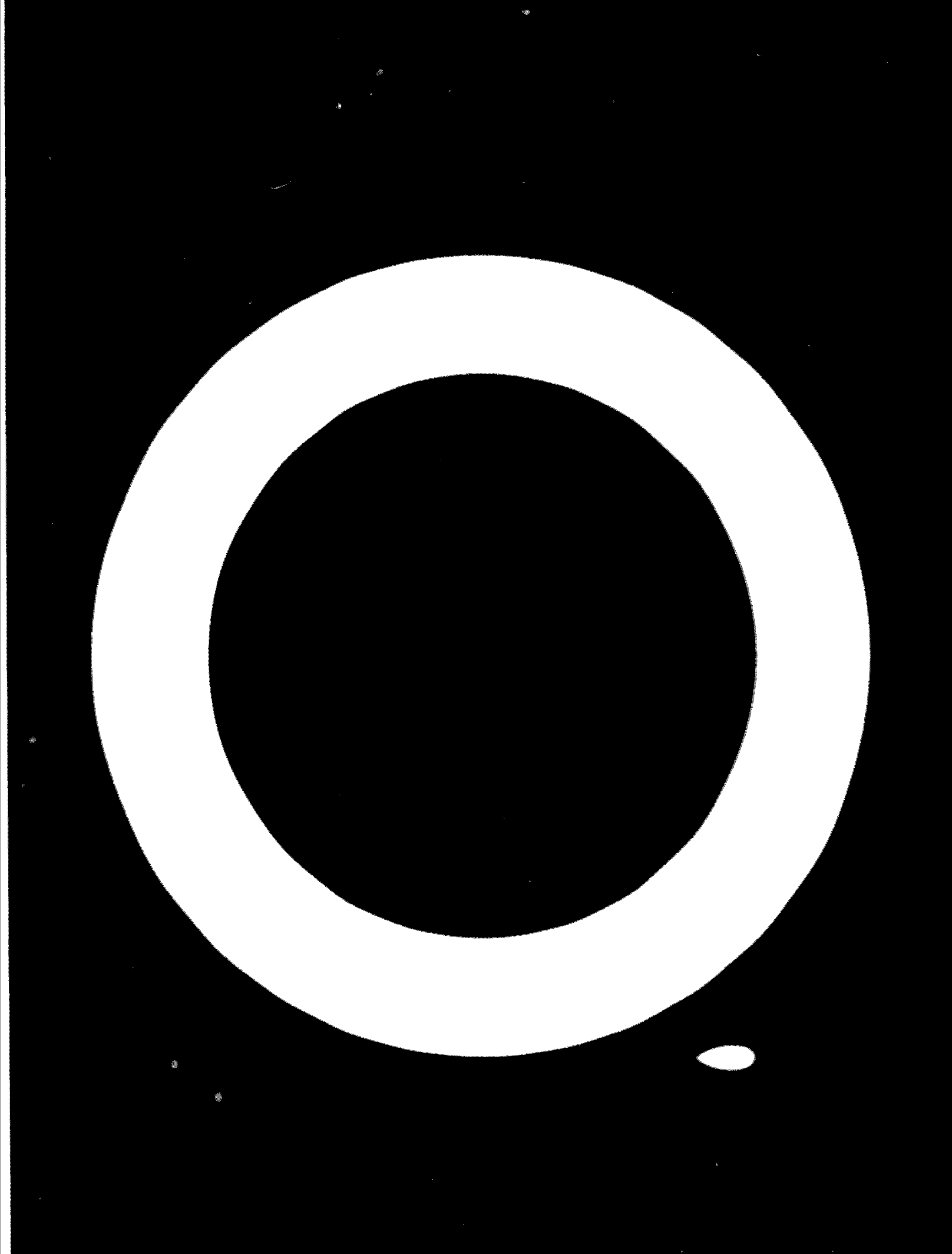
Productivity is generally low.

Exports are insufficient.

Income distribution represents a problem.

The active population is [illegible]
of the total.

IX. PREVIOUS INDUSTRIAL GROWTH



[illegible] REP.

SUMMARY OF THE 1964/65 - 1968/69 INDUSTRIAL DEVELOPMENT PLAN OF [illegible] *

I. GOALS AND OBJECTIVES

A. Planned Growth:

	Average 1960/62	[illegible]	[illegible]	Average Annual Increase [illegible]
Manufacturing GDP/capita	$ [illegible].15	$ [illegible]	$ 16.[illegible]	[illegible]
Total GDP/capita	$55	$8[illegible]	$127	4.[illegible]
Population (000)	9,400	11,[illegible]00	14,1[illegible]	[illegible]
Manufacturing GDP ($ millions)	20	70	238	14.[illegible]
Total GDP ($ millions)*	518	[illegible]30	1,78[illegible]	[illegible]
Manufacturing % of Total GDP	4%	7.5%	13%	

Exchange rate: US $1 = 0.357 East African Pounds (7.14) Tanzania Shillings

* Includes estimated non-monetary GDP of $168 million (for 1960/62), $200 million (for [illegible]), and $[illegible] million (for 1980).

B. Other Objectives

The Plan is the initial part of a long-term perspective plan, whose aim is to bring about changes in the economic and social structure, favorable to balanced and rapid future growth.

The long-term objectives are:

- to increase total monetary and subsistance GDP per capita from $55 in 1960/62 to $127 in 1980.
- to become fully self-sufficient in trained manpower requirements.
- to raise the average life-expectancy of the people from the current 35 to 40 years to 50 years by 1980.

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* Five-Year Plan for Economic and Social Development, 1964 - 1969; Dar-es-Salaam, 1964 - 1967. 151 pages.

The immediate objectives of the 1964 - 1969 Plan are:

- to foster the development of the rural, agricultural sector so that the increase in demand of the peasant farmers, who constitute 85% of all consumers, will stimulate the expansion of non-agricultural sectors.
- to expand the network of transport, marketing and other distributive services, in order to progressively monetize the subsistence sector.
- to establish an industrial base for the economy, starting with the domestic manufacture of consumer goods.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Planned Investment in Development (1964/65 - 1968/69)
($ millions)

	Public Sector	Private Sector	Total
In Manufacturing	36	109	145
Processing Industries	(15)	(15)	(30)
Manufacturing "	(21)	(94)	(115)
In the Whole Economy	365	325	690
Investment in Manufacturing and Processing as % of Total Investment	10%	33%	21%

Private sector investment includes $55 million in loans from the Government to Para-Statal organizations.

Financing the Planned Investment in Development

	Government and Para-Statal	Private	Total	%
Domestic Resources	116	214	330	48
Foreign Resources	304	56	360	52
	420	270	690	100

4. Strategy and Policy

The Government's industrial development policy is conditioned by two main considerations:

- the size of the domestic market for manufactured consumer goods.
- the availability of capital.

An increasing part of the domestic market for manufactured consumer goods will be reserved for Tanzanian industries; substituting for imports will be encouraged, not only for those from overseas, but also for those imports from other East African Common Market countries, since:

- it is considered that the East African Common Market, although contributing to the industrial development of the region as a whole, has not led to an equitable distribution of this development among the countries within the region.
- three quarters of Tanzania's increasing trade deficit with her Common Market partners consists of imported manufactures.

The establishment in Tanzania of a relatively large number of economically viable processing and manufacturing industries to produce import-substituting consumer goods is, therefore, envisaged, on the basis of a study of projected domestic demand by 1970.

The Government will rely primarily on the private sector to undertake new investment in manufacturing.

To encourage the private sector to co-operate in the industrial development effort, the Government will make the following provisions:

- provisions of a legal, technical and fiscal nature consisting of:
  - guarantees for private investment and the repatriation of capital.
  - the provision of adequately equipped industrial sites.
  - protection and assistance to infant industries by appropriate external tariffs and accelerated depreciation and investment allowances.

- provisions of an economic nature, by which the Government will make available economic surveys and feasibility studies of the country's industrial potential, to likely investors.

- provisions of a financial nature, by which the Government will participate to a varying degree in financing certain enterprises, through the Government-owned Tanganyika Development Corporation.

Public sector policies for the achievement of the targets will be directed toward guiding the development effort and organizing the necessary supplies of manpower, finance and materials.

A significant development of industries producing intermediate and domestic goods is not planned at present, as the domestic market is considered too small.

C. Institutions

An Industrial Studies and Development Centre will be set up to:

- advise on industrial policy and organisation.
- assist in surveys concerning the optimal utilization and disposal of Tanzania's raw materials and natural resources.
- undertake the preparation of feasibility studies and the formulation of industrial projects and their implementation.
- provide extension services to existing industrial concerns.
- advise on the regional aspects of industrial projects, taking into account the inter-relationship of the economies of the East African countries.

A National Institute of Productivity will also be established.

III. DEMAND PROJECTIONS AND DATA BASES

The Plan was formulated in the following three stages:

1) The long-term social and economic objectives for 1980 were determined and analysed; this involved:

   - the examination of past rates of growth in the economy, the diagnosis of the main obstacles which had been encountered, and the prescription of structural changes to overcome them.
   - the testing of higher rates of growth against human, material and financial resources likely to be available, and against the conditions likely to be encountered in world markets.

