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THE INDUSTRIAL DEVELOPMENT OF VENEZUELA

prepared by the  
Government of Venezuela

and submitted by the secretariat of the  
Economic Commission for Latin America

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## EXPLANATORY NOTE

Resolution 250 (XI) of 14 May 1965, adopted by the Economic Commission for Latin America (ECLA) at its eleventh session, requested the Latin American Governments "to prepare national studies on the present status of their respective industrialization processes for presentation at the regional symposium". With a view to facilitating the task of the officials responsible for the national studies, the ECLA secretariat prepared a guide, which was also intended to ensure a certain amount of uniformity in the presentation of the studies with due regard for the specific conditions obtaining in each country.

Studies of the industrial development of fourteen countries were submitted to the Latin American Symposium on Industrial Development, held in Santiago, Chile, from 14 to 25 March 1966, under the joint sponsorship of ECLA and the Centre for Industrial Development, and the Symposium requested ECLA to ask the Latin American Governments "to revise, complete and bring up to date the papers presented to the Symposium".

The work of editing, revising and expanding the national monographs was completed by the end of 1966 and furthermore, two new studies were prepared. The ECLA secretariat attempted, as far as possible, to standardize the presentation of the reports, in order to permit comparison of the experience of the different countries with regard to specific problems, particularly in the field of industrial policy.

The national studies on industrial development, to be presented to the International Symposium relate, in alphabetical order, to the following countries: Argentina, Bolivia, Brazil, Central America, Chile, Colombia, Cuba, Ecuador, Guyana, Mexico, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay and Venezuela.

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## Chapter I

### HISTORICAL SUMMARY

#### 1. General Considerations

Until the third decade of the present century Venezuela preserved all the features of an agricultural economy devoted wholly to providing food for its population and some agricultural products for export, this latter with the aim of financing the import of essential articles. The general growth of the economy was slow, and the improvement in the standard of living of the working classes was limited.

The large-scale exploitation of petroleum which began in the 1930's opened up a new stage in the economic and social development of Venezuela. The rhythm of development reached high levels. The growth of the gross domestic product (G.D.P.) was about 9 per cent a year, during the period 1936-58, the highest rate recorded for any country in Latin America.<sup>1/</sup>

Parallel with this rapid economic development came into being an accelerated process of urbanization and an improvement in the level of incomes per head, this latter growing at a rate of approximately 6 per cent annually.

The exploitation of petroleum turned out to be the dynamic factor in the development of Venezuela's economy, but, at the same time it gave it the weaknesses and vulnerability of an economy dependent on a single product. At present the petroleum industry generates more than 90 per cent of the country's foreign exchange as well as 60 per cent of its fiscal revenues, and provides more than one-fifth of its gross domestic product.

Venezuela possesses an extensive and abundant combination of potential natural resources whose mobilization makes for accelerated industrialization. It produces, in fact, nearly 80 per cent of all the petroleum and 60 per cent of the natural gas of the whole group of Latin American countries. The reserves of iron-ore, with an average metal content of 58 per cent, are estimated at some 4,000 million tons. There are in addition abundant deposits of phosphatic rock, limestone, nickel and other minerals. The potential reserves of hydroelectric power are practically inexhaustible and the agricultural resources are abundant. Nevertheless, a large proportion of these resources are only partially exploited or remain still unworked.

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<sup>1/</sup> The average annual rate of growth for Latin America was 4.9 per cent in 1950-61. See Economic Survey of Latin America, 1963 (United Nations publication, Sales No.: 6.II.G.).

## 2. Characteristics of the industrialization process

The industrialization process in Venezuela is of recent making. Only in the '50's can it be said to have taken on a sustained and accelerated character.<sup>2/</sup> This means that in comparison with other Latin American countries<sup>3/</sup> Venezuela began its industrial development with a definite time-lag.

Another peculiarity of Venezuela's industrial development is its relatively high cumulative annual growth. In the period 1950-64 this was 10.5 per cent, a rate higher than that shown by Brazil and Mexico, countries which have been conspicuous for their vigorous industrial development.

In spite of this, it cannot be concluded that the industrial development of this period, whether as regards the level of total production or the internal structure of industry, is to be considered as beyond improvement. On the contrary, it can be asserted that this development suffered from serious weaknesses, and that, being in a position fully to take advantage of the favourable conditions provided for it by the combined economy, it could, and ought to have been better.

The contribution of industrial products of only 17.1 per cent to the generation of the gross domestic product in 1964 is a sign of such weaknesses, since the proportion in other countries with a level of revenue similar to that of Venezuela is about 30 per cent.

When the manufacturing product structure is analysed by divisions of industries it appears that there were few changes over the period 1950-64. In the last year of that period the proportion contributed by traditional industries was still above 50 per cent, whilst that in the other main countries is only 40 per cent, and in the most industrialized it is still less.

Moreover the relatively small proportion contributed by intermediate and metal-transforming industry - only 40 per cent altogether at the end of this period - indicates a different weakness in the development: an unsatisfactory level of integration of the industrial complex. The small contribution of metal-transforming industry particularly stresses this fact because it brings out in turn the weakness of the metal-transforming infrastructure, which is slowing up the development of other sectors of industry.

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<sup>2/</sup> Various branches of industry had been established previously, but without any continuous and vigorous process of industrialization being achieved.

<sup>3/</sup> Argentina, Brazil, Chile, Colombia, Mexico and Peru.

A further weakness of the industrialization process has been its limited contribution to employment. The proportion of the population employed in industry is only 15 per cent of the total active population of the country. During the period 1950-60, only 87,000 jobs in industry were created, and during 1960-64, only 53,900, that is less than 10,780 a year on average; meanwhile the number of people of active age increases yearly by more than 80,000.

Other facts which bring out the weakness of industrial development process are the high expenditure on imported manufactured products which in the last two years reached more than 1,100 million dollars, the small quantity of manufactured products exported apart from petroleum derivatives, and the low average capacity of employment of industrial enterprises, of only 24 persons 4/ per industrial unit.

These weaknesses were not observed on account of the singular fact that the petroleum sector contributed each year an increasing net amount of foreign exchange, providing with ease the finances needed to sustain a high internal consumption of foreign manufactured goods. The need to accelerate the process of import substitution did not become obvious in all its importance because Venezuela was not faced with the structural problem of the bottleneck in the balance of payments, which is slowing up the development of almost all the countries in Latin America.

### 3. The institutional framework

The development of manufacturing industry in the past 15 years can be divided into two well-defined periods:

a) The first, which ran from 1950 to 1957, was characterized by an accelerated, though weak and unstable, pattern of growth. The 13.2 per cent, annual growth rate of industry was feeble when compared with the 9.3 per cent growth rate of the gross domestic product over the same period. This determines a growth relation of 1.42 between the two products, one which has been considerably bettered by other developing countries.5/ In this way it becomes clear that the industrial development did not take full advantage of the extraordinarily favourable conditions generated by the petroleum boom.

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4/ Estimate for 1965.

5/ In the period 1950-59 this relation was 1.89 for a group of 27 "undeveloped" countries, and 1.37 for a larger group which includes developed countries. "Techniques of Programming for Economic Development, with special reference to Asia and the Far East", U.N. 1963.

(b) The second, comprising the period 1958 to 1964 was characterized by a slower industrial growth than that of the previous period,<sup>6/</sup> as a result of a deterioration in the general economic conditions. Nevertheless during this period the growth relation of the industrial product to the gross domestic product rose to 1.52 as a result of the planned development of the Venezuelan economy and of the resolute determination shown by the government in advancing the industrialization of the country.

The two periods mentioned have further notable differences. The first corresponded, politically, to a dictatorial government, and was characterized, economically, by a lack of insight into development programming. The second began with the establishment of the democratic régime and is distinguished for the efforts which have been made in the field of planning.

Until 1958 protectionist measures for the stimulation of certain industrial activities were applied on isolated considerations, often without either the necessary preliminary studies or the intention of integrating them into a national programme of industrialization. Nor did there exist any co-ordination with other sectors of the economy, particularly agriculture. In these years the country possessed no plan of industrial development nor any central planning body (in spite of the fact that, formally, these functions had been assigned in 1952 to the Venezuelan Development Corporation) and, in 1955, the Industrial and Commercial Planning Department had been set up with the Ministry of Development.

During the second period, on the other hand, various measures have been taken intended to co-ordinate the efforts and actions of the public sector and to establish planning bodies. At the end of 1958 the Presidential Central Office for Co-ordination and Planning (CORDIPLAN) was established, and this body immediately got to work to produce the first economic development programme, for the period 1960-64.

There also began a process of strict co-ordination of the industrial with the agricultural sector, through the creation of agro-industrial commissions which are made up of representatives from the Ministries of Development and Agriculture and Livestock and some from private interests. The work carried out by these commissions has been very constructive; highly significant results have been achieved in the fields of cotton, tobacco, fruit, milk-products, oils, pigs and others.

Two institutes, the Venezuelan Iron and Steel Institute and the Venezuelan Petrochemical Institute, have also been set up by the Government to be in charge of specific programmes. In 1960, as a step towards the

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<sup>6/</sup> The annual cumulative rate of the industrial product was 7.8 per cent and that of the gross domestic product 5.1 per cent.



development of a complete regional programme, the Venezuelan Guayana Corporation was organized. For the same purpose the Government has approved the formation of the Andes Development Promotory Commission; the Zulia Planning Council was established in 1962; and a national scheme for regional planning is being studied at present.

The Industrial Committee, which is presided over by the Minister of Development, was created to co-ordinate in an operative form the work of all State bodies active in the field of industry. 7/

In other words, Venezuela has in recent years tried to correct the defects and maladjustments which had arisen during the process of industrialization as a result of isolated and, often improvised, protectionist measures. Naturally like every country which is carrying out a process of accelerated development, it has been confronted with great difficulties in the prosecution of its objectives, and there still remain numerous problems which await an adequate solution.

The lack, previous to 1958, of certain basic legal instruments as, for example, legislation on behalf of industrial development, and of an adequate machinery of co-ordination and information meant that not all the necessary investment decisions were taken and that when they were, it was largely as the result of direct protection or of ad hoc governmental decisions.

As a result of this situation, the process of import substitution was easily affected in those branches of industry in whose favour quantitative regulations and exemptions from customs tariffs on the import of raw materials and capital goods were established. These immunities were granted principally to already established or, in other words, traditional industries.

Moreover, manufacturing processes used to run from the finished towards the intermediate product; only in the last few years has this tendency changed and processes starting from the raw material been introduced. This amounts to a considerable modification in the structure of industry and one which promises well for the future. Subsidies and bonuses applied through customs duties, exemptions, import licences and other measures have been similarly directed towards the favouring of internal consumption of manufactured products and of industries built up on these products. On

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7/ This Committee also includes the Ministers of Finance and of Mines and Hydrocarbons, the head of the Presidential Central Office of Co-ordination and Planning, the presidents of the Development and Guayana Corporations, the Industrial Director of the Ministry of Development, and the head of the industrial department of CORDIPLAN.

the other hand, the same principles have not been applied in the case of industries with export potential. Consequently manufacturing industry is oriented exclusively towards import substitution without regard to export potential. The substitution process by giving preferential treatment to industries producing consumer goods and to assembly industries, has produced a greater rigidity in the balance of payments.

Venezuelan manufacturing industry, moreover, contrary to what has been the case in other Latin American countries, has not been faced with difficulties in the supply of raw materials and plant installations of foreign origin. This circumstance has made for a high level of capital density in manufacturing enterprises, and today many branches of industry have a production capacity greater than the requirements of the internal market, with a resultant waste of capital and raised production costs.

Lastly, the fact that manufacturing production is basically oriented towards consumer goods for the internal market has meant that the setting of industrial enterprises has been chiefly concentrated around the great centres of population. In 1963 more than half the industrial units as well as two-thirds of the manpower employed by the whole manufacturing industry of the country were situated in the Central Zone,<sup>8/</sup> which indicates a high degree of geographical concentration.

A final characteristic of Venezuelan industry is its concentration into large-scale establishments, viz, in 1961, 196 industrial units generated 59.5 per cent of the product, employed 37.2 per cent of the manpower, owned 78.7 per cent of the fixed capital, possessed 77 per cent of the installed capacity, and used 64.4 percent of the raw materials of all manufacturing industry.

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<sup>8/</sup> Central Zone: Federal District, Miranda, Aragua, and Carabobo.

## Chapter II

### RELATIVE IMPORTANCE, STRUCTURE, AND GENERAL CHARACTERISTICS OF MANUFACTURING INDUSTRY

#### 1. Product

The value of the manufacturing product, measured at constant prices, quintupled in the course of the last 15 years, achieving a cumulative annual rate of 10.5 per cent between the years 1950 and 1964. The manufacturing product in 1950 was 1,376 million bolivars (at 1960 prices), in 1955, 2,662 million, in 1960, 3,949 million, and in 1964, 5,589 million. <sup>1/</sup> (See table 1.)

The contribution of the manufacturing sector to the generation of the gross domestic product has shown a definite tendency to increase: 10.7 per cent in 1950, 13.7 per cent in 1955, 15 per cent in 1960, and 17.1 per cent in 1964.

If the growth of the manufacturing product is compared with the total development of the country we obtain the relations which figure in table 2, noting that that corresponding to the last few years is the most favourable. This is due to the planned development of the Venezuelan economy together with the resolute determination shown by the Government in advancing the industrialization of the country.

When the product structure of factory industry is analysed by industrial divisions it becomes apparent that the changes during the last three five-year periods, have been very small as can be seen in table 3. Viz., the contribution of traditional industry to the product fell from 59.3 per cent in the first five years to 55.5 in the last, the proportion contributed by intermediate industry remained about the same and that of metal-transforming and to a lesser extent, residual group industry showed a significant increase.

In the same period, on the other hand, an important structural change in the manufacturing product occurred: the proportion contributed by factory industry increased considerably at the expense of that of artisan industry. Moreover, if the petroleum-refining activities of factory industry are left out of account, the increase noticed above becomes still more obvious, as can also be appreciated from table 3.

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<sup>1/</sup> The corresponding figures for artesan industry derive from very gross estimates, owing to the shortage of records on this sector.

Table 1

VENEZUELA: VALUE OF THE MANUFACTURING PRODUCT

(Millions of bolivars, 1960 prices)

Divisions	1950	1955	1960	1964
<b>A. <u>Traditional industries</u></b>	<u>591</u>	<u>1 288</u>	<u>2 037</u>	<u>2 723</u>
20. Foods	209	397	592	835
21. Beverages	161	303	532	587
22. Tobacco	42	76	198	256
23. Textiles	49	109	238	395
24. Wearing Apparel and footwear	56	218	266	370
25. Wood and cork	28	66	41	57
26. Furniture and fixtures	38	103	130	165
29. Leather and hides	8	16	40	58
<b>B. <u>Intermediate industries</u></b>	<u>322</u>	<u>752</u>	<u>1 109</u>	<u>1 730</u>
27. Pulp and paper	7	33	98	188
30. Rubber	22	61	116	170
31. Chemical products	59	167	270	519
32. Petroleum derivatives	138	297	378	467
33. Non-metallic minerals	95	182	227	292
34. Basic metals	1	12	20	94
<b>C. <u>Metal-transforming industries</u></b>	<u>46</u>	<u>114</u>	<u>229</u>	<u>425</u>
35. Metal products	9	29	91	140
36. Machinery	3	5	9	16
37. Electrical equipment	2	12	51	81
38. Transport material	32	68	78	188
<b>D. <u>Residual group</u></b>	<u>38</u>	<u>103</u>	<u>153</u>	<u>234</u>
28. Printing	32	90	126	161
39. Miscellaneous	6	13	27	73
<b><u>Total for factory industry</u></b>	<u>997</u>	<u>2 257</u>	<u>3 528</u>	<u>5 112</u>
<b>E. <u>Artisan industry</u></b>	<u>379</u>	<u>405</u>	<u>421</u>	<u>477</u>
<b><u>Manufacturing total</u></b>	<u>1 376</u>	<u>2 662</u>	<u>3 949</u>	<u>5 589</u>
<b><u>Manufacturing total not including petroleum</u></b>	<u>1 238</u>	<u>2 365</u>	<u>3 571</u>	<u>5 122</u>

Source: Industrial Department - CORDIPLAN.

Table 2

VENEZUELA: RELATION BETWEEN TOTAL AND INDUSTRIAL GROWTHS

Periods	Rate $\Delta$ G. D. P.	Rate $\Delta$ G. I. P.	Rate $\Delta$ G.I.P. Rate $\Delta$ G.D.P.
	(Compound annual rates)		(Relation)
1950-55	8.8	14.1	1.60
1955-60	6.4	8.2	1.28
1960-64	5.5	9.1	1.65

Source: Industrial Department - CORDIPLAN.

Table 3

VENEZUELA: STRUCTURE OF THE MANUFACTURING AND FACTORY-SCALE PRODUCT

(Percentages)

Groups of industries a/	1950-55	1955-60	1960-64
1. Traditional industries	59.3	55.6	55.5
2. Intermediate industries	32.6	34.0	32.9
3. Metal-transforming industries	4.4	6.0	7.2
4. Residual group	3.7	4.4	4.4
5. <u>Total for factory industry</u> (1+2+3+4)	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
6. Factory industry excluding petroleum refining	68.0	76.3	81.4
7. Petroleum refining	10.6	11.3	9.0
8. Artisan industry	21.4	12.4	9.6
9. <u>Total for manufacturing industry</u> (6+7+8)	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
10. <u>Manufacturing industry in the</u> <u>gross domestic product</u>	<u>12.0</u>	<u>14.3</u>	<u>16.2</u>

Source: Industrial Department - CORDIPLAN.

a/ See Table 1 for the composition of the industrial divisions.

## 2. Industrial Employment

The section of the population employed in manufacturing industry in 1964 represented 14.7 per cent of the total employed population of the country and 13.1 per cent of the labour force. (See table 4.)

Employment in manufacturing industry increased from 212,300 persons in 1950 to 363,000 in 1964, which represents a rise of 71 per cent and a creation of 150,900 new jobs during the period - that is, 10,779 per year on average.

The contribution of manufacturing industry to the problem of employment has been limited; this is brought out by the fact that the proportion of the total employed population absorbed by manufacturing only rose from 13.0 per cent in 1950 to 14.7 per cent in 1964. This increase is significantly less than that shown by other productive activities such as electricity, gas and water, and construction, and by services such as trade, transport, etc. This can be explained by the high capital density attained by manufacturing industry under the stimuli of abundant national revenues and relatively low prices of equipment and machinery.<sup>2/</sup>

During the last five-year period the part played by traditional industries in the structure of industrial employment has increased while that of the other groups has slightly diminished, as can be seen in Table 5. The most important structural change achieved lies in the absorption of artisan employment by factory activities.

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<sup>2/</sup> Until now the unrestricted import of machinery has been permitted, under the additional advantages of exemptions from duty and payment with an overvalued currency.

Table 4

## EMPLOYMENT IN THE VENEZUELAN ECONOMY

Sectors	A. Absolute figures (In thousands of persons)				B. Relative figures (In percentages of total employment)			
	1951	1959	1962	1964	1951	1959	1962	1964
Agriculture	789	777	780	793	45.1	36.1	34.9	32.1
Petroleum	38	37	29	34	2.1	1.8	1.3	1.4
Mining	5	12	11	8	0.3	0.6	0.5	0.3
Manufacturing	227	304	323	363	13.0	14.1	14.4	14.7
Construction	96	157	117	157	5.5	7.3	5.2	6.4
Electricity, gas, and water	6	20	29	31	0.3	1.0	1.3	1.3
Transport and communications	57	79	90	104	3.3	3.6	4.0	4.2
Trade	164	260	288	326	9.3	12.1	12.9	13.2
Other Services	368	505	570	651	21.1	23.5	25.5	26.4
<u>Total employment</u>	<u>1 750</u>	<u>2 151</u>	<u>2 237</u>	<u>2 467</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
					<u>(In percentages of the labour force)</u>			
<u>Total employment</u>	<u>1 750</u>	<u>2 151</u>	<u>2 237</u>	<u>2 467</u>	<u>93.2</u>	<u>89.5</u>	<u>85.8</u>	<u>89.2</u>
Unemployed	127	251	369	298	6.8	10.5	14.2	10.8
<u>Labour force</u>	<u>1 877</u>	<u>2 402</u>	<u>2 606</u>	<u>2 765</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Source: National Plan 1965-1968 - CORDIPLAN.

Table 5

VENEZUELA: STRUCTURE OF EMPLOYMENT IN MANUFACTURING  
AND FACTORY INDUSTRY

(In percentages of total employment)

Groups of industries	1950-54	1955-59	1960-64
1. Traditional industries	48.3	54.2	56.0
2. Intermediate industries	26.8	24.3	23.1
3. Metal-transforming industries	18.9	16.0	15.2
4. Residual group	6.0	5.5	5.7
5. <u>Total for factory industry</u> (1+2+3+4)	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
6. Factory industry excluding petroleum refining	35.4	44.0	49.5
7. Petroleum refining	2.5	2.3	2.2
8. Artisan industry	62.1	53.7	48.3
9. <u>Total for manufacturing industry</u> (6+7+8)	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
10. Contribution to total employment	13.3	14.0	14.1

Source: Industrial Department - CORDIPLAN.



### 3. Investment in industry

Just as in the majority of countries in the process of development there is still a shortage of records for determining industrial investment in Venezuela. Only recently from the Industrial Enquiry made by CORDIPLAN in 1962 can more precise figures be obtained. According to this source, the fixed capital of manufacturing industry amounted in 1961 to 6,519 million bolivars, and from later studies undertaken by CORDIPLAN it can be estimated that in 1964 it had risen to 8,063 million (both figures are given in constant prices of 1960). The net investment during the period 1962-64 can therefore be estimated at 1,544 million bolivars (see table 6).

In 1964, 25.3 per cent of fixed capital belonged to traditional industry, 62.5 per cent to intermediate industry, 5.4 per cent to metal-transforming industry, and 2.1 per cent to the residual group.

Within the group of intermediate industries almost half - 47.3 per cent - of fixed capital is concentrated in division 32: petroleum derivatives an industry which is characterized by a high capital density and is very far developed in Venezuela. Also important is the share of the basic-metal industries, among which two enterprises <sup>3/</sup> possess more than 90 per cent of the fixed capital of that division.

In the group of traditional industries the greatest capital-holding belongs to food industry, with 46.5 per cent of the total for the division, to textiles industry, with 19.7 per cent, and to the beverages industry, with 15.7 per cent. The principal investments of food industry are employed in the sugar centres, which supply internal requirements in full and produce surpluses for export. The high proportion of capital recorded for the beverages industry is worth noticing. It is due to the fact that in this field there are a large number of enterprises which for the most part possess highly mechanized installations and have productivity indexes similar to those of the United States of America. There is a high degree of concentration in the distribution of fixed capital in manufacturing industry. Three divisions - petroleum derivatives, basic-metals and foods - possess 58.3 per cent of the total capital of manufacturing industry, and with the addition of three more divisions - chemical products, non-metallic minerals and beverages - this percentage rises to 80.0

In 1964, 37.7 of fixed capital consisted of buildings and structures, 58.3 per cent of machinery and equipment, 2.1 per cent of transport material and 2.2 per cent of office equipment, as can be seen in table 7.

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<sup>3/</sup> Orinoco Iron and Steel (SIDOR), and Venezuelan Iron and Steel S.A. (SIVENSA).

Table 6

VENEZUELA: FIXED ASSETS AND NET INVESTMENT IN  
MANUFACTURING INDUSTRY

(In millions of bolivars, 1960 prices)

Divisions	Fixed assets 1961 a/	Net investment 1962-1964 b/	Fixed assets 1964
<b>A. <u>Traditional industries</u></b>	<b><u>1 651</u></b>	<b><u>394</u></b>	<b><u>2 045</u></b>
20. Foods	755	197	952
21. Beverages	310	10	320
22. Tobacco	57	6	63
23. Textiles	274	129	403
24. Wearing apparel and footwear	88	16	104
25. Wood and Cork	31	7	38
26. Furniture and fixtures	95	18	113
29. Leather and hides	41	11	52
<b>B. <u>Intermediate industries</u></b>	<b><u>4 168</u></b>	<b><u>873</u></b>	<b><u>5 041</u></b>
27. Pulp and paper	125	61	186
30. Rubber	64	17	81
31. Chemical products	421	248	669
32. Petroleum derivatives	2 206	178	2 384
33. Non-metallic minerals	298	58	356
34. Basic metals	1 054	311	1 365
<b>C. <u>Metal-transforming industries</u></b>	<b><u>258</u></b>	<b><u>176</u></b>	<b><u>434</u></b>
35. Metal products	71	37	108
36. Machinery	4	2	6
37. Electrical equipment	72	22	94
38. Transport material	111	115	226
<b>D. <u>Residual group</u></b>	<b><u>103</u></b>	<b><u>68</u></b>	<b><u>171</u></b>
28. Printing	73	23	96
39. Miscellaneous	30	45	75
<b><u>Total for factory industry</u></b>	<b><u>6 180</u></b>	<b><u>1 511</u></b>	<b><u>7 691</u></b>
<b>E. <u>Artisan industry</u></b>	<b><u>339</u></b>	<b><u>33</u></b>	<b><u>372</u></b>
<b><u>Total for manufactures</u></b>	<b><u>6 519</u></b>	<b><u>1 544</u></b>	<b><u>8 063</u></b>

Source: Industrial Department - CORDIPLAN.

a/ Industrial Enquiry, 1962. Sums converted to 1960 prices.

b/ Preliminary estimate of CORDIPLAN based on product-fixed capital relations, assuming an improved utilization of installed capacity. See Methodology, chapter of the Manufacturing Industry Plan (Plan de la industria manufacturera) 1965-68.

Table 7

VENEZUELA: COMPOSITION OF INDUSTRIAL FIXED ASSETS, 1964

(Percentages of total fixed assets)

Divisions	Buildings and structures	Machinery and equipment	Transport material	Office equipment
<u>A. Traditional Industries</u>	<u>33.1</u>	<u>57.9</u>	<u>3.1</u>	<u>4.8</u>
20. Foods	33.9	56.6	3.1	6.4
21. Beverages	36.3	30.6	10.0	3.1
22. Tobacco	34.9	57.1	4.8	3.2
23. Textiles	28.8	68.0	0.7	2.5
24. Wearing apparel and Footwear	34.6	54.8	4.8	5.8
25. Wood and Cork	26.4	60.5	10.5	2.6
26. Furniture and Fixtures	24.8	61.0	8.0	6.2
29. Leather and Hides	48.1	46.2	1.9	3.8
<u>B. Intermediate Industries</u>	<u>43.4</u>	<u>55.0</u>	<u>0.8</u>	<u>8.8</u>
27. Pulp and Paper	37.6	58.6	1.1	2.7
30. Rubber	28.4	65.4	3.7	2.5
31. Chemical Products	76.8	17.5	3.6	2.1
32. Petroleum Derivatives	24.6	74.8	0.2	0.4
33. Non-Metallic minerals	30.3	65.7	1.7	2.3
34. Basic metals	64.7	34.8	0.2	0.3
<u>C. Metal Transforming Industries</u>	<u>25.6</u>	<u>61.1</u>	<u>8.3</u>	<u>5.0</u>
35. Metal Products	16.7	75.9	3.7	3.7
36. Machinery	50.0	50.0	-	-
37. Electrical Equipment	47.9	40.4	4.3	7.4
38. Transport Material	19.9	62.8	12.4	4.9
<u>D. Residual Group</u>	<u>18.2</u>	<u>71.9</u>	<u>2.3</u>	<u>7.6</u>
28. Printing	15.6	72.9	3.1	8.4
39. Miscellaneous	21.3	70.7	1.3	6.7
<u>Total for Factory Industry</u>	<u>39.0</u>	<u>56.5</u>	<u>2.2</u>	<u>2.3</u>
<u>E. Artisan Industry</u>	<u>10.0</u>	<u>90.0</u>	-	-
<u>Total for Manufactures</u>	<u>37.7</u>	<u>58.0</u>	<u>2.1</u>	<u>2.2</u>

Source: Industrial Department - CORDIPLAN.

/The gross

The gross fixed investment in manufacturing industry for the period 1963-66 amounted to 19.5 per cent of the total investment of the country, putting it second after investments in housing and urban-development which amounted to 20.6 per cent.<sup>4/</sup>

4. The contribution of the principal branches of industry to the manufacturing industry total

The apparent consumption of manufactured products for the years 1960 to 1964 inclusive, is given in table 8, according to the divisions by which they are produced.

The production value of manufacturing industry is given in table 9 the value of imports in table 10, and the value of exports in tables 11 and 12. The aggregate value has already been given in table 1.

In table 13 can be found an analysis of employment by industrial divisions.

Lastly, information on capital analysed by divisions has been given in tables 6 and 7.

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<sup>4/</sup> Plan de la Nación 1963-66.

