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COMPARATIVE ANALYSIS OF INDUSTRIAL DEVELOPMENT:

Algeria  
Brazil  
Korea

Peru  
Philippines  
Thailand

by

Roland Olivier  
UNIDO Consultant

1/ The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the secretariat of UNIDO.

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## CHAPTER I

### BRIEF DESCRIPTION OF THE SIX ECONOMIES STUDIED

#### 1. General background

(a) It appeared useful to give at the outset a few figures on the economic growth rates for each country in the years 1960-1970, and the general objectives of the current plans. These data are often fragmentary, since the documents available usually show only what they want to read concerning the success (or failure) of the plans implemented.

Some general data on the countries dealt with in this study are given in the following table.

Some data on the countries covered by the study (1970)

	Density (inhabitants/ km <sup>2</sup> )	Inhabitants (millions)	Percentage population growth (1970)	GDP per capita dollars	GDP per square kilometer	Percentage growth of GDP (1960-70)
Algeria	6	14.3	3.1	4 270	300	1.7
Brazil	11	93	2.9	38 470	410	2.5
Korea	323	31.8	2.6	7 910	250	6.8
Peru	11	13.6	3.1	6 110	450	3.4
Philippines	128	36.9	3.0	7 660	210	2.9
Tanzania	14	13.3	2.5	1 360	100	3.6

It will be noted that, from the point of view of per capita GDP, these countries - with the exception of Tanzania - are in the bracket from \$210 to \$450 per capita, and therefore are not among the poorest countries.

(b) In order to gain control over industrialization, each of the developing countries studied has endeavoured to plan it. The data, figures and information in this study come primarily from the various development plans prepared by government services. The available forecasts therefore do not always cover the period 1970-1980, but they do indicate the development trend aimed at for this period.

The planning periods for the current plans are shown in the table below.

#### Duration of current development plans

Algeria	1974-1977 (1980: forecasts)	Four years
Brazil	1972-1974	Three years
Korea	1972-1976	Five years
Peru	1971-1975	Five years
Philippines	1971-1974	Four years
Tanzania	1969-1974	Five years

(c) The objectives fixed by the planners may be of only indicative value in the sense that nothing (or almost nothing) appears in available data to back them up (Brazil).

In addition, it so often proved difficult to make systematic comparisons in terms of figures among the six countries concerned. Therefore, each subject was dealt with separately by country with comparable data grouped wherever possible.

### 1. Country-by-country analysis

#### A. Algeria

When it became independent in 1962, Algeria has been resolutely oriented towards socialism. In 1963, there was land nationalization, and from 1965, branches of the economy considered vital for the country were taken over by the State.

1. The first three-year Development Plan began in 1967 (per capita CNP at that time: \$270). It laid the foundations for heavy industry. This industrial development is based on petroleum exports, which continued to increase until 1968 (and thereafter became stabilized):

- 8.6 million tonnes in 1960,
- 26.5 million tonnes in 1965,
- 38.4 million tonnes in 1968.

In 1970, Algeria had a refinery with a capacity of 2.8 million tonnes, a chemical complex manufacturing several basic products (ammonia, nitric acid, urea, etc.) and an iron and steel complex under construction for the production of 400,000 tonnes of steel and 350,000 tonnes of cast iron.

#### Distribution of the industrial product among the various branches of industry:

	<u>1968</u>	<u>1970</u>
Iron and steel	-	13.8%
Chemical products	10.8%	17.0%
Mechanical and electrical engineering	22.0%	10.0%
Others */	68.2%	59.0%
<b>TOTAL</b>	<u>100.0%</u>	<u>100.0%</u>

\*/ Not including hydrocarbons.

2. The second plan (1970-1973) brought about some strengthening of heavy industry.

The third plan (1974-1977) was aimed more at the development of light industries (furniture, carpentry, etc.) with a view to meeting the requirements of domestic consumption.

## B. Brazil

Successive governments assigned themselves first of all the task of economic reconstruction and action to combat inflation and economic distortions; they also developed electric power and transports and set up a number of financial institutions. Once the primary infrastructure had been established, expansion was placed on expansion, achieving a rate of more than 7 per cent a year on the average, and 10 per cent for industry.

From 1964 to 1970, the GNP grew by 52 per cent, and the industrial product increased by 69 per cent. Exports were doubled, and the road network and school and advanced educational system was expanded by a factor of 2.5.

### Brazil - distribution of industrial production, 1967

Consumer goods	48.2%
Durable	13.3%
Non-durable	34.9%
Intermediate goods	40.1%
Capital goods	11.7%
TOTAL	100.0%

### Brazil - distribution of industrial production, 1969

Metallurgy and non-ferrous metals	15.4%
Mechanical engineering, electricity	20.3%
Chemical products	11.2%
Others	53.1%
TOTAL	100.0%

The current objectives of the plan for 1971 - 1974 are:

- To double per capita income by 1980, and
- To bring Brazil to a par with the developed countries in one generation.

These objectives will come to expression in a policy of self-sufficiency and industrial integration. This supposes:

- Regional equilibrium,
- Social change,
- Political stability and
- National security at home and abroad.

### C. Korea

The first two plans formulated in 1960-1970 were aimed at delivering the country from a long period of economic stagnation. Substantial investment programmes were implemented in the power, communications and agriculture sectors, and there was a very substantial growth in exports.

In addition, during the second plan, there was a very strong growth (11.6 per cent a year) and exports increased by 40 per cent. Domestic savings amounted to 12.8 per cent of the GDP in 1967 and 17 per cent in 1970.

The objectives for the plan were as follows:

- Increase in agricultural production and fisheries,
- Rural development,
- Improvement of the balance of payments,
- Development of the heavy and technical engineering industries,
- Use of manpower resources and development of education,
- Social equilibrium,
- Regional development through the establishment of industrial centres and use of the four main rivers,
- Attention to social welfare through the construction of housing, health, social security and improvement of the environment.

### D. Peru

As the following table shows, industry has developed quite rapidly in Peru since 1950. Industry alone accounted for more than 17 per cent of the GDP (17.2 per cent) in 1970.

#### Structure of the GDP

	<u>1950</u>	<u>1960</u>	<u>1970</u>
Agriculture	22.2	20.4	14.5
Fisheries	0.4	1.6	2.1
Mining	5.5	8.6	6.8
Building	5.1	4.1	4.1
Power	0.5	0.7	1.0
<u>Industry, trade, tourism</u>	<u>30.1</u>	<u>39.3</u>	<u>38.7</u>
Housing	8.5	6.5	5.3
Government	10.5	9.3	10.1
Others	17.2	14.5	17.4
Total	100.0	100.0	100.0

However, this industry, which is of the import-substitution type, is still largely oriented towards the production of consumer goods.

Structure of the Industrial ME

	<u>Percentage</u>	<u>Millions of</u> <u>1955 = 100</u>
Consumer goods	61.5	14 185
Intermediate goods	27.0	6 333
Capital goods	11.5	2 635
<b>TOTAL</b>	<b>100.0</b>	<b>23 053</b>

The import substitution usually related only to consumer goods with a low degree of value added.