2) Those intermediate stages were determined which were likely to be achieved by 1970, toward the realisation of long-term targets, especially the production of the various sectors; this involved the following activity:

   - sectoral production was tested against expected demand, both in domestic and foreign markets.
   - for the industrial sector, various assumptions were made concerning the improvement of the existing East African Common Market to promote a better distribution of industrial activity within the area.
   - the financial and manpower resources for achieving the 1970 production targets were computed, leading to the formulation of policies for securing the co-operation of the private sector on the one hand, and for seeking foreign assistance on the other.

3) Specific and co-ordinated development programs were then formulated within the broad framework of the long-term objectives and the intermediate stages likely to be achieved by 1970.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Output Targets for 1970

	Output: No. of Units	Output: Unit		Value Added ($ 000)	% of 1960/62 Average
Processing:					
- coffee curing	49	tons	(000)	475	170
- sugar refining	105	"	"	4,200	300
- cashew nut shelling	6	"	"	2,100	inf.
- grain milling	230	"	"	4,200	150
- edible oils extraction	17	"	"	645	355
- vegetable oils	10	"	"	560	210
- sawmilling	n. a.	"	"	4,760	215
- cotton ginning	88	"	"	6,025	240
Sub-total				22,965	235
Handicrafts:				3,025	130
Food, Beverages and Tobacco Manufactures:					
- bakery products	15	"	"	390	
- fish products	n. a.	"	"	280	
- fruit and vegetable canning	2	"	"	170	
- meat packing	14	"	"	1,765	
- Hydrogenated oil	4.3	"	"	225	
- beer	3,000	gals.	"	1,120	
- soft drinks	1,680	"	"	250	
- cigarettes	4,300	lbs.	"	1,710	
Sub-total				5,910	
Textiles, Clothing, Shoes:					
- sisal ropes and twine		-		250	
- bags (jute and sisal)	10	tons	"	840	
- fishing nets	150	"		200	
- cotton and artificial fabrics	32,000	sq. yds.	"	4,200	
- blankets and coverlets	n. a.			700	
- knitted clothing	n. a.			195	
- tailored clothing	n. a.			1,960	
- shoes	4,000	pairs	"	895	
Sub-total				9,240	

	Output No. of Units	Unit	Value Added ($ 000)
Wood and Paper Products:			
- sisal paper pulp	22	tons (000)	2,240
- artificial wood	n. a.		335
- plywood and veneer	2.5	sq.ft. "	85
- woodworking	n. a.		1,960
- printing and packaging paper	n. a.		1,120
- matches	570	boxes "	225
Sub-total			5,965
Chemicals:			
- oil refining	350	tons (000)	1,680
- industrial gas	11	cu. ft. "	250
- superphosphate	40	tons "	280
- paints and varnishes	3.5	" "	615
- plastics	2.42	" "	700
- insecticides, fungicides	1	" "	310
- soaps and detergents	20	" "	840
- motor vehicle tubes, tires	4.35	" "	1,400
Sub-total			6,075
Building Materials, Glass Products:			
- cement	250	" "	2,520
- glass products	3.5	" "	280
- ceramics, bricks, tiles	90	" "	645
- asbestos products	2.5	" "	170
- enamel holloware	n. a.		85
Sub-total			3,700
Metal Products:			
- steel rolling and galvanisation	20	" "	1,000
- steel tubing	8.3	" "	755
- aluminum rolling	9.0	" "	2,520
- stamped aluminum goods	1.2	" "	505
- iron mongery	3.4	" "	505
- wire and wire-netting	4.0	" "	335
- nails and joinery	2.5	" "	365
- metal furniture	1.3	" "	310
- hand tools	0.3	" "	255
- metal containers	7.0	" "	755
Sub-total			7,305

	Output		Value Added
	No. of Units	Unit	($ 000)
Motor Vehicle Repair	n. a.		2,015
Batteries and Accumulators	n. a.		250
Land Rover and Lorry Assembly	n. a.		2,240
Assembly and Manufacture of Radio Receivers	n. a.		1,400
Grand Total			69,840

B. Priority of Sectors

Highest priority will be given to those large-scale industries which require the whole East African market for economic viability and which have been allocated to Tanzania under a Trade Agreement with Kenya and Uganda. These include Land Rover and lorry assembly, the manufacture of motor vehicle tires and tubes, and the assembly and manufacture of radio receivers.

High priority will also be given to those industries which are economically viable on a domestic basis, and for which an adequate market exists, or will soon exist in Tanzania, as a result of import-substitution policies.

The processing and handicrafts industries, which are now run mostly within a co-operative framework and whose activities will be expanded under the Plan, will receive the lowest priority.

C. Other Sectoral Plans

V. PLANNED MANUFACTURING PROJECTS

Public sector projects include all of those in which the Government plans to invest, whether they are to be implemented by the Government or by the private sector. They are of three general types: projects in the processing industries; projects in the manufacturing industries; and, projects in the handicrafts industries. Planned Government investment in all of these projects during 1964/65 - 1968/69 totals $35.8 million.

Public Sector Projects in the Processing Industries

Projects to be financed through the National Co-operative and the Development Bank, but to be carried out mainly by co-operative societies and the private sector:

	Investment [illegible]
Sisal mobile decorticators and drying racks	[illegible]
Sisal baling presses and brushing machines	[illegible]
Tobacco drier	[illegible]
Tobacco barns and flues	[illegible]
Pyrethrum driers	[illegible]
Coir spinning and coir decorticating plant	[illegible]
Central coffee pulperies	[illegible]
Coffee curing works	[illegible]
Instant coffee factory	[illegible]
Cashew-nut processing plants	[illegible]
Cocoa fermentaries	[illegible]
Co-operative share in tea processing	[illegible]
Co-operative processing of citrus fruits	[illegible]
Rural tanneries	[illegible]
Musoma ghee, butter and powdered milk plants	[illegible]
Pasteurization and milk reconditioning plant (Dar-es-Salaam)	[illegible]
Milk producers' co-operatives	[illegible]
Mobile abattoirs	[illegible]
Poultry processing plant	[illegible]
Fisheries refrigeration and processing plants	[illegible]
Cardamon driers	[illegible]
Rubber processing factories	[illegible]
Co-operative share in sawmills	[illegible]
Co-operative share in milling activities	1,680
Sub-total	7,000

Projects to be financed and implemented by the Tanganyika Development Corporation:

Tea scheme (Bukoba)	1,120
Soluble coffee factory	335
Cashew-nut shelling plants	840
Northern dairies milk processing plants	55
Sugar plantation and mill	6,050
Sub-total	8,400

	Investment ($ 000)
Ministry of Industry Programs:	560
Total Public Sector Investment in Processing Industry Projects:	15,960

Public Sector Projects in the Manufacturing Industries

To be financed and implemented by the Tanganyika Development Corporation:

	Investment ($ 000)
Motor vehicles and assembly plant	28
Lorry assembly plant	56
Radio receiver assembly	112
Wire-drawing plant	280
Quality textiles	5,602
Bags	700
Shoes	280
Cement	560
Asbestos	70
Glass	140
Ceramics	280
Sisal, paper and pulp mill	5,602
Oil refinery	1,400
Fertilizer plant	1,400
Motor tire factory (to be supplied with rubber from Kilombero Valley Plantation)	1,400
Small-scale industries, general	560
Contingencies and unallocated reserves	1,830
Total Public Sector Investment in Manufacturing Industry Projects:	19,600

Public Sector Projects in the Handicrafts Industries

To be financed through the National and Co-operative Bank:

	Investment ($ 000)
Various projects	196
Total Public Sector Investment in Handicrafts Industry Projects:	196

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

The administrative machinery for planning and implementing development will be rationalized and strengthened, since the availability of foreign financial aid (expected to finance 80% of the planned public sector investment) will be conditional upon the presentation of carefully formulated projects.

A Directorate of Development and Planning, under the President's direct authority, has been established to:

- formulate, direct and co-ordinate the over-all social, economic and financial policies.
- control the proper and timely execution of the Plan, review its progress, and initiate remedial action whenever necessary.
- formulate Government policy in respect of private investment, both foreign and domestic, and to define the conditions of Government assistance to the private sector.

The Directorate is intended to centralize the decision-making process with respect to development policy and to strengthen the chain of command within the Government.

A National Economic and Social Council (NESC), consisting of Cabinet Ministers, representatives of employers and employees' organizations, and leading personalities from the private sector, will be established. The NESC, presided over by a Minister of State from the Directorate and serviced by the Directorate's staff, is expected to ensure the active co-operation of all sectors of the nation in formulating and implementing development programs.

As the Ministries and ParaStatal agencies will be called upon to administer a larger volume of investment projects and programs than in the past, they will be re-organized in order to achieve greater financial discipline and enhanced efficiency.

Until such time as the full requirements of trained manpower can be met from the country's own resources, Tanzania will have to rely on technical assistance from abroad.

The formulation of the 1964 - 1969 Plan was the result of close collaboration and co-operation between the various Government Ministries, Regional Development Committees, the Chambers of Commerce, and the National Union of Tanganyika Workers.

VIII. PROBLEM AREAS

IX. PREVIOUS INDUSTRIAL GROWTH

Manufacturing and processing industries contributed a little more than 4% of GDP in 1960 - 1962. They have been growing at the rate of 5.8% annually.