Table 8

VENEZUELA: APPARENT CONSUMPTION OF MANUFACTURED PRODUCTS  
(A.C. = P+I-E)

(Millions of bolivars, 1960 prices)

Products	1960	1961	1962	1963	1964	Mean annual rates 1961-64
<b>A. Traditional industries</b>	<u>5 076</u>	<u>5 290</u>	<u>5 730</u>	<u>5 998</u>	<u>6 600</u>	<u>6.8</u>
20. Foods	2 421	2 609	2 756	2 884	3 143	6.8
21. Beverages	741	723	753	765	840	3.2
22. Tobacco	281	303	323	342	359	6.3
23. Textiles	581	555	707	749	869	10.6
24. Wearing apparel and footwear	589	639	687	739	804	8.1
25. Wood and cork	108	108	109	116	137	6.1
26. Furniture and fixtures	251	241	273	300	310	5.4
29. Leather and hides	104	112	122	103	138	7.3
<b>B. Intermediate industries</b>	<u>2 548</u>	<u>2 705</u>	<u>3 117</u>	<u>3 139</u>	<u>3 703</u>	<u>9.8</u>
27. Pulp and paper	291	330	416	427	493	14.1
30. Rubber	228	237	278	283	322	9.0
31. Chemical products	776	871	1 030	1 013	1 262	12.9
32. Petroleum derivatives	503	503	522	517	562	2.8
33. Non-metallic minerals	428	419	455	478	553	6.6
34. Basic metals	322	345	416	421	511	12.2
<b>C. Metal-transforming industries</b>	<u>2 046</u>	<u>1 939</u>	<u>1 937</u>	<u>2 079</u>	<u>2 773</u>	<u>7.9</u>
35. Metal products	475	479	523	492	571	4.7
36. Machinery	539	424	486	508	654	4.9
37. Electrical equipment	413	390	349	312	404	-0.5
38. Transport material	619	646	579	767	1 144	16.6
<b>D. Residual group</b>	<u>412</u>	<u>433</u>	<u>487</u>	<u>498</u>	<u>599</u>	<u>9.8</u>
28. Printing	203	191	238	242	257	6.2
39. Miscellaneous	209	242	249	256	342	13.1
<b>Subtotal for factory industry</b>	<u>10 082</u>	<u>10 367</u>	<u>11 271</u>	<u>11 714</u>	<u>13 675</u>	<u>7.9</u>
<b>Factory industry excluding petroleum</b>	<u>9 579</u>	<u>9 864</u>	<u>10 749</u>	<u>11 197</u>	<u>13 113</u>	<u>8.2</u>
<b>E. Artisan industry</b>	<u>600</u>	<u>620</u>	<u>641</u>	<u>660</u>	<u>680</u>	<u>3.2</u>
<b>Total for manufactures</b>	<u>10 682</u>	<u>10 987</u>	<u>11 912</u>	<u>12 374</u>	<u>14 355</u>	<u>7.7</u>
<b>Total for manufactures excluding petroleum</b>	<u>10 179</u>	<u>10 484</u>	<u>11 390</u>	<u>11 857</u>	<u>13 793</u>	<u>7.9</u>

Source: Industrial Department - CORDIPLAN.

/Table 9

Table 9

VENEZUELA: VALUE OF MANUFACTURING PRODUCTION

(Millions of bolivars, 1960 prices)

Divisions	1960	1961	1962	1963	1964	Mean annual rates 1960-64
<b>A. <u>Traditional industries</u></b>	<u>4 488</u>	<u>4 769</u>	<u>5 205</u>	<u>5 585</u>	<u>6 094</u>	<u>7.9</u>
20. Foods	2 089	2 299	2 486	2 684	2 909	8.6
21. Beverages	732	703	737	746	808	2.5
22. Tobacco	279	303	323	342	359	6.5
23. Textiles	414	442	547	608	687	13.5
24. Wearing apparel and footwear	552	600	651	711	770	8.7
25. Wood and cork	92	94	96	106	128	8.6
26. Furniture and fixtures	239	235	265	293	303	6.1
29. Leather and hides	91	93	100	95	130	9.3
<b>B. <u>Intermediate industries</u></b>	<u>3 521</u>	<u>3 769</u>	<u>4 215</u>	<u>4 534</u>	<u>4 979</u>	<u>9.0</u>
27. Pulp and paper	200	236	306	325	383	17.6
30. Rubber	188	199	235	247	280	10.4
31. Chemical products	402	475	546	612	734	17.0
32. Petroleum derivatives	2 338	2 444	2 606	2 752	2 885	5.4
33. Non-metallic minerals	353	353	379	393	456	6.6
34. Basic metals	40	62	143	205	221	53.4
<b>C. <u>Metal-transforming industries</u></b>	<u>518</u>	<u>575</u>	<u>621</u>	<u>847</u>	<u>1 152</u>	<u>22.4</u>
35. Metal products	189	207	238	240	290	11.3
36. Machinery	17	19	23	26	29	14.3
37. Electrical equipment	101	109	119	140	159	12.0
38. Transport material	211	240	241	441	684	34.2
<b>D. <u>Residual group</u></b>	<u>236</u>	<u>242</u>	<u>305</u>	<u>338</u>	<u>330</u>	<u>12.7</u>
28. Printing	187	174	213	224	246	7.1
39. Miscellaneous	49	68	92	114	134	28.6
<b><u>Subtotal for factory industry</u></b>	<u>8 763</u>	<u>9 355</u>	<u>10 346</u>	<u>11 304</u>	<u>12 615</u>	<u>9.5</u>
<b><u>Factory industry excluding petroleum</u></b>	<u>6 425</u>	<u>6 911</u>	<u>7 740</u>	<u>8 552</u>	<u>9 730</u>	<u>11.0</u>
<b>E. <u>Artisan industry</u></b>	<u>600</u>	<u>620</u>	<u>641</u>	<u>660</u>	<u>680</u>	<u>3.2</u>
<b><u>Total for manufactures</u></b>	<u>9 363</u>	<u>9 975</u>	<u>10 987</u>	<u>11 964</u>	<u>13 295</u>	<u>9.2</u>
<b><u>Total for manufactures excluding petroleum</u></b>	<u>7 025</u>	<u>7 531</u>	<u>8 381</u>	<u>9 212</u>	<u>10 410</u>	<u>10.4</u>

Source: Industrial Department - CORDIPLAN.

Table 10

VENEZUELA: VALUE OF IMPORTS OF MANUFACTURED PRODUCTS

(Millions of bolivars, 1960 prices)

Divisions	1960	1961	1962	1963	1964	Mean annual rates 1960-64
<b>A. <u>Traditional industries</u></b>	<u>599</u>	<u>595</u>	<u>533</u>	<u>452</u>	<u>514</u>	-3.8
20. Foods	343	314	278	239	240	-8.5
21. Beverages	9	20	16	19	32	37.4
22. Tobacco	2	-	-	-	-	-
23. Textiles	167	183	160	141	183	2.3
24. Wearing apparel and footwear	37	39	36	28	34	-2.1
25. Wood and cork	16	14	13	10	10	-11.1
26. Furniture and fixtures	12	6	8	7	7	-12.6
29. Leather and hides	13	19	22	8	8	-11.4
<b>B. <u>Intermediate industries</u></b>	<u>905</u>	<u>940</u>	<u>1 056</u>	<u>931</u>	<u>1 119</u>	<u>5.4</u>
27. Pulp and paper	91	94	110	102	110	4.9
30. Rubber	40	38	43	36	42	1.2
31. Chemical products	374	415	486	402	516	8.4
32. Petroleum derivatives	41	38	41	30	31	-6.8
33. Non-metallic minerals	77	72	86	92	106	8.3
34. Basic metals	282	283	290	269	314	2.7
<b>C. <u>Metal-transforming industries</u></b>	<u>1 528</u>	<u>1 364</u>	<u>1 316</u>	<u>1 232</u>	<u>1 612</u>	<u>1.2</u>
35. Metal products	286	272	285	252	281	-0.5
36. Machinery	522	405	463	482	625	4.6
37. Electrical equipment	312	281	230	172	246	-5.8
38. Transport material	408	406	338	326	460	3.0
<b>D. <u>Residual group</u></b>	<u>176</u>	<u>191</u>	<u>182</u>	<u>176</u>	<u>232</u>	<u>6.0</u>
28. Printing	16	17	25	18	32	-6.9
39. Miscellaneous	160	174	157	158	210	7.0
<u>Subtotal per factory industry</u>	<u>3 208</u>	<u>3 090</u>	<u>3 087</u>	<u>2 791</u>	<u>3 467</u>	<u>2.0</u>
<u>Factory industry excluding petroleum</u>	<u>3 167</u>	<u>3 052</u>	<u>3 046</u>	<u>2 761</u>	<u>3 436</u>	<u>2.1</u>
<b>E. <u>Artisan industries</u></b>	-	-	-	-	-	-
<u>Total for manufactures</u>	<u>3 208</u>	<u>3 090</u>	<u>3 087</u>	<u>2 791</u>	<u>3 467</u>	<u>2.0</u>
<u>Total for manufactures excluding petroleum</u>	<u>3 167</u>	<u>3 052</u>	<u>3 046</u>	<u>2 761</u>	<u>3 436</u>	<u>2.1</u>

Source: Industrial Department - CORDIPLAN.

/Table 11

Table 11

VENEZUELA: EXPORTS OF MANUFACTURED PRODUCTS, 1960-64

(Millions of bolivars, 1960 prices)

Products	1960	1961	1962	1963	1964	Mean annual rates 1960-64
20. Foods	11	4	8	39	6	-14.1
23. Textiles	-	-	-	-	1	-
26. Wood and cork	-	-	-	-	1	-
28. Printing	-	-	-	-	1	-
31. Chemical products	-	1	2	1	8	-
32. Petroleum derivatives	1 876	1 979	2 125	2 265	2 354	5.8
33. Non-metallic minerals	2	6	10	7	9	45.7
34. Basic metals	-	-	17	53	24	-
37. Electrical equipment	-	-	-	-	1	-
39. Miscellaneous	-	-	-	-	2	-
<u>Total for manufactures</u>	<u>1 889</u>	<u>1 990</u>	<u>2 162</u>	<u>2 365</u>	<u>2 407</u>	<u>6.2</u>
<u>Total for manufactures excluding petroleum</u>	<u>13</u>	<u>11</u>	<u>37</u>	<u>100</u>	<u>53</u>	<u>42.1</u>

Source: Industrial Department - CORDIPLAN.

Table 12

VENEZUELA: EXPORTS OF MANUFACTURED PRODUCTS

(In percentages)

Years	Percentage of the total exports of the country	Composition of exports of manufacturing industry	
		Petroleum derivatives	Other products
1960	25.9	99.3	0.7
1961	28.8	99.4	0.7
1962	27.4	98.3	1.7
1963	29.4	95.8	4.2
1964	28.4	97.8	2.2

Source: Industrial Department - CORDIPLAN.

/Table 13



Table 13

VENEZUELA: EMPLOYMENT IN MANUFACTURING INDUSTRY

(Thousands of persons)

Divisions	1960	1961	1962	1963	1964	Mean annual rates 1960-64
<b>A. <u>Traditional industries</u></b>	<u>90.2</u>	<u>91.8</u>	<u>94.9</u>	<u>97.5</u>	<u>103.9</u>	<u>3.5</u>
20. Foods	28.3	28.6	29.8	30.5	32.6	3.6
21. Beverages	9.5	9.3	9.5	9.6	9.8	0.8
22. Tobacco	2.8	2.9	2.7	2.6	3.1	2.6
23. Textiles	14.5	14.7	17.1	18.4	20.0	8.4
24. Wearing apparel and footwear	18.2	18.7	18.4	18.8	19.7	2.0
25. Wood and cork	3.2	3.3	3.0	3.1	3.1	-0.8
26. Furniture and fixtures	11.4	10.9	11.9	12.1	12.8	2.9
29. Leather and hides	2.3	2.4	2.5	2.4	2.8	5.0
<b>B. <u>Intermediate industries</u></b>	<u>32.8</u>	<u>34.8</u>	<u>39.8</u>	<u>42.9</u>	<u>46.5</u>	<u>9.1</u>
27. Pulp and paper	3.8	4.2	5.4	5.7	6.2	13.0
30. Rubber	3.8	3.8	4.3	4.5	4.8	6.0
31. Chemical products	6.3	7.5	8.5	9.4	11.3	15.7
32. Petroleum derivatives	6.8	7.0	7.2	7.3	7.3	1.8
33. Non-metallic minerals	10.6	9.9	9.8	9.9	10.3	-0.7
34. Basic metals	1.5	2.4	4.6	6.1	6.6	44.9
<b>C. <u>Metal-transforming industries</u></b>	<u>23.4</u>	<u>22.2</u>	<u>23.8</u>	<u>28.1</u>	<u>32.1</u>	<u>8.2</u>
35. Metal products	5.5	5.4	6.0	6.3	7.0	6.2
36. Machinery	0.5	0.5	0.8	0.9	0.9	15.7
37. Electrical equipment	3.4	3.4	3.6	4.1	4.9	9.6
38. Transport material	14.0	12.9	13.4	16.8	19.3	8.4
<b>D. <u>Residual group</u></b>	<u>9.1</u>	<u>8.7</u>	<u>9.9</u>	<u>9.9</u>	<u>10.8</u>	<u>4.4</u>
28. Printing	6.9	6.0	7.0	7.0	7.3	1.4
39. Miscellaneous	2.2	2.7	2.9	2.9	3.5	12.3
<b><u>Subtotal for factory industry</u></b>	<u>155.5</u>	<u>157.5</u>	<u>168.4</u>	<u>178.4</u>	<u>193.3</u>	<u>5.6</u>
<b><u>Factory industry excluding petroleum</u></b>	<u>148.7</u>	<u>150.5</u>	<u>161.2</u>	<u>171.1</u>	<u>186.0</u>	<u>5.8</u>
<b>E. <u>Artisan industries</u></b>	<u>153.8</u>	<u>156.8</u>	<u>154.7</u>	<u>162.1</u>	<u>169.9</u>	<u>2.5</u>
<b><u>Total for manufactures</u></b>	<u>309.3</u>	<u>314.3</u>	<u>323.1</u>	<u>340.5</u>	<u>363.2</u>	<u>4.1</u>
<b><u>Total for manufactures excluding petroleum</u></b>	<u>302.5</u>	<u>307.3</u>	<u>315.9</u>	<u>333.2</u>	<u>355.9</u>	<u>4.2</u>

Source: Industrial Department - CORDIPLAN.

Table 14

VENEZUELA: INTERNAL SUPPLY OF MANUFACTURED GOODS

(Millions of bolivars, 1960 prices)

	1950	1955	1960	1964
1. Internal production	3 238	6 071	9 363	13 295
2. Imports	2 548	3 601	3 208	3 467
3. Total virtual supply (1+2)	5 786	9 672	12 571	16 762
4. Exports	495	1 084	1 889	2 407
5. Total internal supply (3-4)	5 291	8 588	10 682	14 355
		(Bolivars)		
6. Internal supply per inhabitant <u>a/</u>	1 051	1 332	1 393	1 545
		(Percentages)		
7. Import component within the internal supply	48.2	41.9	30.0	24.2
$\frac{2}{5} \times 100$				

Source: Industrial Department - CORDIPLAN.

a/ The population was reckoned at about the middle of each year.

## 5. Characteristics of foreign trade with reference to the manufacturing sector

In Venezuela the level of foreign trade in manufactured products is high. In 1950 almost half the internal supply of manufactured products consisted of imported articles. In 1964 this percentage had been reduced to 24.2 as a result of the dynamic process of import substitution, but the level of imports had risen between these years from 2,458 million bolivars to 3,467 million (at constant prices for 1960), which means an increase of 36 per cent, as can be seen in table 14.

### (a) Imports

The value of imports for the period 1960-64 is given in table 10. Between these years there was an average annual increase of 2.0 per cent, due to a rise in imports of capital and intermediate goods, which in turn was a result of the general process of development and industrialization. Imports of manufactured products made by traditional industries showed, on the other hand, a significant decrease, as a result of the substitution process. The structure of imports, as figuring in table 15, confirms the trends mentioned in the previous paragraph.

The highest import figures belong to manufactured products produced by metal-transforming and intermediate industries. Imports of food and textile products are also considerable.

### (b) Exports

As can be understood from tables 11 and 12, exports of manufactured products basically consist of petroleum derivatives. Only in the last few years has a trend towards diversification appeared.

In 1960 exports of manufactured products represented 25.9 per cent of the total exports of the country, amounting to 1,889 million bolivars. In 1964 exports of manufactures had risen in value to 2,407 million bolivars (1960 prices) and represented 28.4 per cent of the total exports of the country. The proportion contributed by petroleum derivatives in turn fell to 97.8 per cent.

The export figures given in the table mentioned indicate an average inter-annual growth of 6.2 per cent for the period.

## 6. Financing of manufacturing industry

There exist only partial records on the sources and uses of funds in manufacturing industry. Tables 16 and 17 were worked out by the Central Bank on the basis of a sample comprising 870 enterprises. The first of these tables deals with the sources and uses for manufacturing as a whole and for certain divisions in particular. It shows that internal sources represent a relatively low proportion (23.4 per cent), the most important of these being reserves against depreciation. Long

/and short

and short term foreign credits were the principal source, amounting to 49.3 per cent. There is, however, reason to emphasize that within these credits little more than a fifth of the total can be counted as long term, which is due to the fact that present financial legislation prohibits commercial banks from granting credits of a longer term than two years and discounts and rediscounts of more than one year. This situation encourages public institutions to act as development banks, granting medium and long term loans, and providing part funds for the capital organization of work. The facts here adduced have made for low levels of individual savings in the factory sector, at the same time as relatively high levels of investment in capital goods and wide-scale distribution of utilities.

Since the public banking system serving the industrial sector functions to a limited extent as a deposit bank, the system of financing mentioned above has meant, in practise, a transference of funds towards the manufacturing sector. Under this system the financing of the factory sector, by absorbing funds from public institutions, which in turn receive resources from the budget, has in the last analysis consisted in transfer of funds from the petroleum sector to the manufacturing sector, within an ambit of protection imposed by direct barriers and exemptions on imports of raw materials and intermediate products.

On the other hand the Venezuelan capital market, as is the case in other Latin American countries in general functions only on a limited scale and does not constitute a significant source of funds for manufacturing industry.

Table 15

VENEZUELA: STRUCTURE OF IMPORTS OF MANUFACTURED PRODUCTS.  
(In percentages of annual total)

Divisions	1960	1961	1962	1963	1964
<b>A. <u>Traditional Industries</u></b>	<u>19.1</u>	<u>19.9</u>	<u>18.7</u>	<u>16.9</u>	<u>14.8</u>
20. Foods	10.7	10.1	9.0	8.5	6.9
21. Beverages	0.2	0.7	0.5	0.7	0.9
22. Tobacco	0.1	-	-	-	-
23. Textiles	5.6	6.6	6.6	5.8	5.3
24. Wearing Apparel and Footwear	1.2	1.3	1.2	1.0	1.0
25. Wood and Cork	0.5	0.4	0.4	0.4	0.3
26. Furniture and Fixtures	0.4	0.2	0.3	0.2	0.2
29. Leather and Hides	0.4	0.6	0.7	0.3	0.2
<b>B. <u>Intermediate Industries</u></b>	<u>27.7</u>	<u>29.8</u>	<u>32.9</u>	<u>34.8</u>	<u>32.3</u>
27. Pulp and Paper	2.8	3.0	3.6	3.6	3.2
30. Rubber	1.3	1.2	1.4	1.3	1.2
31. Chemical Products	11.1	12.9	14.4	16.0	14.9
32. Petroleum derivatives	1.3	1.2	1.3	1.0	0.9
33. Non-Metallic minerals	2.4	2.3	2.8	3.3	3.1
34. Basic Metals	8.8	9.2	9.4	9.6	9.0
<b>C. <u>Metal-Transforming Industries</u></b>	<u>47.7</u>	<u>44.1</u>	<u>42.5</u>	<u>42.6</u>	<u>46.5</u>
35. Metal Products	8.9	8.8	9.2	8.6	8.1
36. Machinery	16.3	13.1	15.0	16.6	18.0
37. Electrical Equipment	9.7	9.1	7.4	5.8	7.1
38. Transport Material	12.8	13.1	10.9	11.6	13.3
<b>D. <u>Residual Group</u></b>	<u>5.5</u>	<u>6.2</u>	<u>5.9</u>	<u>5.7</u>	<u>6.4</u>
28. Printing	0.5	0.6	0.8	0.6	0.3
39. Miscellaneous	5.0	5.6	5.1	5.1	6.1

Source: Industrial Department - CORDIPLAN.

Table 16

## VENEZUELA: SOURCES AND USES OF FUNDS IN MANUFACTURING INDUSTRY, 1963

(Millions of bolivers)

	Total manufacturing industry	Foods	Beverages	Textiles	Chemicals	Non- metallic minerals	Others manufactures
<b>USES OF FUNDS</b>	<b>1 088</b>	<b>417</b>	<b>52</b>	<b>135</b>	<b>76</b>	<b>74</b>	<b>334</b>
<u>Fixed assets</u>	<u>373</u>	<u>140</u>	<u>25</u>	<u>43</u>	<u>36</u>	<u>21</u>	<u>108</u>
Machinery and equipment	201	72	11	38	21	6	53
Buildings and installations	120	42	10	15	7	8	38
Vehicles and furniture	36	16	5	1	3	1	10
Other depreciable assets	-	6	-	-14	3	-4	9
Lands	16	4	-1	3	2	10	-2
<u>Inventories</u>	<u>193</u>	<u>145</u>	<u>2</u>	<u>24</u>	<u>-</u>	<u>2</u>	<u>20</u>
Merchandise purchased	-7	10	-1	-3	-15	-1	3
Raw materials	92	77	-1	14	1	-	1
Products in manufacture and finished products	49	15	1	12	12	2	7
Others	59	43	3	1	2	1	9
<u>Financial assets</u>	<u>513</u>	<u>126</u>	<u>24</u>	<u>65</u>	<u>40</u>	<u>52</u>	<u>206</u>
Cash and bank deposits	39	-2	9	3	17	-14	26
Accounts outstanding	299	97	-11	56	15	34	108
Stocks, bonds, etc.	175	31	26	6	8	32	72
<u>Intangible assets</u>	<u>2</u>	<u>6</u>	<u>1</u>	<u>2</u>	<u>-</u>	<u>-1</u>	<u>-</u>
<b>SOURCES OF FUNDS</b>	<b>1 088</b>	<b>417</b>	<b>52</b>	<b>135</b>	<b>76</b>	<b>74</b>	<b>334</b>
<u>Internal sources</u>	<u>255</u>	<u>111</u>	<u>2</u>	<u>24</u>	<u>27</u>	<u>18</u>	<u>73</u>
Reserves and surplus	21	30	-22	-6	11	-7	15
Reserves against depreciation	234	81	24	30	16	25	58
<u>External sources</u>	<u>833</u>	<u>306</u>	<u>50</u>	<u>111</u>	<u>49</u>	<u>56</u>	<u>261</u>
Capital	297	23	23	30	20	21	110
Credits	536	283	27	81	29	35	151
Long term	115	72	19	13	-1	15	-3
Short term	421	141	8	68	30	20	154
Bank loans	101	64	3	-2	18	1	17
Credits to suppliers	119	25	-8	30	9	4	59
Others	201	52	13	40	3	15	78

Source: Central Bank of Venezuela.

Note: The following are not included: the National Petrochemical Institute, the Venezuelan Guayana Corporation, and one-man enterprises.

Table 17

## VENEZUELA: CONSOLIDATED BALANCES OF MANUFACTURING INDUSTRY, 1963

(Accumulated balances in millions of bolivars)

	Total manufacturing industry	Foods	Beverages	Textiles	Chemicals	Non-metallic minerals	Other manufac- tures
<b>USES OF FUNDS</b>	<b>8 722</b>	<b>2 839</b>	<b>665</b>	<b>1 250</b>	<b>673</b>	<b>722</b>	<b>2 580</b>
<u>Fixed assets</u>	<u>3 077</u>	<u>1 072</u>	<u>222</u>	<u>399</u>	<u>178</u>	<u>280</u>	<u>926</u>
Machinery and equipment	2 442	752	168	376	113	305	728
Buildings and installations	1 503	549	163	182	75	156	378
Vehicles and furniture	349	139	42	32	24	27	85
Other assets	200	64	18	22	18	23	55
Less: Accumulated depreciation	-1 801	-526	-196	-243	-94	-247	-445
Net total depreciable fixed assets	2 693	978	195	369	136	214	801
Lands	384	94	27	30	42	66	125
<u>Inventories</u>	<u>2 476</u>	<u>330</u>	<u>132</u>	<u>494</u>	<u>210</u>	<u>127</u>	<u>796</u>
Merchandise purchased	226	44	11	14	41	17	99
Raw materials	886	287	34	142	64	21	338
Products in manufacture and finished products	938	272	64	244	71	36	251
Others	426	167	30	34	34	53	108
<u>Financial assets</u>	<u>3 057</u>	<u>961</u>	<u>298</u>	<u>391</u>	<u>275</u>	<u>311</u>	<u>821</u>
Cash and bank deposits	369	107	32	41	33	45	111
Accounts outstanding	2 085	660	174	325	197	152	577
Stocks, bonds, etc.	603	194	92	25	45	114	133
<u>Intangible assets</u>	<u>112</u>	<u>26</u>	<u>6</u>	<u>26</u>	<u>10</u>	<u>4</u>	<u>37</u>

Table 17 (Concl.)

	Total manufacturing industry	Foods	Beverages	Textiles	Chemicals	Non-metallic minerals	Other manufac- tures
<b>SOURCES OF FUNDS</b>	<u>8 729</u>	<u>2 839</u>	<u>665</u>	<u>1 250</u>	<u>673</u>	<u>722</u>	<u>2 580</u>
<u>Internal sources a/</u>	<u>1 019</u>	<u>263</u>	<u>87</u>	<u>134</u>	<u>79</u>	<u>166</u>	<u>290</u>
<u>External sources</u>	<u>7 710</u>	<u>2 576</u>	<u>578</u>	<u>1 116</u>	<u>594</u>	<u>556</u>	<u>2 290</u>
Capital	3 578	1 577	310	409	255	360	1 067
Credits	4 132	1 399	268	707	339	196	1 223
Long term	3 578	1 177	310	409	255	360	1 067
Short term	1 095	347	65	235	102	55	291
Bank loans	1 189	446	106	207	93	26	311
Credits to suppliers	734	227	22	132	76	23	254
Others	1 114	379	75	133	68	92	367

Source: Banco Central of Venezuela.

a/ Reserves and surplus.



7. Sizes and characteristics of manufacturing industry establishments

The Industrial Enquiry chose as its frame of reference "industrial units", understanding by this "a plant or group of plants or industrial combine belonging to a single owner and situated in one and the same place". The concept of industrial units is different from that of enterprise, since the latter can consist of several industrial units in different places, and also from that of firm, since this often includes the commercial section of the enterprise. In the same work, industrial units which employ more than 100 persons are considered as "large industry", those which provide work for between 21 and 100 persons as "medium industry", and those which employ between 5 and 20 persons as "small industry".

Average factory employment was 21 persons <sup>5/</sup> per industrial unit, and analysis of employment by strata reveals a considerable degree of polarization in large or very small firms (see table 18). Viz., small industry has an average of 9 persons per unit and medium industry of 37. In both cases the average is found much nearer the lower than the upper limit of that stratum owing to the influence of the great number of firms of small employment capacity.

Conversely, in large industry the employment average is as high as 298 persons, which is almost three times greater than the lower limit of the stratum.

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<sup>5/</sup> This average is low in comparison with that in other Latin American countries. In Chile, for example, it was 36 persons in 1957.

Table 18

VENEZUELA: NUMBER OF FACTORY TYPE INDUSTRIAL UNITS, 1961

Divisions	Strata	Large industry more than 100	Medium industry		Small industry 5-20	Factory industry total
			51-100	21-50		
<b>A.</b>	<b><u>Traditional industries</u></b>	<u>125</u>	<u>94</u>	<u>569</u>	<u>3 499</u>	<u>4 287</u>
	20. Foods	43	35	134	1 189	1 401
	21. Beverages	24	18	26	153	221
	22. Tobacco	5	3	6	44	58
	23. Textiles	27	12	30	106	175
	24. Wearing apparel and footwear	17	16	217	973	1 223
	25. Wood and cork	1	1	43	181	226
	26. Furniture and fixtures	4	6	99	751	860
	29. Leather and hides	4	3	14	102	123
<b>B.</b>	<b><u>Intermediate industries</u></b>	<u>53</u>	<u>50</u>	<u>122</u>	<u>721</u>	<u>946</u>
	27. Pulp and paper	11	9	11	52	83
	30. Rubber	6	3	18	103	135
	31. Chemical products	11	18	46	181	256
	32. Petroleum derivatives	9	2	1	3	15
	33. Non-metallic minerals	14	16	39	358	427
	34. Basic metals	2	2	7	19	30
<b>C.</b>	<b><u>Metal-transforming industries</u></b>	<u>7</u>	<u>17</u>	<u>178</u>	<u>1 574</u>	<u>1 776</u>
	35. Metal products	4	8	32	277	321
	36. Machinery	-	1	7	25	33
	37. Electrical equipment	1	2	45	207	255
	38. Transport material	2	6	94	1 065	1 167
<b>D.</b>	<b><u>Residual group</u></b>	<u>11</u>	<u>2</u>	<u>80</u>	<u>422</u>	<u>522</u>
	28. Printing	9	7	41	317	374
	39. Miscellaneous	2	2	39	1 105	148
	<u>Totals</u>	<u>196</u>	<u>170</u>	<u>949</u>	<u>6 216</u>	<u>7 531</u>

Source: Industrial Enquiry, 1962 - CORDIPLAN.

/The sizes

The sizes given for the industrial units of the 20 divisions dealt with here show that in petroleum derivatives, textiles, basic metals, pulp and paper, tobacco, and beverages, the average employment is two or more times greater than the factory industry average of 21 persons. This group, which is composed of three traditional and three intermediate industries, typifies Venezuelan large industry. The high average in textiles industry - four times above the general - is somewhat remarkable. It shows that in this division the creation of large, mechanized, modern units has been promoted, without being balanced by the encouragement given to the establishment of medium and small ones, as has also been the case in other Latin American countries. This characteristic has destroyed the flexibility of the textile products market. The high employment figures for the tobacco and beverages industries are also conspicuous.

The petroleum derivatives division merits special reference, for there the employment average is as high as 465 persons, more than 20 times above the general average.

Conversely, the smallest figures are found in the metal-transforming industries, with the exception of metal products, in certain traditional industries - wearing apparel and footwear, wood and cork, furniture and fixtures - and in the printing division of the residual group. The combination of these divisions can be taken as typifying the small industry of the present. From the nature of their activities it can be said that most of the industries in these divisions function practically at the level of the artisan workshop.

In the middle lie groups which have an average similar to the general average: foods and leather and hides among traditional industries; rubber, chemical products and non-metallic minerals among the intermediate industries; and miscellaneous in the residual group. This group can be taken as typifying medium industry. (See table 19.)