In addition, the economy was marked by a dispersion of production. This structure encouraged high prices and did not allow surplus income to be reinvested, as well as encouraging regional imbalances, since 60 per cent of industrial production was located in the Lima area.

Geographical distribution of production

<u>Region</u>	<u>Percentage</u>
Piura .....	5
Ancash .....	6
Lima-Callao .....	66
Junin .....	7
Arequipa .....	4
Rest of the country .....	12

Lastly, the heavy foreign dependence was manifested in participation by foreign capital, an excessive debt and a trade balance deficit.

The current industrial development plan will be aimed at reorienting industry and the whole economy in order to achieve national sovereignty and a "more just society". The objectives for achieving this are as follows:

- Transformation of the structure of production and establishment of industrial zones,
- Strengthening of the action of the public sector as the main agent of industrial development,
- Reduction in the degree of economic and technological dependence,
- Optimum utilization and combination of factors of production,
- Participation of workers in the ownership and management of enterprises.

The industrial strategy for achieving the above objectives will be as follows:

- Opening up to foreign markets,
- Transformation of the social structure and strengthening of the State's role.



**E. The Philippines**

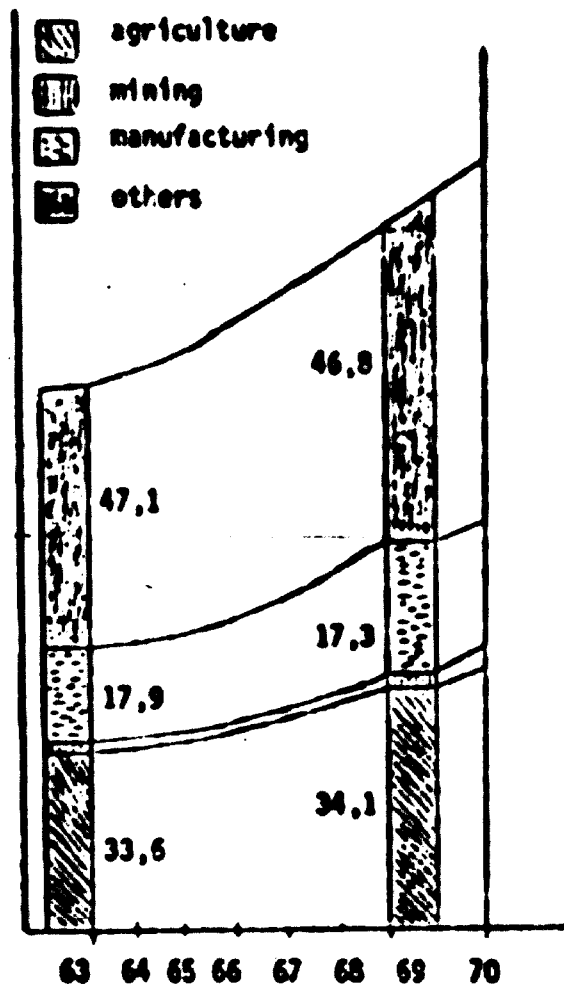
The graph below shows that, between 1963 and 1969, the share of industry and agriculture in the GDP declined somewhat, in contrast to the situation in the other countries studied. The Philippines are one of the only countries in which the percentage of agriculture is more important than that of industry.

In the context of the plan, the Government's main tasks will be to accelerate economic growth and achieve a healthier balance of payments.

For this purpose, the plan will allow for the followings:

- No direct State participation in industrial investments,
- Control of investments through the establishment of an appropriate administrative framework,
- Use of foreign capital.

GDP by sector



Agriculture, whose growth rate should be 7.5 per cent, will be controlled by the Government, which will aim at increasing the production of cereals and proteins (cereal production should cover 65 per cent of requirements by 1974, as against 85 per cent in 1969), and at developing cash crops such as bananas, cocoa, sorghum, soya beans and cotton.

For industry, an annual growth rate of 6.5 per cent should be brought about through State assistance to 50 priority activities and 100 projects. Industries creating jobs will be favoured with a view to reducing unemployment. Inflation (more than 15 per cent per annum in 1970) will also be combated.

#### F. Tanzania

Tanzania has been independent since 1961. The first five-year plan, drawn up for the period 1964-1968, provided for an annual growth rate of 6.7 per cent. The actual growth rate was only 4.3 per cent.

This first plan had mobilized the Government for large infrastructure investments, and industrialization was to be brought about through private capital. In 1967, the Government undertook nationalization of 80 per cent of the economy. Quantitative objectives were then achieved to the extent of 75 per cent, and industry grew by 10 per cent a year. The share of the industrial product in the GDP increased from 4 per cent in 1962 to 9.5 per cent in 1970.

Gross capital formation accounted for 14.5 per cent of the GDP in 1963, as compared with 22 per cent in 1967. With regard to industry, 70 per cent of its capital came from abroad, and it provided jobs for 33,000 persons in 1967, as compared with 22,000 in 1962.

The current plan (1969-1974) provides for annual growth rates of 6.5 per cent for the GNP and 10 per cent for industry. The most salient fact is that this country counts solely on its own resources (financial and manpower) for its development, the objectives of which are as follows:

- Social equality,
- Collective and co-operative structures,
- Self-sufficiency,
- Social and economic change,
- Integration into the African economy.

Of the six countries described above, the development of two differs from that of the others. The Philippines are concentrating on the agricultural sector (without, however, neglecting the industrial sector) because agriculture is to develop more quickly than industry. Tanzania, the poorest of the six countries, will use only its own resources to develop its economy. This independent attitude with regard to foreign countries can be traced to the political regime, which preaches considerable austerity.

For the other four countries, industry will be the main beneficiary of current projects.

CHAPTER 11

OBJECTIVES OF INDUSTRIALIZATION  
PRIORITY AREAS AND INDUSTRIAL SECTORS

1. Rate of development of the industrial sector

Industrial development and creation of structures of, production and investment.

- Existing structures and
- The current level of development.

(a) The table below showing the share of the industrial sector in the GDP (or G.P) gives some idea of the level this can reach to, or what is possible.

Share accounted for by various sectors of the economy in the GDP (or G.P)

	<u>Agriculture and fisheries</u>	<u>Industry</u>	<u>Mining</u>	<u>Other</u>
<b>Algeria:</b>				
GDP, 1970	10	15	24	51
GDP, 1980	6.9	18.7	24	50.4
<b>Brazil:</b>				
GDP, 1970	18.3		24	59
GDP, 1974	16.1		25	59
<b>Korea:</b>				
GDP, 1970	28.4		21.7	49.9
GDP, 1976	22.4		27.9	49.7
<b>Peru:</b>				
GDP, 1970	16.6	20.9	6.8	55.7
GDP, 1975	14.3	26	6.3	53.4
<b>Philippines:</b>				
GDP, 1971	34.1	16.1	1.8	46.8
GDP, 1974	35.1	16.8	3.7	44.4
<b>Tanzania:</b>				
GDP, 1969	30.4	6.2	2.0	41.4
GDP, 1974	47.2	8.4	1.3	43.1

Except for Tanzania, all these countries have an industrial production amounting to between 10 and 15 per cent of the GDP (or G.P). The Philippines and Korea, which have a high population density, have an agriculture which appears more highly developed in comparison with their industrial development.