SUMMARY OF THE 1966 - 1970 INDUSTRIAL DEVELOPMENT PLAN OF TOGO*

I. GOALS AND OBJECTIVES

A. Planned Growth

	1965+	1970	Average Annual Increase
Manufacturing GDP/capita	$ 6.90	$ 10.50	8.8 %
Total GDP/capita	$ 88	$104	3.4 %
Population (000)	1,700	1,900	2.3 %
Manufacturing GDP ($ millions)	11.7	20.0	11.3 %
Total GDP ($ millions)	150	198	5.7 %
Manufacturing % of Total GDP	7.8 %	10.1 %	

Exchange rate: US $ 1 = 247 CFA Francs.

+ GDP and population figures used in the Plan were estimates; the actual population reported for 1965 was considerably lower.

B. Other Objectives

- to increase economic independence
- to increase exports of manufactured goods
- to earn enough foreign exchange to pay for 85 % of imports by 1970 (63 % in 1963)
- to make more efficient use of the relatively abundant factors of production, such as labour
- to increase the number of jobs available
- to train labour
- to improve the infrastructure.

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* Plan Quinquennal de dévelopement, 1966 - 1970, Paris, Simag, 1965. 221 pp.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

	Total Planned Investment 1966 - 1970 ($ millions)	% of total
Private	34	30
Public	81	70
	115	100

Total private investment will be, in part, composed of:

	$ millions
Foreign donations (including Catholic and Protestant missions)	3.2
Foreign private capital (of which $ 700,000 is in industry)	1.5
Credit (the Togo Development Bank will play a major role)	2.5
Total :	7.2

Total public investment will be composed of:

	$ millions
Loans (including foreign)	18.4
Foreign donations	13.6
Public funds	49.0
Total :	81.0

Planned investment in plant and equipment in the industrial sector during the 1966 - 1970 period appears to total roughly $ 9 million, or about 8 % of the total planned investment.

B. Strategy and Policy

The Government will take action

- to promote industrial projects
- to improve production conditions
- to participate in certain enterprises
- to carry out studies of the available natural resources and the feasibility of projects.

C. Institutions

The domestic rate of saving must be considerably increased.

A Togolese Development Bank will be established to act in close cooperation with the Department of Industry. Its main functions will be:

- to study investment possibilities, particularly in industry and commerce
- to mobilize both domestic and foreign financial resources
- to promote industries with priority for development
- to grant firms technical assistance, particularly to solve organizational and management problems.

Its financial resources will be composed of its own social capital (a minimum of $ 1.2 million), savings on deposit, loans and donations by other organizations, and both domestic and foreign loans.

III. DEMAND PROJECTIONS AND DATA BASES

TOGO

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

B. Priority of Sectors

Planned investment will be made mostly during the first 3 years of the Plan to complete textile and brewery projects already begun.

C. Other Sectoral Plans

V. PLANNED MANUFACTURING PROJECTS

Projects already in the process of realization include the following:

Textiles - A spinning, weaving and printing factory will start production at Dadja in 1966. It will have a capacity of 6 million metres per year, and employ 500 workers. The investment involved is $ 3.6 million.

Breweries - A plant was installed in 1965 at Agoué vé. Its expected annual production will be 10,000 hectoliters of beer plus 5,000 hectoliters of soft drinks and non-alcoholic beer. The initial investment was $ 750,000 of which $ 500,000 is social capital ($ 125,000 owned by the State). Forty workers will be employed, including four foreigners.

Planned expansions of existing production capacity include the following:

Phosphates - The Compagnie Togolaise des Mines du Bénin (C.T.M.B.) will increase its capacity to 1,200,000 tons per year as of 1966. The State will increase its participation in the company.

Palm oil - An existing plant will be renewed at a cost of $ 44,000 as part of an agreement signed with the European Economic Community. Additional equipment will be acquired at a cost of $ [illegible]. The company is expected to improve its financial position and attain economies of scale as [illegible] as new plantations start yielding their [illegible] (about 19[illegible]).

Starch - The starch factory at Ganavé has benefited from the supply of gari roots by [illegible], and from favorable foreign markets. [illegible] capacity will, therefore, be doubled to [illegible] tons per year. The investment required is $ 425,000, which will, in part, be covered by the State's increased ownership of the [illegible] social capital. Forty new jobs will be created.

Printing - The recently established "Editions du Togo" has been equipped with machinery from West Germany. Further equipment will be acquired at a cost of $ 290,000.

Projects which will, or may, be started and completed during the 1966 - 1970 Plan period include the following

Meat Processing - A slaughter house and cold storage rooms will be built at Lomé with the support of the French Fund for Aid and Co-operation (Fonds Francais d'Aide et de Co-opération). The investment required is $ 1 million.

Distilling - The installation of a distillery must bring the Government more revenue than the loss of tax proceeds ($ 1 million). A distillery could be operated at Mango, with imported raw material, until the production of sugar cane from the Oti plains becomes sufficient. The investment required is $ 304,000, in which the State participation will be $ 125,000. The Plant will employ 26 workers.

Coco-fibre treatment - A plant will be established, on an experimental basis. Fibres have hitherto been used as fuel, but are now to be exported as twisted thread, in bales, or as floor mats. The initial production will be 100 tons per year. The cost of the factory is estimated at $ 122,000, and it will employ 10 workers.

[illegible]

[illegible]

[illegible] expected to be [illegible] tons of cement per year. It is, however, dependent upon the completion of the new [illegible] of [illegible]. The [illegible] investment [illegible] $ [illegible] part $ [illegible] covered by the [illegible] State participation [illegible] $ 1[illegible].

[illegible] which studies are being made, or will be made, to analyse the prospects of establishing them [illegible]ude

[illegible] - New products and new forms of packaging will be studied by the French Fund for Aid and Co-operation (Fonds Français d'Aide et de Coopération).

Light mechanical goods - (copper products, nails, agricultural tools, iron smithery, household articles, metallic furniture). Domestic demand can be satisfied by the establishment of small firms.

Phosphates - Fertilizer production might be further developed to help satisfy both domestic and world agricultural needs.

Others - a plant to produce plastic goods

an enamel factory

the manufacture of clothes; while difficult at the moment, this might be diversified later to include mattresses, cushions, etc.

> shoes and sandals made of either leather or plastic could be produced by the factory at Lomé.

Further studies will be made in industries which the Government should promote and participate in their establishment, including bricks, distilleries, and pharmaceutical products.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

The Plan will be executed through the country's general and technical administrative systems.

The functions of the Department of Industry (Direction de l'Industrie) will be

- to study projects which might be realized, either by the State or by private individuals
- to organise the area around ports for industrial purposes, with the collaboration of an Urbanization Committee
- to re-examine tariff policy in order to reduce its unfavourable effects on industry
- to act against dumping by other countries
- to support the industrial section of the Chamber of Commerce
- to organize traineeships
- to diffuse technical and financial information
- to organize conferences and seminars
- to promote meetings with neighboring countries in order to obtain access to wider markets.

The new Togolese Development Bank will act in close cooperation with the Department of Industry.

2000

A National Research Institute (Institut National de Recherche) has been created to study the natural resources available and the feasibility of certain projects.

VIII. PROBLEM AREAS

The industrial sector, with the exception of phosphates, is still in an embryonic stage. This is mainly due to:

- the lack of cheap energy
- the lack of new materials
- the small domestic market
- the lack of entrepreneurship
- the high cost of importing equipment
- the lack of trained personnel.

Capital is often considered to be a scarce factor of production. Yet, in reality, it is almost always available when the expected rate of return on an investment is particularly high.

IX. PREVIOUS INDUSTRIAL GROWTH

Very little industrial development has taken place. Certain complexes have been established, but there is little exchange between industries. The fastest growth rates have been registered in the case of phosphates and starch.

SUMMARY OF THE 1969-1973 INDUSTRIAL DEVELOPMENT PLAN OF TRINIDAD AND TOBAGO *

I. GOALS AND OBJECTIVES

A. Planned Growth:

	1968	1973	Average Annual Increase
Manufacturing GDP/capita	$127	$149	3.2%
Total GDP/capita	$750	$850	2.5%
Population (000)	1,020	1,110	1.6%
Manufacturing GDP ($ millions)	130	166	5.[illegible]%
Total GDP ($ millions)	765	945	4.3%
Manufacturing % of Total GDP	17%	18%	

Exchange rate: US $1 = Trinidad and Tobago $2

B. Other Objectives:

To diversify the production structure in order to make the economy less dependent on the petroleum sector.

To shift the curve of investment decisions from foreign controlled to locally controlled institutions.

To eliminate structural unemployment.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

The gross capital formation planned for the whole economy for the 1969 - 1973 period is $893 million. This will be provided by:

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* Government of Trinidad and Tobago: "Draft: Third Five-Year Plan, 1969 - 1973", Trinidad, 1968. 446 pages

	1969-1973 ($ millions)	% of Total
Net national savings	280	32
Net foreign savings (= Balance of payments deficit on current account)	173	19
Depreciation provisions	440	49
Total	893	100

Public sector expenditures will total $ 188 million over the period. The sources of finance will be as follows:

	1969-1973 ($ millions)	% of Total
Public sector savings	67	
Capital receipts and other informal borrowing	40	
Uncovered gap	10	
Total Internal Finance	117	62
External Finance (including loans and grants)	71	38
Total	188	100

Seventy per cent of the total public sector expenditures will be for "economic" purposes, and thirty per cent for "social and other" purposes.