Table 19

VENEZUELA: AVERAGE EMPLOYMENT IN FACTORY INDUSTRY, 1961

Divisions	Strata	Large industry more than 100	Medium industry		Small industry 5-20	Total factory-scale industry
			51-100 (Persons employed per industrial unit)	21-50		
<b>A.</b>	<b><u>Traditional industries</u></b>	<b><u>278</u></b>	<b><u>71</u></b>	<b><u>31</u></b>	<b><u>10</u></b>	<b><u>21</u></b>
	20. Foods	255	70	31	9	20
	21. Beverages	219	71	34	12	42
	22. Tobacco	403	79	33	9	49
	23. Textiles	442	72	31	9	84
	24. Wearing apparel and footwear	171	69	31	9	16
	25. Wood and cork	118	51	30	10	15
	26. Furniture and fixtures	213	80	31	9	13
	29. Leather and hides	165	68	30	11	20
<b>B.</b>	<b><u>Intermediate industries</u></b>	<b><u>363</u></b>	<b><u>67</u></b>	<b><u>30</u></b>	<b><u>11</u></b>	<b><u>36</u></b>
	27. Pulp and paper	230	64	33	13	50
	30. Rubber	325	73	36	9	28
	31. Chemical products	267	69	28	11	29
	32. Petroleum derivatives	746	91	31	15	465
	33. Non-metallic minerals	276	61	30	11	23
	34. Basic metals	623	80	30	13	62
<b>C.</b>	<b><u>Metal-transforming industries</u></b>	<b><u>391</u></b>	<b><u>66</u></b>	<b><u>31</u></b>	<b><u>8</u></b>	<b><u>13</u></b>
	35. Metal products	359	60	32	9	17
	36. Machinery	-	71	32	8	15
	37. Electrical equipment	109	69	33	8	13
	38. Transport material	628	73	30	8	11
<b>D.</b>	<b><u>Residual group</u></b>	<b><u>152</u></b>	<b><u>62</u></b>	<b><u>31</u></b>	<b><u>2</u></b>	<b><u>17</u></b>
	28. Printing	162	64	31	9	16
	39. Miscellaneous	110	55	30	12	18
	<u>Averages</u>	<u>298</u>	<u>69</u>	<u>30</u>	<u>2</u>	<u>21</u>

Source: Industrial Enquiry 1962 - CORDIPLAN.

8. Industrial employment

Employment in manufacturing industry analysed by divisions is given in table 13. In the last 15 years important changes have taken place in the structure of employment. In 1950 factory employment was considerably less than that of artisan industry, and amounted to only 43.1 per cent of total employment. In 1960 this percentage had risen to 50.3, and in 1964 to 53.2

According to the Industrial Enquiry, in 1961 employment in factory industry was divided in the following proportions: 117,115 workers amounting to 74.6 per cent; 32,432 staff, amounting to 20.7 per cent; and 7,391 other types of employees, chiefly partners, relations of the owner of the business, and domestic workers, amounting to 4.7 per cent. These figures are given in table 20.

Table 20

VENEZUELA: DISTRIBUTION OF THE LABOUR FORCE IN INDUSTRY,  
ACCORDING TO EMPLOYMENT STATUS, 1961

(Number of Persons)

Employment Stratum	Workmen	Staff	Others	Total	
				Number	Percentages
A. <u>Large Industry</u>					
I. More than 100	43,809	13,825	1,036	58,427	37.2
B. <u>Medium Industry</u>					
II. 51 - 100	9,177	2,064	449	11,690	7.5
III. 21 - 50	21,953	5,481	1,899	29,333	18.7
C. <u>Small Industry</u>					
IV 5 - 20	42,176	11,305	4,007	57,488	36.6
<u>Totals</u>	<u>117,115</u>	<u>32,432</u>	<u>7,391</u>	<u>156,938</u>	<u>100.0</u>
Percentages	74.6	20.7	4.7	100.0	

Source: Industrial Enquiry, 1962 - CORDIPLAN.

/The mean

The mean relation was 277 staff for every 1,000 workers. This reached its maximum value of 310 in large industry, in response to the greater organization and control required by industrial units of such a size which in many cases themselves distribute the products they manufacture. The next value, 268 staff per 1,000 workers, belongs to small industry, and is doubtless due to the effect of the indivisibility of the services of the staff, which in units of reduced dimensions reaches a considerable difference.

In any case, the general relation appears to be high, which tends to indicate, on the one hand, a high degree of mechanization in production processes and, on the other, a certain lack of rationalization of administrative procedures.

#### 9. The siting of industry

The fact that manufacturing production is basically oriented towards making consumer goods, has had the result that the siting of industrial units has been concentrated around the great centres of population.

According to the Industrial Census of 1963, something more than half the industrial establishments of the country, occupying more than two thirds of industrial employees, were situated in the Central Zone. This indicates a high degree of concentration.

Industrial concentration has been intensifying during the last few years in spite of the fact that the Government has adopted a series of measures designed to bring about decentralization. Viz., according to industrial censuses, in 1953, 38.2 per cent of industrial establishments and 48.1 per cent of manufacturing employees were located in the Central Zone; in 1963 these percentages had risen to 53.3 and 68.6. (See table 21.)

Table 21

VENEZUELA: GEOGRAPHICAL DISTRIBUTION  
OF MANUFACTURING INDUSTRY

(Percentages)

Regions	Industrial Establishments			Manpower Employed in Manufacturing Industry		
	1953 <sup>a/</sup>	1950 <sup>b/</sup>	1963 <sup>c/</sup>	1950 <sup>d/</sup>	1958 <sup>b/</sup>	1963 <sup>c/</sup>
I. Central (Federal District, Miranda, Aragua, Carabobo)	38.2	36.9	53.3	48.1	60.9	68.6
II. North West (Zulia, Falcón)	18.1	17.6	8.8	15.3	15.8	7.5
III. Andes (Lara, Mérida, Táchira, Trujillo)	28.3	18.4	18.3	16.0	9.9	9.8
IV. East (Anzoátegui, Bolívar, Monagas, Nueva Esparta, Sucre, Amacuro Delta Territory)	9.9	20.0	11.0	14.5	10.1	9.9
V. Central South (Apure, Barinas, Cojedores, Guárico, Portuguesa, Yaracuy, Amazon Territory)	5.5	7.1	8.6	6.1	3.3	4.2

a/ Industrial Census 1953.

b/ Industrial Sample of the Ministry of Labour (Ministerio del Trabajo) taken in 1958.

c/ Industrial Census 1963.

d/ Population Census 1950.

### Chapter III

#### PLANS OR PROGRAMMES FOR INDUSTRIAL DEVELOPMENT

##### 1. The general planning system

Venezuela's planning system is of recent origin. It derives from Decree 492 of 30th December 1958 of the Council of Government which was established after the overthrow of Marcos Pérez Jiménez dictatorship. This decree set up the Presidential Central Office of Co-ordination and Planning (CORDIPLAN) and laid the foundations for the creation of a national planning system.

Previously, in 1952, the Venezuelan Development Corporation <sup>1/</sup> had been assigned the task of "elaborating a national plan for social and economic development". This organization, however, only worked out certain sectorial plans in reference to industry. It was from 1958 onwards that planning began to be considered an important activity in Venezuela. A clear demonstration of this is that the new Political Constitution lays down a condition to the effect that the President of the Republic must, in his annual speech to Congress, present "the outlines of a plan for the economic and social development of the nation".<sup>2/</sup> Besides this, the same Constitution lays down that "the State will promote economic development and diversification of production with the aim of creating new sources of wealth, of increasing the level of wages of the population, and of strengthening the economic sovereignty of the country". As a result, Venezuela is the only country in Latin America whose constitution concerns itself with the need for planning. In this respect it has advanced beyond the rest of the countries of the Continent, and beyond the resolution contained in the Punta del Este Charter, according to which the governments of Latin America recognize that planning is needed to direct economic and social development.

The organization of planning in Venezuela constitutes a genuine system, in that it includes integral units and methods covering all the technical and geographical factors of development. The principal characteristics of this system are as follows:

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<sup>1/</sup> The planning body set up in Venezuela in 1946 adopted an organization similar to that of the Production Development Corporation established in Chile in 1939.

<sup>2/</sup> Art. 191 of the standing Political Constitution.



(a) the planning unit (CORDIPLAN) is situated at the presidential level and has all powers over the machinery of operation and information as are of assistance in its work of formulation, control and evaluation of plans;

(b) the President of the Republic himself directs planning through his Council of Ministers;

(c) the system includes sectorial planning units and sectorial commissions;

(d) it includes regional planning units and commissions, and its regional programming has been closely linked to development activities;

(e) it includes organizations for carrying out administrative planning, such as the Public Administration Commission (CAP),<sup>3/</sup> functioning independently of CORDIPLAN. The latter nevertheless retains certain powers in connection with such activities;

(f) one of the aspects of this system which has been most successfully developed is its co-ordination of plans and budgetary measures;

(g) the Economics Council - which title does not have the same meaning as has been given it in other Latin American countries - is situated at the level of the Ministry of Development;

(h) the private sector plays no permanent part in the system, but has some importance at the sectorial and regional level;

(i) there is a direct link between the planning unit and the Legislative Authority; CORDIPLAN gives technical assistance to commissions of the National Congress and plays an important part in the discussion of the Budget;

(j) the state planning bureaux, situated at the level of the Governor of the State, and the local bureaux, situated at that of the municipalities, co-ordinate their work through regional units and through the Central Office.

Within the Council of Ministers there is an economic commission which consists of those ministers of state whose office is concerned with the productive and financial sector i.e., the Ministers of Mines and Hydrocarbons, Development, Agriculture and Livestock, Public Works, and Finance.

The Economic Commission of the Council of Ministers contains, in turn, the Industrial Committee, which comprises the top personnel of the industrial sector (its composition and functions will be described when the industrial planning system is analysed).

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<sup>3/</sup> At the level of the Ministry of Finance.

The sectorial planning bureaux have not up till now fulfilled the role assigned to them in the general system. An exception to this is the Public Administration Commission which carries out sectorial planning in the Ministry of Finance. Other planning bureaux have recently been set up in several ministries, such as those of Public Works and Education.

The most important responsibilities of these bureaux, as layed down in the Decree 492 already mentioned, are as follows:

(a) to undertake studies and research on the various sectors of development;

(b) to compile the necessary records on the spending programmes put forward by respective administrations of the sector, and to send them to CORDIPLAN;

(c) to give legal advice to the minister of their sector in all that concerns programming, co-ordination and control over the execution of such programmes;

(d) to act as a link between the minister of their sector and CORDIPLAN.

As for regional planning bodies there are at present the Venezuelan Guayana, which conducts the planning for that rich and extensive area and the Andes Development Promotory Commission. Other regional organizations of the same type are now being formed, among them a development commission for the Eastern regions and the Central-Western Development Foundation (FUDECO).

Lastly, at the state level, there is the Zulia Planning Council, which was organized by CORDIPLAN, and is kept in strict co-ordination with it.

The functions and responsibilities of CORDIPLAN, grouped according to the different stages of the planning process are as follows:

In the stage of programme formulation:

(a) to make studies of economic and social development and keep up to date a general plan of economic and social development;

(b) to commission and summarize studies on matters which concern programming;

(c) to maintain the unity of programming, bringing sectorial work into line with the decisions taken by the government authorities;

(d) to put forward the general outlines of physical and spatial planning;

(e) to consolidate investment budgets annually and to prepare the budget programme in co-operation with the Ministry of Finance;

/(f) to

(f) to present to the Executive a draft statement of an order of priorities for fiscal expenditures;

(g) to supervise the use of programming techniques in public administration, with a view to making them uniform.

CORDIPLAN plays no part in the stage of execution. Nevertheless, it is obliged to help the Executive with the supervision of plans.

It also discharges the function of legal adviser; it must give its preliminary opinion on:

(a) contracts for studies on economic and social development;

(b) the creation, suppression and fusion of administrative bodies, as well as any substantial changes in their powers;

(c) reforms of fiscal legislation and any others which affect the Ministry of Finance or economic development.

Lastly, CORDIPLAN is obliged to carry out important functions relative to technical training in programming. Viz., it must:

(a) promote the rotation of officials of the various ministries within the national planning system;

(b) direct the education and training of programming officials;

(c) organize periodical scientific conferences on programming.

## 2. The industrial planning system

The organization of industrial planning constitutes a system in that all bodies concerned with either the technical or geographical aspects of industry fall within its scope. The principal characteristics of this system can be summarized as follows:

(a) the planning body is a part of the Central Office of Co-ordination and Planning, and has all powers over the machinery of operation and information as are of assistance in its work of formulation, control and evaluation of plans. This body, the Department of Industrial Planning and Co-ordination covers the sectors of manufacturing industry, mines and hydrocarbons, and electric power and gas;

(b) in theory, the President directs industrial planning through his Council of Ministers. In practice, this work is carried out at the ministerial level by the Industrial Committee, a body which comprises the highest-ranking public officials concerned in the sphere of industry. This committee constitutes a "high command" of a politico-technical character for industrial planning;

/(c) as

(c) as subsidiaries of the Industrial Committee at the technical level, there are "sectorial planning and co-ordination groups", which collaborate in the formulation of specific programmes and in bringing official activities into line with the execution of those parts of the National Plan concerned with the industrial sector. They must also act as technical advisers to the Industrial Committee;

(d) in certain industrial divisions there are programming groups, whose functions will be described below in connection with the private sector. These groups are subsidiary to the Industrial Committee, which makes the final decisions on the programmes which they develop;

(e) in the Ministry of Agriculture there are agro-industrial commissions which take part in the promotion of certain agricultural products that serve as raw material for industry. The private sector also plays a part in these commissions through the trade union organizations;

(f) the regional planning bodies have industrial departments which work in co-operation with the Industrial Planning and Co-ordination Department of CORDIPLAN;

(g) the execution of plans is basically the responsibility of the Ministries of Development, Mines and Hydrocarbons, and Finance. The projects put up by the public sector are carried out by organizations or autonomous enterprises subsidiary to those ministries;

(h) within the Ministry of Development the Departments of Industry, Statistics and Censuses, Registration of Industrial Property and Commerce are directly concerned with industrial activity. There are other organizations subsidiary to this ministry of considerable importance, such as the Credit Commission for Medium and Small Industry, the Venezuelan Industrial Standards Commission (COVENIN), the Venezuelan Productivity Institute (INPRO), the Venezuelan Institute of Technological Research (INVESTI), and the Venezuelan Development Corporation, which latter, in turn, has as subsidiaries the Industrial Bank and the Regional Banks. To sum up, everything related to industrial financing, as well as to certain aspects of technological training and research, centres around the Ministry of Development. <sup>4/</sup> Affiliated to the Development Corporation (C.V.F.) are the electrical authority (CADAPE), and the sugar corporation, "Centrales Azucareras S.A.";

(i) the Ministry of Mines and Hydrocarbons is the executive organ for mining and petroleum policy through its Mines and Geology Departments, its Technical Office for Hydrocarbons and its Evaluation Centre. The Venezuelan Petrochemical Institute and the Venezuelan Petroleum Corporation are subsidiaries of this ministry;

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<sup>4/</sup> Man-power training is carried out by the National Institute of Educational Co-operation (INCE) a subsidiary of the Ministry of Education. Other aspects of technological research are carried out by the universities.

(j) the Ministry of Finance is also concerned with industrial activity through its customs department and the customs services, the national port services, its revenue department and the revenue service, the General Administration of Salt-Mines, etc.

The Industrial Committee, a subsidiary of the Economic Commission of the Council of Ministers, was created in 1960 for the purpose of studying and correcting problems related to the country's industrial development.

Membership in this committee has been determined in accordance with the general purpose for which it was created. The highest-ranking officials of both the executive and programming branches of the public sector whose duties directly concern industrial development take part in it. It is presided over by the Minister of Development, and includes as members the Minister of Mines and Hydrocarbons, the Minister of Finance, the head of CORDIPLAN, the president of the Guayana Corporation, the president of the Development Corporation, the Industrial Director of the Ministry of Development, and the head of the Industrial Department of CORDIPLAN.

Until early in 1961 the Industrial Committee functioned only irregularly and on occasion. Beginning from March of that year, on the initiative of the head of CORDIPLAN, it began to meet regularly and to make decisions on various matters related to industrial development.

The far-reaching resolutions adopted by it established it as the "high command" of industry and clarified various aspects of economic policy.

It is interesting to observe that in Venezuela in planning such a move it was preferred to transform an organization already into the command; as it was considered that to create a new one would inevitably arouse the resistance of various sectors, particularly the departments of the public service, which thereby are forced to submit to the requirements of co-ordination and planning since this means in many cases a loss of power for them or, at least, that their activities will be brought under certain measure of control.

After three years in operation the Industrial Committee is accepted equally by the public sector and by the private and has come to be the supreme authority in industrial planning and co-ordination.

It has been agreed that programming groups should be set up within the planning system for the purpose of working out specific programmes for branches of industry considered of strategic importance.

At the end of 1961 the Industrial Committee gave its approval to the "Programme for Motor Vehicle Industry", which had been produced by CORDIPLAN with the advice of CEPAL, and which proposed the creation of a programming group for motor vehicle industry. This group was set up in May 1962 and since then has been in regular operation. It comprises one representative from the Ministry of Development, one from the Development Corporation (C.V.F.),

/one from

one from CORDIPLAN, two from the Motor Industries Association,<sup>5/</sup> and two from the Association of Motor Vehicle Part Makers.

The chief functions of the Programming Group are as follows:

- (a) to make programmes for the integral development of the Venezuelan motor vehicle industry and to propose to the Industrial Committee measures conducive to the success of this development;
- (b) to co-ordinate and direct manufacture of vehicle parts in the country;
- (c) to recommend the granting of licences for import of special armoured vehicles;
- (d) to recommend measures, studies and research for achieving an improvement in the quality of manufacture of vehicle parts and spare parts in the country;
- (e) to study and appraise the different proposals put before the Ministry of Development in connection with the motor vehicle industry;
- (f) to recommend the stimulatory measures necessary for the development of particular industries supplying vehicle parts;
- (g) to supervise the execution of resolutions recommended by itself and ratified by the Industrial Committee;
- (h) to collaborate with the Standards Commission (COVENIN) in the establishment of standards in the motor vehicle industry;
- (i) to collaborate with the Institute of Technological Research and the Productivity Institute in achieving technical improvements in the industry;
- (j) to collaborate with the Institute of Educational Cooperation (INCE) in the training of labour for specialized work required in the different stages of production.

The Programming Group of the Motor Vehicle Industry constitutes an interesting experiment which has proved the ability of the public sector and private initiative to establish a useful working partnership. The good results obtained so far have made the authorities consider the creation of similar groups in other branches of industry. With this in mind, they formed in 1964 on a similar basis the Programming Group for Industrial Abattoirs.

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<sup>5/</sup> Originally the inclusion of a representative of the Assembly Industry Association was proposed.

Besides the organizations described above, there are others belonging to the Ministry of Development and the Ministry of Agriculture and Livestock which take part in industrial affairs. Chief among these are the agro-industrial commissions which consist of representatives from the Ministries of Development and Agriculture and Livestock and from the private sector. Commissions of this kind have been set up for cotton, textiles and tobacco, fruit, milk products, oils, pigs, and other divisions.

These commissions in general have acted efficiently, but their operations have not been co-ordinated with the work of the planning organizations.

Subsidiary to the Ministry of Mines and Hydrocarbons there is the Venezuelan Petrochemical Institute, whose job is to work out programmes for the development of chemical and petrochemical industry. This institute is in contact with CORDIPLAN. During the last few years its programming work has been of great importance.

The National Institute of Educational Co-operation (INCE) is responsible for the training of skilled labour. So far its plans have not been kept in line with the requirements of industrial development.

The Productivity Institute maintains contact with CORDIPLAN, but its programmes have not been directed by the latter. COVENIN (the Venezuelan Industrial Standards Commission) also does not co-ordinate its work with CORDIPLAN.

Lastly, the Venezuelan Development Corporation is carrying out a series of studies on programming, working on some branches in co-operation with CORDIPLAN.

### 3. General Plans

Venezuela was the second Latin American country to produce a general plan of economic development.<sup>6/</sup> According to CEPAL it figures among the six countries of Latin America with the most highly developed machinery of direction.<sup>7/</sup> The planning system is perhaps the most complete and advanced of this region.

CORDIPLAN finished work early in 1960 on the first four years plan, for the period July 1960 - June 1964. This medium range plan contained over-all forecasts for production, employment and investments, and specific targets for particular sectors of the economy, chiefly manufacturing industry and agriculture. With regard to the social sectors, such as education, housing, health, etc. it included only very general, preliminary appraisals.

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<sup>6/</sup> The first was Chile, which produced in 1959 the Ten Year Development Plan.

<sup>7/</sup> "Advances in Material for Planning in Latin America" E/CN.12/677.

Another characteristic of this first four year plan was that it set its targets on the assumption that the Venezuelan economy would continue to expand at the same rate as in the five year period 1955-59. But in 1960 a recession began which continued through 1961 and 1962, and was only replaced by an upward trend at the end of this latter year. The targets were therefore above what could be achieved in reality.

This earlier experiment was taken into careful consideration in working out the second four year plan, for 1963-66; and this latter constitutes a notable advance on the former in its adoption of new techniques,<sup>8/</sup> its extension to the fields of mining and hydrocarbons and to the social sectors, and its inclusion of certain regional programmes. With regard to certain important areas e.g. industry and education, it contains long term targets as part of what is known as "Plan Prospect 1975".

#### 4. Plans for manufacturing industry

##### (a) The general strategy of industrial development

The main outlines of the strategy for the development of manufacturing industry are sketched out in the Manufacturing Industries Plan 1963-66, in the Declaration on Fundamental Aspects of Economic Politics,<sup>9/</sup> and in the presidential speech of 1965.<sup>10/</sup> This strategy originates from a thorough study of the facts of the socio-economic situation and from a scientific analysis of the industrial development of Venezuela. It forms a part of the general development strategy whose aim is, in the last instance, to transform the present petroleum based economy into a modern industrial and agricultural economy by a process which will produce greater stability and a higher standard of living for the population. This involves an accelerated process of industrialization aimed at diversifying production, lessening the vulnerability of the economy to external pressures, creating new sources of work, and improving the quantity and distribution of income.

Venezuelan manufacturing industry is now entering a more advanced and difficult stage than that of the end of the 50's. The concern is now to build up heavier industries using a more complicated technology, which in some cases will have to sell their products abroad and therefore must operate efficiently and at competitive costs. Moreover, existing industries will have to carry out a process of rationalization so as to increase productivity, improve the quality of their goods, and lower their prices.

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<sup>8/</sup> The techniques were recommended by CEPAL and UNO.

<sup>9/</sup> Miraflores, 30th May 1962, pamphlet.

<sup>10/</sup> 2nd Presidential Speech, presented to the National Congress by Citizen Dr. Raúl Leoni, Constitutional President of the Republic, on the 11th of March 1965.



Parallel to diversification of production it will be necessary to concentrate on integration so as to achieve the structural changes required for more efficient operation of the whole industrial complex. In other words, inter-industrial relations must be improved. One of the main objectives of economic policy between 1965 and 1968 will therefore be to strengthen and rationalize the basic industries in which the state has already made considerable investments.

Import substitution will continue for some years yet to be a dynamic factor in industrial development. The industries producing intermediate and capital goods offer the best prospects in this direction. In future, however, the development of export industries will have a considerable impact on the economy, and it is expected that during the period covered by the plan there will begin a definite trend towards increasing exports of manufactured products other than petroleum derivatives. Export industries will be built up for those types of goods for which Venezuela possesses plentiful natural resources, and for which the demand in international markets tends to increase; this is the case in the chemical, petrochemical, and metal-transforming industries, which all offer very favourable comparative advantages for international trade.

Similarly, the continually increasing exploitation of the immense resources of power should contribute decisively to the attainment of this objective.

Attempts will also be made to remove certain obstacles, such as the shortage of skilled labour, which have been slowing up the development of this sector, and to improve and adapt the machinery of co-ordination, development and promotion.

To sum up, the basic outlines of the strategy for the development of the manufacturing sector are as follows:

- (i) Accelerated development, which cannot result spontaneously from the natural impetus of the productive machinery, but must be brought about under the stimulus and direction of a planned process.
- (ii) Industrial integration, to achieve an improvement in the operations of the whole industrial complex.
- (iii) Maximization of employment wherever it is compatible with an adequate product growth, so as to create new sources of work without seriously affecting the levels of productivity.
- (iv) Encouragement of basic state enterprises which are likely to improve the development of those natural resources in which the country has comparative advantages, as is the case in the iron and steel and petrochemical industries; these to constitute the basis of export industries.
- (v) Improvement of the productivity of existing industries.

/(vi) : Removal

(vi) Removal of the main obstacles which until now have slowed up industrial development.

(b) Forecasts for the period 1965-68

The first Manufacturing Industries Plan formed part of the National Plan 1960-64. The second plan covered the period 1963-66, and the third and present is for 1965 to 1968.

It is the intention of CORDIPLAN to work out four year programmes every two years, readjusting the targets and forecasts according to the changes recorded in the actual social and economic conditions.

(i) Demand forecasts. Over the period covered by the present plan a strong increase in total demand for manufactured products is expected. Apparent consumption forecasts indicate that the average annual growth will be 8.9 per cent, and an increase of 5.9 per cent is anticipated for external demand.

This implies that industrial development during the next four years will be oriented basically towards satisfying the manufactured products requirements of the internal market, but does not necessarily mean that exports will make no contribution to the expansion of the Venezuelan industrial complex. On the contrary, a strong expansion of 63.6 per cent a year is expected in external demand for manufactured products other than petroleum derivatives.

Internal demand. A strong increase in internal demand for manufactured products is anticipated. The forecasts contained in Table 22 indicate that levels of consumption in the last year of the plan, i.e., 1968, will have reached 20,176 million bolivars (40.6 per cent more than the figure for 1964).

This increase in consumption will result from various factors due to the general process of development and to the economic policy which will be applied. Viz., it is expected, that the annual growth of the economy will be 7.2 per cent over the period covered by the plan; and it is considered that there will be in turn a substantial increase in per capita income and a redistribution of income in favour of wage-earners; the creation of new jobs, especially in the industrial sectors, will contribute towards the improvement of income distribution; public expenditure, largely directed towards social programmes and especially towards the construction of working class housing, will be a dynamic agent in consumption growth and the consequently greater demand for intermediate and capital goods will have to be met by industrial expansion.

The greatest growth in demand is expected to be for products of the metal-transforming and intermediate industries, and an increase of this kind is necessary if industry is to maintain its accelerated development. In other words, it is industry itself which will partly generate the demands made on it. This clearly shows the dynamism of this sector.

Table 22

VENEZUELA: APPARENT CONSUMPTION OF MANUFACTURED PRODUCTS

(A.C. = P + I - E)

(In millions of bolivars)

Divisions	1964	1965	1968	Mean annual rates 1964-68
<b>A. Traditional Industries</b>	<b>6.600</b>	<b>7.104</b>	<b>8.582</b>	<b>6.8</b>
20. Foods	3.143	3.398	4.029	6.4
21. Beverages	840	896	1.079	6.5
22. Tobacco	359	382	460	6.4
23. Textiles	869	935	1.165	7.6
24. Wearing Apparel and Footwear	804	862	1.062	7.2
25. Wood and Cork	137	148	184	7.7
26. Furniture and Fixtures	910	935	419	7.8
29. Leather and Hides	138	148	184	7.6
<b>B. Intermediate Industries</b>	<b>3.703</b>	<b>4.125</b>	<b>5.663</b>	<b>11.2</b>
27. Pulp and Paper	493	547	748	11.0
30. Rubber	322	348	438	8.0
31. Chemical Products	1.262	1.418	2.014	12.4
32. Petroleum Derivatives	562	588	674	4.6
33. Non-Metallic Minerals	553	610	845	11.2
34. Basic Metals	511	614	944	16.6
<b>C. Metal-Transforming Industries</b>	<b>2.773</b>	<b>3.304</b>	<b>4.336</b>	<b>11.8</b>
35. Metal Products	571	624	814	9.3
36. Machinery	654	810	1.117	14.3
37. Electrical Equipment	404	476	622	11.4
38. Transport Material	1.144	1.406	1.783	11.7
<b>D. Residual Group</b>	<b>599</b>	<b>651</b>	<b>830</b>	<b>8.5</b>
28. Printing	257	280	357	8.6
39. Miscellaneous	342	371	473	8.4
<u>Sub-total for Factory Industry</u>	<u>13.675</u>	<u>15.184</u>	<u>19.411</u>	<u>9.1</u>
<u>Factory Industry excluding Petroleum</u>	<u>13.113</u>	<u>14.596</u>	<u>18.737</u>	<u>9.3</u>
<b>E. Artisan Industry</b>	<b>680</b>	<b>700</b>	<b>765</b>	<b>3.0</b>
<u>Total for Manufactures</u>	<u>14.355</u>	<u>15.884</u>	<u>20.176</u>	<u>8.9</u>
<u>Total for Manufactures excluding Petroleum</u>	<u>13.793</u>	<u>15.296</u>	<u>19.502</u>	<u>9.0</u>

Source: Industrial Department - CORDIPLAN.

/The demand

The demand for products of traditional industry - mostly non-durable goods - will increase at an annual rate of 6.6 per cent.

The highest expansion rates will be achieved by the products of the basic metals, machinery and chemical industries, with 12.0 per cent or more a year.

Since there is not enough information on this sector for precise estimates, it has been assumed that consumption of artisan products will have an increase corresponding to expected population growth.

External demand. As for external demand, petroleum derivatives will continue to constitute the main part of exports of manufactured products. Until 1960 they represented more than 99.3 per cent of the total value of exports of the sector; in 1964 this percentage had fallen to 97.8, and by 1968 it will have been reduced to 87.5, as a result of the policy of diversifying industrial exports. The figures are summarized in Table 23.

External demand for manufactured products other than petroleum derivatives is expected to increase substantially over the period covered by the plan especially that for chemical and iron and steel products. Besides, such basic goods as those, only food products, tobacco, furniture and fixtures, textiles, and non-metallic minerals are expected to reach a foreign market, and these altogether will represent little more than 1.0 per cent of the total manufactured exports.

The increase anticipated in external demand for petroleum derivatives is only 3.0 per cent a year, a much lower figure than the 5.8 per cent recorded for 1960-64. Although this growth might be considered sluggish it has been pointed out that the main consumer countries for these products have increased their own production capacity in this division and will therefore require a larger supply of crude petroleum.<sup>11/</sup>

(ii) Supply forecasts. Supply, particularly that of nationally manufactured produce, is expected to react favourably to the probable developments in demand. This will occur to the extent that manufacturing industry, whether to satisfy internal demand by import substitution or to sell its goods in foreign markets, should make better use of its installed capacity, raise its productivity and be strengthened by the entry of new industries into the market - all these making for increased production.

In addition to this Venezuela will have enough foreign exchange during the next few years to be able to make up any deficiencies in national manufacturing production.

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<sup>11/</sup> The hydrocarbons and mines plan envisages an increase of 44 per cent in exports of crude petroleum during the period.