(b) Algeria, whose mining sector is very important, has a high rate of industrial development, largely owing to its exports of hydrocarbons, which account for nearly all the mining sector. Since petroleum prices rose

considerably in 1973, it can be expected that the following data will fall short of actual achievements.

In Tanzania, on the other hand, the industrial sector is very weak and will remain so, since it will not account for 10 per cent of the G.P before 1980.

The annual growth rates for industrial production which have been observed (or are forecast) are as follows:

Algeria	10 per cent
Brazil	10 per cent
Korea	13 per cent + mining
Peru	11 per cent
Philippines	6.25 per cent
Tanzania	10-11 per cent.

(c) Extrapolating the growth rates of the G.P and industrial production up to 1980, the following figures are obtained:

Share of industrial production in the G.P (or GDP)  
between 1970 and 1980

	<u>Share of G.P (or G.P)</u> <u>in 1970</u>	<u>Share of GDP (or G.P)</u> <u>in 1980</u>
Algeria	15.0 per cent	21.5 per cent
Brazil	24.0 per cent (including mining)	29.0 per cent (including mining)
Korea	21.7 per cent (including mining)	32.5 per cent (including mining)
Peru	20.9 per cent	28.8 per cent
Philippines	16.1 per cent	17.0 per cent
Tanzania	6.2 per cent	10.6 per cent

2. General objectives of industrial development

In general, the industries set up initially in the countries are light industries producing consumer goods or other goods with a low degree of value added. All these industries depend on imports of basic materials, intermediate products and capital goods.

The common objectives will be:

- Change of industrial structures through encouragement of the establishment of industries producing intermediate and capital goods for import substitution;
- Regionalization through the establishment of new industrial centres;

- Reduction of economic and technological dependence on the foreign industrial sector through a resort to investment and to the better utilization of domestic resources;
- Industrial integration starting with basic industries;
- Creation of employment.

In order to achieve this, the State must take action, either directly (Peru, Algeria, Tanzania), or through the intermediation of industrial banks promoting the financing of investments and projects.

Small-scale and hand-craft industries will also be developed and will create jobs.

The implementation of programmes will depend on financing, both internal and the opening up of foreign markets:

- **Financing:** either directly by the State (Algeria, Tanzania), partially by the State (Peru), or with very little State financing (Brazil, Philippines, Korea);
- **Opening up of foreign markets:** marketing policy and the financial incentives will be the main factors.

When the State is the investor, the industries concerned will be basic industries and will require large amounts of capital (iron and steel, petrochemicals, basic chemical industries).

\* \* \*

We shall deal here first with the basic industries, then with other industries. The financing of investments and the consequences of industrialization for balances of payments will be dealt with later on.

### 3. Establishment of basic industries: iron and steel

The iron and steel industry is one of the basic branches which can supply all the "downstream" industries using metals. Therefore, many countries have embarked on the construction of iron and steel complexes.

However, production costs are higher in these countries than in Western industries. These cost differentials are due to the very substantial economies of scale from which the iron and steel industry benefits. Thus, since the developing countries do not have adequately large domestic markets or export possibilities, and often lack sufficient capital, iron and steel complexes in these countries are small in size and therefore have high production costs.

It may be that this is only a result of the general economic situation, being linked to the excess capacities in the industrialized countries and the low price of steel in the world market. It would appear that, since 1960,

excess capacity has become more uncommon, or at least has declined, and a steel shortage is expected if large investments are not made in time in the iron and steel industry. It is therefore possible that part of these investments should be made in countries whose geographical location and iron or coal deposits make this attractive to the investor.<sup>1/</sup>

(a) Algeria

The technological lines chosen are:

- Flat products,
- Bars and sections,
- Welded and seamless tubes,
- Sections.

Metal production

<u>Product</u>	<u>Units</u>	<u>1973</u>	<u>Production</u>	
			<u>1977</u>	<u>1980</u>
Cast iron	1 000 T.	430	900	1 550
Crude steel	1 000 T.	480	1 000	1 700

The investments relate to the El Hadjar (Annaba) iron and steel complex and the steel-processing sectors.

Production will grow at an average rate of 14 per cent a year, and investments will account for 15 per cent of all industrial investments.

The processing of zinc ore is also planned.

	<u>1973</u>	<u>1977</u>	<u>1980</u>
Refined zinc, tonnes	600	730	730

(b) Brazil

Same orientation regarding the basic iron and steel industry.

Metal production

	<u>Unit</u>	<u>1970</u>	<u>1974</u>	<u>Growth %</u>
Steel	1 000 T.	5 400	11 200	107
Aluminium	"	65	120	85
Zinc	"	10	30	62
Tin	"	13	15	15

<sup>1/</sup> In any event, if a country establishes an iron and steel industry in order to be independent and save foreign exchange, it must have at least iron or coal in its territory, since simultaneous import of equipment, ore, coal and possibly highly skilled technicians results in savings of foreign exchange which are so small that the investment is not justified.

(c) Korea

Iron and steel production is to follow a rapid growth, and will increase by 280 per cent.

Production of ferrous metals

	<u>1970</u>	<u>1980</u>
Iron, steel and rolled products (in thousands of tonnes)	1 270	3 500

New establishments will relate to:

- Steel foundry (200,000 tonnes) and special steels (20,000 tonnes).

Investments in the iron and steel industry will amount to \$11 billion, and production will increase by 13 per cent a year.

(d) Peru

The metal products industries are to grow by 15 per cent, or 10 per cent a year.

For steel, investments will be distributed as follows between the private and State sectors (with State participation ranging from 35 per cent to 51 per cent).

Investments in the iron and steel industry

	<u>Total for the programme</u>	<u>Investment, 1970-1975</u>	<u>Balance remaining</u>
<u>Total for the iron and steel industry</u>	29 940	7 330	22 610
of which, by the State sector	18 960	6 344	12 616
<u>Total for non-ferrous metallurgy</u>	1 481		
of which, by the State	688		

These investments relate to:

- Expansion of the Chinbete complex and two other projects, at least one of which - at Nasca - will be fully controlled by the State.

Steel production is expected to amount to 900,000 tonnes in 1975 and 1,360,000 tonnes in 1980.



These investments account for 18.5 per cent of total industrial investments.

(e) Philippines

Of the 161 projects registered with the Board of Investments (BOI) (body responsible for assisting investments in specific branches and sectors), a few relate to major investments in the iron and steel industry.

These investments, by sector, will be as follows:

- Steel	\$609 million	} or 79 per cent of all industrial investments
- Nickel	\$345 million	
- Aluminium smelting	\$128 million	
- Cold rolling mill	<u>\$595 million</u>	
Total	\$1,468 million	

In this country, the capital invested in industry is private.

(f) Tanzania

No major basic iron and steel industry project is planned, apart from the establishment of a medium-sized rolling mill to produce 10,000 tonnes of rolled products in 1970, which accounts for 4.7 per cent of total investment.