Public sector expenditures in industry will amount to $ 11 million (or 6 %) of the total of $ 188 million. This will include:

- a $ 7.5 million loan to industry (and hotels) through the Industrial Development Bank,
- a $ 1 million investment in the development of industrial estates, for light industry,
- a loan and equity participation in industries,

- feasibility studies,

- the construction of industrial estates and training in factory skills,

- technical assistance.

B. Strategy and Policy

Industrial development will be export-oriented, both toward the Caribbean Free Trade Area and world markets.

Training will be carried out in export marketing techniques.

Specialized export houses and export companies will be set up.

An organization will be established to set, and enforce, standards.

Distinctive Trinidad and Tobago styles and designs of existing products will be developed.

The following will also aid in the drive for increased exports:

- the Trade Promotion Activity Council

- the new Export Promotion Department of the Ministry of Industry and Commerce

- the revision of the Export Allowance, according to the Fiscal Review Committee's findings.

- an export award, recently instituted by the Prime Minister.

Efforts will be made to maximize the impact of industry on the economy, through a greater integration of the manufacturing sector with the rest of the economy.

The development of local raw materials will be furthered by the Industrial Research Centre of the University of the West Indies.

An Industrial Research Centre and Standards Testing facilities will be established.

Industrial Programming on the basis of interrelated complexes is essential, for integration is a rarity (particularly in the basic materials industries).

Efforts will be made to lower the marginal propensity to consume imported goods rather than domestic ones.

Technological research will be undertaken to explore possible economic uses of hitherto unutilised factors of production.

Greater domestic public and private participation in industrial financing will be encouraged to reduce the flow of profits and interest out of the country.

Foreign capital will continue to play an important role in providing technological and management know-how, markets, and investment funds.

Fiscal policy incentives will be revised according to the suggestions made by the Fiscal Review Committee, and efforts will be made to harmonize fiscal incentives among Commonwealth Caribbean countries.

Tariff protection will be granted to certain industries for 5 years, subject to price and quality controls.

Solutions to employment problems will be obtained by:

- increasing exports of labour-intensive products, including garments, handicrafts, electronics, and furniture.

- establishing industrial complexes to create linkages with the rest of the economy. Both direct and indirect employment could then be maximized and capital saved.

Only efficient plants will be encouraged.

C. Institutions

An Institute for Management and Administration Studies will be set up. It will complement the work of the Department of Business Studies and Public Administration of the University of the West Indies.

The Industrial Development Corporation (IDC) will continue to sponsor the Productivity Centre and to provide technical assistance to manufacturers.

The IDC will continue to operate its Industrial Loan Fund, until the new Industrial Development Bank is set up, to provide medium and long-term investment finance.

The government will also be prepared to:

- make financing available to industrial producers
- enable feasible industrial activities to be undertaken
- invest in needed industries, whenever private investment cannot be obtained.

Monetary and fiscal policies will be used to encourage investment of local financial resources.

The creation of locally-owned financial institutions will be encouraged.

The local ownership of shares in productive activities will be promoted.

III. DEMAND PROJECTIONS AND DATA BASES

Projections are given for the main economic magnitudes, as well as for individual agricultural and industrial products.

Projections were made on the basis of the following assumptions:

- population will increase at 1.6 % per annum
- crude oil production will remain constant
- a 5 % growth rate will be achieved by assembly industries, textiles and garments, food processing and building materials.
- the terms of trade will remain constant
- there will be a major construction boom
- hotel capacity will double.

All projections are made in terms of 1968 prices.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Sector	1968-1973 Average Annual Rate of Growth
Food processing (including alcohol and tobacco)	7 %
Assembly industries	7 %
Building materials	8 %
Textiles and garments	8.5 %

The garment industry will expand between 1969 and 1973, in terms of both investment and employment, due particularly to demand from North America. Also, the possibility of creating an integrated textile and garment industry in the Caribbean would offer employment to an extent of 10,000 people in the area.

B. Priority of Sectors

C. Other Sectoral Plans

Possible basic materials industries include:

- paper	- cement
- plastics	- wood
- glass	- fuels
- rubber	- industrial chemicals
- leather	(alkalies, chlorine, sulfuric acid)

The following new basic industries, centered on caustic soda, could be established:

	Annual Production	
Caustic chlorine	54,000 47,500	tons NaOH tons Cl
Caustic soda by Solvary process	146,000	tons
Sodium carbonate	220,000	tons
Glass	25,000	tons
Paper	124,000	tons
Leather tannery	15,000	hides

The establishment of different types of petro-chemical industries is dependent on whether:

- natural gas will be discovered in commercial quantities.
- oil refineries will expand.
- access to US, UK, EEC and Latin American markets can be obtained.

V. PLANNED MANUFACTURING PROJECTS

Assembly production:

There is great scope for "deepening" of the new motor car assembly industry through local or Caribbean production of:

- tires and other rubber products
- cotton, and products of the petroleum industry
- hardboard, sisal and other fabric material
- glass, paint
- steel.

There is scope for the assembly of electronic products for re-export to North America, particularly since this operation is highly labour intensive.

Textiles and garment production:

Two new plants with an annual capacity of 72,000 dozen shirts valued at $ 2 million will start producing for export in 1969.

Food processing:

An instant coffee plant will start production in mid 1969, with an output of 300,000 pounds.

Two pork processing plants will start production in 1969. Their combined output will be 54 million pounds of meat per year.

Expansion will take place in the processing of flour, quick frozen fish and vegetables, and the production of chocolate flavoured malt drink powder.

Building materials and hardware:

Work is to start on the construction of a steel [illegible] and produce re-rolling bars. Expected output is 8,[illegible] tons per [illegible].

A feasibility study is being made on the production of wall[illegible] from bagasse.

A plant producing 2 million filament bulbs a year will start operating in [illegible].

Natural gas based petro-chemicals:

Two alternatives are possible:

- expand the present production capacity of fertilizer output by building new plants; or,
- establish a complex producing nitric acid ammonium nitrate, urea and resins. Total investment required is $25 million.

Petroleum based petro-chemicals:

A naphtha steam cracking unit, primarily concerned with ethylene, will be built. An output of 250,000 tons a year is envisaged. Its capital cost will be $12 million.

Industrial Estates and Zones:

An Industrial Estate will be constructed at Point Lisas. The company, which has just been created, will build a deep-water harbor and an Industrial Estate at a cost of $8 million. Preference will be given to the location of export-oriented industries, such as petro-chemicals, in this Estate. Although this Estate is primarily a private sector project, the Government will participate in it.

The industrialization of a Zone at Piarco Airport will be studied.

[illegible]

[illegible]

[illegible]

[illegible] North American [illegible]

[illegible]

[illegible] Government, [illegible] Ministry of [illegible] and Development and the Ministry of Finance. They will [illegible] for:

- initiating broad over-all policies,
- co-ordinating sectoral plans,
- supervising and implementing sectoral projects and programs,
- evaluating the progress of executing ministries and agencies in achieving the Plan's objectives.

An Evaluation Section will be established in the Ministry of Planning and Development to review the progress made on all policies and projects.

Sectoral Planning Units in key ministries and agencies will be concerned with the formulation, implementation and evaluation of sectoral plans.

The Industrial Development Corporation will be re-organized and will have a stronger Research Unit to carry out its planning functions. It will undertake feasibility studies and evaluate

[illegible]

[illegible]

[illegible]

[illegible] for use of modern techniques, such as "cost-benefit analysis" and "systems analysis".

Panels of engineers and architects will be made available to undertake preliminary studies at short notice.

Consultants will be used, particularly in relation to the actual execution and operation of programmes.

VIII. PROBLEM AREAS

The domestic market is small.

The country's resource base is narrow.

Attitudes and institutions are still associated with a colonial structure.

[illegible]

[illegible] has [illegible] and [illegible]

[illegible] the existing tax exemptions, foreign ownership of [illegible] firms [illegible], [illegible] them [illegible] resulted in large profits [illegible] remitted abroad.

[illegible]*

[illegible] AND [illegible]

A. Planned Growth:

	[illegible]	[illegible]	[illegible]	Average Annual Increase [illegible]
Manufacturing GDP per capita	$15.[illegible]	n.a.	$[illegible]	6.[illegible]
Total GDP per capita	$1[illegible]	$1[illegible]	$[illegible]	[illegible]
Population [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Manufacturing GDP $ millions	[illegible]	n.a.	[illegible]	[illegible]
Total GDP $ millions	[illegible]**	[illegible]	[illegible]	[illegible]
Manufacturing % of Total GDP	[illegible]		[illegible]	

Exchange rate: $1 = [illegible].4 dinars

**from UN Monthly Bulletin of Statistics, October 19[illegible].

B. Other Objectives

To "Tunisify" the economy's colonial and other foreign controlled sectors.

To establish relations with France on an equal basis.