Table 23

VENEZUELA: VALUE OF EXPORTS OF MANUFACTURED PRODUCTS

(In millions of bolivars, 1960 prices)

Divisions	1964	1965	1968	Mean annual rates 1964-68
<b>A. <u>Traditional Industries</u></b>	<b><u>8</u></b>	<b><u>13</u></b>	<b><u>23</u></b>	<b><u>30.2</u></b>
20. Foods	6	12	15	25.7
22. Tobacco	-	g/	1	-
23. Textiles	1	1	1	-
25. Wood and Cork	1	-	3	31.6
26. Furniture and Fixtures	-	-	3	-
<b>B. <u>Intermediate Industries</u></b>	<b><u>2 395</u></b>	<b><u>2 507</u></b>	<b><u>3 004</u></b>	<b><u>5.8</u></b>
31. Chemical Products	8	20	70	71.9
32. Petroleum Derivatives	2 354	2 425	2 649	3.0
33. Non-Metallic Minerals	9	12	15	13.6
34. Basic Metals	24	50	270	83.3
<b>C. <u>Metal-Transforming Industries</u></b>	<b><u>1</u></b>	<b><u>-</u></b>	<b><u>1</u></b>	<b><u>-</u></b>
37. Electrical Equipment	1	-	-	-
38. Transport Material	-	-	1	-
<b>D. <u>Residual Group</u></b>	<b><u>1</u></b>	<b><u>-</u></b>	<b><u>-</u></b>	<b><u>-</u></b>
28. Printing	1	-	-	-
39. Miscellaneous	2	-	-	-
<b><u>Sub-total for Factory Industry</u></b>	<b><u>2 407</u></b>	<b><u>2 520</u></b>	<b><u>3 028</u></b>	<b><u>5.9</u></b>
<b><u>Total for Factory Industry excluding Petroleum</u></b>	<b><u>53</u></b>	<b><u>95</u></b>	<b><u>372</u></b>	<b><u>62.6</u></b>
<b><u>Total for Manufactures</u></b>	<b><u>2 407</u></b>	<b><u>2 520</u></b>	<b><u>3 028</u></b>	<b><u>5.9</u></b>
<b><u>Total for Manufactures excluding Petroleum</u></b>	<b><u>53</u></b>	<b><u>95</u></b>	<b><u>372</u></b>	<b><u>62.6</u></b>

Source: Industrial Department - GORDIPLAN.

g/ Less than one million bolivars.

/Production value.

Production value. The value of manufacturing production will grow over the period of the plan from 13,295 million bolivars to 19,092 million (constant prices of 1960) which amounts to a 43.6 per cent increase and an annual growth rate of 9.5 per cent. Its growth rate, excluding petroleum refining, will be 11.0 per cent a year, and that of factory industry, excluding petroleum, 11.5 per cent a year.

The rates given here, which are appreciably, higher than those estimated in apparent consumption of manufactured products, make it clear that the process of import substitution will not slacken during the period and that exports of manufactured products other than petroleum derivatives will increase.

Table 24 shows the extent of the process of import substitution. Viz., in 1960 30.0 per cent of internal supply was derived from abroad; in 1964 this percentage had already fallen to 24.2; and it is expected to drop to 20.4 in 1968.

As regards traditional and, equally, intermediate products a high degree of substitution will have been attained by 1968. But there will still be a wide margin in the case of metal-transforming products and those of miscellaneous industries.

The forecasts for the value of manufacturing production show that the highest rates of growth will be reached in the metal-transforming, miscellaneous and intermediate goods industries. The rates for the machinery, basic metals, chemical products, metal products, transport material, paper and pulp, and miscellaneous divisions are particularly significant, for they are all above 13.0 per cent a year. (See Table 25.)

The highest rate belongs to the machinery division, a sector for which two development programmes have been produced. These will be carried out by the Venezuelan Development Corporation and by the Venezuelan Guayana Corporation.

As regards the artisan and home industry sector of manufacturing production an annual growth of only 3.0 per cent has been postulated.

Value of imports. Requirements of imported manufactured products are given in Table 26. During the period covered by the plan the over-all level will be maintained without wide variations. Nevertheless important changes will occur in the import structure. There will be a considerable decrease in imports of the products of the traditional and, to a lesser extent, the intermediate goods industries, and a significant increase in those of metal-transforming products, particularly of capital goods.

Aggregate Value. Forecasts for the industrial product or for the aggregate value during the manufacturing process are given in Table 27. The product will rise in value from 5,589 million bolivars in 1964 to 8,411 million in 1968 (1960 prices); this represents a total increase for the period of 50.5 per cent and an annual rate of 10.8 per cent. The growth for the factory sector comes

out at 11.4 per cent a year, which becomes 12.1 per cent if petroleum refining is excluded from the sector. A growth of 3.0 per cent is assumed for artisan industries.

Table 24

VENEZUELA: PROPORTION OF EXTERNAL SUPPLY IN APPARENT CONSUMPTION OF MANUFACTURED PRODUCTS

(In percentages)

Divisions	1964	1965	1968
<b>A. Traditional Industries</b>	<b>7.8</b>	<b>6.8</b>	<b>4.0</b>
20. Foods	7.6	6.6	3.2
21. Beverages	3.8	3.6	2.1
22. Tobacco	-	-	-
23. Textiles	21.1	18.5	13.8
24. Wearing Apparel and Footwear	4.2	3.0	1.2
25. Wood and Cork	7.3	7.4	3.8
26. Furniture and Fixtures	2.3	2.1	1.0
29. Leather and Hides	5.8	5.4	4.3
<b>B. Intermediate Industries</b>	<b>30.2</b>	<b>29.3</b>	<b>24.7</b>
27. Pulp and Paper	22.3	20.8	16.4
30. Rubber	13.0	12.4	10.3
31. Chemical Products	40.9	41.5	39.6
32. Petroleum Derivatives	5.5	4.9	3.6
33. Non-Metallic Minerals	19.3	17.1	11.7
34. Basic Metals	61.4	53.9	32.7
<b>C. Metal-Transforming Industries</b>	<b>58.1</b>	<b>55.8</b>	<b>49.1</b>
35. Metal Products	49.2	46.0	34.9
36. Machinery	95.6	95.1	81.8
37. Electrical Equipment	60.9	61.4	58.5
38. Transport Material	40.2	35.8	31.5
<b>D. Residual Group</b>	<b>37.1</b>	<b>34.9</b>	<b>28.9</b>
28. Printing	4.7	3.9	1.4
39. Miscellaneous	61.4	58.2	49.7
<b>Average</b>	<b>24.2</b>	<b>22.7</b>	<b>20.4</b>

Source: Industrial Department - CORDIPLAN.

Table 25  
 VENEZUELA: VALUE OF MANUFACTURING PRODUCTION  
 (In millions of bolivars, 1960 prices)

Divisions	1964	1965	1968	Mean annual rates 1964-68
<b>A. <u>Traditional Industries</u></b>	<u>6 094</u>	<u>6 635</u>	<u>8 260</u>	<u>7.9</u>
20. Foods	2 909	3 185	3 915	7.7
21. Beverages	868	864	1 056	6.9
22. Tobacco	359	382	461	6.4
23. Textiles	687	763	1 005	10.0
24. Wearing Apparel and Footwear	770	836	1 049	8.0
25. Wood and Cork	128	137	180	8.9
26. Furniture and Fixtures	303	328	418	8.4
29. Leather and Hides	130	140	176	7.9
<b>B. <u>Intermediate Industries</u></b>	<u>4 972</u>	<u>5 442</u>	<u>7 269</u>	<u>9.2</u>
27. Pulp and Paper	383	433	625	13.0
30. Rubber	280	305	393	8.9
31. Chemical Products	754	849	1 286	14.3
32. Petroleum Derivatives	2 885	2 984	3 299	3.4
33. Non-Metallic Minerals	456	510	761	13.7
34. Basic Metals	221	333	905	42.3
<b>C. <u>Metal-Transforming Industries</u></b>	<u>1 162</u>	<u>1 459</u>	<u>2 208</u>	<u>17.4</u>
35. Metal Products	290	337	530	16.3
36. Machinery	29	40	203	62.8
37. Electrical Equipment	159	179	258	12.9
38. Transport Material	684	903	1 217	15.5
<b>D. <u>Residual Group</u></b>	<u>380</u>	<u>424</u>	<u>590</u>	<u>11.6</u>
28. Printing	246	269	352	9.4
39. Miscellaneous	134	155	238	15.4
<b><u>Subtotal for Factory Industry</u></b>	<u>12 615</u>	<u>13 940</u>	<u>18 327</u>	<u>9.5</u>
<b><u>Factory Industry excluding Petroleum</u></b>	<u>9 730</u>	<u>10 956</u>	<u>15 028</u>	<u>11.5</u>
<b>E. <u>Artisan Industry</u></b>	<u>680</u>	<u>700</u>	<u>765</u>	<u>3.0</u>
<b><u>Total for Manufactures</u></b>	<u>13 295</u>	<u>14 640</u>	<u>19 092</u>	<u>9.5</u>
<b><u>Total for Manufactures excluding Petroleum</u></b>	<u>10 410</u>	<u>11 656</u>	<u>15 793</u>	<u>11.0</u>

Source: Industrial Department - CORDIPLAN.



Table 26

VENEZUELA: REQUIREMENTS OF IMPORTED MANUFACTURED PRODUCTS

(Millions of bolivars, 1960 prices)

Divisions	1964	1965	1968	Mean annual rates 1964-68
<b>A. Traditional Industries</b>	<u>514</u>	<u>482</u>	<u>345</u>	<u>-9.5</u>
20. Foods	240	225	129	-14.4
21. Beverages	32	32	23	-7.9
22. Tobacco	-	-	-	-
23. Textiles	183	173	161	-3.1
24. Wearing Apparel and Footwear	34	26	13	-21.3
25. Wood and Cork	10	11	7	-8.5
26. Furniture and Fixtures	7	7	4	-13.1
29. Leather and Hides	8	8	8	-
<b>B. Intermediate Industries</b>	<u>1 119</u>	<u>1 210</u>	<u>1 398</u>	<u>5.7</u>
27. Pulp and Paper	110	114	123	2.8
30. Rubber	42	43	45	1.7
31. Chemical Products	516	589	798	11.5
32. Petroleum Derivatives	31	29	24	-6.2
33. Non-Metallic Minerals	106	104	99	-1.7
34. Basic Metals	314	331	309	-0.4
<b>C. Metal-Transforming Industries</b>	<u>1 612</u>	<u>1 857</u>	<u>2 129</u>	<u>7.2</u>
35. Metal Products	281	287	284	0.3
36. Machinery	625	770	914	10.0
37. Electrical Equipment	246	297	364	10.3
38. Transport Material	460	503	567	5.4
<b>D. Residual Group</b>	<u>222</u>	<u>227</u>	<u>240</u>	<u>2.0</u>
28. Printing	12	11	5	-19.6
39. Miscellaneous	210	216	235	2.8
<b>Subtotal for Factory Industry</b>	<u>3 467</u>	<u>3 776</u>	<u>4 112</u>	<u>4.4</u>
<b>Factory Industry excluding Petroleum</b>	<u>3 436</u>	<u>3 735</u>	<u>4 088</u>	<u>4.4</u>
<b>E. Artisan Industry</b>	-	-	-	-
<b>Total for Manufactures</b>	<u>3 467</u>	<u>3 764</u>	<u>4 112</u>	<u>4.4</u>
<b>Total for Manufactures excluding Petroleum</b>	<u>3 436</u>	<u>3 735</u>	<u>4 088</u>	<u>4.4</u>

Source: Industrial Department - CORDIPLAN.

Table 27

VENEZUELA: AGGREGATE VALUE IN MANUFACTURING INDUSTRY

(Millions of bolivars, 1960 prices)

Divisions	1964	1965	1968	Mean annual rates 1964-68
<b>A. <u>Traditional Industries</u></b>	<b><u>2 723</u></b>	<b><u>2 961</u></b>	<b><u>3 691</u></b>	<b><u>7.9</u></b>
20. Foods	835	916	1 126	7.8
21. Beverages	587	628	768	7.0
22. Tobacco	256	274	329	6.5
23. Textiles	395	439	578	10.0
24. Wearing Apparel and Footwear	370	402	505	8.1
25. Wood and Cork	57	61	79	8.5
26. Furniture and Fixtures	165	179	228	8.4
29. Leather and Hides	58	62	78	7.7
<b>B. <u>Intermediate Industries</u></b>	<b><u>1 730</u></b>	<b><u>1 943</u></b>	<b><u>2 929</u></b>	<b><u>14.1</u></b>
27. Pulp and Paper	188	212	306	12.9
30. Rubber	170	189	243	9.3
31. Chemical Products	519	581	895	14.6
32. Petroleum Derivatives	467	483	534	3.4
33. Non-Metallic Minerals	292	331	487	13.6
34. Basic Metals	94	147	464	49.1
<b>C. <u>Metal-transforming Industries</u></b>	<b><u>425</u></b>	<b><u>532</u></b>	<b><u>823</u></b>	<b><u>20.4</u></b>
35. Metal Products	140	162	256	16.3
36. Machinery	16	21	108	61.3
37. Electrical Equipment	81	91	131	12.8
38. Transport Material	188	265	398	20.6
<b>D. <u>Residual Group</u></b>	<b><u>234</u></b>	<b><u>261</u></b>	<b><u>361</u></b>	<b><u>11.5</u></b>
28. Printing	161	176	230	9.3
39. Miscellaneous	73	85	131	15.7
<b><u>Subtotal for Factory Industry</u></b>	<b><u>5 112</u></b>	<b><u>5 704</u></b>	<b><u>7 874</u></b>	<b><u>11.4</u></b>
<b><u>Factory Industry excluding Petroleum</u></b>	<b><u>4 645</u></b>	<b><u>5 221</u></b>	<b><u>7 340</u></b>	<b><u>12.1</u></b>
<b>E. <u>Artisan Industry</u></b>	<b><u>477</u></b>	<b><u>491</u></b>	<b><u>537</u></b>	<b><u>3.0</u></b>
<b><u>Total for Manufactures</u></b>	<b><u>5 589</u></b>	<b><u>6 195</u></b>	<b><u>8 411</u></b>	<b><u>10.8</u></b>
<b><u>Total for Manufactures excluding Petroleum</u></b>	<b><u>5 122</u></b>	<b><u>5 712</u></b>	<b><u>7 877</u></b>	<b><u>11.4</u></b>

Source: Industrial Department - CORDIPLAN.

/The highest

The highest growth rates belong to the metal-transforming industries in which the average will be 20.4 per cent a year, the highest rate of all being that of the machinery division where it is thought to develop the two promotional programmes referred to above.

Intermediate industries are expected to achieve a product growth of 14.1 per cent a year, based on the expansion of three strategic sectors, namely, basic metals, chemicals, and paper and pulp.

For traditional industries an annual rate of 7.8 per cent is postulated, higher than the anticipated 6.8 per cent expansion of consumption of these products. This implies that a vigorous process of import substitution will continue, especially in the food products and textiles divisions.

The growths projected will produce important changes in the product structure of the manufacturing sector, as can be appreciated in Table 27.

Factory industry will continue to increase its contribution to the industrial product, from the 91.5 per cent of 1964 to 93.6 in 1968. The metal-transforming and intermediate industries will substantially increase their contribution during the period, while that of the traditional industries will diminish and that of the residual group remain the same.

The structural changes mentioned are similar to those which take place in every process of development, and imply that the industrial complex will be more integrated; the 1968 structure still corresponds to that of countries in an intermediate stage of industrial development.

It is a significant fact that within the general economic development there will also be a growth of the share of the manufacturing product in the generation of the gross domestic product (from 17.1 per cent in 1964 to 19.4 per cent in 1968)

(iii) Forecasts for employment and for the product per employed person.

Employment. The industrial expansion envisaged by the plan will lead to the creation of 82,100 new jobs, or 20,525 per year. This latter figure compares favourably with the 13,475 recorded for the period 1960-64, and with the 7,655 of the decade 1950-60, and makes clear how considerable are the targets aimed at.

It is expected that the number of persons employed in manufacturing industry will rise from 363,200 to 445,300 in 1968. Factory industry will absorb 61,200 persons and artisan industry 20,900.

The annual growth rate of industrial employment will be 5.2 per cent - that of factory industry being 7.1 per cent and that of artisan industry 3.0 per cent. These figures are given in Table 28.

Table 28

VENEZUELA: EMPLOYMENT IN MANUFACTURING INDUSTRY

(Thousands of persons)

Divisions	1964	1965	1968	Mean annual rates 1964-68
<b>A. <u>Traditional Industries</u></b>	<b>103.9</b>	<b>110.5</b>	<b>129.7</b>	<b>5.7</b>
20. Foods	32.6	34.6	40.6	5.6
21. Beverages	9.8	10.3	12.0	5.2
22. Tobacco	3.1	3.2	3.5	3.1
23. Textiles	20.0	21.7	26.3	7.1
24. Wearing Apparel and Footwear	19.7	20.8	23.9	4.9
25. Wood and Cork	3.1	3.2	3.4	2.3
26. Furniture and Fixtures	12.8	13.8	16.7	6.9
29. Leather and Hides	2.8	2.9	3.3	4.2
<b>B. <u>Intermediate Industries</u></b>	<b>46.5</b>	<b>48.8</b>	<b>60.1</b>	<b>6.6</b>
27. Pulp and Paper	6.2	6.9	9.3	10.7
30. Rubber	4.8	5.1	6.0	5.8
31. Chemical Products	11.3	12.1	15.6	8.4
32. Petroleum Derivatives	7.3	7.4	7.6	1.0
33. Non-Metallic Minerals	10.3	10.3	13.6	7.2
34. Basic Metals	6.6	7.0	8.0	4.9
<b>C. <u>Metal-Transforming Industries</u></b>	<b>32.1</b>	<b>35.6</b>	<b>51.2</b>	<b>12.4</b>
35. Metal Products	7.0	7.7	10.7	11.2
36. Machinery	0.9	1.0	3.5	40.2
37. Electrical Equipment	4.9	5.1	6.5	7.3
38. Transport Material	19.3	21.8	30.5	12.2
<b>D. <u>Residual Group</u></b>	<b>10.8</b>	<b>11.5</b>	<b>13.5</b>	<b>5.7</b>
28. Printing	7.3	7.6	8.4	3.6
39. Miscellaneous	3.5	3.9	5.1	9.9
<b><u>Subtotal for Factory Industry</u></b>	<b>193.3</b>	<b>206.4</b>	<b>254.5</b>	<b>7.1</b>
<b><u>Factory Industry, excluding Petroleum</u></b>	<b>186.0</b>	<b>199.0</b>	<b>246.9</b>	<b>7.3</b>
<b>E. <u>Artisan Industry</u></b>	<b>169.9</b>	<b>174.6</b>	<b>190.8</b>	<b>3.0</b>
<b><u>Total for Manufactures</u></b>	<b>363.2</b>	<b>381.0</b>	<b>445.3</b>	<b>5.2</b>
<b><u>Total for Manufactures excluding Petroleum</u></b>	<b>355.9</b>	<b>373.6</b>	<b>437.7</b>	<b>5.3</b>

Source: Industrial Department - CORDIPAN.

/Absolute employment

Absolute employment increases analysed by divisions turn out, not surprisingly to be greatest in the traditional industries, which at present employ the largest proportion of industrial labour and which have the highest concentration of manpower per production unit 25,800 new jobs will be created in this sector; next in order of importance will be the metal-transforming industries where 19,100 will be created, the intermediate industries where there will be 13,600, and the residual group where there will be 2,700. If relative increase is considered, however, the order of divisions radically alters, in that now it is the metal-transforming industries which take first place, with an annual increase rate of more than twice the average of those of the other divisions.

Product per employee. The attainment of the productivity and employment targets depends on an increase of productivity in the different industrial divisions, which, taking sectorial forecasts into account, should occur if the trends of the last decade are maintained.

The product per person employed in manufacturing industry will rise from 15,388 bolivars in 1964 to 18,888 bolivars in 1968, that is by 22.7 per cent. The productivity increase envisaged will take place chiefly in factory industry, with that of artisan industry remaining at its present level.

The greatest manpower productivity increases of 31.0 and 31.7 per cent are expected to occur in the intermediate and metal-transforming industries respectively. In the case of the first this growth will be partly due to the very remarkable 307.3 per cent increase of the product per employee in the basic metal industries, while in the second case it will be influenced by the 73.6 per cent improvement of the machinery constructing industries.

(iv) Investment forecasts. Gross fixed investment. The production and employment targets set by the plan will require a gross fixed investment of 5,807.0 million bolivars at 1960 prices (See Table 29), which, converted into 1964 prices, is 7,490.1 million.

Of the total investment 94.6 per cent will be in the factory and 5.4 per cent in the artisan sector.

The group of intermediate industries will have the greatest share of total investments in factory industry, with a little more than two-thirds (69 per cent); after them will come the traditional industries with 19.0 per cent, the metal-transforming industries with 10.0 per cent, and the residual group with 2.0 per cent.

63 per cent of the total gross fixed investments made during the four years covered by the plan will be concentrated in four industrial divisions, basic metals, chemical products, petroleum derivatives, and foodstuffs. In the first two cases this will be due to the execution of important new projects while in the other two the greater part of the gross investment will be allocated against depreciation as will be seen below.

/Approximately two-thirds

Approximately two-thirds (64 per cent) of the gross fixed investment will consist of machinery and equipment, 27 per cent of buildings and structures, 4 per cent of transport material, and 5 per cent of office equipment.

The composition of the gross fixed investments is given in Table 29. Net investment accounts for 58 per cent of it, and depreciation for 42 per cent.

Table 29

VENEZUELA: NET INVESTMENT, DEPRECIATION AND GROSS INVESTMENT IN INDUSTRY, 1965-68

(Millions of Bolivars, 1960 prices)

Divisions	Net investment	Depreciation	Gross investment
<b>A. Traditional Industries</b>	<b>392.4</b>	<b>630.7</b>	<b>1 023.1</b>
20. Foods	218.6	295.7	514.3
21. Beverages	-	100.0	100.0
22. Tobacco	-	20.0	20.0
23. Textiles	161.0	121.6	282.6
24. Wearing Apparel and Footwear	7.0	29.8	36.8
25. Wood and Cork	3.2	12.0	15.2
26. Furniture and Fixtures	-	36.8	36.8
29. Leather and Hides	2.6	14.8	17.4
<b>B. Intermediate Industries</b>	<b>2 493.3</b>	<b>1 290.7</b>	<b>3 784.0</b>
27. Pulp and paper	215.2	62.9	278.1
30. Rubber	29.0	24.6	53.6
31. Chemical Products	968.2	172.5	1 140.7
32. Petroleum Derivatives	111.6	610.6	722.2
33. Non-Metallic Minerals	191.7	106.8	298.5
34. Basic Metals	977.6	313.3	1 290.9
<b>C. Metal-Transforming Industries</b>	<b>405.9</b>	<b>166.0</b>	<b>571.9</b>
35. Metal Products	83.1	38.6	121.7
36. Machinery	117.7	9.6	127.3
37. Electrical Equipment	58.8	33.5	92.3
38. Transport Material	146.3	84.3	230.6
<b>D. Residual Group</b>	<b>52.0</b>	<b>59.8</b>	<b>111.8</b>
28. Printing	-	31.2	31.2
39. Miscellaneous	52.0	28.6	80.6
<b>Subtotal for Factory Industry</b>	<b>3 343.6</b>	<b>2 147.2</b>	<b>5 490.8</b>
<b>E. Artisan Industry</b>	<b>47.0</b>	<b>260.9</b>	<b>307.0</b>
<b>Industrial Buildings</b>	<b>9.2</b>	<b>-</b>	<b>9.2</b>
<b>Total Investments</b>	<b>3 399.8</b>	<b>2 407.2</b>	<b>5 807.0</b>

Source: Industrial Department - CORDIPLAN.

/Net investment.

Net investment. During the period covered by the Plan net investment is expected to amount to 3,399.8 million bolivars at 1960 prices, that is, 4,390.0 million at 1964 prices.

Almost the whole net investment will be absorbed by factory industry, and only a little more than 1 per cent by artisan activities.

Almost three-quarters (73.3 per cent) of the net investment will be absorbed by the intermediate group of industries, 12 per cent by the metal-transforming industries, 12 per cent by the traditional industries, and 2 per cent by the residual group.<sup>12/</sup>

More than half (57 per cent) of the total net investments made during the period covered by the plan will go into the chemical products and basic metals divisions. This gives a good idea of the medium term direction of industrial development.

Net investments in the pulp and paper, foods, non-metallic minerals, transport material, and machinery divisions will also be considerable.

67 per cent of net investment will consist in machinery and equipment, 28 per cent in buildings and structures, 2 per cent in transport material, and 3 per cent in office equipment.

These investments represent a considerable outlay which will be principally borne by private initiative. Viz., table 30 shows that 60.9 per cent of net investment during the four years of the Plan comes from the private sector and 39.1 per cent from the public.

The investment of the public sector will chiefly go into the basic metal, chemical products, and petroleum derivatives divisions, where basic industries will be built up; these in turn will stimulate the development of new industries in the private sector.

Investment in concrete projects. Fixed capital investments for concrete projects will amount to 2,369.7 million bolivars at 1960 prices, that is, 3,068.1 at 1964 prices. (See Table 31.)

Almost all of these investments will be used in the development of intermediate and metal-transforming industry, 88 per cent going to the former and 8 per cent to the latter; the remaining 4 per cent has been allocated to the food and the wood and cork industries, and to the Venezuelan Development Corporation's industrial building programme.

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<sup>12/</sup> The net investment includes a programme for the construction of industrial buildings which will be carried out by the Venezuelan Development Corporation during 1965 and 1966 and in which 10.5 million bolivars (1964 prices) will be invested.

Table 30

VENEZUELA: CHARACTER OF NET INVESTMENT IN  
MANUFACTURING INDUSTRY, 1965-68

(Percentage)

Divisions	Private Sector	Public Sector
<u>A. Traditional Industries</u>	<u>95.5</u>	<u>4.5</u>
20. Foods	91.9	8.1
21. Beverages	-	-
22. Tobacco	-	-
23. Textiles	100.0	-
24. Wearing Apparel and Footwear	100.0	-
25. Wood and Cork	100.0	-
26. Furniture and Fixtures	-	-
29. Leather and Hides	100.0	-
<u>B. Intermediate Industries</u>	<u>50.4</u>	<u>49.6</u>
27. Pulp and Paper	94.0	6.0
30. Rubber	100.0	-
31. Chemical Products	38.4	61.6
32. Petroleum Derivatives	39.4	60.6
33. Non-Metallic Minerals	100.0	-
34. Basic Metals	42.8	57.2
<u>C. Metal<sup>W</sup> Transforming Industries</u>	<u>83.2</u>	<u>16.8</u>
35. Metal Products	92.4	7.6
36. Machinery	83.8	16.2
37. Electrical Equipment	94.8	5.2
38. Transport Material	72.5	27.5
<u>D. Residual Group</u>	<u>100.0</u>	<u>-</u>
28. Printing	-	-
39. Miscellaneous	100.0	-
<u>Total for Factory Industry</u>	<u>60.3</u>	<u>39.7</u>
<u>Industrial Buildings</u>	<u>-</u>	<u>100.0</u>
<u>E. Artisan Industry</u>	<u>100.0</u>	<u>-</u>
<u>Manufacturing Total</u>	<u>60.9</u>	<u>39.1</u>

Source: Industrial Department - CORDIPLAN.



Table 31

VENEZUELA: INVESTMENTS IN FIXED CAPITAL FOR  
CONCRETE INDUSTRIAL PROJECTS, 1965-68

(Millions of bolivars, 1960 prices)

Divisions	1965	1966-68	Total 1965-68
<u>A. Traditional Industries</u>	<u>25.1</u>	<u>47.1</u>	<u>72.2</u>
20. Foods	24.2	44.8	69.0
25. Wood and Cork	0.9	2.3	3.2
<u>B. Intermediate Industries</u>	<u>139.4</u>	<u>1 944.4</u>	<u>2 083.8</u>
27. Pulp and paper	-	99.3	99.3
31. Chemical Products	56.2	791.3	847.5
32. Petroleum Derivatives	9.3	58.4	67.7
33. Non-Metallic Minerals	17.9	95.5	113.4
34. Basic Metals	56.0	899.9	955.9
<u>C. Metal-Transforming Industries</u>	<u>25.7</u>	<u>178.8</u>	<u>204.5</u>
35. Metal products	7.8	24.3	32.1
36. Machinery	5.6	80.9	86.5
37. Electrical Equipment	4.5	11.1	15.6
38. Transport Material	7.8	62.5	70.3
<u>Subtotal</u>	<u>190.2</u>	<u>2 170.3</u>	<u>2 360.5</u>
<u>Industrial Buildings</u>	<u>3.4</u>	<u>5.8</u>	<u>9.2</u>
<u>Total</u>	<u>193.6</u>	<u>2 176.1</u>	<u>2 369.7</u>

Source: Manufacturing Industries Plan, 1965-68.

5. Organizations with executive responsibilities in industrial development

Execution of programmes and of industrial policy is basically the responsibility of the Ministry of Development.<sup>13/</sup> The duties of this ministry may be summarized as follows:

- (a) co-ordination of industrial and commercial development with agricultural, grazing, and mining production;
- (b) intervention by the Federal Executive in directing, supervising, protecting and developing the produce and exercise of trade;
- (c) co-ordination of credit provided by the State and its subsidiaries in the real estate, urban and rural, and industrial and mercantile branches of credit;
- (d) relations of the Federal Executive with the National Economics Council and the Industrial Bank;
- (e) administration of industries whose economic affairs are the responsibility of the state;
- (f) control of the industrial chambers, commercial chambers and exchanges, industrial and commercial associations; also of exhibitions, fairs and markets;
- (g) intervention by the Federal Executive in matters connected with insurance and other branches of business;
- (h) control of patents and trade and factory marks; of trade names and agricultural brand names, of forestry and livestock industry;
- (i) intervention by the Federal Executive in matters connected with price-fixing, freight hires and tariffs, supply and accomodation;
- (j) administration of import licences, quotes and other import restrictions;
- (k) supervision of tourism, hotels, and national services for the development of tourism;
- (l) centralization of statistics and national censures;
- (m) the Metric System and Weights and Measures;

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<sup>13/</sup> Decree 40, 30th December 1950: Organic Statute of Ministries.