4. Establishment of basic industries: the chemical industries

The chemical industry is one of the most dynamic elements in industrial development. Its growth rate very often exceeds the average growth rate of industry by two-thirds.

The establishment of basic petrochemical or inorganic chemical complexes gives rise downstream to such a wide range of products that many countries decide to set up this type of complex.

This type of basic heavy industry is highly dependent on economies of scale i.e. linked to market size more than to the availability of raw materials. Thus this industry will often not be very competitive at the outset, especially in countries with small populations and low income which have difficulty in exporting to the world market, since the installations will not always be of optimum size. In addition, this highly capital-intensive industry will be influenced very little by the low cost of local labour.

In this branch, the petrochemical and basic chemical (alkalines, acids and their derivatives) industries have been included.

(a) Algeria

The aim of the chemical industry will be to use Algeria's natural resources to the best advantage.

Organic chemistry, chemical synthesis and petrochemical engineering are the two main streams (processing of gas and petroleum) have already been selected in the plan for 1970-1973. For inorganic chemistry, there will be three plants:

- Manufacture of acids,
- Production of compressed and dissolved gases,
- Manufacture of soda products.

The operation of these plants will make it possible to meet requirements in respect of fertilizers, plastics, pesticides, paints, etc.

Some basic and finished products

	Unit: thousands of tonnes		
	1973	1974	1975
Sulphuric acid	260	750	830
Ammonia	250	350	550
Phosphoric acid	70	300	450
Ethylene		120	120
Polyethylene		40	60
Synthetic fibres		10	14
Paints and varnishes	39	40	50

Production in this branch will increase by 15 per cent a year, and investments will account for 15 per cent of industrial investments.

(b) Brazil

The chemical industry will absorb 5.5 million cruzeiros, or 18.3 per cent of total industrial investments. Refining capacity for petroleum products will be expanded by a factor of 1.5.

In chemical production, the manufacture of certain basic products will expand considerably.

		1970	1974
		(thousands of tonnes)	(thousands of tonnes)
Soda	+162%	183	480
Sulphuric acid	+160%	557	1 450
Elastomers	+ 32%	76	100
Fertilizers	+230%	248	820

In this sector, State participation will be extremely limited.

(c) Korea

A petrochemical complex producing 100,000 tonnes of ethylene has already been built during the current plan, and new units producing raw materials for plastics will be set up.

An ammonia plant will also be established to meet fertilizer requirements.

Investments in the basic chemical industry will call for \$342 million, or 16 per cent of total industrial investments. Production will increase by 13 per cent a year between 1970 and 1976.

(d) Peru

In order to meet the country's requirements, a great effort will be made in the chemical sector through the establishment of:

- A petrochemical complex (Pampilla complex), manufacturing organic intermediate products required for the chemical industries;
- A phosphate product (fertilizer) complex;
- A complex manufacturing soda derivatives.

The other plants set up will produce acetone, synthetic fibres, dyes and other chemical products.

The investments will be both State and private.

Total investments in the chemical sector  
(in 1970 soles)

	<u>Total cost</u>	<u>During the period</u> <u>1971-1975</u>	<u>Remainder</u>
State	6 629	5 083	1 746
Private	13 506	13 506	-
TOTAL	20 135	18 589	1 746

These investments account for 21.5 per cent of total industrial investments; production will grow at an annual rate of 12.5 per cent.

(e) The Philippines

The chemical industries as such will account for an investment of \$120 million, to which will be added \$119 million for petroleum refining, or taken together 8.3 per cent of total industrial investments. This chemical industry will manufacture few, if any, basic or intermediate products.

(f) Tanzania

The share of industrial investments earmarked for this branch will be 18.4 per cent.

There are no major projects. There will be development or establishment of medium-sized plants manufacturing consumer goods and some intermediate products, i.e. fertilizers (105,000 tonnes in 1970), handliners, detergents, tyres, etc. Since the establishment of plants producing basic products calling for major investments is made difficult by the smallness of the market, Tanzania is not at present considering them.

These industries will also have foreign markets, and their exports should grow rapidly.

5. Establishment of processing industries: in mechanical and electrical engineering industries

Every country must necessarily establish a certain number of processing industries to meet a whole group of domestic requirements. For example, the mechanical and electrical engineering industries are closely related to the acquisition of know-how and growth of a domestic technology benefiting industry as a whole.

The development process is slow in this sector; a mechanical or electrical engineering industry cannot be established the way an iron and steel complex is set up. Since the range of products is very wide, requirements can be met only little by little, with harmonious development of the sector, since the main customer of the sector is the sector itself. Like the preceding industries, but perhaps much less so, these industries are subject to economies of scale (minimum production runs). Their profitability therefore depends on the size of the domestic market, for it is only at the final stage that the mechanical or electrical engineering industry will be competitive in foreign markets and will be able to export. Consumption of products manufactured by these industries grows with per capita income and total population. The most highly populated countries will therefore be in the best position to develop their mechanical engineering industries. In 1970, Brazil had already reached an advanced stage in development, where simple products accounted for 20 to 30 per cent of the total. Some products now call for a very large market and complex techniques. Production of electrical equipment still exceeds mechanical engineering production. However, this industry is not yet competitive in foreign markets.

The planning of this sector will be complex, since all these inter-dependent industries must be made subject to co-ordinated decisions and therefore require an efficient organization linking all the individual enterprises.

In addition, the development of this sector will be entirely dependent on the training of technicians and engineers.

The table below indicates the importance of the mechanical and electrical engineering industries in comparison with the iron and steel and chemical industries.

	<u>Percentage of total industrial investments (1)</u>		<u>Percentage of annual growth in production (2)</u>		<u>Mechanical and electrical engineering industry</u>	
	<u>Iron and steel industry</u>		<u>Chemical industry</u>		(1)	(2)
	(1)	(2)	(1)	(2)	(1)	(2)
Algeria	15	14	15	15	15	27
Brazil	32	-	18.3	-	26.6	-
Korea	14	13	17	13	16.5	17
Peru	18.5	10	21.5	12.5	19.5	13
Philippines	50	-	8.3	-	-	-
Tanzania	4.7	-	18.0	-	8.4	-

Country examples:

- Algeria: this branch accounts for 15 per cent of industrial investments, and production is to increase by 27 per cent a year between 1974 and 1980.
- Brazil: 26.6 per cent of industrial investments.
- Korea: 16.5 per cent of industrial investments; production will increase by 17 per cent a year.
- Peru: 19.5 per cent of industrial investments, with an annual growth of 13 per cent.
- Tanzania: 8.4 per cent of investments.

It may be noted in passing that the annual growth rates of production are often a little higher in the mechanical and electrical engineering industries than in iron and steel. This is due to a lower capital coefficient.

6. Establishment of processing industries: Other examples

The remainder of investments will be reserved for the processing industries whose importance is stressed by all the countries, namely:

- Agricultural and food industries,
- Building materials industries,
- Textile and ready-made garment industries,

- Leather and footwear industries,
- Wood and furniture industries, etc.