To change attitudes and adapt Tunisians to a modern way of life.

To promote both the material and the moral aspects of man's development.

To reform the present institutional structures in order to eliminate the various desequilibria between sectors and between regions.

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* Secrétariat d'Etat au Plan et aux Finances: "Perspectives décennates de dévelopment, 1962 - 1971", Tunis, Impremeré Officielle, 1962. 365 pages.

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To attain full employment.

To enable the economy to develop by itself without requiring aid from other countries, by 1973.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Investment in All Sectors

	1962 - 1971 ($ millions)	% of Total
Domestic	1,900	68
Foreign	890	32
Total	2,790	100%

In 1962, domestic investment shall account for 45%, and in 1971 for 80%, of total investment in these respective years.

Investment in Industry (1957 - 1971)
($ 000)

Non-metallic mineral products	10,500
Drink	3,800
Foodstuffs	20,150
Clothing	1,665
Textiles (cloth)	35,200
Paper, cellulose, publishing	9,300
Wood	295
Leather, shoes (mostly in shoe production)	4,050
Rubber	585
Chemical products	100,650
Metallurgy (mostly in steel production)	57,120
Petrol derivatives	23,800
Miscellaneous	10,950
Total	278,165
Extractive industries	55,000
Total	333,165

Planned investment in manufacturing industries will account for 10% of all investment.

B. Strategy and Policy

The agricultural and industrial sectors will be integrated, in order to eliminate the "dual economy".

Export production will be diversified, mainly in the interests of import-substitution.

Inter-regional desequilibria between North and South will be corrected by granting priority to the industrialization of the South.

Policy will be enacted:

- to eliminate development differences between basic industries (chemicals, steel) and the light manufacturing industries.
- to develop the industrial sector in close harmony with the rest of the economy, and, in particular, with handicrafts.

The government will take direct action:

- to invest in power, transport and water supply.
- to invest in any other field for which private enterprise has only limited resources available.
- to help and encourage private enterprise to undertake the realization of certain projects.
- to encourage the merger of small marginal firms.
- to give technical assistance.
- to encourage local branches of foreign firms to make their investment decisions according to Tunisian needs.

Financial advantages will be given to private firms, in the following different ways:

- in the case of productive industries, foreign proprietors will be able to transfer all their dividends abroad; in the case of non-productive industries, however, this will be limited to [illegible].
- fiscal advantages will be granted.
- quotas will be established to protect local industries, whenever these can produce sufficient quantities at a reasonable price, and when competition can be maintained among Tunisian firms.
- credit advantages will be granted through facilitating medium and long-term loans at local banks.

[illegible]. Institutions

The proportion of savings to [illegible] is planned to increase from 8.3% in 1962 to 26% in 1971.

III. DEMAND PROJECTIONS AND DATA BASES

Projections are made for all sectors of the economy through 1971.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors

Growth of Value Added by the Manufacturing Sector

	1957	1971
	($ thousands)	
Food	13,577	47,561
Drink	7,439	9,572
Clothing	3,213	13,747
Textiles	5,521	16,948
Chemicals	5,086	25,220
Metallurgy	11,438	28,286
Paper	402	3,963
Publishing	1,583	2,697
Shoes, leather	4,345	7,195

	Value Added 1957	Value Added 1971
	($ thousands)	
Wood and furniture	[illegible],244	5,[illegible]
Non-metallic minerals	4,365	15,184
Rubber products	3[illegible]6	1,[illegible]66
Tobacco	1,369	1,4[illegible]
Petrol derivatives	-	4,17[illegible]
TOTAL	61,608	18[illegible],266
of Total [illegible]	11[illegible]	16[illegible]

Growth of Gross Output

	1957	1971
	($ thousands)	
Food (total):	81,200	197,300
butter	1,310	2,4[illegible]
cheese	2,700	5,5[illegible]
fats	29	238
olive oil	27,000	70,000
grignon oil	1,760	4,520
canned meat	36	595
canned fish	2,250	3,930
sugar	-	10,900
sugar products	1,430	3,600
coffee	2,950	4,300
cacao and preparations	-	357
paste	8,550	6,200
bread and pastry	18,100	41,500
semolina	8,700	21,000
canned vegetables	1,190	7,200
canned fruit	2,050	6,300
bran and grinding	1,920	6,400
miscellaneous	1,190	2,400
Drink (total):	23,1[illegible]	26,500
wine	20,500	20,500
beer	1,630	3,450
ice, mineral water	454	1,070
alcoholic beverages	-	86
others	500	1,430
Clothing (total):	5,200	21,600
Textiles (total):	14,000	55,200
blankets	357	1,600
tapestry	845	2,100
embroidery	595	1,600
cotton cloth	1,070	12,400
woolen cloth	5,950	12,600
synthetic cloth	1,570	6,400
other cloth	238	-
cotton thread	-	10,700
woolen thread	3,150	7,600
ropes	78	238
silk materials	131	-

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	Gross Output 1957	Gross Output 1971
	($ thousands)	
Chemicals total :	20,100	92,500
hyperphosphates	1,890	1,890
superphosphates	5,900	17,400
fertilizers	367	24,000
sulphuric acid	1,840	5,950
phosphoric acid	476	1,430
phosphorus	-	8,350
sulphur	119	5,000
soap	2,800	5,100
explosives	960	1,670
gas derivatives	564	1,190
paint	524	2,400
linseed oil	1,070	2,150
perfumes	333	2,150
pharmaceuticals	1,240	4,750
insecticides	-	1,190
plastics	202	3,200
other products	1,790	4,650
Metallurgy (total):	27,500	73,500
iron products	2,650	2,600
lead products	6,900	5,950
machines	18,000	65,000
Paper and Cellulose (total):	1,100	8,100
paper	1,080	4,300
cellulose	-	3,800
Publishing (total):	2,900	4,800
Shoes, Leather (total):	11,600	26,700
leather	2,500	7,850
shoes	8,100	16,700
other products	952	2,150
Wood, Furniture (total):	8,900	18,100
wood	1,190	1,190
wood products	7,200	16,300
cork, other products	476	595
Non-metallic Mineral Products:	9,800	26,800
glass	300	2,400
ceramics	2,300	7,150
cement	5,600	8,350
chalk	690	3,350
plaster	109	269
bricks	259	1,290
tiles	48	126
stone work	-	2,000
pugging	14	57
other products	476	1,830
Rubber and Derivatives (total):	800	4,300
tires	179	3,350
rubber shoes	364	476
other products	238	476

	Gross Output	
	($ thousands)	
Tobacco (total):	3,400	[illegible]
Petroleum Derivatives (total):	-	[illegible]
All Manufacturing	210,000	598,000

[illegible]. Priority of Sectors

Investment shall be made in those sectors which are [illegible]cial for economic development; particularly in chemical plants and producer goods factories.

[illegible]. Other Sectoral Plans

Employment in manufacturing will increase from [illegible] to [illegible], as follows:

	[illegible]	[illegible]
Food and Drink	14,[illegible]	31,5[illegible]
Textiles and Clothing	[illegible]	6[illegible]
Chemicals	3,[illegible]	9,5[illegible]
Metallurgy	13,[illegible]	25,[illegible]
Paper, Cellulose, Publishing	1,5[illegible]	4,[illegible]
Shoes and Leather	5,500	11,[illegible]
Wood and Furniture	6,000	12,000
Non-metallic Mineral Products	7,500	14,500
Rubber Derivatives	200	600
Tobacco	700	[illegible]
Petroleum Derivatives	-	n. a.
TOTAL	78,400	168,90[illegible]
	(increase:	115%)

V. PLANNED MANUFACTURING PROJECTS

Preference will be given to those projects which will promote the industrialization of the South.

An industrial complex, exploiting local power and mining resources, will be established in the South.

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Milk, butter and cheese: A central dairy will be established in the interests of public hygiene.

Bread and pastry: Investment will be made in small-sized production units.

Sugar: A refinery with a capacity of [illegible] tons per year will be built at Béja.

Drink: A brewery with a capacity of [illegible] tons will be built.

Textiles and clothing: A first plant is under construction at Sousse for the production of cotton thread, and a woolen thread plant with a capacity of [illegible] tons is planned. In addition, weaving factories will be installed to produce [illegible] tons of cotton cloth and [illegible] tons of woolen cloth by 1971. One factory is already in operation at Ksar-Hellal.

Chemicals: Investment of 13 million in superphosphates will permit an increase of the production capacity of the existing plant, as well as the installation of a new plant with a capacity of 100,000 tons of finished products. Investment of 14 million will be made for the construction of a phosphorous factory to produce 200,000 tons per year, if cheap power can be provided.

A problem arises in relation to the construction of a fertilizer plant; the market must be capable of absorbing a production of 150 tons per day.

Metallurgical Products: Plants to assemble small motors, refrigerators, and radios from imported parts will be established. Depending on the results of market studies, a factory will be established to produce: hammers, screws, locks, padlocks, keys, taps and some household appliances. In addition, a steel plant, requiring an investment of $48 million, will be built to produce approximately 150,000 tons of products a year.

Leather Goods: Action will be taken to diversify the production of tanneries, through the installation of plants using leather for the manufacture of clothes, for example.