(n) supervision of the operations of the autonomous institutes subsidiary to the Office.

The Ministry of Development exercises its functions in industry chiefly through its Industrial Department, which has been charged with "co-ordinating and executing the Government's industrialization policy, planning and promoting the development of new industries, and providing technical advice to existing industries".

The Ministry of Development also contains the Registry of Industrial Property, which is responsible for maintaining the records and titles of industrial property, and for protecting the patent-rights of inventions having some connection with industry and the rights of products, makers or traders over the phrases or special signs which they adopt. This body has a patents and a trade-marks department.

The following autonomous bodies are subsidiary to the Ministry of Development:

(a) The National Economics Council,<sup>14/</sup> whose functions are as follows:

- to advise the Executive on all matters relating to the development and co-ordination of the national economy;
- to undertake studies on economic problems and to suggest or recommend to the public authorities the measures it judges adequate for their solution and for the better development and co-ordination of the economic activities of the country;
- to study the drafts of laws and decrees of an economic character; also those of resolutions involving reforms of customs duties, which will be submitted for their preliminary consideration by the Executive, and on which they must produce a report within such reasonable space of time as may be agreed upon;
- to take account of the opinions of the various bodies representing the economic interests of the country, which it may request wherever it thinks fit. It is also empowered, in cases of need, to set up commissions of specialists or experts in the various affairs under its care.

(b) The Venezuelan Development Corporation,<sup>15/</sup> whose powers are as follows:

- to undertake studies with regard to the promotion of new industrial enterprises;

<sup>14/</sup> Decree 211, of the 8th of March 1964.

<sup>15/</sup> Organic Statute: decrees 416 of the 20th June 1952.

- to promote farming, industrial and other types of enterprise of importance in the national economy, and to administer them, if this is necessary;
- to set up such experimental industrial production plants or establishments as may be useful, or to collaborate in this;
- to underwrite or acquire, whenever may be useful, shares, bills, bonds, and other titles of enterprises whose main activities are directly connected with production or with public services of use to the economic development of the country, and to guarantee in some form the whole or part of the bills, bonds, or other titles which may be issued by such enterprises.
- to issue bonds or bills unsecured, secured by pledge, and secured by mortgage;
- to be responsible for issuing and negotiating bonds or bills of private enterprises, and to stipulate the conditions in each case;
- to issue share certificates, by name or made out to bearer, giving rights over the various classes or groups of assets or titles possessed by it;
- to grant loans on mortgages reduceable by periodical payments or payment at no longer term than 20 years;
- to make discounts and unsecured loans for terms of no more than one year, as long as these are in connection with the development of production;
- to grant loans secured by pledge for terms of no more than twenty years;
- to grant loans on bank or insurance bonds for terms of no more than five years;
- to receive savings deposits in the form of bank books, monetary deposits, bonds of any kind, and other similar valuables;
- to act as a trust, and as such, to hold in deposit goods given in guarantee;
- to take up, as it thinks fit, the representation of holders of bonds, bills, shares or any other titles issued and sold by the Corporation;
- to dispose of or mortgage its properties. When the value of such properties exceeds five hundred thousand bolivars (Bs. 500,000.00) it must obtain a previous authorization from the Ministry of Development.

(c) The Public Electrical Administration and Development Company (CADAFE),<sup>16/</sup> which is a subsidiary of the Venezuelan Development Corporation and has the following powers:

- to generate, distribute and sell electric power;
- to use this power in subsidiary industrial applications;
- to carry on business transactions deriving from, dependent on, or connected with these aims;
- to lend its services to the other electrical enterprises of the country in matters of administrative control, legal advice, and technical supervision;

(d) The Industrial Bank of Venezuela,<sup>17/</sup> which has the following powers.

- to protect and promote national manufacturing and mining industries;
- to grant credits in the form of loans and open accounts and in any other form authorized by law, for the establishment of industrial enterprising in national manufactures and mining, for use by existing enterprises of this kind as capital for further development, for the purchase of machinery, utensils or tools for use by manufacturing or mining enterprises, and for assistance in the expenses of exploration and in the improvement of sales facilities;
- to present for discount and as security promissory notes and bills obtained from borrowers in the course of transactions it has carried out;
- to apply for loans on the security of credits granted on mortgage, with the previous authorization of the Executive;
- to require such guarantees as are necessary for the security of their transactions;
- on the basis of funds arising from any deposits which may be made with them, to set up savings accounts, grant loans, issue notes, and carry on all such transactions as are permitted under the standing bank legislation. But their own integral capital must be used only in transactions relating to industry.

(e) The Regional Development Banks, of which there are four, namely, Coro, Los Andes, Guayana and Zulia. Their powers are as follows:

- to carry out banking transactions of every kind within the law, but with the constant and fundamental aim of advancing the development of this region in every aspect of its economic activities;

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<sup>17/</sup> Industrial Bank Law of the 23rd of July 1937.

- to accept as security for credits granted personal guarantees, pledges, mortgages or a combination of these, according to the resolutions of their board of directors; also to grant credits without special guarantee, in accordance with the law, on the unanimous vote of a plenum of the board of directors;

- to act as the financial agents of the Venezuelan Development Corporation for areas defined in the contracts they make with this body.

(f) The National Commission for Financing of Small and Medium Industry <sup>18/</sup> whose powers are as follows:

- to approve or disapprove the granting of credits charged to the Credit Fund Programme for Artisan and Small Industry;

- to approve or disapprove the discounts, investments and other transactions authorized by the decree, which are charged to the Fund for the Financing of Medium Industry;

- to approve or disapprove the annual spending budget for its operations;

- to work out operative standards for the employment of the above Funds, which will come into force on resolution by the Ministry of Development;

- any others which the Ministry of Development may decide to authorize.

(g) The Venezuelan Productivity Institute (INPRO), <sup>19/</sup> with the following powers:

- to sponsor scientific experimental research into factors which prevent the achievement of a higher level of productivity in the different stages of industrial development;

- to organize activities aimed at eliminating psychological factors adverse to an increase in productivity and at creating in the public an attitude conducive to the achievement of a higher level of productivity by the economic forces of the country;

- to promote short and long term technical aid programmes for manufacturing industry in general and activities related to it which may lead to greater productivity and better use of the country's resources;

- to develop regional technical aid programmes for helping enterprises to adjust themselves to technological innovations and to the progressive development of the country.

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<sup>18/</sup> Decree 646, of the 13th of November 1961.

<sup>19/</sup> Statutes of the 13th of November 1961.

(h) Venezuelan Industrial Standards Commission (COVENIN),<sup>20/</sup> with the following powers:

- to study, develop and modify industrial standards, and to propose their adoption to the Ministry of Development;
- to control the application of industrial standards;
- to set up such technical commissions as are needed to study, develop and modify the standards relevant to the different branches of industry;
- to establish and maintain relations with international organizations concerned with standards and with corresponding standards organizations in other countries.

#### 6. Private initiative in industrial programming

Private initiative plays an effective part in industrial programming at three levels:

(a) the over-all national level, through the National Economics Council, the advisory body;

(b) the sectorial level, through the programming groups (motor vehicle and slaughterhouse industries) and the national councils (metallurgic and chemical industries);

(c) the regional level, through the regional corporations (Zulia Planning Council, Andes Corporation, promotory commission for development of the Eastern regions, Central-Western development foundation (FUDECO)).

It is at the sectorial and regional levels that private initiative plays its most important part.

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<sup>20/</sup> Decree 50 of the 30th of December 1958.

Chapter IV

THE PRINCIPAL SECTORS OF MANUFACTURING INDUSTRY

This chapter gives a short description of certain industrial divisions, beginning with those of the traditional group - foods, textiles, and leather and hides - and ending with the dynamic industries - pulp and paper, chemicals and petrochemicals, petroleum derivatives, steel and the motor vehicle industry.

Monetary values are given at 1960 prices, unless otherwise indicated. The information given covers only the manufacturing activities 1/ of any division.

I. TRADITIONAL INDUSTRIES

1. The food industry

(a) General characteristics

The food industry at present constitutes the most important manufacturing division of Venezuela. In 1964 it generated an aggregate value of 835 million bolivars that is, 16.3 per cent of the factory product; it employed 32,600 persons, or 16.9 per cent of factory manpower; and its fixed capital reached 952 million bolivars which is equivalent to 12.4 per cent of factory capital. In the same year there were 1,630 industrial units belonging to this division.

In artisan industry the production of food, especially of the type which can be classified as home produce, is of considerable importance, principally as a source of employment.2/

Food industry achieved a sustained and accelerated development after the Second World War, and was oriented towards import substitution, in which respect it has made considerable progress. In 1950 imported products constituted 33.0 per cent of the total supply of the country, but by 1960 they had been reduced to 14.2 per cent, and by 1964 to 7.2 per cent. There remains, however, some room for substitution within the 240 million bolivars (72 million dollars) spent on imports of such products in 1964. (See table 32.)

1/ By factory activity is understood all those enterprises which employ 5 or more persons.

2/ There is a shortage of information on the economic importance of artisan activity.



(b) Analysis of demand

In the period 1960-64 consumption of manufactured food products has maintained a steady growth of 6.8 per cent a year. This growth is mainly due to the policy of redistributing the national income by incorporating the rural population into the process of production.

The development of demand for food products since 1960 has for the most part been harmonious, since all branches included in the division have experienced considerable increases, with the exception of the fruit industry whose production value slumped between 1963 and 1964. The development in some branches has been exceptional, for instance in the sugar industry where the increase has been 8.1 per cent a year, and in the sweets and chocolates industry where it has been 10.4 per cent a year.

External demand, though small, has shown a definite tendency to increase over the last few years, particularly as regards marine produce and sugar.

(c) Analysis of supply

The production value of meat products is the highest of the whole group. Nevertheless their aggregate value as regards the manufacturing process is very low, only amounting to 0.043 per cent of the production value of stock raising, which is one of the main activities of this branch.

The sugar and miscellaneous foods industries are highly developed in Venezuela by comparison with other Latin American countries. Production of animal foods constitutes one of the most important branches of the latter industry. Considerable progress has also been made in production of milk products; in 1965 Venezuelan industry was already producing half the dried milk consumed by the country, and it is expected that by 1968 the whole supply of this product will come from internal sources.

Table 33 gives the production values, and table 34 production volumes, of the different branches of the industry.

In 1964 the value of imported food products was 240 million bolivars and their volume was 255,778 metric tons. In the last few years imports in this division have fallen off considerably as a result of the sustained substitution process which has been achieved there. At present milk products make up more than half the value of all imported food products. (See table 35.)

Table 32

VENEZUELA: APPARENT CONSUMPTION OF MANUFACTURED FOODS

(Millions of bolivars, 1960 prices)

Index No.	Branch of Industry	1960	1961	1962	1963	1964
20	<u>Foods</u>	<u>2 421</u>	<u>2 609</u>	<u>2 756</u>	<u>2 884</u>	<u>3 143</u>
201	Meat	549	592	615	666	697
202	Milk Products	479	490	516	545	559
203	Fruit	143	147	162	165	165
204	Marine Products	45	36	43	45	59
205	Flour	318	344	346	356	375
206	Bread	203	200	203	235	260
207	Sugar	198	216	237	217	270
208	Chocolate	85	95	104	115	126
209	Miscellaneous	401	489	530	540	632

Source: Industrial Department - CORDIPLAN.

Table 33

VENEZUELA: PRODUCTION VALUES OF MANUFACTURED FOODS INDUSTRY

(Millions of bolivars, 1960 prices)

Index No.	Branch of Industry	1960	1961	1962	1963	1964
20	<u>Foods</u>	<u>2 089</u>	<u>2 299</u>	<u>2 486</u>	<u>2 684</u>	<u>2 909</u>
201	Meat	491	563	590	624	669
202	Milk Products	313	327	372	421	431
203	Fruit	103	110	133	145	142
204	Marine Products	38	31	41	44	54
205	Flour	274	299	307	327	347
206	Bread	203	199	203	235	260
207	Sugar	197	215	236	264	274
208	Chocolate	96	96	105	115	126
209	Miscellaneous	374	459	499	509	606

Source: Industrial Department - CORDIPLAN

Table 34

VENEZUELA: VOLUMES OF PRODUCTION OF  
MANUFACTURED FOODS

(Thousands of Metric Tons)

Index No.	Branch of Industry	1960	1961	1962	1963	1964
20	<u>Foods</u>	<u>1 303</u>	<u>1 483</u>	<u>1 595</u>	<u>1 710</u>	<u>1 929</u>
201	Meat	154	174	181	191	206
202	Milk Products	198	204	216	240	248
203	Fruit	41	43	43	44	43
204	Marine Products	21	17	22	24	29
205	Flour	342	368	396	424	487
206	Bread	8	8	8	9	10
207	Sugar	238	260	288	320	333
208	Chocolate	13	13	14	15	17
209	Miscellaneous	288	396	427	444	556

Source: Industrial Department - CORDIPLAN.

Table 35

VENEZUELA: VALUES OF IMPORTS OF  
MANUFACTURED FOODS

(Millions of bolivars, 1960 prices)

Index No.	Branch of Industry	1960	1961	1962	1963	1964
20	<u>Foods</u>	<u>343</u>	<u>314</u>	<u>278</u>	<u>239</u>	<u>240</u>
201	Meat	58	29	25	27	28
202	Milk Products	166	163	144	124	128
203	Fruit	40	37	29	20	23
204	Marine Products	7	8	9	5	6
205	Flour	44	45	39	29	28
206	Bread	-	1	-	-	-
207	Sugar	1	1	1	-	-
208	Chocolate	-	-	-	1	-
209	Miscellaneous	27	30	31	33	27

Source: Industrial Department - CORDIPLAN.

/Apart from

Apart from a few items such as particular milk products, fishing boats, and certain industrial raw materials, Venezuela is in a position to supply its own requirements in this field, and is directing its efforts towards doing so. Even though it is not possible to produce primary agricultural products, such as corn, barley and certain fruits, etc., which must be grown in a temperate climate, the manufacture of their derivatives is already partly being carried out in the country.

The costs' structure of the division for 1961 is given in table 36.

In general food industry has been able to count on definite state protection of its development and the obstacles which have confronted it have not been great. But among these it is worth noticing the inability of the agricultural sector to supply sufficient quantities of the raw materials required by the industry of a proper quality and at suitable prices. These deficiencies, however, have not made themselves felt as the country has been able to rely on large reserves of foreign exchange with which to buy its raw materials abroad. In addition to them, the out-of-date system of income distribution has slowed up growth in consumption of food products.

(d) Development prospects

According to the Manufacturing Industries Plan for 1965-68 the expected growth of internal demand for food products over the next four years is 6.4 per cent a year. (See table 22.) If this growth is to occur it will be necessary to carry out an intensive policy of income redistribution.

Production will grow at an annual rate of 7.7 per cent as a result of continued import substitution, particularly that of milk products. Imports will decrease by 14.4 per cent a year; exports, on the other hand, will expand at an annual rate of 25.7 per cent; and employment will increase by 5.6 per cent a year. If these targets are to be reached, it will be necessary to make a gross investment of 514.3 million bolivars, 42.5 per cent of it net investments.

The greatest developments of the next four years will occur in the milk products branch, where the growth rate will be 10.1 per cent a year, in the sugar industry, where it will be 8.3 per cent, and in the fruits and miscellaneous branches, where it will be 8.1 per cent.

Lastly, it is estimated that the exports of branch 204, marine products, will increase to 2 million bolivars in 1968, and those of sugar to 13 million.

Table 36

VENEZUELA: COSTS' STRUCTURE OF THE FOODS INDUSTRY, 1961  
(Percentages of production value)

Inputs	The whole division	Large industry	Medium industry	Small industry
1. <u>Material inputs</u>	<u>65.8</u>	<u>59.5</u>	<u>66.7</u>	<u>73.5</u>
(a) Industrial operations	0.3	0.4	0.3	0.2
(b) Raw materials	64.1	57.9	64.7	72.0
(c) Fuels and lubricants	0.6	0.7	0.6	0.5
(d) Electric power	0.8	0.5	1.1	0.8
2. <u>Manpower inputs</u>	<u>12.1</u>	<u>13.6</u>	<u>13.3</u>	<u>9.6</u>
(a) Wages	6.4	6.1	7.4	6.2
(b) Salaries	3.8	5.1	3.8	2.2
(c) Other remunerations	0.1	-	0.1	0.2
(d) Social grants	1.8	2.4	2.0	1.0
3. <u>Other inputs</u>	<u>22.1</u>	<u>26.9</u>	<u>20.0</u>	<u>16.9</u>
(a) General expenditure	3.1	3.6	4.4	1.7
(b) Various	19.0	23.3	15.6	15.2

Source: Industrial Enquiry 1962 - CORDIPLAN

2. The textile industry

(a) General characteristics

In most countries the textiles and also the food products industries are the most important of the early stages of industrialization. As these industries satisfy basic needs, this is not surprising. And this means in turn that they are generally assured of a market which will progressively increase along with the growth in population. Moreover, textiles industry uses raw materials derived from agriculture and stock-raising and constitutes a source of work for an important volume of manpower. In Venezuela it directly employs 20,000 persons, that is, more than 10 per cent of the manpower used by factory industry, and indirectly another 20,000 persons in the production of the raw materials required by it, in particular that of cotton.

/Its contribution

Its contribution to the aggregate value of the manufacturing sector has been estimated at 7.1 per cent, and its share in the product generated by traditional industry at nearly 15 per cent.

The level of development attained by Venezuelan textiles industry places it among the major national industries, as can be seen below:

(i) According to the Industrial Census of 1953 there were at that time 296 textiles establishments (including artisan establishments) in the country, employing 8,445 persons, at an average of 28 persons per establishment. As existing in 1961, the Industrial Enquiry of CORDIPLAN mentioned 175 establishments (this includes only factory establishments), employing 14,684 persons, or an average of 84 persons per establishment, which is four times as large, as the factory average.

Employment in this industry represents 5.5 per cent of manufacturing employment and 19.2 per cent of employment in traditional industries. During the period 1960-64 it increased at the rate of 8.4 per cent a year.

87 per cent of the employees were workers, 11 per cent staff, and 2 per cent other types of employee.

About 15 per cent of textiles establishments manufacture 81 per cent of the production and employ more than 80 per cent of the labour working in this industry, which shows the high degree of concentration in this sector.

The factory establishments of this industry are located in the principal consuming centres. About 60 per cent of these enterprises are in the metropolitan area. It should be pointed out, however, that those of greatest size are established in the industrial zones of the states of Miranda, Aragua and Carabobo.

(ii) The product per employee was 17,279 bolivars in 1961 and 19,750 bolivars in 1964, which is an increase in manpower productivity of 14 per cent.

(iii) In 1961 capital density per industrial unit was 1.6 million bolivars, 10 per cent higher than the factory average, and putting this industry in fourth place after petroleum derivatives, basic metals and chemical products, all industries with high capital requirements. Fixed capital density per employee was 19,000 bolivars, higher than the average in the traditional industries, and also than that of the metal-transforming industries and the residual group. 79.6 per cent of this fixed capital is concentrated in large industry. 15.2 per cent belongs to medium industry, and 5.2 per cent to small industry. The amount of fixed capital rose to 274 million bolivars in 1961 and to 403 million in 1964. 6.8 per cent of all this capital consists of machinery and equipment, 29 per cent of buildings and structures, 0.7 per cent of transport material, and 2.3 per cent of office equipment.

The large majority of textiles factories use modern equipment. Many of them possess machinery built between 1959 and 1963. Some of the factories now in operation can be counted among the most modern of Latin America. To ensure this high standard, the Ministry of Development has taken special precautions to prevent the import of out-of-date machinery; that is, imports of textiles machinery are controlled by the Projects Department and have been made subject to special licence.<sup>3/</sup>

(iv) In 1961 installed power in textiles industry was 40,305 HP putting it second in this respect among the traditional industries and fourth in factory industry as a whole. In the same year installed power per employee was 2.7 HP, and per worker 3.1 HP.

(b) Analysis of demand

Because national production was at that time insufficient, during the '50's demand was largely met by imported articles.<sup>4/</sup> But during 1950-54 internal supply of textiles products expanded by 194 per cent. Similarly, the supply per inhabitant rose from 58.78 bolivars in 1950 to 100.62 bolivars in 1964, that is by 71 per cent.

National textiles industry now satisfies almost the entire Venezuelan market, supplying about 80 per cent of total consumption, and in certain items, such as cotton fabrics, 90 or even 95 per cent.

The most remarkable characteristics of the industry during the last few years has been the qualitative change which has taken place in consumption, resulting from a growing preference for products made from synthetic fibres.

Between 1950 and 1954 apparent consumption increased at a rate of 10.5 per cent a year, during 1955-59 at 11.1 per cent and over the last five years at 10.6 per cent.

In 1960 apparent consumption of textiles products <sup>5/</sup> amounted to 581 million bolivars, and in 1964 to 869 million, with an inter-annual growth of 10.6 per cent. This is the highest growth rate of any traditional industry and can be explained by the fact that the textiles industry is one which is in full course of development and integration and is generating its own intermediate demand. This characteristic of the industry gives rise to a consumption elasticity of demand (1.1) greater than that in those Latin American countries where the industry is fully developed.

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<sup>3/</sup> Resolution N° 42/181 of 4 February 1961.

<sup>4/</sup> In 1950 nearly 70 per cent of consumption was of imported products.

<sup>5/</sup> Apparent consumption is taken as the sum of production value and the value of imports. The value of exports is left out of account as being insignificant and so are stocktaking variations.

In table 8 above is given the value of apparent consumption of textiles products during 1960-64.

The relation of internal supply to apparent consumption is high; it was 71.3 per cent in 1960 and 79.1 per cent in 1964.

Consumption of spun goods and finished goods increased by 11.9 per cent a year over the last 4 years, that is, a growth of 57 per cent, from 412 million bolivars in 1960 to 645 million in 1964.

Demand for the products of this branch of the industry constitutes nearly 78 per cent of total demand for textiles.

Among the textile products for which demand is greatest are cotton fabrics, which represent nearly two-thirds of the total consumption of fabrics of the country.

Consumption of knitted goods grew by 34 per cent during the period 1959-64, that is, at an annual rate of 6.1 per cent; consumption of knitted goods in cotton, nylon and in cotton stockings was particularly large.

It is only in the last few years that Venezuelan textiles products have begun to be exported - to the Caribbean market - and these are still on a small scale. In 1964 exports of thread were made, to the value of one million bolivars.

(c) Analysis of supply

The process of development of production has so far been basically carried out by import substitution, and this policy will continue for some years to be a strong stimulus to production. The other chief stimulus to industry has been the protection measures, which during 1950-60 brought into being a much broader basis of development.

Soon after the tariff reform of 1958 and the inclusion in 1960 of light cotton fabrics and other items among articles requiring import licence, lighter, finer and better quality clothing began to be produced (in 1961) as substitutes for imported fabrics. This encouraged the expansion of existing factories and the establishment of new enterprises, as only the import of raw materials and of necessary products of low consumption, or whose manufacture in the country might be thought uneconomical, was permitted.

Textile production showed a praiseworthy annual growth of nearly 16 per cent during the period 1960-64. (See table 37.)



Table 37

VENEZUELA: PRODUCTION OF THE TEXTILES INDUSTRY

(Millions of bolivars, 1960 prices)

Years	Spun goods and finished goods	Knitted goods	Cordage and sacking	Textiles not specified in other groups	Total for the textiles industry
1960	281	69	19	45	414
1961	314	68	20	40	442
1962	408	71	19	49	547
1963	459	75	20	54	608
1964	503	97	26	61	687

Source: Industrial Department - CORDIPLAN

This explosive increase in textile production has resulted in the establishment of auxiliary industries, among which the following may be mentioned: those of cardboard bobbins; those of chemical products such as ammoniac, sodium silicate, caustic soda, urea, etc., those of starches, feculas, detergents, softening agents and other materials for sizing and dressing - all these are increasingly replacing imported products.

The development of textile production between 1959 and 1964 has been extraordinary, the growth in value being 79 per cent from 383 million bolivars to 687 million at constant prices. This represents an annual growth of 12.4 per cent, which between 1960 and 1964 was still greater - 13.5 per cent a year. Table 38 gives the details of the production of the more important textiles products during 1960-64.

The modernization and expansion which have been carried out in dyeing and finishing plants provide all modern processes and innovations such as, printing according to different methods, mercerizing, sanforization, anti-crease finish, etc.

Table 39 gives the growth index of the Venezuelan textiles industry as compared with those of other Latin American countries, and it can be seen that it has a relative growth higher than any.

The high degree of self-sufficiency achieved by textiles industry is reflected in a high level of import substitution; in 1950 imports represented nearly 70 per cent of consumption, but by 1964 were only 21.0 per cent.

Table 38

## VENEZUELA: PRODUCTION OF CERTAIN ITEMS IN TEXTILES INDUSTRY

Branches and Products	Units	1960	1961	1962	1963	1964
<u>231 Spun goods, fabrics, and garments</u>						
Cotton spun goods	Tons	7 845	8 581	12 478	13 628	14 792
Cotton fabrics (total)	Thousands of metres	33 168	33 778	50 472	58 460	68 928
Rayon fabrics	Tons	3 227	4 101	4 443	4 851	4 901
Artificial silk fabrics	Thousands of metres	27 191	33 509	39 864	41 463	34 271
Woollen fabrics	Thousands of metres	1 347	1 668	1 907	2 544	3 348
<u>232 Manufacture of knitted goods</u>						
Cotton goods	Tons	958	864	871	826	884
Nylon goods	Tons	366	445	465	574	782
Cotton stockings and socks	Thousands of pairs	2 336	2 264	4 373	1 710	628
Nylon stockings and socks	Thousands of pairs	15 873	16 633	14 712	18 303	25 985
<u>233 Manufacture of cordage</u>						
Packing	Tons	736	857	740	762	945
Sisal sacks	Thousands of units	4 977	5 610	5 743	5 794	5 857
Sisal cord	Tons	2 375	2 535	2 476	2 705	2 975

Source: Industrial Department - CORDIPLAN.

Table 39

LATIN AMERICA: TEXTILES PRODUCTION, 1960-63

(Index: 1958 = 100)

Country	1960	1961	1962	1963
Argentina	84.6	90.2	64.4	53.3
Bolivia	108.8	132.5	135.5	138.6
Brazil	114.8	121.2	125.8	124.2
Colombia	115.0	127.7	130.8	134.5
Chile	98.8	103.2	108.7	125.7
Mexico	110.3	109.2	110.7	114.0
Venezuela	139.0	146.0	176.0	188.0

Source: Economic Study of Latin America 1963, United Nations.

The main imports are of cloths of artificial or synthetic fibres, which in 1959 constituted 19 per cent of import of spun goods and fabrics with a value of 32 million bolivars, and rose in 1964 to 29 per cent; woollen and other animal threads and yarns constituted 20 per cent of imports in 1964, with a value of 28 million bolivars, and cotton fabrics to 18 per cent, with a value of 26 million bolivars.

Since spun goods and fabrics are the most important articles of the industry, and since their imports constitute nearly 78 per cent of all imported textiles, any variations occurring in these items repercuss on statistics for the whole industry. Thus it can be seen that imports in this brand went up by 30 per cent between 1963 and 1964, which should result in an increase by a similar proportion of those of the industry as a whole.

Besides this a considerable volume of cloth enters the country by the illegitimate channel of contraband, which distorts the textiles market and makes timely and adequate marketing of the products of the national industry more difficult.

In 1964 imports of this type of product amounted to about 5 per cent of all imported manufactured products.

If imports are divided into two groups, raw materials and finished products, we see that purchases of textile raw materials, that is, those which will be used in future productive processes, have been increasing their share in the total imports of the division.

/The costs'

The costs' structure of textiles industry in 1961 (given in Table 40) was characterized by a high proportion of material inputs. These amounted to 42.5 per cent of production value, and 95 per cent of them again were raw material inputs.

The item of most importance among raw materials is cotton, since the price of national cotton is almost double the international price.

Table 40

VENEZUELA: COSTS' STRUCTURE OF TEXTILES INDUSTRY, 1961

(In percentages of production value)

Inputs	Total factory scale	Large Industry	Medium Industry	Small Industry
1. <u>Material inputs</u>	<u>42.5</u>	<u>41.8</u>	<u>46.5</u>	<u>46.3</u>
(a) Industrial operations	0.2	0.1	0.8	0.3
(b) Raw materials	40.5	39.8	44.2	44.8
(c) Fuels and lubricants	0.6	0.7	0.4	0.3
(d) Electric power	1.2	1.2	1.1	0.9
2. <u>Manpower Inputs</u>	<u>29.3</u>	<u>30.8</u>	<u>24.0</u>	<u>22.0</u>
(a) Wages	17.7	18.6	15.0	13.3
(b) Salaries	6.8	7.1	6.0	5.0
(c) Other remunerations	0.2	0.2	-	-
(d) Social grants	4.6	4.9	3.0	3.7
3. <u>Other Inputs</u>	<u>28.2</u>	<u>27.4</u>	<u>29.5</u>	<u>31.7</u>
(a) General expenditure	3.7	3.9	4.3	0.3
(b) Various	24.5	23.5	25.2	31.4

Source: Industrial Enquiry 1962 - CORDIPLAN.

Manpower inputs (wages, salaries, social grants) amount to 29.3 per cent of the production value, and about 84 per cent of them consists of salaries and wages.

Among the obstacles to development, the poor quality and high prices of the supplies might be mentioned.

/To overcome

To overcome this, growing and picking methods must be improved. In Venezuela cotton is grown on the small-holding system; that is, more than 70 per cent of the farms where it is grown are no larger than 5 hectares <sup>6/</sup> and have little or no mechanization.

Very little cotton is grown in Venezuela suitable for yarn counts higher than 40. But since the textiles industry for the most part produces yarns of no higher count than this, the national cotton fibre has been thought suitable to supply the industry.

The Industrial Standards Commission (COVENIN) has issued standards for classifying cotton. In working out these standards the procedure of the cotton classifying department of the Development Corporation has been taken as basic.

According to degree of clearness and characteristics of the fibre cotton is classified as: superior, at 4.05 bolivars the kilogramme; standard, at 3.95; and inferior, at 3.70.