It would not seem necessary to recall here the very important role played by the agricultural and food industries in the industrial development of a country. In recent years, sugar and paper pulp have been coming to the forefront.

In addition, all the countries concerned, in particular the poorest ones, are making a special effort with respect to the production of building materials such as cement.

## CHAPTER III

### PRODUCTION AND EMPLOYMENT

One of the official goals of industrial development is to provide jobs. In countries where the level of unemployment and the birthrate are high, this is essential.

Jobs in industry are the result of two factors:

- On the one hand, the creation of new jobs as a result of the development of production in existing plants or through the implementation of new projects;
- On the other hand, the elimination of existing jobs through enhancement of labour productivity.

#### 1. Enhancement of labour productivity

In a given industrial branch, the average increase in productivity between two points in time is in fact the result of two factors:

- An improvement in existing industrial plants coinciding with better organization or better management (leadership, personnel training, additional equipment);
- A very great increase in productivity in new plants set up between the two points in time (establishment of increasingly modern plants which are therefore more productive than existing ones), to make them competitive.

The measures carried out take into account both factors. We have:

#### Increase in annual productivity in industries:

- Algeria	+ 4.3%
- Brazil	6.4%
- Korea + mining	1.0%
- Peru	4.2%
- Philippines + mining	- 0.4%
- Tanzania	+ 3.0%

The results are high for Algeria, Brazil and Peru. This shows in passing the orientation in new plants set up towards technological choices which reduce labour to a minimum.

For Algeria and Peru, it was possible to establish a distribution of this increase among the various sectors.

#### - Algeria

	<u>Annually</u>
- Total industry	4.3%
- Iron and steel industry	8.6%
- Chemical and other industries	5.0%
- Engineering and electrical industries	8.7%
- Other industries	2.3%

- Peru

	<u>Annual</u>
- Total industries	4.2%
- Consumer goods	3.2%
- Intermediate goods	5.2%
- Capital goods	4.1%

As can be seen, it is in the strongly developing branches (iron and steel, chemicals, mechanical and electrical engineering as well as the intermediate goods), where large modern industrial complexes have been set up, that progress has been strongest.

The case of the Philippines (weak growth in productivity) is perhaps deliberate, since the Board of Investments (body selecting industrial projects) pays special attention to labour-intensive industries (main objective of the Plan).

Note: The training of skilled labour and high-level cadres is imperative for future development. An important effort has been undertaken along these lines, since if the country proves unable to supply competent cadres and skilled labour in adequate numbers, it will be impossible for industrial development to continue.

Tanzania, for example, thinks that its requirements in respect of cadres and skilled labour will be met by 1980.

2. Development of employment in industry

The following table shows the growth rate for total population, total employment and employment in industry by country (period covered by the Plan).

	<u>Employment in industry</u>	<u>Total employment</u>	<u>Total population</u>
Algeria	7.0%	6.5%	3.4%
Brazil	3.5%	3.1%	2.9%
Korea	6.1%	2.5%	1.5%
	+ mining		
Peru	3.5%	-	3.1%
Philippines	6.6%	4.5%	3.5%
	+ mining		
Tanzania	7.9%	+5.6%	2.7%

It can be seen that for all the countries:

- The growth rate for total employment is higher than that for the population. There would therefore appear to be a better rate of employment in general, i.e. a fairly substantial increase in the ratio between employed and unemployed persons.



- The growth rate for employment in industry is higher than that for total employment, in other words the proportion of the employed population working in industry is increasing.

Furthermore (with reference to the development of the GDP), it appears that total employment is growing more slowly than the GDP; thus, the average productivity of labour in the economy as a whole is increasing.

#### 6. Country-by-country analysis

##### (a) Algeria

Industry must create 150,000 jobs specifically in production between 1973 and 1980.<sup>1/</sup>

The table below shows the number of jobs already existing and created between 1969 and 1980. It is seen that in the period 1973-1980, industry is creating 19 per cent of total jobs.

#### Shift in the number of jobs in industry between 1969 and 1980

	<u>1969</u>	<u>1973</u>	<u>1980</u>
Mines and quarries	13 000	16 000	22 000
Iron and steel	5 300	10 700	14 200
Mechanical and electrical engineering	16 000	32 000	90 700
Building materials	10 000	10 000	36 000
Textiles	26 350	33 300	40 500
Leather	6 800	7 800	9 200
Chemicals	7 350	9 500	24 500
Others	17 000	23 000	32 000
Foodstuffs	23 000	30 000	49 000
Hydrocarbons	15 500	20 500	30 000
Power, water	<u>9 600</u>	<u>6 300</u>	<u>11 600</u>
Total for industry	<u>145 900</u>	<u>209 100</u>	<u>352 700</u>

##### (b) Brazil

During the period 1970-1973, the annual growth in jobs, by sector, will be:

- Primary sector	+1.2%
- Secondary sector	+4.1%
<u>Industry</u>	+3.5%
<u>Building</u>	+4.6%
- Tertiary sector	4.7%
Total	3.1%

<sup>1/</sup> Temporary jobs, primarily in building and public works, resulting from the total investments will account for 120,000 new jobs during the same period.

The total number of active members of the population will be 33 million out of 100 million inhabitants.

(c) Korea

In view of the low growth rate of the population, the employment problem, while remaining important, is not and will not be as acute as in the other countries.

In 1970, there were 9.9 million jobs. With an annual increase of 3 per cent, there will be 11.8 million jobs by 1976, an overall increase of 18.6 per cent.

Mining and industry will provide 20.5 per cent of jobs in 1976, as compared with 16.1 per cent in 1970. In principle, then, these sectors will create around 800,000 jobs in six years.

(d) Peru

Between 1971 and 1975, the industrial sector will create 140,000 new jobs, including 64,000 in industry and 108,000 in small-scale industry and artisanal enterprises.

	<u>1970</u>	<u>1976</u>	<u>Annual growth</u>
<u>Industry</u>	191 100	255 400	+3.4%
Consumer goods	113 700	139 000	+3.2%
Intermediate goods	46 600	68 800	+5.7%
Capital goods	30 800	47 500	+6.4%
Small-scale industry and artisanal enterprises	432 300	539 900	+3.2%
<b>Total</b>	<b>623 400</b>	<b>795 300</b>	<b>+3.5%</b>

Industry will, then, create an average of 13,000 jobs a year.

(e) Philippines

In 1971, there were 1 million unemployed.

The active population will increase from 13.2 million in 1971 to 15 million in 1974. The Government will pursue a policy aimed at reducing unemployment, which will decline from 7.7 per cent in 1970 to 5 per cent in 1974, in other words by 750,000 unemployed.

The growth rate for employment will be 4.5 per cent, with that for industry amounting to 6.6 per cent.

Distribution of employment by sector

	1967	1974	Increase in 1974	
			During 1968-1974	Annual
Agriculture	58.2	55	+2.3%	3.3%
Mining and industry	11.7	13	+4.2%	6.4%
Building	2.5	3	5%	49.0%
Electricity, gas, water, etc.	0.3	0.5	136.7%	19.3%
Trade	9.9	10.4	37.0%	5.4%
Others	<u>17.4</u>	<u>18.1</u>	-	-
	100	100	31.1%	3.4%

In view of the acuteness of the employment problem, industry will have to use the maximum amount of local labour wherever possible.