Wood Products: An investment of [illegible] will be made to increase the production of wood crates.

Rubber Products: A new plant for the production of tires is envisaged, depending on the results of a market study being carried out.

Petroleum Derivatives: Projected investment of [illegible] million will permit the production of petro-chemicals from petroleum sub-products.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

VII. ORGANIZATION AND SYSTEM OF PLANNING AND IMPLEMENTATION

The National Investment Corporation (Société Nationale d'Investissement) has been established by the Government. Its functions will be:

- to provide capital to stimulate private enterprise.
- to take the initiative in establishing new industries.
- to study, and to help elaborate, projects.

A special agency will be created to deal with projects to establish new industries. In particular, its functions will be:

- to co-ordinate and diffuse knowledge of the studies made.
- to carry out at a later stage various studies which might be required, with the participation of trained Tunisian personnel.

- to act eventually as an agency for the promotion of investment in new industries.

Administrative reforms will be carried out.

VIII. [illegible]

The following general problems are enumerated:

- lack of management and skilled worker cadres, particularly of the middle and higher grades. The illiteracy rate is high.
- small domestic market, and a population of 4 million, with very limited disposable income.
- lack of capital; the domestic savings rate is almost negligible.
- the economy is still very much dependent on world prices and on foreign capital.

Specific problems pertaining to the industrial sector include the following:

- under the protectorate régime, the country's industry was limited to mining (lead, phosphates, iron).
- little or no attention was paid to the development of manufacturing industries, but an effort was made to improve the infra-structure.
- only private enterprise, guided predominantly by foreign interests, was interested in manufacturing.

IX. PREVIOUS INDUSTRIAL GROWTH

Total GDP increased from $485 million in 1950 to $614 million in 1959, at an average annual rate of 2.6%.

Since 1950, development of the industrial sector has been modest in comparison with agriculture; industrial production increased at approximately 0.6% per annum.

Since independence in 1956, considerable expansion has taken place in leather, textiles, and wood, largely due to tariff protection from foreign competition.

Total investment in Tunisia was $1[illegible] million in 1950; it diminished continuously to $66 million in 1958. In 1959, however, it increased to $75 million.

[illegible]

[illegible] Rwanda [illegible]

[illegible] non monetary [illegible] Rwanda's [illegible] revision [illegible] monetary [illegible]

B. [illegible] Objectives:

[illegible] the framework of the [illegible] term [illegible] transform the economy and [illegible] Rwanda, and [illegible] increase the [illegible]

[illegible] diversify production [illegible] expansion [illegible] farming and by developing cash crops.

To strengthen agriculture and [illegible] develop the country's infra structure.

II. INVESTMENT, STRATEGY, [illegible] AND [illegible]

A. Investment

* The Second Five-Year Plan, July 1966 - June [illegible], Entebbe, [illegible] [illegible] pages

[illegible]

Manufacturing [illegible]

[illegible]

	Investment
[illegible]	
[illegible]	
[illegible]	[illegible]
[illegible] refining	[illegible]
Total	[illegible]
Manufacture of food and beverages	
[illegible] processing	[illegible]
[illegible] products	[illegible]
Total	[illegible]
Other Manufacturing:	
[illegible] and wearing apparel	[illegible]
Wood and paper products	5.
Printing and publishing	1.1
Leather, leather products and rubber products	7.8
Chemicals and chemical products	16.8

	Investment
Non-metallic mineral products	[illegible]
Basic metal industries and metal products	[illegible]
Miscellaneous (including Small Industries Program)	[illegible]
Total	[illegible]

Total planned investment in manufacturing: $[illegible] million

4. <u>Strategy and Policy</u>

The basic industrial strategy will be to promote import-substitution of consumer goods in the local Uganda market, with the production of particular items geared, wherever possible, to the concurrent exploitation of potential markets in adjacent East African countries.

Manufacturing for export to countries other than the East African countries will be limited to:

- increasing the degree of processing of exported primary products (hides, fish, oil seeds, etc.)
- the addition of new products to the list of processed primary products (meat, soft fibers, sisal, cassava, rubber, milk, etc.)

Local industries will be given tariff protection in the Uganda market.

The industrial program will be financed by both domestic and foreign funds, and implemented in both the private and public sectors.

The Government expects its chief agency for developing industry, the Uganda Development Corporation (UDC), to continue to play a positive role in pioneering new industries; it will remain the Government's main instrument for accelerating the rate of industrial development.

Projects undertaken by the UDC will be chosen, not only on the basis of their profitability, but also on the basis of their long-term effects on the industrial, and over-all, development of the economy.

Foreign investment, as a source of technical knowledge, managerial skill and capital, is expected to play an important role in developing industry.

The Government will implement the Industrial Charter and the Foreign Investment (Protection) Act, which are devised to give special encouragement to foreign participation in industry.

The small-scale industry program is expected to play a vital role in training Uganda Africans in entrepreneurship, the lack of which seriously inhibits faster industrialization.

Due to unemployment and the general scarcity of capital, priority will be given to labor-intensive projects, wherever this is feasible.

Of the 100,000 new employment opportunities expected to be created during the Plan, the manufacturing sector is expected to create 17,000 new jobs and to employ 64,000 persons in 1971, compared with 47,000 in 1966.

C. Institutions

The investment targets require:

- a steady increase in the rate of domestic savings, both in the public and private sectors.
- a tight restraint on the rate of growth of private consumption expenditures and on the expansion of consumer imports.
- substantial increases in Government recurrent revenues, to finance the expansion in public services and in economic infra-structure.
- a sizeable increase in foreign aid.

III. DEMAND PROJECTIONS AND DATA BASES

Features of the present Plan which were lacking in previous attempts at planning are as follows:

- the Plan is based on a far more detailed survey of the whole economy, as well as of each particular sector.
- the major projects were subjected to a systematic evaluation, before inclusion in the Plan.
- the Plan targets were determined within the framework of a 15-year perspective plan, which maps out the structural changes that the economy will have to undergo if growth is to take place.
- the Plan takes account of other sectors, in addition to the public sector.

The size of the industrial program in the Plan was determined, primarily, on the basis of two assumptions:

- that the domestic market for industrial goods will grow at a faster rate than domestic incomes.
- that there will continue to be a market elsewhere in East Africa for a substantial range of manufactured goods.

IV. PLANNED DEVELOPMENT OF MANUFACTURING SECTORS

A. Planned Growth of Manufacturing Sectors:

	($ millions)		Average Annual
	1966	1971	Increase
Cotton ginning, coffee manufacturing, and sugar manufacturing	23.2	30.5	5.6%
Manufacture of food products	11.2	19.0	11.1%
Miscellaneous manufacturing	31.6	57.5	[illegible]
Total	66.0	107.0	10.1

The planned growth of manufacturing output will result in part from a fuller utilization of the capacity installed during the First Plan, but the major share of output will come from the creation of new productive capacity in all lines of industry.

B. Priority of Sectors

C. Other Sectoral Plans:

The Small Industries Program

It is proposed to embark on a vigorous, well-conceived and unified program of action to develop the small industries sector, with the particular objective of promoting the participation of Africans in industry.

The principal measures which will be adopted to encourage small-scale industrialists are:

- the provision of easy credit.
- the provision of promotional and extension services, such as training, technical advice, research, marketing services, and legal assistance.
- the provision of prepared industrial sites and common facilities.

The entire program will be administered by one central body, which will have at its disposal a sizeable fund from which loans will be provided to small industrial enterprises.

A Management Training Advisory Centre, now being set up, will provide training and technical and business advice on a continuing basis to entrepreneurs.

Prepared and serviced industrial land, complete with workshop buildings, will be offered at low rentals to small-scale enterprises. It is hoped that a substantial proportion of small industries will be located on these sites, as this will greatly facilitate the application of policy measures.

V. PLANNED MANUFACTURING PROJECTS

Cotton Ginning and Coffee Curing

Investment in these activities will be mainly for the purpose of improving methods in order to obtain better quality cotton linters and cured coffee. New processing facilities will be necessary to cope with the expected increase in output of these two crops.

Sugar Manufacturing

Two new projects are planned:

	Output	Investment
- Kenyala factory (Bunyoro)	55,000 tons	$ [illegible] m.
- second factory (location not yet decided)	[illegible] tons (first stage)	$[illegible] m.

These two projects, along with expansions to existing enterprises, are expected to increase Uganda's output to about 220, [illegible] tons of milled white sugar by 1971. Most of this output will be taken up by increased consumption in the East African markets.

Manufacture of Food Products

The bulk of the $16.8 million to be invested in this sub-sector will be directed toward increasing the supply of food products already being produced in Uganda, including an investment of $8.1 million to expand the tea manufacturing industry, in line with the planned expansion in tea growing.

New lines of production are:

- a meat processing factory (Soroti) to prepare fresh and canned meat for export. Capacity: 75,000 head of livestock per annum. Investment: $2.6 million.
- two milk processing plants (one in Kampala), capable of handling [illegible] - 17,000 gallons of milk per day.
- a fish canning factory in the region of Lake Victoria.

Textiles and Wearing Apparel

The expansion of these industries constitutes a key factor in the import-substitution program.