The National Cotton Council was set up in 1961 to improve quantity increase production and raise productivity. This is presided over by the Minister of Agriculture and Livestock, and contains representatives from both the production and the industrial sides of the private sector, who discuss problems arising over the commercial relations of the different groups taking part in the cultivation and manufacture of cotton. Among the most important achievements of this Council is the creation of the Cotton Development Fund with contributions from the public sector and from private interests. The creation of this fund has made it possible for the private sectors to collaborate in financing for technical aid, marketing and industrialization projects.

A different consideration is that at present, thanks to technological innovations, a large percentage of the raw material used by the industry is of chemical origin, so that this source of expenditure is bound in future to respond to the growth of the textiles industry.

Some of the most important enterprises within the industry have an integrated process which runs right from cotton growing to the marketing of the products. That is, they themselves provide their most important raw material: cotton.

The skilled labour which the industry depends on has for the most part been trained within it. Some enterprises give training courses for their personnel; others send their operators and apprentices on training programmes given by INCE, a body which has done much to alleviate the problem of manpower training.

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<sup>6/</sup> From work presented by the Venezuelan Development Corporation in the I Convention on Raw Materials, 1963.

In August 1965 an agreement was made between INCE, the Development Corporation and Fedecamaras, with the object of bringing into the industry as apprentices a large contingent of young people between 16 and 18 years of age.

(d) Development prospects

The forecasts indicate that the level of consumption for 1968 will be 1,165 million bolivars, 34 per cent higher than that of 1964. Demand will increase by 7.6 per cent a year. Internal supply will rise from 81.6 per cent in 1965 to 86.3 per cent in 1968.

Demand for products of the spun goods and finished goods branch is expected to show the largest increase of 7.6 per cent a year.

If the targets proposed for textiles demands are to be reached the income per inhabitant must be raised, and also be better distributed.

Supply, especially that from national production, is expected to meet favourably to the developments of demand during the period 1965-68.

Since the annual growth of national production during this period will be 10 per cent, by 1968 it will be in a position to supply 86.3 per cent of total demand. And as this is an appreciably higher rate of growth than that of apparent consumption it is clear that import substitution will continue on some scale.

The anticipated value of the imports in 1968 is 161 million bolivars, which will be 13.7 per cent of apparent consumption.

3. The leather and hides industry

(a) General characteristics

The leather industry in Venezuela is relatively new, having developed gradually over the last 20 years.

This activity began to get under way in and after 1942, when 17 tanneries were set up to exploit the raw material (cowhides) which in previous years had been totally wasted or used on an insignificant scale in the manufacture of belts, shoe-soles, chair seats, etc. All leather used in the manufacture of footwear and other articles, was imported. But by 1961 there were already 123 leather and hides establishments, employing 2,445 persons.

It can be said that this industry is developing only as regards the production of treated hides and shoe-soles, while its manufacturing activities are so far very undeveloped.

/Its share

Its share in the income generated by traditional industry was 2.1 per cent and in the total income of manufacturing industry nearly 1 per cent.

The Industrial Census of 1936 mentioned the existence of 568 establishments, employing 4,016 persons.<sup>7/</sup>

The Industrial Census of 1956 records 148 establishments employing 1,293 persons, at an average of 9 persons per establishment. 70 per cent of all employees were workers.

In 1961 the Industrial Enquiry of CORDIPLAN gave the figures as 2,445 employees in a total of 123 establishments, the average being, therefore, 20 persons per establishment. 83 per cent of the total consisted of small industrial units the providing work for 47 per cent of the labour employed in this industry. 86.3 per cent of the total employees were workers, 12.5 per cent staff, and the remaining 1.2 per cent other types of employees.

During the period 1961-64 employment rose from 2,445 persons to 2,800, that is, 355 new jobs were created and 17 new units set up.

In the early stages of their existence most of the main industries were established near the metropolitan area, as it is here that their greatest consumer, the footwear industry, is situated. In the course of time, however, the largest tanneries of the metropolitan area have moved to Cagua, Aragua State. There were various considerations influencing them: they are enterprises which need large spaces for the construction of their buildings and can get them at low prices in this zone; manpower is readily available there; there is plenty of water, a basic factor in farming; and lastly, this zone is near the areas of consumption, since Cagua has good communications directly linking it to the metropolitan area, where 80 per cent of the footwear industry is located, and to the Lake Valencia basin, where there is almost 10 per cent. 50 per cent of tanning industry is located in Cagua.

Of persons employed in this industry, 69.2 per cent belong to the tanning and leather finishing branch and 30.8 per cent to the manufactured products branch.

Aggregate value per employee rose from 11,405 bolivars in 1953 to 17,117 bolivars in 1961, and then to 19,694 in 1964, this is a productivity growth of 73 per cent, involving an annual rate of 5.1 per cent.

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<sup>7/</sup> Manufacture of footwear was included under the classification of leather industry, and there were thus a large number of establishments employed in the manufacture of light shoes (alpargatas); that is, the great majority consisted of establishments of one or two run tanning small quantities of hides for use in their own products.

(b) Analysis of demand

The apparent consumption of leather and hides rose from 50 million bolivars in 1950 to 138 million in 1964, an annual increase of 7.5 per cent. Internal supply, which was only 50 per cent in 1950, rose to 94.2 per cent in 1964, an increase which brings out the extent of the substitution process which took place in such a short time.

90 per cent of the market for this industry is provided by the footwear industries, and 10 per cent by the group of saddle and harness makers, and similar enterprises manufacturing articles from leather and hide.

Table 41 records the value of consumption classified according to sources of supply. Its growth over the period 1960-64 was 7.4 per cent a year. Consumption of leather and hides constitutes 1 per cent of consumption of manufacturing products. The tanning and finishing brand supplies nearly 80 per cent of apparent consumption, the remaining 20 per cent consisting of manufactured products. Internal supply rose from 87.5 per cent in 1960 to 94.2 per cent in 1962.

Table 41

VENEZUELA: APPARENT CONSUMPTION OF LEATHER AND HIDES PRODUCTS

(Millions of bolivars, 1960 prices)

Years	National Production			Imports	Apparent consumption	Internal supply (Percentage)
	Tanning	Leather products	Total			
1960	73	18	91	13	104	87.5
1961	74	19	93	19	112	83.0
1962	80	20	100	22	122	81.9
1963	76	19	95	8	103	92.2
1964	104	26	130	8	138	94.2

Source: Industrial Department - CORDIPLAN.

(c) Analysis of supply

The production value of leather and hides has increased by 420 per cent between 1950 and 1965, from 25 million to 130 million bolivars. Constant prices of 1960, at a rate of 12.5 per cent a year. In 1964 it was 2.1 per cent of the production of traditional industry.

/At present



At present the industry supplies most of the requirements of the footwear and saddle and harness industries, and only small quantities of fine quality hides are imported.

Nearly 80 per cent of production comes from the tanneries and finishing workshops, and 45 per cent of this consists of leather for footwear. Table 42 also gives leather and hides production according to the different branches of the industry, and there the importance of the tanning and finishing branches becomes apparent. During the last few years the proportion of imports in apparent consumption has been small; viz., in 1964 it was only 5.8 per cent. Of the imports of that year 43 per cent were of tanning and finishing products. About 25 per cent consisted of tanned calf skin (Russia's calf).

Table 42

VENEZUELA: PRODUCTION OF CERTAIN PRODUCTS OF THE LEATHER AND HIDES INDUSTRY

Years	Shoe-leather (Thousands of sq. ft.)	Lining leathers (Thousand of units)	Soles (Tons)	Dressed hides
1960	16 828	1 144	5 297	1 055
1961	17 471	1 041	5 455	1 226
1962	21 960	723	5 312	1 152
1963	21 638	634	4 890	1 208
1964	28 959	696	7 263	2 129

Source: Industrial Department - CORDIPLAN.

The Government has given the leather industry important advantages during the last few years in the shape of protective tariffs and import quota controls. Only those items whose manufacture is little developed or which are not produced satisfactorily in the country are imported.

As regards the costs' structure, material inputs in 1961 accounted for 56 per cent of the gross production value, and other inputs for 24 per cent, as can be seen in table 43. Raw material inputs constituted 98 per cent of material inputs and 55 per cent of the gross production value. 67 per cent of all raw material inputs were of national origin.

Chief among the obstacles to the development of this industry are the shortage of trained manpower and the deficiencies of the leather supply as regards quantity, quality and prices.

/Table 43

Table 43

VENEZUELA: COSTS' STRUCTURE OF THE LEATHER AND HIDES INDUSTRY, 1961

(In percentages of the production value)

Inputs	Total for leather and hides industry	Large industry	Medium industry	Small industry
1. <u>Material inputs</u>	<u>55.8</u>	<u>59.0</u>	<u>53.4</u>	<u>54.2</u>
(a) Industrial operations	-	-	-	-
(b) Raw material	54.7	57.8	53.4	53.2
(c) Fuels and lubricants	0.2	0.3	-	0.2
(d) Electric power	0.9	0.9	1.0	0.8
2. <u>Manpower Inputs</u>	<u>19.7</u>	<u>17.3</u>	<u>20.9</u>	<u>21.0</u>
(a) Wages	11.4	10.4	12.4	11.6
(b) Salaries	4.4	3.3	4.7	5.2
(c) Other remunerations	0.1	0.3	-	-
(d) Social grants	3.8	3.3	3.8	4.2
3. <u>Other Inputs</u>	<u>24.5</u>	<u>23.7</u>	<u>25.7</u>	<u>24.8</u>
(a) General expenditure	1.5	3.0	1.9	-
(b) Various	23.0	20.7	23.8	24.8

Source: Industrial Enquiry 1961 - CORDIPLAN.

(d) Development prospects

A growth in demand of 7.6 per cent is expected during 1965-68, which is higher than that predicted for products of the traditional industries (6.6 per cent).

It is expected that the production of this industry, by increasing on the basis of better use installed capacity and arise in manpower productivity, will respond favourably to the expansion of demand. During 1965-68 top production value will grow from 140 million to 176 million bolivars, an increase of 7.9 per cent a year.

/Internal supply

Internal supply will increase from 94.6 per cent in 1965 to 95.6 per cent in 1968. Imports are expected to remain more or less at the value reached in 1963 and 1964, that is, at 8 million bolivars at constant prices, which leaves a margin for those goods which will still be imported to cover consumption. At present Venezuelan tanneries are able to produce many different types of hides and leathers, and only a few for which national production is still too small to cover consumption, have to be imported. There is one enterprise which is occupied solely in the production of Russia calf.

This year an artificial leather plant has begun to be constructed in Cagua, Aragua State, which will use as raw material waste material from tanneries, waste from cotton ginning plants and rice mills, etc. These will be treated with chemical, many of which are produced in the country. Continuous sheets of various kinds will be obtained, which will chiefly be used in the footwear and saddle and harness industries.

## II. DYNAMIC INDUSTRIES

### 1. Pulp and paper industry

#### (a) General characteristics

In Venezuela the development of the pulp and paper industry has followed the traditional path, that is, it began with the manufacture of end products, next took up that of paper and paperboard, and finally that of pulp.

Manufacture of paper began between 1915 and 1916, when the first two factories were set up in the country. That of paperboard began later, in 1946, but then had an accelerated expansion; that of pulp, beginning with sugar cane bagasse, started in 1961. Production of paper and paperboard products, as a result of the economic development of the country, has expanded more rapidly than that of paper and paperboard. In 1964 the country possessed 79 converting factories with an installed capacity greater than 100,000 tons a year, which produced 95 per cent of the requirements of the internal market.

Over the last decade the gross product of pulp and paper industry has grown at a cumulative annual rate of 32.7 per cent. This growth has become weaker in the last few years. Viz., in the period 1950-54 the growth rate of the product was of the order of 55 per cent; over the four years 1950-54 it was 28.1 per cent; and for the whole period between 1950 and 1965 it was 26.5 per cent. Between 1960 and 1964 it was on average 17.7 per cent a year.

The contribution of this division to the manufacturing industry product began to increase from 1950 onwards; in that year it was 0.5 per cent, in 1959 2.2 per cent, and by 1964 3.4 per cent.

In this division both the number of establishments and the employment have increased at an accelerated rate. 75 per cent of the enterprises producing pulp, paper and paperboard and 67 per cent of paper and paperboard converting enterprises in Venezuela were set up during the period 1950-54. Employment increased from 600 persons in 1950 to 6,200 in 1964, at an annual rate of 18.4 per cent.

The number of establishments rose from 7 in 1936 to 37 in 1953, and to 90 in 1964.

In 1961 the size of these establishments averaged 50 persons per industrial unit for the whole division, more than double the general average for manufacturing industry.

The gross product per employee reached 25,799 bolivars in 1960 and 30,323 in 1964, which puts it at a considerably higher level than the factory average.

/There is

There is a high degree of concentration within the industry. Viz., in 1961 78.8 per cent of the total value and 75 per cent of the product were concentrated in 11 large industrial units.

In 1961 the fixed capital of paper and pulp industry amounted to 128.1 million bolivars 83.1 per cent belonged to large industry, 16.4 per cent to medium industry, and 3.3 per cent to small industry. In the same year the product-fixed capital ratio was 0.90, one of the highest of factory industry, and the highest of the intermediate group of industries. This ratio was 0.703 for the basic products and 1.169 for the final products industries.

The fixed capital density per industrial unit was 9.4 million bolivars in units employing more than 100 persons, 1.1 million bolivars in medium industry, and approximately 81,000 bolivars in units employing between 5 and 20 persons.

Installed power was 33,485 HP in 1961. Out of this 30,005 HP belonged to large industrial units, 2,722 HP to medium industry, and 785 HP to small industry.

Thus as regards installed power also there is a high concentration in the large industrial units, due to their being modern enterprises which are for the most part highly mechanized. This concentration is brought out still more clearly by the figure for installed power per employee, which was 11.9 HP in large industry as compared with the 4.0 HP of medium and the 1.1 HP of small industry. The average for the whole industry was 8.0 HP.

(b) Analysis of demand

The apparent consumption for pulp and paper industry is given by value in table 44 and by volume in table 45. The apparent consumption of paper and paperboard rose from an average of 115,000 tons for 1959 and 1960, to over 178,000 tons in 1964, which gives an average growth rate of 11.5 per cent a year. Consumption of paper, which was approximately 20,000 tons in 1950, rose to 89,000 tons in 1964. Consumption of paperboard for its part grew at an average annual rate of 10.2 per cent over the period 1959-64, and in this last year amounted to 90,000 tons. <sup>8/</sup>

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<sup>8/</sup> Paperboard forms a specific category which includes sheathing (building) paper, intermediate corrugated cardboard, and box cardboard. Its consumption reached 90,086 tons in 1964, of which 69 per cent was of national production and the remaining 31 per cent imports consisting of light paperboard, and paperboard for milk and food cartons and paper cups.

Table 44

VENEZUELA: APPARENT CONSUMPTION OF PULP AND PAPER

(In millions of bolivars, 1960 prices)

Products	1960	1961	1962	1963	1964
<b>A. <u>Production</u></b>	<b><u>200</u></b>	<b><u>236</u></b>	<b><u>306</u></b>	<b><u>325</u></b>	<b><u>383</u></b>
(a) Paper	50	72	86	101	105
(b) Paperboard	18	24	39	37	51
(c) Mechanical and chemical pulp	-	-	3	5	5
(d) Paper and paper- board products	132	140	178	182	222
<b>B. <u>Imports</u></b>	<b><u>90</u></b>	<b><u>94</u></b>	<b><u>109</u></b>	<b><u>103</u></b>	<b><u>110</u></b>
(a) Paper	20	23	23	18	19
(b) Newsprint	13	14	22	18	19
(c) Paperboard	27	24	29	33	30
(d) Mechanical and chemical pulp	11	18	23	24	28
(e) Paper and paper- board products	19	15	12	10	14
<b>C. <u>Apparent consumption</u></b>	<b><u>290</u></b>	<b><u>329</u></b>	<b><u>416</u></b>	<b><u>427</u></b>	<b><u>493</u></b>
(a) Paper	70	95	110	118	124
(b) Newsprint	13	14	22	18	19
(c) Paperboard	45	47	69	70	81
(d) Mechanical and chemical pulp	10	18	26	29	33
(e) Paper and paper- board products	152	155	189	192	236

Source: Manufacturing Industries Plan 1965-68.

/Table 45



As regards per capita consumption, Venezuela is one of the largest consumers of all the Latin American countries. In 1953 consumption per inhabitant was 8.3 kilogrammes of paper, 7.3 kilogrammes of paperboard and 4.2 kilogrammes of newsprint, an average of 20 kilogrammes per person for the products of the paper and paperboards division. In the same year consumption per inhabitant of end products was 9.7 kilogrammes. By 1964 per capita consumption of all paper and paperboards had risen to 25.1 kilogrammes and that of paper and paperboard products to 12.8 kilogrammes. Comparison of the Venezuelan level of consumption per inhabitant with that of the United States (over 150 kilogrammes per inhabitant) shows the future possibilities of expansion.

Growth of demand for newsprint has been closely related among other factors, to population growth. <sup>9/</sup> 39,000 tons were consumed in 1964, an average of 4.5 kilogrammes per inhabitant.

Consumption of mechanical and chemical pulp rose from 31,704 tons in 1959 to 87,000 tons in 1964, with values of 9.4 and 33.4 million bolivars respectively. In 1964 national production was sufficient to supply 18.3 per cent of the total demand; the remaining 81.7 per cent was met from imported pulps.

As regards paper and paperboard products, national production in this year was able to supply 95 per cent of total demand; the remaining 5 per cent consists of specialized products not manufactured in Venezuela.

(c) Analysis of supply

The supply of pulp and paper products available to the public has increased considerably between 1950 and 1964. Viz., in 1950 the available quantity of all paper and paperboard products, including newsprint, was 8.9 kilogrammes, by 1959, it was 20 kilogrammes and by 1964 25.1 kilogrammes. Paper production has had an accelerated rhythm of growth. It is almost all carried out by 8 factories which, in physical terms, contributed 82.3 per cent of the total volume for 1964.

Paperboard production has grown even more rapidly than that of paper, and, like the latter, underwent a large increase during 1961-62 partly because installed capacity in existing factories was thus being extended, and partly because a new industrial unit producing paperboard and Bristol board began production at that time. Between 1960 and 1964 annual growth was 26.6 per cent.

Chemical and mechanical pulp completes the basic group. It has been produced in Venezuela on a limited scale and demand has been satisfied by imports; production has had a moderate growth, and the type of product obtained is a short-fibre pulp which uses sugar cane bagasse as the main raw material. Installed capacity is 20,000 tons a year. It is estimated that the Venezuelan Guayana Corporation's scheme for producing pulp from tropical woods, which will be put into operation in 1967, will result in a rise in pulp production in 1968 to approximately 76,000 tons.

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<sup>9/</sup> In the last 5 years this has grown by 3-2 per cent a year.



The paper and paperboard products industry has had a greater development than any other in the division. Viz., its production volume in 1950 of 4,000 tons rose to 63,000 tons in 1960, and to 106,132 in 1964. Over the five years 1960-64 its average growth rate was 15.9 per cent.

As national production has been insufficient for the country's requirements, demand has largely been met by imports. In the last few years, however, considerable progress has been made in import substitution, particularly of end products and certain types of paper and paperboard.

In 1964 the volume and value of imports was still at a high level. Nevertheless, important qualitative changes have occurred in their composition; more pulp and newsprint was bought and less ordinary paper and paperboard.

The dynamic character of this industry is shown by the fact that it generates a considerable demand within its own division. In 1961 material inputs deriving from its own sector were 43 per cent of total inputs. The costs' structure is given in table 46.

Generally speaking, this industry has not been faced with great obstacles to its development. In the pulp manufacturing section it will only be possible to make the short-fibre product, since there is no wood suitable for production of long-fibre pulp. No projects have been made, therefore, for national production of newsprint.

(d) Development prospects

A programme has been established for the development of pulp and paper industry during 1965-68. This programme is based on the need to satisfy growing demand for paper and paperboard and on certain targets to be reached in import substitution, particularly of paper, paperboard and pulp, which are still being imported in large quantities.

In 1968 the production of the whole division will be 63.2 per cent higher than in 1964, its average growth rate being 13.0 per cent a year. Particularly important will be the growth of the paper and paperboard group by an average of 17.1 per cent a year. (See table 47).

Apparent consumption is expected to grow by 11 per cent; the product for the group will increase by 12.9 per cent; and the proportion contributed by this product to the gross product of the industrial sector will be 3.7 per cent in 1968, as against 3.4 per cent in 1964.

If these targets are to be reached, especially as regards the paper and paperboard group, gross investments over the next 4 years will have to be 315 million bolivars. The investment made by the Venezuelan Guayana Corporation with the aid of Venezuelan and foreign enterprises in installing an integrated pulp and paper plant forming part of the Guayana industrial complex will be of particular importance.

Table 46

VENEZUELA: COSTS' STRUCTURE OF PULP AND PAPER INDUSTRY, 1961

(Percentages of gross production value)

Inputs	Factory-scale total	Large industry	Medium industry	Small industry
1. <u>Material Inputs</u>	<u>51.0</u>	<u>53.4</u>	<u>39.7</u>	<u>49.8</u>
a) Industrial operations	0.9	0.4	1.8	5.9
b) Raw material	48.1	50.9	36.3	43.0
c) Fuel and lubricants	0.7	0.8	0.3	-
d) Electric power	1.3	1.3	1.3	0.9
2. <u>Manpower Inputs</u>	<u>20.7</u>	<u>18.2</u>	<u>26.3</u>	<u>43.0</u>
a) Wages	10.1	8.3	12.8	31.2
b) Salaries	6.2	5.5	9.1	6.7
c) Others remunerations	0.2	0.3	0.3	-
d) Social grants	4.2	4.1	4.1	5.1
3. <u>Other Inputs</u>	<u>28.3</u>	<u>28.4</u>	<u>34.0</u>	<u>7.2</u>
a) General expenditure	0.3	1.3	0.6	-
b) Various	28.0	27.1	33.4	7.2

Source: Industrial Enquiry 1962.



This plant, if all goes according to plan, will begin production in the middle of 1967, and will be working at maximum capacity in 1970, when it will be able to produce 40,000 tons a year of paper and paperboard and nearly 30,000 tons a year of short-fibre pulp.

Within the paper and paperboard converting enterprises four expansion schemes will be carried out in 1966, at the cost of 96 million bolivars. 72 million of this will be spent on machinery, and 22 million on the enlargement of existing buildings.

## 2. Chemical industry

### (a) General characteristics

Chemical industry in Venezuela has expanded rapidly over the past 15 years. The annual growth rate during 1950-64 was 16.3 per cent. The value of the industrial product of the sector has increased 10 times over the same period.

In spite of this very considerable growth the chemical industries still have a lot of room for development. It may be said that up to now their activities have been directed exclusively towards import substitution, and in this respect their achievements have been of considerable importance. But this stage of the sector's development is coming to an end, and one of greater complexity is beginning, in which new basic chemical industries, some of which will be competing in foreign markets and will therefore have to function efficiently and economically, must be set up.

In 1953 the predominant activity within the division was the manufacture of soap, which represented 31.3 per cent of total production; next in importance was that of pharmaceutical and miscellaneous products. By 1964 the activities of the division had been diversified, and although soap and detergent manufacture continued to be one of the most important, they had lost ground, relatively speaking, to that of pharmaceuticals, paints and similar products. At the same time, thanks to the production of the Venezuelan Petrochemical Institute, production on the part of the basic industries began to reach a considerable volume.

In 1964 chemical industry employed 5.8 per cent of the manpower working in factory activities. In the same year its productivity per employee was 3 times higher than the manufacturing average and was third after those of tobacco production and petroleum refining. In 1964 its capital was 9 per cent of factory capital. In 1961 there were 256 industrial units employed in chemical production.

/(b) Analysis

(b) Analysis of demand

Annual consumption of chemical products per inhabitant rose from 101.2 bolivars in 1960 to 146.0 bolivars in 1964. This goes to show that use of chemical products in almost all economic activities is increasing at an accelerated rate, which is due to the sector's own dynamic development.

In spite of the growth which has occurred in production, imported chemical products have substantially increased their share in imports of manufactured products, and in 1964 their value amounted to 516 millions bolivars (about 115 million dollars). (Refer back to table 10.) There is here, then, ample room for substitution.

78 per cent of the inputs of the chemical group derive from the division itself; the next highest proportion derives from the pulp and paper division, mainly consists of containers.

Exports of petrochemical products began in 1961, when the Venezuelan Petrochemical Institute exported certain of its products such as fertilizers and liquid chlorine. Sales of fertilizers began by bringing in one million bolivars in 1962 and by 1964 were worth 10 million.

Exports of liquid chlorine are small; in 1964 barely amounted to 850 tons.

(c) Analysis of supply

The development of chemical industry during the period 1960-64 has been continuous and accelerated. Production value grew by 17.0 per cent a year. Within the division the following products have had a development higher than the general average: basic chemical products (51.5 per cent), fertilizers (51.0 per cent), resins, plastics, insecticides (42.1 per cent) and pharmaceutical products (26.5 per cent). (See Table 48.)

80 per cent of the production of this division consists of consumption products and only the remaining half of manufacture of raw materials; however, the integration of this division is rapidly beginning.

It can be seen that the production structure is little diversified. 61.4 per cent of the total product is concentrated in those branches: pharmaceutical products (23.2 per cent), detergents, soaps and other toilet preparations (19.0 per cent), and varnishes and thinners (19.2 per cent); while production of basic chemical products amounts to only 5.5 per cent of the total.

/Table 48

Table 48

VENEZUELA: PRODUCTION VALUE OF CHEMICAL INDUSTRY

(Millions of bolivars, 1960 prices)

Index number	Branches of industry	1960	1961	1962	1963	1964	Medium annual rates 1960-64
31	<u>Chemical Products</u>	<u>402.0</u>	<u>474.9</u>	<u>545.8</u>	<u>612.2</u>	<u>754.1</u>	<u>17.0</u>
311.1	Basic chemical products	7.9	12.7	14.2	26.5	41.6	51.5
311.2	Fertilizers	6.9	12.4	15.2	19.7	35.8	51.0
311.3	Resins, synthetic rubber plastics, insecticides	10.3	22.0	27.5	32.3	41.9	42.1
311.4	Explosives, matches and pyrotechnic products	21.1	21.4	22.6	24.7	26.2	5.6
311.5	Industrial gases	13.9	13.2	13.9	16.3	15.4	2.6
312	Industrial oils and greases	21.7	24.8	26.7	24.4	27.0	5.5
313	Paints, varnishes and lacquers	91.2	106.7	109.5	118.9	144.7	12.2
314.1	Pharmaceutical products	68.3	77.0	107.9	141.2	175.0	26.5
314.2	Perfumes, cosmetics and toilet preparations	48.0	61.0	63.6	67.2	89.0	16.7
314.3	Detergents, soap and other clearing preparations	104.1	116.2	133.4	129.3	143.3	8.3
319	Miscellaneous	8.6	9.5	11.3	11.7	14.2	13.4

Source: Industrial Department - CORDIPLAN.

Imported chemical products constitute a large proportion of imports of manufactured products. In 1964 their value was 516 million bolivars, they represented 14.9 per cent of all manufacturing imports and supplied 41 per cent of the apparent consumption of chemical products.

This high import level is mainly due to raw material requirements for the manufacture of other industrial products within the division or in other divisions.

The costs' structure of chemical industry for 1961 is given in table 49.

/Table 49

Table 49

VENEZUELA: COSTS' STRUCTURE OF CHEMICAL INDUSTRY

(Percentages of gross production values)

Inputs	Total for chemical industry	Large industry	Medium industry	Small industry
1. <u>Material inputs</u>	<u>32.5</u>	<u>35.9</u>	<u>34.6</u>	<u>20.1</u>
(a) Industrial operations	0.5	0.1	1.4	-
(b) Raw materials	31.0	34.9	31.7	19.6
(c) Fuels and lubricants	0.3	0.4	0.1	0.1
(d) Electric power	0.7	0.5	1.4	0.4
2. <u>Manpower inputs</u>	<u>22.9</u>	<u>20.0</u>	<u>22.7</u>	<u>25.0</u>
(a) Wages	6.7	6.5	6.4	7.9
(b) Salaries	11.7	10.9	12.7	11.9
(c) Other remunerations	0.6	-	-	2.9
(d) Social grants	3.9	4.6	3.6	2.3
3. <u>Other inputs</u>	<u>44.6</u>	<u>42.1</u>	<u>42.7</u>	<u>54.9</u>
(a) General expenditure	11.2	10.7	6.1	21.0
(b) Various	33.4	31.4	36.6	33.9

Source: Industrial Enquiry, 1962.

The chief obstacle which has faced this industry had been the narrowness of the internal market, since chemical industry in general requires production on a large scale. Serious problems have also arisen for this industry in connexion with the shortage of trained manpower and the consequent difficulties of modernizing techniques and equipment.

(d) Development prospects

Venezuela possesses the right natural resources for the development of a chemical industry, particularly the petrochemical branch. Its petroleum and gas reserves are the largest of South America and it has huge resources of minerals and electric power.

For these reasons the National Plan for 1965-68 sets ambitious targets for the development of this sector. Two official bodies - the Venezuelan Petrochemical Institute and the Venezuelan Development Corporation - will carry out important projects in this field.

Apparent consumption of chemical products will grow by 8.8 per cent a year, production by 14.3 per cent, imports by 1.7 per cent, and employment by 8.4 per cent.

The growth of the basic products branches will be particularly high, as a result of programmes carried out by the Venezuelan Petrochemical Institute. This can be seen from table 50.

/Table 50

Table 50

VENEZUELA: FORECAST OF THE PRODUCTION VALUE  
OF CHEMICAL INDUSTRY

(Millions of bolivars 1960 prices)

Index N°	Branches of industry	1964	1965	1966	1967	Mean annual 1968 rates 1964-68	
31	<u>Chemical Products</u>	<u>754.1</u>	<u>849.2</u>	<u>968.8</u>	<u>1 083.5</u>	<u>1 286.1</u>	<u>14.3</u>
311.1	Basic chemical products	41.6	57.6	69.1	91.1	130.2	33.0
311.2	Fertilizans	35.1	43.1	46.3	49.8	77.0	21.7
311.3	Resins, synthetic rubber, plastics, insecticides	41.9	48.2	55.4	71.7	125.2	31.6
311.4	Explosives, matches and pyrotechnic products	26.2	32.6	64.5	66.3	68.2	27.0
311.5	Industrial gases	15.4	17.0	18.8	20.8	23.0	10.5
312	Industrial oils and greases	27.0	29.8	32.9	36.3	40.1	10.4
313	Paints, varnishes and lacquers	144.7	154.8	165.6	177.1	189.5	7.0
314.1	Pharmaceutical products	175.0	191.0	210.0	231.0	254.1	9.8
314.2	Perfums, cosmetics and other toilet prepar.	89.0	101.0	114.6	130.1	147.7	13.5
314.3	Detergents, soaps, etc.	143.3	157.6	173.4	187.3	206.1	9.5
319	Miscellaneous	14.9	16.5	18.2	22.0	25.0	13.8

Source: Industrial Department - CORDIPLAN.