(f) Tanzania

The rural population accounts for 25 per cent of the total population.

Distribution of non-agricultural jobs

	1968-1969	1973-1974	Increase	
			Annual	Total
Mines/quarries	6 000	6 000	-	0%
Industry	36 000	57 000	7.9%	58%
Building	49 000	71 000	6.4%	45%
Services	17 000	18 000	11.0%	180%
Trade	25 000	37 000	6.8%	48%
Others	<u>124 000</u>	<u>159 000</u>	<u>3.2%</u>	<u>21%</u>
	250 000	348 000	+5.6%	37%

In the coming five years, jobs in industry will increase by 7.9 per cent, while total employment will increase by 5.6 per cent a year.

CHAPTER IV

FINANCING

Industrial investments can be financed by the mobilisation of savings in the industrial sector. However, because domestic savings are often insufficient to meet the requirements of all investments, it is necessary to resort to external financing.

1. Amount of industrial investments

Industrial investments represent a certain percentage of total investments. More specifically, the table below shows the share of industrial investments in the total investments in the country.

	<u>Industrial investments</u>	<u>Total investments</u>
Algeria	31%	6%
Brazil	17%	3%
Korea	21%	1%
Peru	13%	8%
Philippines	10.5%	29.5%
Tanzania	24.0%	7.0%

The maximum effort at industrialization and the development of the industrial resources is being made by Algeria. Brazil and Peru show relatively small percentages owing to the effort made in infrastructure and the oil pipeline, the low rate of industrial investment is explained by the desire to develop agricultural resources first of all (see above).

2. Share of the State in industrial investments

Apart from Algeria, the State plays a part in industrial investment above all in the heavy industries requiring large initial investments.

The ratio between State and private industrial investments gives an idea of State participation in the transformation of the industrial structure.

	<u>State</u>	<u>Private</u>
Algeria	97	3%
Brazil	< 10%	> 90%
Korea	10%	90%
Peru	25.3%	74.7%
Philippines	?	?
Tanzania	74.0%	26.0%

It goes without saying that mobilisation of the savings of industrial enterprises will be different depending on whether or not the State is preponderant in their investments.

For example, in Algeria, the cash flow of enterprises will be automatically paid into an investment fund and distributed according to the needs of the country's industrial policy. This is perhaps the best way to control and direct industrial development.

For Tanzania, whose semi-State sector is important, only State investments will be directly controlled. Enterprises in semi-State sectors, while adhering to the plan, will preserve some independence.

#### 5. Investment sources by country

The traditional sources of finance for investments are well known:

- Local: State (through taxes)  
Enterprises (cash flow, gross savings)  
Households (savings)
- Foreign: Grants  
Loans (on variable terms).

Advances made by the currency issuing bank to the treasury may in some cases be substantial.

Furthermore, adequate reserves of foreign exchange should make possible the necessary purchases of capital goods abroad.

#### (a) Algeria

Industrial investments amounting to 35 per cent of total investments will be directly controlled by the State (being compelled to pass through the banking sector, which is itself State-controlled).

Private industrial investments are extremely small, amounting to 3.3 per cent of the total. The State will therefore be the main source of finance, through taxes and charges on activities outside the petroleum sector, and above all through petroleum resources.

With regard to imports linked to industry:

- Capital goods account for 47 per cent of total imports;
- Raw materials and semi-finished products account for approximately 30 per cent.

#### (b) Brazil

The share of the private sector, which is already very substantial, is to increase to 30 per cent. An importing policy must therefore be introduced.

Investment credits (of domestic or foreign origin) will be pooled in a Capital Market Development Fund (FIMCAP), in which the World Bank, A.I., the Central Bank of Brazil, the National Development Bank and other banks will participate.

Measures are planned in respect of:

- Interest rates, with a view to their reduction, and
- Financial assistance to small and medium-sized enterprises.

A monetary and credit policy has been established.

(c) Korea

Between 1972 and 1977, domestic savings will be doubled (i.e. an increase of 19 per cent a year). Despite this sharp increase, it will be necessary to call upon foreign capital, whose share will, however, decline from 35 per cent in 1970 to 21 per cent in 1977.

Investments in industry will increase by 45 per cent between 1970 and 1976, or by 9.7 per cent a year. While the State has invested in several industrial sectors (e.g. iron and steel), the remainder of the financing falls to the private sector:

	<u>1970</u>	<u>1977</u>
Private savings	38.8%	56.3%
Government savings	26.0%	30.0%
Foreign contribution	35.2%	13.7%

(d) Peru

The financing of investments will be assisted by the establishment of State financial agents, making it possible to channel savings.

However, part of the investments will be carried out with foreign capital.

Requirements in respect of foreign exchange (without distinction between industrial and other investments):

State sectors	5.7 thousand million soles
	9.8 thousand million in foreign exchange
Private sectors	23.6 thousand million soles
	22.0 thousand million in foreign exchange

The distribution between actual contributions and credit will be as follows:

- State sector

Soles	67 per cent - actual contribution 33 per cent - credit
Foreign exchanges	20 per cent - actual contribution 80 per cent - credit

- Private sector

Soles	40 per cent - actual contribution 60 per cent - credit
Foreign exchanges	23 per cent - actual contribution 77 per cent - internal credit

The amount of foreign exchange credits will account for 39 per cent of investment requirements, or \$640 million.

(e) Philippines

The share of investments in the GNP will increase from 17.6 per cent in 1970 to 21 per cent in 1974. Total investments will increase by 20 per cent during the period of the Plan, or by an average of 6 per cent a year.

Private savings, 34.4 per cent of which will be earmarked for industry and mining, will grow more slowly than public savings - at an average rate of 6.5 per cent, as compared to 18 per cent, and the share accounted for by the private sector will therefore decrease from 84 per cent to 80 per cent of total domestic savings.

Note: The very high rate of growth of State-sector savings is attributable to the years 1971 and 1972 (33 per cent and 18 per cent); it has subsequently stabilized at around 10 per cent.

Sources of private finance for total investments between 1971 and 1974

- Capital inflows	13.3%
- Domestic savings	86.7%
- Government finance institution	8.5%
- Private banks	10.2%
- Other bodies	6.8%
- Savings of enterprises	14.4%
- Personal savings	46.6%

(f) Tanzania

In this country, where the State controls a large proportion of economic activity, most investments will be made by the State and semi-State sector.

Total investments should increase in capacity by 10 per cent during the period of the plan, with the annual growth distributed as follows:

- State sector	+10%	
- Semi-State sector and co-operatives	+20%	10% overall
- Private sector	+ 7%	

The sources of finance will be distributed as follows (not distinguishing the industrial sector):

- State sector	37.5%
- Semi-State sector	28.5%
- Private sector	26.0%
- East African Community	8.0%

Resources will be external to the extent of 41 per cent for the State sector and 35 to 40 per cent for the semi-State sector. Private investments will relate very little, if at all, to industry.