Cotton Textile Manufacturing: Major extensions are planned to the two existing factories, which will result in an increase of about 50% in their combined capacity; (investment: $7 million). A new factory with a capacity of [illegible] million sq. yds. per year is planned; (investment: $2.8 million). These factories are expected to utilize as much as a quarter of Uganda's annual cotton crop by 1971.

Synthetic Textile Manufacturing: Three medium-sized factories to produce a total of 15 million sq. yds. of nylon, polyester, rayon and other synthetic fabrics is planned; (investment: $8.1 million).

Hessian and hessian bags: Over $2.8 million is planned to be invested in this new industry.

Wood and Wood Products

New units and extensions to existing units are planned for the sawmilling, chipboard and furniture-making industries; (investment: $[illegible] million).

A factory using imported craft paper to produce paper bags is about to start production; (investment: $[illegible] million).

Printing and Publishing

The main project in this group relates to the expansion of the Government's printing press in Entebbe; (investment: $0.[illegible] million).

Leather and Leather Products

A tannery to process a major part of the local production of hides and skins is being planned.

An expansion of the footwear industry, along mass-production lines, is being envisaged to exploit the expanding market in East Africa; (investment in these areas: $2.8 million).

Chemicals and Chemical Products

A factory to produce 100,000 tons of nitrogenous fertilizer is planned; (cost: $14 million).

A factory to produce pharmaceutical goods of various kinds is planned.

Extensions to existing facilities for the production of sulphuric acid, plastics, polythene products, and paints are planned.

Non-metallic Mineral Products

A glass factory is to be set up to commence production early in the Plan period; (cost: $1.1 million).

Expansion of the production of cement, asbestos structures, lime, concrete products, industrial ceramics, and allied products is planned.

Basic Metals and Metal Products

There is a proposal to set up an iron and steel complex, using local iron ore reserves, with a steel plant having a capacity of 100,000 tons per annum being set up in the initial stage; (investment of $19.6 million during the Plan period).

Expansion of the existing steel plant and engineering works for the production of steel tubes, rolling sheets and baling hoops will be started to enable the local manufacture of agricultural implements; (investment: 2.8 million).

A plant to manufacture bicycle parts is planned.

A second galvanized, corrugated iron sheet plant will be built.

The production of steel boxes will be expanded.

Other Projects

The projects listed above do not constitute a complete list of plans for the development of the industrial sector, as some of the projects are very small and others have not yet been sufficiently elaborated to merit mention.

The total industrial program has been estimated by taking into account, not only definitely known projects, but also others considered to be feasible and likely to be implemented.

The arrangements for financing some of the projects have not yet been completely worked out. It is expected that about half the entire program will be financed through the parastatal and public sector, and a substantial portion of the balance by local private entrepreneurs.

VI. PRODUCTIVITY AND CAPACITY UTILIZATION

VII. ORGANIZATION AND SYSTEMS FOR PLANNING AND IMPLEMENTATION

The techniques of planning, appropriate for a mixed economy like Uganda's, which is subject to externally-induced fluctuation and in which information regarding the operation of the economy is incomplete and unreliable, are still being evolved.

The Planning Commission, under the Chairmanship of the President of Uganda, consists of the Ministers concerned with economic and social affairs, the Director of Planning, and the Chairmen of the Uganda Development Corporation and the Uganda Electricity Board. This Commission has the primary responsibility for planning.

The Ministry of Planning will play a key role in the implementation of the Plan. It has five main responsibilities:

- to serve as the Secretariat of the Planning Commission and to see that the projects included in the Plan are implemented.
- to mobilize and administer the provision of technical assistance.
- to do economic planning, to assess progress on projects, and to make short-term plans.
- to do manpower planning, in collaboration with other ministries.
- to organise the program of foreign finance, in collaboration with the Ministry of Finance.

Planning units will be set up in certain of the Central Government Ministries, which are responsible for the implementation of the public sector programs related to their functions.

In those Ministries which have no planning units, a senior officer will be designated to serve as liaison officer to the Ministry of Planning.

The Ministry of Commerce and Industry will be responsible for co-ordinating activities outside of the public sector and will apply Government policy in the field of industrial development.

The administrations of the Kingdoms and of the Districts will be encouraged to participate fully in the planning process.

A major part of the industrial development program will be undertaken by the Uganda Development Corporation, whose role is considered to be crucial.

A National Economic and Social Council, representing all sectors of Uganda's economy, has been set up to ensure the co-operation of the private sector in development.

The various sectoral and aggregate targets have been assessed for internal consistency. However, the Ministry of Planning is undertaking work on contingency plans to permit adjustment to situations where shortfalls may occur, such as the following:

- aid hopes may not materialize.
- export prices may fall more sharply than has been assumed in the Plan.
- savings may expand more slowly than is projected.
- the investment program may not prove as productive as is planned.

Special care will be taken to ensure that the public sector development budget is organised with sufficient flexibility to adapt to changes in economic circumstances, to leads and lags in implementation, and to delays in financing, so that the over-all targets can still be realised by the end of the Plan.

VIII. PROBLEM AREAS

Uganda depends heavily on imports as a source of supply of most manufactured goods, including simple consumer goods.

A program of import-substitution to reduce import dependence requires investment in imported capital goods, which have to be paid for by stagnant export earnings from coffee and cotton.

The small size of the manufacturing sector (9% of total GDP in 1966), over half of which consists of crop and food processing, mainly for an East African market, places a restriction on the speed with which a structural change in the economy can be realized.

The development of manufacturing in Uganda is also limited by the following factors:

- the small size of the Uganda market for manufactured goods.
- the small number of Ugandan industrial entrepreneurs and the limited availability of capital.
- Uganda's participation in the East African common market has diverted certain industries, which could have been set up to serve the Ugandan market, to other locations in East Africa. (It is acknowledged, however, that some of Uganda's most successful industry has prospered, as a result of free access to the markets of Tanzania and Kenya.)

The planned growth rates require a high rate of capital formation in all sectors, and an expansion in trained manpower.

IX. PREVIOUS INDUSTRIAL GROWTH

SUMMARY OF THE [illegible] - [illegible] INDUSTRIAL [illegible]*

I. GOAL AND OBJECTIVES

A. Planned Growth:

	[illegible]	[illegible]	Average Annual Increase
Manufacturing GDP/capita	[illegible]	[illegible]	[illegible]
Total GDP/capita	[illegible]	[illegible]	[illegible]
Population (000)	8,[illegible]	[illegible]	[illegible]
Manufacturing GDP ($ millions)	[illegible]	[illegible]	[illegible]
Total GDP ($ millions)	[illegible]	[illegible]	[illegible]
Manufacturing % of Total GDP	[illegible]		

Exchange rate: [illegible] Bolívares

B. Other Objectives

To attain higher living standards.

To reduce unemployment to 7% in 1968.

II. INVESTMENT, STRATEGY, POLICY AND INSTITUTIONS

A. Investment

Total investment (all sectors) will average [illegible] million a year.

	1965 - 1968 ($ millions)	%
Public investment	2,800	34
Private investment	5,500	66
Total Investment	8,300	100

Eighty-seven per cent of public investment will be earmarked for improvement of the economic infra-structure.

*OFICINA CENTRAL DE COORDINACIÓN Y PLANIFICACIÓN: "Plan de la Nación, 1965 - 1968", Caracas, 1967. 539 pages.

[illegible]

[illegible] investment [illegible]

[illegible] manufacturing sector [illegible] investment [illegible]

[illegible]

[illegible]
Mexican Institutions
[illegible]

	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	128	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

Investment in the Manufacturing Sector [illegible]
$ millions

	Gross Investment	[illegible]	[illegible]
[illegible] Industries:			
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
Tobacco	[illegible]	[illegible]	[illegible]
Textiles	[illegible]	[illegible]	[illegible]
Shoes and Clothing	[illegible]	[illegible]	[illegible]
Wood and Cork	[illegible]	[illegible]	[illegible]
Furniture and Accessories	[illegible]	[illegible]	[illegible]
Leather and Hides	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]
Intermediate Industries:			
Paper and Cellulose	[illegible]	[illegible]	[illegible]
Rubber	[illegible]	[illegible]	[illegible]
Chemical Products	[illegible]	[illegible]	[illegible]
Petroleum Derivatives	[illegible]	[illegible]	[illegible]

Intermediate Industries (cont'd)		
Non-metallic Minerals		
Basic Metals	4	
Total	[illegible]	
Mechanical Industries		
Metal Products	[illegible]	
Machinery	[illegible]	
Electrical Equipment		
Transport Material		
Total		
Other Industries		
Graphic Arts		
Cottage Industries		
Industrial Buildings		
Site Expenses		
Total		
Total Investment in Manufacturing		

Strategy and [illegible]

The move toward [illegible] of the [illegible] will be continued.

Industrial integration will be promoted.

Heavy industries requiring a more complex technological know-how will be promoted.

Import-substitution will continue to play a major role in expanding the manufacturing sector.

Employment opportunities will be increased, as long as this does not result in less productivity.

[illegible]

[illegible] government [illegible] measures:

- the promotion of basic industries, such as chemicals, petrochemicals and steel, through increased investment
- [illegible] of the establishment of new enterprises
- the promotion of investment in manufacturing through the country's [illegible] institutions.
- [illegible] import industries [illegible]
- [illegible] of [illegible] temporary [illegible].