The proportion of foreign products in internal supply of chemical products will fall from 40.9 per cent in 1964 to 31.2 per cent in 1968.

For the period 1965-68 a gross investment of 1,140.7 million bolivars is predicted, and a net investment of 968.2 million.

The expansion projects of the Venezuelan Petrochemical Institute for the period 1965-68 are, in brief, as follows:

(i) Extension of installed capacity in the fertilizer plant group, so as to be able to make full use of installed capacity and bring about

/a considerable



a considerable increase in exports, particularly of phosphate fertilizers. The additional capacity resulting from this extension will be 600,000 tons a year, and the additional production value about 130 million bolivars. It is estimated that it will begin production in 1968. 60 per cent of this production will be exported, and it will make an addition to the present volume of 120,000 tons.

(ii) Extension of installed capacity in the sodium-chloride group, as to supply the national market with caustic soda and furnish the chlorine required by the plastics complex.

(iii) Installation of a synthetic rubber complex in Zulia State. Its programmed minimum capacity is 40,000 tons, but there are possibilities that this may be extended. It will begin production in 1968 and will employ 250 persons.

(iv) Installation also in Zulia State, of a low density polythene plant, with complete integration and an initial capacity of 50,000 tons. 70 per cent of the capital will be provided by a foreign firm of international standing. This plant will be basically oriented towards export (80 per cent). It is expected that it will come into operation in the second half of 1967. Its production value will be 100 million bolivars and it will employ 400 persons.

(v) Installation of a dodecabenzene plant in Morón with a capacity of 10,000 tons a year, a production value of 20 million bolivars, and employing 30 persons. It will begin production at the end of 1967. Only 15 per cent of its capital will be provided by the Venezuelan Petrochemical Institute.

(vi) Installation, also in Morón, of an aluminium sulphate production and refrigeration plant, with an initial capacity of 10,000 tons a year, a production value of 20 million bolivars, and employing about 150 persons. It will begin production at the end of 1967. 20 per cent of its production will be intended for export.

(vii) Installation of a polyvinyl chloride plant, with an initial capacity of 50,000 tons a year, a production value of 30 million bolivars, and employing about 100 persons.

(viii) Inauguration at the end of 1968 of plants for the following products: ethylene oxide, caprolactamic acid, tetraethyl lead, and further fertilizers for export.

To complete the picture of development in these industries, the Venezuelan Development Corporation is carrying out a promotional programme designed to bring into production 18 industrial chemical plants, which will employ 900 persons, have an investment of 102 million bolivars, and a production value of 97 million bolivars.

### 3. Petroleum derivatives

#### (a) General characteristics

The petroleum derivatives industry is now highly developed in Venezuela. Its production amounted to 2,885 million bolivars in 1964 (21.7 per cent of all manufactures and its aggregate value to 467 million bolivars (8.4 per cent of the manufacturing industry product).

This industry, besides constituting a basis source of energy for internal consumption, has been fundamentally oriented towards the external market, and thus has produced a large influx of foreign exchange.

During 1960-64 it had an interannual growth of 5.4 per cent.

In 1961 employment in this branch of industry was 4.4 per cent of employment in factory industry, that is, 7,000 persons (4,522 workers and 2,478 staff).

The product per employee was 2.4 per cent greater than the factory average, which is due to the high degree of mechanization characteristic of this industry. This in turn gives it a high capital density in 1961 8.0 times as much as the factory industry average.

The petroleum derivatives industry generally operates near the height of its installed capacity, and, as a result of the technological characteristics of this type of activity, can increase its capacity at short notice in accordance with the requirements of the market. Present capacity is over 1.1 million barrels a day, as can be seen in Table 51.

The refining industry in Venezuela is almost all in the hands of the foreign enterprises which exploit crude petroleum. The Venezuelan Petroleum Corporation, a public organization, has a small refining plant in Morón.

/Table 51

Table 51

VENEZUELA: REFINING CAPACITY BY COMPANIES, 1950-1960 <sup>a/</sup>

Company	1950	1955	1960	1964
Creole	103 000	205 000	413 500	506 500
Shell	79 600	209 600	329 600	341 600
Ven-Gulf	30 000	59 000	121 200	159 000
Mobil	270	130	55 200	75 400
Richmond	-	-	33 000	42 500
Sinclair	35 000	35 000	35 000	38 000
Texas	10 000	10 000	10 000	10 000
Phillips	-	2 100	3 500	3 800
Venezuelan Petroleum Corporation <sup>b/</sup>	-	-	2 500	2 300
Total capacity	<u>257 870</u>	<u>520 830</u>	<u>1 003 500</u>	<u>1 182 100</u>
Processed petroleum	<u>249 811</u>	<u>536 620</u>	<u>882 283</u>	<u>1 091 968</u>
Percentages of employed capacity	<u>96.9</u>	<u>103.0</u>	<u>87.9</u>	<u>92.4</u>

a/ As on 31 December.

b/ Until the 31 March 1964 this belonged to the Venezuelan Petrochemical Institute.

(b) Analysis of demand

Venezuela is a net exporter of petroleum derivatives; in 1950 internal consumption represented 20.7 per cent of production, and in 1964, 18.4 per cent.

External demand for petroleum derivatives grew during 1950-64 at an annual rate of 11.6 per cent. In the last few years, however, the rate has been lower; in the period 1960-64, for example, it was only 5.8 per cent. As has been said before, this is because the principal consuming countries have increased their refining capacity.

Until 1960 exports of petroleum derivatives constituted 99.3 per cent of all exports of manufactured products, but by 1964 this percentage had fallen to 97.8 per cent.

/The volume

The volume of exports of refined products was 67 million barrels in 1950, 148 million in 1955, 252 million in 1960, and 316 million in 1964.

Internal demand appears small in comparison with external demand - it is only about 17 per cent as much as it.<sup>10/</sup> During the period 1950-64 it expanded at an annual rate of 7.7 per cent. Internal consumption of refined products rose from 19 million barrels in 1950 to 54 million barrels in 1964.

Certain products - specialized oils - which are not manufactured in the country are still imported. The growth of apparent consumption has been only 2.8 per cent a year during the period 1960-64 (refer back to Table 8).

(c) Analysis of supply

Production of petroleum derivatives rose from 249,811 barrels a day in 1950 to 1,091,968 barrels a day in 1964. This is an interannual growth rate of 11 per cent, which fell in 1960-64 to 5.4 per cent.

One of the characteristics of this production is the high proportion of heavy fuels in the refining yield; these made up 56.6 per cent of the total output in 1950 and rose to 58.5 per cent in 1964.

The import restriction policy of the United States has resulted in a strong trend towards supplementing sales of crude petroleum in that market with sales of heavy derivatives. This explains why production of heavy fuels has been increased and why there has been a drop in the level of consumption with respect to production.

The costs' structure of the division for 1961 is given in Table 52.

The obstacles to this industry's development derive from the constantly changing conditions, particularly the price fluctuations, of the international market.

(d) Development prospects

In consideration of the fact that the principal consumers are beginning to instal refineries for the supply of light fuels in their own countries, a no more than moderate expansion of production, of 3.4 per cent a year, is projected by the National Plan for the period 1964-68.

Exports will increase by 3.0 per cent, apparent consumption by 4.6 per cent, and employment by 1 per cent. Substitution of some imports is being considered.

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<sup>10/</sup> Including imports.

Table 52

VENEZUELA: COSTS' STRUCTURE OF  
PETROLEUM DERIVATIVES, 1961

(Percentages of gross production value)

Inputs	Factory-scale Total	Large industry	Medium industry	Small industry
1. <u>Material Inputs</u>	<u>79.0</u>	<u>79.2</u>	<u>74.8</u>	<u>78.2</u>
a) Industrial operations	0.6	0.6	-	-
b) Raw materials	76.6	76.7	73.1	76.5
c) Fuels and lubricants	1.7	1.7	1.2	1.7
d) Electric power	0.1	0.2	0.5	-
2. <u>M manpower Inputs</u>	<u>6.7</u>	<u>6.7</u>	<u>5.5</u>	<u>5.0</u>
a) Wages	2.5	2.5	2.6	3.4
b) Salaries	2.3	2.3	1.8	0.8
c) Other remunerations	-	-	-	-
d) Social grants	1.9	1.9	1.1	0.8
3. <u>Other Inputs</u>	<u>14.3</u>	<u>14.1</u>	<u>19.7</u>	<u>16.8</u>
a) General expenditure	-	-	0.3	0.3
b) Various	14.3	14.1	19.4	16.5

Source: Industrial Enquiry, 1962.

Gross investments needed to achieve the targets set amount to 722.2 million bolivars, of which 111.6 million will be net investment. The latter includes the construction of a refinery by the Venezuelan Petroleum Corporation in Zulia, which will have a refining capacity of 50,000 barrels a day.

4. Iron and steel industry

(a) General characteristics

Iron and steel production in Venezuela started only in 1950 when the works of Venezuelan Iron and Steel S.A. (SIVENSA) began production. These had an initial capacity of 20,000 tons of billets a year.

/In 1961

In 1961 the works of Orinoco Iron and Steel C.A. (SIDOR), a company belonging to the Venezuelan Guayana Corporation, began production; their planned capacity was 750,000 tons of steel ingots and 600,000 tons of finished products a year.

Both works are going through a stage of expansion. SIVENSA is just completing the installation of a continuous casting plant with a capacity of 120,000 tons, and SIDOR has already completed its first stage installations and is beginning to carry out plans belonging to the second, which will integrate the works up to the production of that products.

In 1964 SIVENSA's production was 119.845 tons of billets from scrap iron raw material and SIDOR's was 359.882 tons of steel ingots. SIDOR uses high context iron ore derived from neighbouring deposits in the same part of Guyana.

Production value was 130 million bolivars in 1964, 59 per cent of the total production of the industries in the basic metals division and 1 per cent of manufacturing production.

In 1964 the two iron and steel works employed 5,400 persons, which is 2.3 per cent of factory employment.

One of the more special features of Venezuelan iron and steel industry is that it uses electric reduction ovens, instead of the high ovens used in other Latin American countries. Another is that production has been concentrated on bars and billets, structural shapes and seamless steel tubes. The rolling mill for flat products planned by SIDOR is not expected to begin production until 1968. The fact that flat products are not produced is particularly remarkable since there is a very favourable market for them in Venezuela and their manufacture results in a much higher aggregate value than that of the products which are manufactured at present.

(b) Analysis of demand

Over the last five years apparent consumption of iron and steel products has grown by 12.8 per cent a year, as can be seen in Table 8. It is estimated that in the last few years consumption has reached a more normal rhythm of growth after the violent expansion which it went through during 1957 and 1958, when the petroleum companies imported large quantities of seamless tubes either for extensions of their own operations or because of the fact that manufacture of tubes was shortly to begin in the country.<sup>11/</sup> In these years the average value of imports was 970.5 million bolivars and their volume 1,375,000 tons.

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<sup>11/</sup> A similar situation, though on a smaller scale, occurred in imports of steel products.

As a result of the growing production of SIDOR, during the last few years a considerable qualitative change has taken place in internal supply. In 1960 only 12.6 per cent of internal consumption was supplied by national production; but in 1964 this proportion had risen to 46.2 per cent.

The largest internal demand is for non-flat products, which constituted 46.2 per cent of total consumption for the five years, as can be seen in Table 53. The next largest is for tubes, which constituted 28.3 per cent; the remainder consisted of flat products.

External demand has mostly been for the more basic iron and steel products such as pig iron and steel ingots, while seamless tubes, of which there are surpluses for export, have not been sold on any considerable scale in foreign markets.<sup>12/</sup>

The chief buyers of Venezuelan iron and steel products have been Japan, South Korea, Italy, Colombia, and the United States.

Table 53

VENEZUELA: APPARENT CONSUMPTION OF IRON AND STEEL PRODUCTS

(In thousands of metric tons)

Years	Flat products	Non-flat products	Tubes	Total
1960	112.3	229.6	116.4	458.3
1961	115.4	214.7	92.0	422.1
1962	140.2	303.1	148.4	591.7
1963	136.6	216.1	213.9	566.6
1964	226.3	357.5	237.2	821.0
<u>Total for the five years</u>	<u>730.8</u>	<u>1 321.0</u>	<u>807.9</u>	<u>2 859.7</u>
<u>Annual average</u>	<u>146.2</u>	<u>264.2</u>	<u>161.6</u>	<u>571.9</u>

Source: Industrial Department - CORDIPLAN.

<sup>12/</sup> The most important sale was of 5,000 tons to the United States.

(c) Analysis of supply

Installed capacity for pig iron is 650,000 tons a year, and for steel 870,000 tons. Of the latter SIDOR produces 750,000 tons and SIVENSA 120,000. SIDOR's installed capacity for finished products is 600,000 tons, the distribution of which is given in table 54.

In 1964 SIDOR worked at 50 per cent of its installed capacity, and its most important plant for finished products, the tube foundry, at 41 per cent.

Imports over the last five years are given in table 55.

Of the obstacles which have showed up the development of the iron and steel industry, the chief have been the shortage of qualified manpower at all levels and the financial difficulties suffered by the state enterprise. These works are, however, expected to become financially self-sufficient during the next few years.

The original layout of the iron and steel works has also played a part in preventing its rapid and successful development for 50 per cent of the capacity of these works is devoted to seamless tubes the demand for which ultimately depends on the petroleum industry, while it has at present no rolling mill for the production of steel flats, for which there is a demand of 200,000 tons a year in the internal market.

(d) Development prospects

With Venezuela's plentiful resources of high context iron ore the medium and long term development prospects of its iron and steel industry are among the best of any branch.<sup>13/</sup>

The SIDOR works plans, during the period 1965-68, to achieve a high level of production and an income sufficient to cover its costs, and also to begin a phase of extension of its installations.

In consideration of the fact that the national market for seamless tubes has turned out to be less than installed capacity which national consumption of flat products has been growing at a higher rate than that of other iron and steel products, the Venezuelan Guayana Corporation has been studying the possibility of installing a rolling mill for that products, which would absorb steel production left unused by the present processes of the works and would, besides, result in a considerable saving of foreign revenue by substituting imports of basic products.

At the beginning of 1966 the decision will be made on the different technical solutions which have been under consideration for the construction of this flat rolling mill. According to one of those alternatives, a semi-continuous mill would be installed, satisfying an anticipated demand of 500,000 tons a year, of which approximately 150,000 tons would be for hot rolled products and 350,000 for cold rolled products. 100,000 tons of the cold rolled production would consist of tin plate and about 50,000 tons of galvanized laminas.

<sup>13/</sup> The reserves of the Guyana region alone are estimated at about 4,000 million tons.



Table 54

VENEZUELA: INSTALLED CAPACITY OF SIDOR  
FOR FINISHED PRODUCTS, 1965

Products	Annual capacity (Tons)
Structural shapes	70 000
Rails and others products for services	61 500
Billets	86 150
Flats	10 350
Smooth black wire	8 800
Smooth galvanized wire	2 150
Galvanized barbed wire	14 850
Nails	1 200
Seamless tubes	295 000
<u>Total steel products</u>	<u>550 000</u>
<u>Cast tubes</u>	30 000
<u>Other cast objects</u>	20 000
<u>Total iron products</u>	<u>50 000</u>
<u>Total finished products</u>	<u>600 000</u>

Source: SIDOR.

Investment in the flat rolling mill has been estimated at 536.1 million bolivars 14/ and its production value at about 480 million; it will increase direct employment in SIDOR by approximately 800 persons. This important project will be put into operation towards the end of the period covered by the National Plan for 1965-68.

14/ 454.1 million in the rolling mill itself and 82 million in transport, auxiliary installations and miscellaneous expenditure.

/Table 55

Table 55

## VENEZUELA: IMPORTS OF IRON AND STEEL PRODUCTS

	1960		1961		1962		1963		1964	
	Tons	Per- cent- age	Tons	Per- cent- age	Tons	Per- cent- age	Tons	Per- cent- age	Tons	Per- cent- age
<b>Total</b>	<b>369 965</b>	<b>100.00</b>	<b>297 696</b>	<b>100.00</b>	<b>392 071</b>	<b>100.00</b>	<b>374 455</b>	<b>100.00</b>	<b>412 502</b>	<b>100.00</b>
First smelting and first rolling products	13 793	3.73	1 258	0.2	44 672	11.40	13 065	3.50	1 121	0.27
Iron alloys, standard iron, iron silicon	278	0.75	616	0.21	4 624	1.19	2 005	0.53	4 023	0.98
Shapes and rails	50 735	13.71	55 869	18.75	66 198	16.88	49 624	13.26	65 693	15.92
Milled products, round, square and rectangular	68 097	18.41	8 862	2.97	2 335	0.59	2 222	0.59	14 394	3.49
Flat sheets	102 790	27.78	109 776	36.84	126 666	32.31	130 766	34.92	150 082	36.38
Drawn products, such as wire	18 340	5.01	36 269	12.18	29 013	7.40	32 362	8.64	49 386	11.97
Piping	91 975	24.86	68 165	22.88	82 123	20.94	60 531	16.16	78 610	19.06
Forged and cast parts	19 107	5.16	14 555	4.88	34 348	8.76	81 833	21.85	46 923	11.38
Others such as strips bands, etc. and those not elsewhere classified	4 650	0.12	2 599	0.87	2 092	0.53	2 047	0.55	2 270	0.55

Source: General Statistics Department year book - Ministry of Development.

Note: There is a discrepancy between the figures here for imports of flat products and the figures given in table 53. This is because this table does not include lithographic plates and other flat products which have gone through a conversion process.

Orinoco Iron and Steel is similarly considering a programme for extending its installations, which will enable it to raise its production levels and lower its costs. A project for extension of steel production capacity is under study at the moment; this will include oxygen injection equipment at an estimated cost of 49 million bolivars, an investment of 25 million bolivars in a coke oven, and an investment of 50 million bolivars in extension of various general services of the works.

The Venezuelan Guayana Corporation will also be promoting two important projects for industrializing iron mining, with a minority share of the investments which will be made in them. These consist of construction of a sponge iron works with a capacity of 1,500,000 tons a year, which would begin a production of 130,000 tons in 1968, and also of an enriched ore works with an initial capacity of 1,000,000 tons a year. In both cases the Venezuelan Guayana Corporation will be associated with international private enterprises. Most of the production of these works will be intended for export.

Studies are being carried out by the Venezuelan Guayana Corporation, with the technical advice of a specialist enterprise of the United States, towards the establishment of a heavy machinery complex in Guyana as part of the second and third stage development of the iron and steel industry. The preliminary aim of these studies is to assess the advantages of establishing a series of horizontally integrated industries which would produce the more simple types of machinery and equipment used by the manufacturing, petroleum, mining, construction, and transport industries.

According to the approach taken at present, the enterprises would be grouped into establishments each specializing in one of the operations involved in converting steel or other metals into machine parts, such operations being casting, forging, stamping, manufacture of metal parts, and, finally, assembly of a particular type of machinery or equipment.

Preliminary estimates suggest a fixed capital investment of 79.2 million bolivars over the four years covered by the plan, of which the Venezuelan Guayana Corporation would supply about 18 million.

Production value would be 76 million bolivars and the enterprises would employ about 1,100 persons.

It is hoped that by developing these programmes, the following targets, among others, may be reduced:

(i) Increase of steel production capacity from the 870,000 metric tons of 1964 to over 1,300,000 tons in 1968.

(ii) Increase of production value from the 207 million bolivars of 1964 to 797 million in 1968, that is, at an annual rate of 40.1 per cent.

(iii) Rise in the level of exports of iron and steel products from the 24 million bolivars of 1964 to 270 million in 1968.

## 5. Motor-vehicle industry

### (a) General characteristics

The Venezuelan economy provides conditions particularly favourable for the development of the motor vehicle industry which compensate for the disadvantages of what at first sight seems a narrow market. Viz., since there is an extensive highway system the direct means of transport is by road; a factor which will become increasingly important as industry develops. As a result of the high per capita income and the widespread availability of foreign exchange there is a large inventory of vehicles, which in turn means a considerable potential demand for manufacture of spare parts and accessories. Lastly, Venezuela possesses abundant fuels at low prices.

The motor vehicle industry is still in its first stage of development. In spite of the fact that vehicle assembly activity began in 1948, there has been little use of national materials in this process and the aggregate value has been small. Manufacture of spare parts and accessories is also in its first stage.

The development of the assembly industry shows three distinct phases. The first (1948-56) was characterized by a marked progressive increase in production parallel to an equal increase in the country's total consumption of vehicles, and also by a very limited use of national materials in the assembly process. The second (1957-59) was marked by a violent distortion of the previous relations between total consumption of vehicles, which increased abruptly, and assembly activity, which declined; also by a fall in employment on the part of the enterprises, and a total drop in the use of national materials. In the third, which began at the end of 1959 and has been characterized by the application of protectionist measures on behalf of assembly industry by the Government, industrial activity has recovered and a high percentage of national materials has been introduced into the production's process.

In 1964 44,941 motor vehicles were assembled in the country and the national parts used amounted to 18 per cent of the weight of the vehicles. Assembly of 58,500 units, using 25 per cent national materials, was expected for 1965.

At present there are 14 assembly plants, which in 1964 had a fixed capital investment of 76,669,734 bolivars; this works out at a fixed capital density per person employed in the industry of 20,013 bolivars and per worker of 27,951 bolivars. An important aspect of this industry has been its contribution to employment, since in 1964 it employed a total of 3,831 persons, 2,743 as workers, 1,088 as staff, who drew wages to a total amount of 51,030,152 bolivars. The number of employees per assembly plant was 273 for each enterprise, with 396 staff per 1,000 workers.

/(b) Analysis

(b) Analysis of demand

Apparent consumption of transport material in the period of 1960-64 has grown at a rate of 16.6 per cent a year. The figures for this apparent consumption, measured in motor vehicle units, are given in table 56.

In 1964 there was a large increase in consumption of motor vehicle units, which was now 72.6 per cent of total consumption for the industry. A similar increase is expected to occur in 1965.

In 1964 external supply of motor vehicle units was 5.6 per cent of total supply.

It can be seen that demand in Venezuela is very high in comparison with that in other Latin American countries. As regards automobiles, this is due to high average level of income in Venezuela and to the replacement requirements of the inventory of this type of vehicle, which in 1963 amounted to 286,620 units. As regards motor lorries and commercial vehicles, demand is basically determined by the acceleration of the general development of the Venezuelan economy <sup>15/</sup> and by replacement requirements. The inventory of commercial vehicles was 108,345 units in 1963.

(c) Analysis of supply

Assembly of motor vehicles has developed strongly over the last few years, as can be seen in table 57. Production quadrupled between 1960 and 1964, the greatest increase being in automobile assembly where production rose from 6,452 units in 1960 to 32,321 in 1964.

In 1963 and 1964, although import of automobiles was prohibited, 3,810 units were brought into the country under present exemption rules.<sup>16/</sup> As for motor lorries, imports consist of specialized units not assembled in the country.

Until 1961 manufacture of vehicle parts and spare parts remained in its infancy. The chief manufacture was of tyres and their inner tubes, for which a production capacity had been achieved very much greater than the requirements of the Venezuelan market of the time. Another activity which had been carried out on some scale was assembly of batteries for vehicles. To those must be added manufacture of other items such as paints, varnishes, certain upholstering materials, oils, and lubricants. The proportion of those nationally manufactured products used in the assembly process was approximately 8 per cent of the total weight of an average vehicle. Nevertheless most of the inputs of these industries, as was also the case in rubber products and batteries, were of foreign origin. This meant that the purely national contribution to these manufactures was very small.

<sup>15/</sup> The gross domestic product grew at an average annual rate of 8.0 per cent over the period 1936-64.

<sup>16/</sup> Diplomatic exemptions and importation of vehicles by persons resident outside Venezuela. Also, contraband reached serious proportions during these years.

Table 56

## VENEZUELA: APPARENT CONSUMPTION OF MOTOR VEHICLES

(Units)

Years	Imports			National assembly			Apparent consumption		
	Total	Automobiles Station Wagons	Commercial Motor Lorries	Total	Automobiles Station Wagons	Commercial Motor Lorries	Total	Automobiles Station Wagons	Commercial Motor Lorries
1960	24 266	16 498	7 768	10 334	6 452	3 882	34 600	22 950	11 650
1961	19 663	12 606	7 057	11 787	8 842	2 945	31 450	21 448	10 002
1962	12 874	7 432	5 442	11 666	8 768	2 898	24 540	16 200	8 340
1963	3 171	1 342	1 829	24 390	18 034	6 356	27 561	19 376	8 185
1964	2 642	2 468	174	44 941	32 321	12 620	47 583	34 789	12 794

Source: Ministry of Development and information direct from the enterprises.

/From 1961

From 1961 onwards production of this type of article began to be diversified. For example, glass sheets, which are obligatory used in all units assembled in the country and amount to 1.5 per cent of the average assembled vehicle, have been produced since then. In 1964 curved safety glass of national manufacture began to be used. Besides these, in the last two years production has begun of honeycomb radiators, exhaust pipes and silencers, brake fluid, sound absorbing paste, radios battery cables, coils, chokes, treated wood for lorries, seats for lorries, and air and oil filters. At the end of 1963 manufacture of shock absorbers, automobile seats, leaf springs and bumpers began.

Manufacture of bodywork for motor buses and lorries is on a sufficient scale to supply the whole national market, for which reason use of national products is obligatory for enterprises assembling this type of vehicle. There are 4 enterprises producing bodywork in operation, two for motor buses and two for lorries.

Table 57

VENEZUELA: PRODUCTION OF THE CHIEF ITEMS OF  
TRANSPORT MATERIAL

(Units)

	1960	1961	1962	1963	1964
<u>Assembly</u>	<u>10 334</u>	<u>11 787</u>	<u>11 666</u>	<u>24 390</u>	<u>44 941</u>
Automobiles	6 452	8 842	8 768	18 034	32 321
Commercial vehicles and motor lorries	3 882	2 945	2 898	6 356	12 620
<u>Manufacture of parts and spare parts a/</u>	<u>117 625</u>	<u>268 649</u>	<u>439 667</u>	<u>964 989</u>	<u>1 577 775</u>
Accumulators	117 625	267 017	312 622	365 616	414 518
Silencers and exhaust pipes b/	-	-	82 015	276 559	472 007
Air and oil filters	-	-	38 000	314 000	640 000
Radiators	-	1,632	7 030	8 814	24 212
Seat springs	-	-	-	-	25 868
Automobile seats	-	-	-	-	1 170

Source: Industrial Department - CORDIPLAN and information direct from the companies.

a/ Only some enterprises have been taken into account.

b/ Each system consists of three parts.

/Material inputs

Material inputs amount to 68 per cent of production value, and of these 98 per cent consist of raw material, which for the most part is imported CKD material. In spite of the fact that the value of national raw material was nearly 60 million bolivars in 1960, its share in the total inputs is still not very large.

With regard to the costs' structure of transport material which is given in (table 58), in 1961 material input requirements amounted to 56.4 per cent of the gross production value, manpower inputs to 25.6 per cent and other inputs to 18 per cent. A higher percentage can be observed in the material inputs of the large industrial units, where it was 81.1 per cent. This difference is due to the fact that the assembly industries have to import CKD material. Thus we see that the value of the raw material constituted 99.3 per cent of national inputs. The remaining material inputs amounted to very little.

Table 58

VENEZUELA: COSTS' STRUCTURE OF TRANSPORT MATERIAL, 1961

(Percentage of gross production value)

Inputs	Large industry	Medium industry	Small industry	Total transport material
A. <u>Material inputs</u>	<u>81.1</u>	<u>46.6</u>	<u>37.0</u>	<u>56.4</u>
a) Industrial operations	0.1	0.5	0.3	0.3
b) Raw materials	80.6	45.3	33.9	54.7
c) Fuels and lubricants	0.8	0.2	1.8	0.8
d) Electric power	0.2	0.6	1.0	0.6
B. <u>Manpower inputs</u>	<u>10.4</u>	<u>31.0</u>	<u>29.0</u>	<u>25.6</u>
a) Wages	3.7	19.7	19.6	15.1
b) Salaries	4.0	6.9	5.6	6.3
c) Other remunerations	-	0.2	0.1	0.1
d) Social grants	2.7	4.2	3.7	4.1
C. <u>Other inputs</u>	<u>8.5</u>	<u>22.4</u>	<u>34.0</u>	<u>18.0</u>
a) General expenditure	1.5	7.5	5.5	4.5
b) Various	7.0	14.9	28.5	13.5

Source: Industrial Enquiry, 1962 - CORDIPLAN.

/(d) Development



(d) Development prospects

Manufacture of motor vehicle parts has considerable room for future development, since to accomplish that target of 5 per cent a year average increase in use of national products in assembly plants, on infinite number of parts will be required. To accelerate this development and compensate for its structural weaknesses the Venezuelan Development Corporation has high on its list of priorities the promotion of enterprises manufacturing vehicle parts and spare parts independent of the vehicle manufacturers, and is also studying the possibility of partnership with these enterprises whose high minimum scale requires centralized production; besides this it intends to provide additional stimuli in the form of tax concessions and technical assistance.

Moreover the entry of Venezuela in the Latin American Free Trade Association (ALALC) opens up possibilities of complementarity agreements for this branch, which will enable it to take advantage of minimum scales for certain products and at the same time to accelerate integration programmes, not on a national, but on a zonal scale.

The principles on which motor vehicle industry is to be developed are laid down in a programme which was approved by the Government at the beginning of 1962 and is now being carried out. This integral development of the motor vehicle industry can be divided into two stages with concrete ultimate goals.

On the first stage, which is now in full course of development, the goals are:

(i) Assembly of all automobiles, commercial vehicles and lorries, together with manufacture of simple parts to take part in assembly and of various materials for general use.

(ii) Beginning of manufacture and introduction into assembly of more complex parts in common use, which will probably require centralized production.