#### 4. Conclusion

Thus, all these countries are going to endeavour to mobilise domestic savings so as to increase investments and the share in these investments accounted for by local finance.

The role of the State and its weight in investments will therefore tend to increase, except in Brazil where they will decline.



CHAPTER V

FOREIGN TRADE RELATIONS

1. "Foreign Trade" as a factor of "national development"

In the framework of their development, the countries studied have been faced with the following tasks:

- (a) Achieving self-sufficiency by substituting local products for imports of certain products;
- (b) Developing the exports of products having maximum added value.

(a) At the outset, the effort to achieve self-sufficiency will consist in substituting local products for imports of consumer and intermediate goods. All the countries must import essential foodstuffs such as cereals, milk and meat, which weigh heavily on their trade balances. However, better agricultural yields should reduce these imports.

None the less, despite the import-substitution, the volume of imports always tends to increase in all the countries covered by this study (see section 3 below). It would of course be interesting to follow the development of imports by general groups of products (study of structures), in particular the position taken by capital and intermediate goods to the detriment of finished products.

(b) All the countries concerned are planning to develop all their exports, as indicated by the table below.

Growth in total exports

Algeria .....	7.0%
Brazil .....	10.0%
Korea .....	24.3%
Peru .....	10.0%
Philippines.....	8.5%
Tanzania .....	5.5%

All these countries, with the exception of Tanzania, expect to develop their exports of industrial products.

Some, like Brazil and Korea, appear to be instituting "aggressive" trade policies, while others such as the Philippines or Tanzania, will develop agricultural products with some degree of processing. Algeria will develop its natural petroleum resources, which will continue to be preponderant.

Korea, whose exports of electrical equipment can be expected to grow considerably, is currently starting out with the export of products assembled in the country from imported parts.

In a very general way, for technical and cost reasons, the exports of industrial products do not usually relate to goods with advanced production technologies.

It goes without saying that the promotion of these exports should be accompanied by incentives of all sorts to stimulate them (tax exemptions, financial facilities for exporting industries, the establishment of dynamic trade networks, etc.).

Lastly, some countries such as Peru or Tanzania would appear to be orienting their exports towards privileged markets, making up a sort of economic enclave of neighbouring countries whose economies would appear to be developing in a complementary manner.

## 2. Exports of industrial products by country

### (a) Algeria

The table below showing the breakdown of Algerian exports reveals the preponderance of hydrocarbons.

#### Development of Algerian exports in terms of value

	<u>1973</u>	<u>1977</u>	<u>1980</u>
Hydrocarbons	85%	87%	89%
Mining products	3%	2%	2%
Industrial products	5%	5%	5%
Agricultural products	7%	6%	7%

#### Value of these exports in Algerian dinars

	<u>1973</u>	<u>1977</u>	<u>1980</u>
Hydrocarbons	6 645	8 500	10 920
Mining products	170	220	315
Industrial products	420	500	620
- Iron and steel	150	200	200
- Urea, phosphoric acid	150	80	100
- Paper	20	20	40
- Plastics	-	-	-
Agricultural products	575	565	515
- Wine	400	350	300
- Citrus fruits, market gardening products	120	140	140
- Others	55	75	75
<b>TOTAL</b>	<u>7 800</u>	<u>9 785</u>	<u>12 300</u>

It will be seen that industrial exports will increase by 41 per cent between 1973 and 1980, while agricultural exports would appear to tend to decline slightly, primarily as a result of wine exports.

The value of hydrocarbon exports given here is without a doubt very much lower than it will be in the future, owing to the increase in prices which has already taken place (and other possible increases).

Exports will account for 28 per cent of the GDP in 1980. The average growth rate for the value of exports could be expected to be 7 per cent a year between 1973 and 1980.

(b) Brazil

In order to develop its foreign trade, Brazil will endeavour to integrate this trade into world trade. The growth rates should be in a good ratio.

Exports should increase by 10 per cent a year, with 20 per cent of this increase accounted for by manufactured goods.

The export strategy will call for:

- Diversifying: Manufactured goods - \$800 million in 1974,  
Ores and non-traditional products - \$400 to 700 million;
- Taking advantage of the Generalized System of Preferences;
- Setting up an export consortium;
- Increasing the importance of banks abroad;
- Expanding trade representations abroad;
- Drawing up long-term export contracts;
- Joining with foreign companies to develop product sales;
- Taking a stand against the protectionism of the developed countries.

These measures show that Brazil intends to follow a very "aggressive" trade policy.

(c) Korea

As regards growth objectives for exports, Korea is at the head with 24.3 per cent a year.

By comparison with 1970, exports in 1976 will have approximately trebled, from \$1.4 thousand million, or 17 per cent of the GDP, to \$4 thousand million, or 29.6 per cent of the GDP.

Value of Korean exports, in millions of U.S. dollars

	1970	1976
- Exports: Goods	871	3 517
- Income, invisibles	497	545

The following table shows the breakdown of exports.

Distribution of exports, in millions of U.S. dollars

	1970		1976		Percentage share
Mining products	47	5.6%	96	2.7%	71%
Industrial products	737	83.6%	3 173	90.5%	49%
(Chemical products)	22	3.0%	127	5.8%	83%
(Metallurgical products)	24	3.3%	143	4.5%	59%
(Mechanical engineering products)	59	8.0%	730	23.0%	1 237%
(Light: Textiles)	340	46.2%	1 237	39.0%	36%
(Others)	292	39.7%	879	27.7%	30%
Agricultural products	26	3.0%	98	2.8%	37%
Fishery products	72	8.2%	153	5.2%	25%
TOTAL	882	100.0%	3 510	100.0%	39%

Among the industrial products, it will be seen that the export-oriented industries have made a breakthrough, increasing their total share of exports from 8 per cent to 39 per cent.

In order to facilitate and develop exports, the following incentives are planned:

- Development of the free trade zone,
- Development of export-oriented industries,
- Establishment of long-term banking facilities,
- Development of technology.

In addition, Korea is seeking new markets, including those of some communist countries, by establishing trade missions.

(d) Peru

Peruvian exports should increase from \$866 million in 1969 to \$1.8 thousand million in 1975, including \$500 million for industrial products, i.e. at a rate of 10 per cent a year, with:

- Use of the expanded IAPTA (Latin American Free Trade Association) and GRAM (Asian Group) markets; and
- Supplementary participation of the States in the Asian sub-region.

The table below shows the breakdown of exports.

Distribution of exports, in millions of dollars

	<u>1971</u>	<u>1975</u>	<u>Percentage 1975</u>
Traditional products (cotton, sugar, coffee, wool)	1 040 152	1 300 153	20%
Fishery products	353	361	-
Petroleum and derivatives	4	4	-
Mining products	531	782	47%
Non-traditional products (fisheries, mining)	50 35	500 125	830%
Industrial products	<u>25</u>	<u>175</u>	360%
TOTAL	<u>1 100</u>	<u>1 800</u>	1 500%

The share accounted for by industry remains very small in the 1970s, starting from 0.3 per cent, but increasing to 21 per cent by 1975. Other forecast statistics emphasize industrial products more strongly because they include among these products sugar, whose value is \$56 million. The increase in non-traditional industrial products is due to the paper, chemical and mechanical engineering industries.