[illegible] whenever any of the [illegible]:

- [illegible] start to [illegible] their [illegible]
- export subsidies are granted by other countries
- foreign [illegible] occur

[illegible] research [illegible] promote [illegible]

[illegible]

[illegible]

[illegible] over the [illegible] period.

[illegible], development, and promotion institutions [illegible] improved [illegible] provide greater stimulation to the industrial sector.

[illegible] between agriculture and industry will be [illegible] by the National [illegible] Boards [illegible] which operate within the Ministry of Agriculture.

The [illegible] in industries [illegible] industries [illegible] in the formulation of economic policy.

The Venezuelan Development Corporation (Corporación Venezolana de Fomento) will be responsible for coordination between different industrial zones.

Private sector financing will be affected by:

- the Venezuelan Development Corporation
- the Industrial Bank
- the national banks.

Measures to improve the domestic capital market are studied.

Credit [illegible] industrial [illegible]

[illegible]

Projections are given for all sectors of the economy [illegible] the planned economic growth.

[illegible]

B. Planned Growth of Manufacturing Sectors

Growth of Value Added

	[illegible]	[illegible]	[illegible]
	Bs. Millions		[illegible]
Traditional industries:			
Food	[illegible]	[illegible]	
Drink	[illegible]	[illegible]	
Tobacco	57	[illegible]	
Textiles	88	[illegible]	[illegible]
Shoes and Clothing	82	[illegible]	[illegible]
Wood and Cork	[illegible]	[illegible]	[illegible]
Furniture and Accessories	[illegible]	[illegible]	[illegible]
Leather and Hides	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

VENEZUELA

	Value Added		%
	[illegible]	[illegible]	
	Millions		Increase
Intermediate Industries:			
Paper and Cellulose	[illegible]		[illegible]
Rubber	[illegible]	[illegible]	[illegible]
Chemical Products	[illegible]	[illegible]	
Petroleum Derivatives	[illegible]	[illegible]	[illegible]
Non-metallic Minerals	[illegible]	[illegible]	[illegible]
Basic Metals	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]
Mechanical Industries:			
Metallic Products	[illegible]		
Machinery	[illegible]		
Electrical Machinery	[illegible]		[illegible]
Transport Material			[illegible]
Total		[illegible]	
Other Industries			
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]			
[illegible]			
Total			[illegible]6
[illegible]	[illegible]		[illegible]

Change in Production Structure

	Value of Output	
	[illegible]	[illegible]
	% of total	
Traditional Industries	[illegible]	[illegible]
Intermediate Industries		
Petroleum Derivatives		
Mechanical Industries		[illegible]
Miscellaneous	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]
Cottage Industries	[illegible]	[illegible]
Total	100	100

[illegible] Priority of Sectors

Priority will be given to:

- chemicals and petro-chemicals,
- machinery, metallic products, electrical equipment, and transport material,
- paper and cellulose,
- industrial buildings,
- slaughter-houses.

Import-substitution will take place chiefly in the intermediate and capital goods sectors.

Export promotion will focus on the chemicals, petro-chemical, and machinery sectors.

[illegible] Other Sectoral Plans

Employment will increase from 363,000 in 1964 to 445,000 in 1968, at an annual rate of 5%.

Employment offered by the manufacturing sector will account for 18.5% of the total in 1968 (19% in 1964).

Employment
(000)

	1964	1968	
Traditional Industries	1[illegible]4	1[illegible]	
Intermediate Industries	39	52	
Petroleum Derivatives	7	8	
Mechanical Industries	32	51	
Miscellaneous	11	1[illegible]	
Sub-total	193	254	(a 7% per annum rate of growth
Cottage Industries	170	191	
All Manufacturing:	363	445	(a 5% per annum over-all rate of growth)

[illegible]

Vote

[illegible]

Vote

[illegible]

[illegible] investment [illegible] of which:

[illegible] in intermediate industries,

in mechanical industries,

[illegible], wood and cork, and in the industrial buildings projected by the [illegible] Development Corporation.

[illegible] promoted by [illegible] institutions will require [illegible] of this [illegible] in fixed capital.

[illegible]

[illegible] ... for export ...

[illegible] production of basic petro-chemicals ... [illegible]

[illegible] satisfy domestic demand for [illegible] soda.

[illegible]

[illegible]

A polyethylene plant will be established, [illegible] the Petro-chemical Institute contributing [illegible] and a multi-national corporation [illegible]. The plant will [illegible] operational at the end of 196[illegible], and it will be located [illegible] or in Puerto La Cruz. Eighty per cent of [illegible] duction will be for export and it will employ [illegible] initial capacity of [illegible] tons will [illegible] future date.

A plant with an annual capacity of [illegible] tons [illegible] established to produce dodecylbenzene. The Venezuelan [illegible] chemical Institute will supply 15% of the needed investment. The plant will become operational in 1967. It will be located at Morón and will employ 50 people.

A plant will be built with an annual capacity of [illegible] tons to produce aluminum sulphate and refrigerants. The Venezuelan Petro-chemical Institute will contribute 25% of the required investment, and Allied Chemical the remainder. The plant will become operational at the end of 1967 and will employ 150 people. Twenty per cent of its production will be for export.

[illegible]

[illegible]

[illegible] ... metric tons per year.

... plant, with a capacity of ... metric tons per year.

Dynamite at ... plant, with a capacity of ... metric tons per year.

Synthetic Rubber. The project to establish a complex to manufacture synthetic rubber has been delayed ... years, but will be realized in 19.. The complex will produce a minimum of ... tons a year and will offer employment to ... people. It may be located at [illegible].

Steel. The steel program of the Venezuelan Guyana Corporation includes the following projects:

- production by the Corporación Venezolana de Guyana-Siderurgica del Orinoco (SIDOR) will increase, and present capacity will be expanded.
- a feasibility study will be made concerning the establishment of a steel laminating plant. This would absorb the excess supply of steel, and have an import-substitution effect.

The project, which will become operational by the end of the Plan period, will require an investment of [illegible] million. Employment will be made available for [illegible] people.

The Siderurgica Del Orinoco will expand its present capacity, in order to reduce its costs.

A project is under way on the production of enriched iron ore and blooms:

- enriched iron ore will be produced at an annual rate of 1 million tons.
- the total capacity of bloom production will be 1.5 million tons per year, although initially only 15[illegible], [illegible] tons will be produced per year.

Production by the 2 plants involved will be chiefly exported.

Aluminum: The new aluminum plant projected in the 196[illegible]-1966 Plan has been modified in order to satisfy the domestic market. It will be realized by Alumino del Caroni, S. A. (ALCASA), by the end of 196[illegible]. ALCASA's present capacity is 1[illegible],[illegible] tons per year in the form of ingots. The new plant will roll these ingots into smooth and corregated sheets. Total investment will be [illegible] million, and the plant will employ [illegible] people.

Heavy Machinery: A project is under study for the establishment of a complex at Guyana, with the collaboration of a U. S. firm. Preliminary estimates indicate a total fixed capital investment of 18 million. Employment will be available for 1,1[illegible] people.

Metals and Machinery: The National Metallurgical Council (Consejo Nacional de Metallurgia) was created in 1963 to promote the development of metallurgy industries in co-operation with the Ministry of Development. Further growth will be encouraged by the Venezuelan Guyana Corporation and the Development Corporation.

[illegible] the construction of [illegible] sulphur houses [illegible]

[illegible] in the state of [illegible]

[illegible] in the state of Apure

[illegible] the state of [illegible]

[illegible] in the state of [illegible]

[illegible] in the state of [illegible]

[illegible] in the state of [illegible]

[illegible]

Average Output per Person [illegible]

[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
All Above Industries	[illegible]		
[illegible] Industries			
[illegible] Manufacturing Industries	[illegible]		

The Venezuelan [illegible]

[illegible]

The Central [illegible] of Coordination and Planning [illegible] (Central de Coordinación y Planificación [illegible]) [illegible] for technical assistance, scholarships, and [illegible] the obtaining of foreign credit.

The Venezuelan Corporation of Guyana was established [illegible]

A Commission for the Promotion of the Andes' Development (Comisión Promotora del Desarrollo de los Andes) and the Zulian Planning Council (Consejo Zuliano de Planificación — [illegible]) were created in 1963.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] formulation of the [illegible] these groups [illegible] regions and sectoral planning.

The establishment of a permanent mechanism, composed of representatives of both private and public sectors, is [illegible]:

- to define the [illegible] objectives of the Plan
- to select strategies and policies to attain these objectives.
- to improve the utilization of domestic natural resources.

[illegible]

[illegible] INDUSTRIAL [illegible]

Total GDP increased from [illegible] million to [illegible],190 million between [illegible] and 1964. The manufacturing sector grew at an annual rate of [illegible], largely due to intense import-substitution.

[illegible]

[illegible]

However, integration of the industrial [illegible] remained insufficient. The [illegible] structure was diversified.

Exports of manufactured [illegible] consumption [illegible], while manufactured exports rose by [illegible] for values. Employment in the manufacturing sector increased from [illegible]

The [illegible] industry remained [illegible] between [illegible] and [illegible]

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