(e) Philippines

Exports should grow by 8.5 per cent a year between 1970 and 1974.

Incentives are granted to exporters under an "Export Promotion Law". This law also set up an Export Assistance Fund to encourage the diversification of exports, up-grade their quality and improve marketing methods.

Financial incentives take the form of tax exemptions in respect of imported raw materials, sales credits and exemption from taxes on capital goods.

Distribution of exports, in millions of dollars

	<u>1970</u>	<u>1974</u>
Sugar	153	188
Wood products	257	323
Coconut products	188	269
	65 per cent	60 per cent
	of exports	of exports
Ores		
- Copper concen- trate	164	187
- Other ores	13	112
	19 per cent	23 per cent
	of exports	of exports
Others	150	208
	16 per cent	17 per cent
	of exports	of exports
TOTAL	<u>235</u>	<u>287</u>

It can be seen that an effort has been made in respect of ore, while the share accounted for by agricultural and forest products remains constant. This reflects an increased utilization of local resources.

(f) Tanzania

Calculations made on the basis of a decline in reserves available show an increase in exports of 5.5 per cent a year. Agricultural products are growing by 7 to 8 per cent a year.

Exports in 1968 give an idea of the breakdown of exports.

	<u>Distribution of exports, 1968 (Millions of dollars)</u>		
	<u>Amount</u>	<u>Value</u>	<u>Percentage</u>
Cotton, T <sup>3</sup>	60.4	267	14.5
Coffee, T <sup>3</sup>	46.1	251	15.2
Sisal, T <sup>3</sup>	117.7	180	11.1
Diamonds, thousand of carats	835.2	179	11.1
Petrol, gallons	117.7	142	7.9
Cashews, T <sup>3</sup>	74.1	97	6.0
Cloves, T <sup>3</sup>	14.3	75	4.6
Meat, tonnes	5.7	45	2.8
Oil, tonnes	38.3	44	2.7
Tea, tonnes	6.3	44	2.7
Tobacco, pounds	10 046	37	2.3
Others		248	15.4

In 1975, exports can be expected to amount to 29 per cent of the GNP. This figure should decline, since the GNP should increase faster than exports.

It is seen that, in 1968, there were no exports of processed or industrial products.

3. Development of the trade balance

It would appear that, under the combined action of a relative reduction in imports (import substitution) and a substantial growth in the exports of industrial products, the trade balances of countries should improve, and it is in fact seen that, for most of the countries, at least in terms of relative value, the difference between inputs and exports (trade deficit) is declining.

(a) Algeria

	<u>Balance-sheet of goods and services</u>		
	<u>1975</u>	<u>1976</u>	<u>1980</u>
Imports	-8 400	-10 560	-11 390
Exports	7 800	9 785	12 300
- Trade balance	-600	-775	+910
- Services balance	-350	-500	-400
- Surplus (exports - imports)	-950	-1 275	+510

(b) Brazil

Imports should grow by 8 per cent, and the balance should shift from -\$200 million to -\$300 million, with a foreign exchange reserve of \$1.4 thousand million maintained.

(c) Korea

In millions of dollars

	<u>1970</u>	<u>1976</u>
Imports of goods	-1 804	-3 654
Imports of invisibles	- 378	- 878
Exports of goods	+ 882	+3 510
Exports of invisibles	+ 497	+ 548
Surplus (exports minus imports)	- 803	- 474

(d) Peru

Objectives of the trade balance, in millions of dollars

	<u>1971</u>	<u>1975</u>
Imports	-1 000	-1 500
Exports	1 100	1 800
Surplus (exports minus imports)	+ 400	+ 300

Over the five years, reserves should increase by \$150 million.

(e) Philippines

Trade balance, in millions of dollars

	<u>1971</u>	<u>1974</u>
Imports	-1 095	-1 775
Exports	1 015	1 305
Surplus (exports minus imports)	- 80	+ 530

(f) Tanzania

Trade balance in shillings

	<u>1972</u>	<u>1974</u>
Imports	2 152	2 640
Exports	2 090	2 467
Surplus (exports minus imports)	- 62	- 173

#### 4. Conclusion

In the light of the plans, it appears that two situations can be distinguished:

- The countries whose mining exports are small (all except Algeria) will have to increase exports of finished or semi-finished products if they wish to finance their investments. Their trade policy should therefore be very dynamic;
- Algeria, whose hydrocarbon resources account for more than 85 per cent of its exports, will not for the time being have the same problems in connexion with the promotion of sales of industrial products abroad.



## CHAPTER VI

### CONCLUSION

Of the six countries studied, which are located in different continents, have different political systems and different types of wealth, some stand out sharply from the others in respect of the goals sought through industrialization.

1. All without exception are endeavouring to achieve self-sufficiency and economic independence through development and the integration of basic industries. For some, this is under way, and for others such as Tanzania and the Philippines, a start will be made in 1970-1980.

All are also seeking to develop their exports of industrial products.

2. On the other hand, while general policy is the same as regards the need to industrialize, means of application vary, in particular as regards the role of the State and of foreign countries.

#### (a) Role of the State

The State plays a preponderant role in Algeria and Tanzania, where all the key sectors of the economy have been partially or fully nationalized. This position makes the State the driving force in the economy, through control of savings and selection of investments.

Peru considers that certain sectors of the economy, in particular heavy industry, should be partly controlled by the State.

The other countries, in other words Brazil, South Korea and the Philippines, have left the responsibility for industrial development to the private sector, while endeavouring to control and guide it by means of incentives.

#### (b) The role of foreign countries

All, except Tanzania, which wishes to follow a more self-sufficient policy, and perhaps Algeria because of its hydrocarbons, will need an input of foreign capital, but this share should eventually decline, making way for domestic capital.

3. However, while the industrialization policy advocated by the planners appears coherent in absolute terms, the context in which it is being followed, i.e. the stage of industrial development, current per capita income and

market, must not be forgotten. The countries with large population, like Brazil, the Philippines and Korea may hope to have markets sufficiently large to enable them to produce a range of varied basic products at a relatively low cost. The countries with small populations (and few resources) will be able to produce only at high cost if they have only a limited range of commodities. These countries must therefore endeavour to initiate joint industrialization in order to establish a regional development, permitting them to share in the industrialization effort, while improving their position with regard to production costs.

4. There remains one problem not dealt with here. The plans of the countries studied in this paper are unanimous as regards the objective of raising the standard of living. This progress should normally have three dimensions:

- Improvement in the material standard of living, (as measured in a growth in consumption);
- Improvement in the social and cultural level, as measured in the use of a certain number of public services;
- Lastly, an improvement in the quality of life.

While industrialization does not always produce favourable results with regard to the latter point (deterioration of the countryside, pollution), it does on the other hand exercise a favourable influence with regard to the former two dimensions through the urbanization which is more or less inherent in it and the spread of high incomes.

However, it is very difficult to find reliable data linking standard of living and industrialization in the documents available.





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