(iii) Manufacture of spare parts and accessories in general requiring simple production processes.

The goals of the second stage concern progressive fitting of the gaps in the total integration of the industry. Initially it is hoped to achieve the following:

(i) Manufacture and machining of engines.

(ii) Manufacture and introduction into assembly process of larger parts, mechanical sub-assemblies and the remaining constituent parts, with the exception of bodywork.

/(iii) National

(iii) National manufacture of most spare parts and accessories.

According to well founded calculations and hypothesis, if these targets are achieved by 1970 the substitution by national products of 60 per cent of the weight of the average vehicle and the annual requirements of spare parts will require a direct increase in employment of the order of 30,000 new workers.

Measures have also been taken to protect import substitution by Venezuelan products of various important types of spare parts. This kind of protection will be extended to other articles as the industry develops.

Along the same lines, and as a complement to the programmed development, the Venezuelan Industrial Standards Commission (COVENIN) has begun to establish the required minimum standards of quality to which the products of the motor vehicle industry are to be subject, so as to safeguard both industrial consumers and consumers in general and to ensure that the locally manufactured products may be better than or, at least, as good as their imported equivalents.

In March 1962 the Programming Group for Motor Vehicle Industry was created to bring about the integration of this industry.

It is worth mentioning that its activities, carried on in an atmosphere of hard work and cooperation, are a clear proof that the interests of the Government and of the private sector are perfectly compatible. 17/

The Manufacturing Industries Plan estimates for the period 1965-68 a near annual growth in apparent consumption of 10.8 per cent, which will be satisfied by a rise of 14.7 per cent in production and of 4.2 per cent in imports, while employment should increase at an annual rate of 12.2 per cent. For the attainment of these targets a gross investment of 305.6 million bolivars between 1964 and 1968 is envisaged.

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17/ The Programming Group has five work commissions which carry out studies on the problems inherent in motor-vehicle industry.

## Chapter V

### POLITICAL MEASURES ON BEHALF OF INDUSTRIAL DEVELOPMENT

#### 1. Government action for promotion of industry

In Venezuela action for promotion of industry is carried out chiefly through two instruments: one consists in the Active Promotion Programme, the Venezuelan Development Corporation, and the promotional activities of the Venezuelan Guayana Corporation and the Venezuelan Petrochemical Institute; the other is the protectionist policies of the Ministry of Development. There are, in addition, further organizations taking part in industrial development, such as the Venezuelan Productivity Institute, the National Institute of Educational Co-operation, etc.

##### (a) Promotion by the Venezuelan Development Corporation

The Venezuelan Development Corporation conducts its activities through the Industrial Promotion Department, and the chief instrument by which it applies its measures is the so-called Active Promotion Programme. This programme embodies the new approach which has been taken to promotion in Venezuela since April 1964. Its main objectives are:

- (i) To supply the needs of Venezuelan industrial development, in accordance with the general design of the National Plan, through the Industrial Promotion Department.
- (ii) To direct the financial policy of the Venezuelan Development Corporation towards industries producing basic and intermediate goods, so as to satisfy national demand.
- (iii) To integrate manufacturing industry with national production of primary materials, and encourage an optimum use of resources.
- (iv) To promote siting of industrial plants in the provinces.
- (v) To raise the level of employment and assist in the training and improvement of manpower.
- (vi) To encourage diversification, decentralization and democratization in the industrial development process.
- (vii) To improve the administrative machinery for applying the state industrial policy by establishing co-ordination between all agencies concerned in development and ensuring timely, coherent and effective action on their part.

/The chief

The chief means by which the Venezuelan Development Corporation carries out its programmes are:

(i) Co-ordination: the Venezuelan Development Corporation co-ordinates its activities with those of the public agencies (Ministries of Development, Finance and Work, CORDIPLAN, INCE, INPRO, etc.) so as to achieve an adequate formulation and execution of the country's industrial policy, and to found it squarely on study of the conditions necessary to develop effective monetary, credit and technical measures which can be applied in the industrial promotion programme. It also keeps in contact with the private sector organizations of the industrialists of the country which are concerned with orienting and executing promotion activities.

(ii) Technico-economic assistance: the Industrial Promotion Department, on behalf of private activities, provides industrialists, investors or promoters with information on economic and marketing conditions; it also assists persons contributing incomplete ideas or projects by finishing and evaluating such as may be in accordance with the previously determined order of priorities, and gives legal advice to persons or bodies wishing to take advantage of the credit procedures of the Corporation.

The Department collects all information which may serve as data for the better development of promotional planning. For this purpose it keeps in active contact with industrialists, producers' associations, etc; it analyses the Ministry of Development's Registry of Ideas and Projects and the regional projects promoted by various agencies; it investigates the technical and economic factors present in the different branches of industry, in particular, the chemical and metal-transforming industries, and examines the possibilities of development which may arise out of programmes or policies determined by official agencies; it exchanges information and experience with public and private credit agencies, both national and foreign.

(iii) Working out of projects: This, together with financial aid, is the principal means of "Active Promotion", since it has been proved that the lack of industrial projects has slowed up development. The Industrial Promotion Department of the Venezuelan Development Corporation works out and assesses projects for the priority branches, after which it makes them available to the private sector.

(iv) Financial aid: the Venezuelan Development Corporation provides financial arrangements for industrial promotion, which will be described below.

In addition to this, the Venezuelan Development Corporation takes shares in enterprises, whose financial structure cannot be completed from private resources, on condition that the private shareholders undertake to purchase the titles subscribed by the Corporation within some moderate term fixed to that effect.

/The promotion

The promotion programme has been extended to the whole interior of the country through a network of 10 strategically placed branch offices of the Promotion Development.

(b) Promotion by other agencies

There are two agencies in the public sector - the Venezuelan Guayana Corporation and the Venezuelan Petrochemical Institute - which play an important part in industrial promotion. The former carries out regional activities and promotes establishment of industries in the Guyana zone; the latter, whose activities are of a sectorial type, is concerned with promotion of chemical and petrochemical enterprises.

A large number of municipalities and states also play a part in promotion by creating industrial zones.

Lastly, there are certain bodies in the private sector which engage in industrial promotion such as the Venezuelan Development Company (AVENDES), Creole Investments and Shell Investments, although their activities are recent and their plans on a limited scale.

2. Protective tariffs

(a) General characteristics of the tariff

The present tariff was established in Venezuela in 1959 under the guidance of the Central American Uniform Tariff Nomenclature (NAUCA). But owing to the very different structure of foreign trade in Central America this nomenclature does not correspond to Venezuelan requirements. Authorities in the Ministry of Finance have begun to revise this tariff by adopting the Brussels Nomenclature (NAB). The entry of Venezuela into the ALALC has further made it necessary to adopt the NABALALC nomenclature, which does justice to the real conditions of the region.

Venezuela is a member of the United Nations, but does not belong to the General Agreement on Tariffs and Trade (GATT).

Table 59 gives the total value of imports during the three years 1961-63, together with the tariff incidence, on the different groups of products. It can be seen that in general the incidence is low - only 21.6 per cent on average. The higher percentages correspond to products which do not constitute as much as 5 per cent of the total imports of Venezuela; these are, beverages and tobacco (105.0 per cent) non-edible raw materials excluding fuels (69.6 per cent) and oils and fats (322.6 per cent), all products for which high tariffs have been established to protect national production.

The tariff incidence on imports from the ALALC of almost double the over-all incidence is due to the fact that most of what is imported from this area consists of food products and highly taxed manufactured articles.

Table 59

VENEZUELA: CUSTOMS DUTIES AND ITS INCIDENCE  
ON VALUES OF IMPORTS, 1961-63

Products section	Value of world imports <u>a/</u> (Millions of bolivars)	Tariff incidence (Percentage)	Value of imports from ALALC <u>a/</u> (Millions of bolivars)	Tariff incidence (Percentage)
0 <u>Food products</u>	<u>1 395</u>	<u>29.7</u>	<u>79.8</u>	<u>51.4</u>
1 Beverages and tobacco	80	105.0	0.1	259.5
2 Non-food raw materials excluding fuels	318	69.6	34.8	99.2
3 Fuels and lubricants	95	30.0	0.1	21.4
4 Oils and fats <u>b/</u>	72	322.6	0.6	65.7
5 Chemical products	1 217	32.2	16.2	14.8
6 Other manufactured articles	2 783	24.9	49.2	16.8
7 Machinery and transport material	2 941	5.7	18.2	4.5
8 Miscellaneous manufactured articles	971	18.3	19.5	25.7
9 Live animal, not else- where specified, special transaction, gold and other assets	118	6.5	5.3	19.3
<u>Totals</u>	<u>9 990</u>	<u>21.6</u>	<u>223.8</u>	<u>41.9</u>
<u>Yearly averages</u>	<u>3 330</u>	<u>21.6</u>	<u>74.6</u>	<u>41.9</u>

Source: Technical Secretariat of the National Commission for the ALALC.

a/ Value f.o.b.

b/ Of both animal and vegetable origin.

Note: Incidence has been calculated on the basis of theoretical duties arising from the application of specific and ad-valorem duties. The real incidence is less as a result of exemptions and of preferential treatment given in certain cases.

/(b) Exemption

(b) Exemption

The exemption legislation, which was established in 1951 by Decree 315 and later modified in 1960, lays down rules for waiving customs duties in the following cases:

(i) Machinery, tools and other articles for use in industrial, agricultural or stock-raising operations established or about to be established in the country whose import is not prejudicial to national production.

(ii) Raw materials not produced in the country and which do not have immediate substitutes of national production.

(iii) Raw materials and substitutes whose production in the country is to any considerable extent deficient in quality and quantity as the relevant ministers judge fit.

(iv) Articles for use as containers of national products.

There are also special exemption rules in favour of imports made by the hydrocarbon and mining industries.

There are relatively few available statistics on the exemptions policy. The records of exemptions granted have generally been compiled for the purpose of controlling the operations of the moment and do not take account of the financial bases involved and the origin of the merchandise favoured by this legislation. Table 61 gives the sums involved in the exemptions approved in 1959, 1960 and 1963.

(c) Other aspects

Until a few years ago the tariff policy had a basically financial aim and it is only recently that it has begun to acquire a protectionist bias. Until 1959 protection measures were determined not so as to incorporate them into a well articulated but by considerations of each case separately, and this made them considerably less effective.

Moreover the protective tariffs have been established a posteriori and as valid for an indefinite period.

This has affected improvement of the productivity levels of the industrial enterprises and has created conditions of monopoly in certain branches.

In recent years steps have been taken to convert the tariff policy into an effective instrument for stimulating an industrial development more in line with the future growth of the Venezuelan economy. The National Plan has also established the principle that protective tariffs must be temporary, that is, must be valid only for the time required to consolidate the industries protected.

/The Ministries

The Ministries of Development and Finance take part in tariff modifications. Studies of the case at issue are presented to the Industrial Committee for approval, after which these two ministries announce their respective decisions concerning it.

Table 60  
VENEZUELA: EXEMPTIONS GRANTED IN 1959, 1960 AND 1963

Products	1959		1960		1963	
	Millions of bolivars	Percent ages	Millions of bolivars	Percent ages	Millions of bolivars	Percent-ages
1. <u>Primary Goods</u>	<u>105</u>	<u>38</u>	<u>233</u>	<u>57</u>	<u>1</u>	<u>0.4</u>
-Food products	33	12	124	30	1	0.4
-Raw Materials	72	26	109	27	-	-
2. <u>Intermediate and Capital Goods</u>	<u>83</u>	<u>30</u>	<u>104</u>	<u>26</u>	<u>100</u>	<u>35.7</u>
-Intermediate Goods	82	30	103	26	97	34.6
-Manufactured fuels	1	-	1	-	1	0.4
-Capital Goods	-	-	-	-	2	0.7
3. <u>Goods in current consumption</u>	<u>89</u>	<u>32</u>	<u>70</u>	<u>17</u>	<u>179</u>	<u>63.9</u>
-Manufactured foods	28	10	20	5	144	51.4
-Chemical and pharmaceutical products	3	1	4	1	32	11.4
-Other manufactured products	58	21	45	11	3	1.1
<u>Total for exemptions</u>	<u>277</u>	<u>100</u>	<u>407</u>	<u>100</u>	<u>280</u>	<u>100.0</u>
<u>Value f.o.b. of products exempted</u>	<u>604</u>	-	<u>619</u>	-	<u>512</u>	-

Source: Ministry of Finance.



### 3. Other forms of import control

Venezuela still maintains certain trade agreements, based on a "most favoured nation" chance, with the following countries: Belgium, 1884; Bolivia, 1883; Canada, 1883; El Salvador, 1883; Great Britain, 1884; Italy, 1861; Spain, 1882; and United States, 1940.

The reciprocal Trade Treaty which has been in force between Venezuela and the United States of America since the 6 of November 1939 contains a long list of products whose tariff assessments cannot be modified. Many of these, especially the industrial products, are now manufactured in the country, and faced with the impossibility of raising their assessments, the Government has resorted to the tie-in and import licence system.

During the three years 1961-63 the total value of goods imported under licence was 1,684 million bolivars, which gives a yearly average of 561 million and represents 16.9 per cent of the value of all imports. (See table 61.)

### 4. Industrial credit policy

#### (a) Industrial credit procedures

One of the instruments used most successfully in stimulating and developing manufacturing enterprises has been industrial credit granted for short, medium and long terms.

(i) Long terms credits. The Venezuelan Development Corporation's principal financial procedure consists in granting long term loans for promotion of new industries or for extension of existing ones. These loans are for a term of 5 to 10 years; the annual interest is 6 per cent, with the first year interest free and monthly, quarterly or half-yearly payments thereafter; they must be secured on mortgage.

The Venezuelan Development Corporation for a commission of 1.5 per cent a year, will also provide special endorsements by which it guarantees payment of credits granted by foreign financial organizations.

Lastly, within its long term procedure the Venezuelan Development Corporation will undertake a "plan for lease of fixed assets with option of purchase", which will apply to industrial promotion alone. After studying a project the Development Corporation offers the promoter the factory he needs on a long term lease with option of purchase, and acquires the land, constructs the building and buys and instals the machinery and equipment; the only condition required of the applicant is that he supply in cash the sum needed as working capital for the initial financing of the enterprise. Once he has obtained this working capital the factory is handed over to him on the conditions given above.

Table 61

VENEZUELA: IMPORT OF PRODUCTS UNDER LICENCE DURING 1961-63  
(Millions of bolivars)

Products section	Value of imports a/	
	World	ALALC
0. <u>Food products</u>	<u>790</u>	<u>36</u>
1. Beverages and tobacco	-	-
2. Non food raw materials excluding fuels	14	2
3. Fuels and lubricants	-	-
4. Oils and fats b/	-	-
5. Chemical products	76	1
6. Other manufactured articles	500	28
7. Machinery and transport material	202	-
8. Miscellaneous manufactured articles	97	1
9. Live animals not elsewhere specified, special transactions, gold and other assets	-	-
<u>Totals</u>	<u>1 684</u>	<u>68</u>
<u>Yearly averages</u>	<u>561</u>	<u>23</u>

Source: Technical Secretariat of the National Commission for the ALALC.

a/ Value f.o.b.

b/ Of both animal and vegetable origin.

/The period

The period after which the option becomes effective, the terms of the lease, and the amount of the redemption which will serve as the basis for calculating the purchase price will be different as between real property (land and buildings) and machinery and equipment. In the first case the term of the option of purchase will be 10 years and the payment on the lease 1 per cent of the cost of the property per month. Of this monthly rent the Venezuelan Development Corporation will count 6 per cent a year as interest and 1 1/2 per cent as covering taxes, administrative expenses, collection, etc. The remainder will be deducted from the value of the property and accredited as redemption to the enterprise concerned, in case it should exercise its option of purchase.

Machinery and equipment will be hired for eight years on a monthly charge of 12.32 bolivars per 1,000 bolivars of total cost. Of this monthly rent the Venezuelan Development Corporation will count 6 per cent a year as interest on the investment, and the remainder will be accredited as redemption to the enterprise in case it should exercise its option of purchase.

In the public sector only the Venezuelan Development Corporation grants long term credits. In the private sector the Venezuelan Development Company - CAVENDES - grants credits for a term of 10 years at an interest of 9 per cent, and requires collateral guarantees as security for the transaction.

(ii) Medium term credits. In Venezuela medium term credit grants (2 to 5 years) by the Venezuelan Development Corporation and CAVENDES are widely available, under the same procedures as are laid down for long term transactions.

Apart from this, the National Commission for Financing of Small and Medium Industry conducts two interesting programmes:

For artisan activity and small industry: credits for term at no more than 5 years for small enterprises, these being understood as enterprises with a capital of no more than 100,000 bolivars.

The purpose of these credits is to finance purchase of equipment, machinery and installations, and to provide working capital; the maximum sum is 25,000 bolivars, the limit of the term is 5 years, and an interest free period is granted of one year, which in special cases may be increased to 18 months.

The credits must be legalized by a contract between the parties. After the general securities 1/ have been established the funds are handed over by the Industrial Bank, which is the depositary for the resources of the National Commission.

The charge on these transactions consists of a 6 per cent annual interest and a commission of one payment only of 0.5 per cent of the amount of the open credit.

1/ Mortgage on the property of the creditor or guarantee on the stock in trade and security of a third person. The transaction also requires endorsement by the Executive of each State.

For medium industry: this being understood as those enterprises whose book capital is between 100,000 and one million bolivars. The maximum sum granted in these credits is 250,000 bolivars; the interest is 7.5 per cent a year; and the maximum term of the credit is 6 years when it covers expenditure on machinery and equipment, and 3 years when it is for use as working capital. The credits are granted through the commercial banks under the guarantee of the National Commission, which receives for this a commission of 1 per cent.

(iii) Short term credits. These are granted by both the Industrial Bank and the commercial banks. In the former case the interest fluctuates between 7.5 and 9.0 per cent and collateral securities on a special guarantee by the Venezuelan Development Corporation is required. For these guarantees the Development Corporation charges a commission of 1.5 per cent a year.

The guarantee is granted for up to two years, and if at the end of the second year 55 per cent or more of the credit has been reduced, it can be extended for two years more.

In the case of the commercial banks, credits are granted to industry on the same conditions as to other activities, at an interest which fluctuates between 9 and 12 per cent, and at terms of between 3 months and 2 years.

The National Commission for Financing of Small and Medium Industry itself grants short term credits for use as working capital on the conditions which have been described above.

Lastly, the Venezuelan Development Corporation has recently set up two programmes for financing the export of manufactured products; the first makes available to the producer any raw material needed for manufacturing the products to be exported without his having to draw on his own resources of security and guarantee, as would be the case in any strictly commercial credit transaction; and the second provides an arrangement whereby any foreign purchaser of natural or industrial Venezuelan products may benefit from a term of a maximum of six months for payment of his purchase, starting from the date on which the Venezuelan Development Corporation makes the payment requested by the purchaser.

(b) Industrial credit institutions

(i) The Venezuelan Development Corporation is the most important industrial credit institution in Venezuela and its work has been of great value in the industrialization process. At the end of 1964 the capital of this institution amounted to 1,886 million bolivars, its liquid assets were worth 221 million, and its long term assets 1,752 million, 1,390 million of this being investments in various enterprises in which the Corporation has controlling interests and whose capital is totally free of liability and 362 million being long term loans. Its short term liabilities

/amounted to

amounted to 110 million bolivars and its long term to 30 million, 25 million of this being funds borrowed from the Interamerican Development Bank. The resulting balances indicate an exceptional state of liquidity, solvency and financial stability.

The Venezuelan Development Corporation's capital has been formed by grants from the budget and from other assets provided by the Government.

(ii) The Industrial Bank of Venezuela was established by Law 17 of July 1937, and has a capital of 140 million bolivars almost all of which is owned by the Venezuelan Development Corporation.

Subsidiary to the Industrial Bank there are five regional development banks carrying out transactions in various states. Until 1963, however, both the Industrial and the Regional development banks functioned as private banking organizations, and as a result did not provide any effective stimuli for industrial development.

(iii) The Commission for Financing of Small and Medium Industry.<sup>2/</sup> Recently created, it has funds of about 40 million bolivars for use in loans to artisan activity and small industry and of 25 million for loans to medium industry.

In the case of small industry, the funds are shared yearly between the different states. The Regional Commissions which have been established in each state, after deciding what credits can be granted in accordance with their assigned quota, propose them to the National Commission. These Commissions are presided over by the Governor of the State or his representative and have four members, who are distinguished persons of the region. The Governor nominates the executive secretary of the Regional Commission. The applications for loans are sent to the National Commission in Caracas, which carries out the technical examination of the credits recommended, and approves or rejects them.

(iv) Private financing agencies. Separate from the private banks Venezuela has a mixed development agency, the Venezuelan Development Company (C.A. Venezolana de Fomento), which is jointly owned by the Venezuelan Development Corporation, Venezuelan private investors and the International Finance Corporation.

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<sup>2/</sup> Decree 152 of 9 October 1959, and Decree 646 of 13 November 1961.

The Company was set up in October 1963, with an initial capital of 50 million bolivars, for the purpose of extending the capital market. This financial agency not only enables national private savings to be channelled into industry but also regularly brings foreign savings into it.

Its principal object is to encourage the development of new and existing enterprises to promote their expansion and to contribute with financial support to the promotion of new enterprises; also to assist in directing new investment towards primary industrial activities and agricultural activities producing raw materials for industry.

As well as the Venezuelan Development Company, there are in Venezuela the Creole Investments Company and the Shell Investments Company; both of these conduct financial operations, either by entering into partnership with enterprises or by supplying credits.

The Creole Investments Company was set up in August 1961 with a capital of 10 million dollars for use in purchase of shares in Venezuelan private industrial companies. Its operations consist in buying minority holdings of ordinary shares in new or expanding enterprises. At no time does it grant loans, nor does it take part in petroleum or commercial and service activities.

The Shell Investments Company, like the above, takes ordinary shares in companies, and also grants such credits for working capital or for fixed assets as it thinks necessary. It was set up in 1963 for the purpose of increasing the availability of private investment capital.

(v) Commercial banks. These conduct every kind of ordinary bank transaction, except that their loans are limited by law to terms of two years and their discounts to one year. There are 37 banks,<sup>3/</sup> which conduct their activities through 469 offices shared among 150 different places. Venezuela has the largest number of banks per population of any Latin American country.<sup>4/</sup>

(vi) Other financing systems. A further financing procedure consists in taking out shares in new industrial enterprises. This is done by the Venezuelan Development Corporation in the case which have been unable to complete their financial structure from private resources, under the condition that the private shareholders undertake to purchase the titles subscribed by the Corporation within some reasonable term fixed to that effect.

The Creole and Shell Investments Companies also make investments both in new and in existing enterprises, but never so as to acquire more than 49 per cent of the shares.

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<sup>3/</sup> In 1963.

<sup>4/</sup> In 1963 the figure was one office for every 17,900 inhabitants.

(c) Financial resources

The financing of manufacturing industry by public credit institutions in the last five years figures in table 62. The average yearly amount granted in credits was 119 million bolivars, in special guarantees 39 million, and in other kinds of financing 19 million.

Of the credits granted by the Venezuelan Development Corporation in the last five years 59.9 per cent was for use in traditional industries, 23.5 per cent for intermediate industries, 12.5 per cent for metal-transforming industries, and 4.1 per cent for the residual group, as can be seen in table 63.

In the last few years the Venezuelan Development Corporation has increasingly tended to adapt its credit policy to the order of priorities laid down in the National Plan, which is as follows: 5/

- (i) Industries directly or indirectly concerned in the governments basic projects.
- (ii) Industries making extensive use of nationally produced agricultural or mineral materials whose production generates employment.
- (iii) Industries making extensive and continuous use in their production of untrained manpower.
- (iv) Industries directly generating foreign exchange.
- (v) Industries with comparatively low production costs, which can therefore compete with imported products without requiring strong tariff protection.
- (vi) Industries whose suitable siting contributes to decentralization.

The Government lays special emphasis on production of foods and other items for general consumption, and therefore lends strong support to activities of industrial promotion and co-operative organization which may ensure the expansion of such production, and thus achieve at low cost a supply adequate to the growing needs of the working population.

At the time medium and small industry, since they help to open up sources of employment in many regions of the country, are being advanced by means of a programme for providing them with credits and technical assistance.

5. Taxation policy

Until now there has been no special tax policy for manufacturing industry which has therefore been taxed to much the same extent as other economic activities. Only the petroleum and iron mining activities have been taxed at a rate much higher than that of all others.

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5/ These criteria are also applied by all other state bodies.

Table 62

VENEZUELA: INDUSTRIAL FINANCING BY PUBLIC CREDIT INSTITUTIONS  
(Millions of bolivars, at current prices)

Bodies	1960	1961	1962	1963	1964
<u>Venezuelan Development Corporation</u>					
Credits <sup>a/</sup>	110	51	97	39	35
Guarantees	10	19	117	18	30
Other types of financing <sup>b/</sup>	54	22	3	9	8
<u>Industrial Bank of Venezuela</u>					
Credits <sup>c/</sup>	9	19	28	47	106
Guarantee	-	-	-	-	-
<u>Ministry of Development, Small and Medium Industry</u>					
Credits	4	11	13	13	13
Guarantees	-	-	-	1	1
<u>Total</u>	<u>187</u>	<u>122</u>	<u>258</u>	<u>127</u>	<u>193</u>
Credits	123	81	138	99	154
Guarantees	10	19	117	19	31
Other types of financing	54	22	3	9	8

Source: Venezuelan Development Corporation, Industrial Bank of Venezuela and Ministry of Development.

- <sup>a/</sup> Includes long and short term credits and lease of fixed assets.  
<sup>b/</sup> Includes promissory notes, subscription to shares, bonds, and financing of exports.  
<sup>c/</sup> Also includes mining and agricultural credits.



Table 63

VENEZUELA: INDUSTRIAL CREDITS GRANTED BY THE  
VENEZUELAN DEVELOPMENT CORPORATION

Yearly averages	Total sum of credits granted	Traditional industries	Inter-mediate goods	Metal-transforming	Residual group
(Millions of bolivars, at current prices)					
1946-49	12.4	5.6	5.3	0.4	1.1
1950-55	12.3	8.4	0.8	-	3.1
1956-60	60.6	43.1	6.5	7.1	3.9
1960-64	66.3	39.7	15.6	8.3	2.7
(Percentages of the total)					
1946-49	100.0	45.2	42.7	3.2	8.9
1950-55	100.0	68.3	6.5	-	25.2
1956-60	100.0	71.1	10.7	11.7	6.5
1960-64	100.0	59.9	23.5	12.5	4.1

Source: Industrial Department - CORDIPLAN.

/According to

According to the present Income Tax law<sup>6/</sup> manufacturing enterprises must pay 2 1/2 per cent on industrial and commercial profits and a progressive complementary tax on "net gains", which is from 2 per cent for those between 0.01 bolivars and 8,000 bolivars up to 45 per cent for those above 28 million bolivars a year. The law allows a large number of deductions to be made in determining the net income; similarly a tax relief is granted on incomes above 14 million bolivars "for investments in the expansion of the country's means of production on the part of the taxee".

According to the same law the National Executive can exempt from tax "all or part of interest on capital invested in industry which investment it considers to be in the national interest" and "all or part of gains derived from branches of manufacture not previously established in the country", and "similarly those derived from branches of manufacture already existing in Venezuela which may be of equal importance to the development of the economy and whose expansion makes for substitution of a large number of imports". The law also lays down that the exemptions will be agreed in each case by resolution of the Executive and must include a term for their duration, not excluding 10 years in any case.

Besides the charges determined by the Income Tax law manufacturing enterprises are subject to the municipal rates of a very small amount.<sup>7/</sup>

According to official estimates taxation, apart from that on petroleum and iron, is only from 5 to 6 per cent.<sup>8/</sup>

It might be added that Venezuela possesses some of the lightest and most flexible tax regulations of Latin America.

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6/ 17 February 1961. Official Gazette Special Number 669.

7/ Patents Ordinance and others.

8/ CORDIPLAN.

6. Legal regulations on foreign capital and enterprises

Foreign investments in manufacturing industry receive the same treatment as national investments. Their position is, therefore, very favourable in comparison with the regulations to which they would be subject in other countries.

The low rates of taxation, the high returns on investments and the generally favourable conditions of development in Venezuela have meant that foreign capital can play a considerable part in the manufacturing sector. It is estimated that in 1963 the cumulative gross foreign investment in manufacture was 766 million bolivars.<sup>9/</sup> The largest foreign investments made in manufacture have been in the cosmetics and paints, motor vehicle assembly, rubber, petroleum derivatives, and tobacco industries, as can be seen in table 64.

Table 64

VENEZUELA: FOREIGN INVESTMENT IN  
MANUFACTURING INDUSTRY, 1963

Branches of industry	Total investment (Percentages)
1. Cosmetics and paints	19.5
2. Motor vehicle assembly	17.4
3. Rubber and its derivatives	16.9
4. Tobacco	14.8
5. Chemicals	8.8
6. Foods	8.6
7. Textiles	4.4
8. Paper and paperboard	3.8
9. Cement	2.9
10. Containers and tin cans	2.5
11. Metal products	0.4
<u>Total</u>	<u>100.0</u>

Source: Central Bank of Venezuela, Report for 1962.

<sup>9/</sup> Central Bank, Report for 1964; 136 million invested in light and electric power must be deducted from this figure.

## 7. Promotion policy for exports of manufactures

Recently, in the National Plan 1963-66, the need to promote exports of manufactured products has been pointed out. The measures so far taken to stimulate this process, which in future will reach considerable proportions, have been as follows:

(a) In 1962 the Venezuelan Exporters Association was created, and this has received every kind of assistance from the Ministry of Development.

(b) In 1963 a start was made in founding trade information centres in foreign countries, the first of these being set up in the neighbouring island of Curaçao. They are intended to promote sales of Venezuelan products by means of permanent and ephemeral exhibitions. The extension of this work to other regions of the Caribbean is being considered.

(c) In 1964 the Venezuelan Development Corporation's credit arrangements for exports, which have been described above, were established.

## 8. Arrangements on behalf of small industry

Although there is no special legislation in favour of small industry, during the last few years various measures have been taken toward stimulating this important sector. It is worth mentioning in particular the special credit assistance system, 10/ training of skilled manpower, creation of industrial zones, and the granting of exemptions from municipal rates. The details of these measures are described in other parts of this chapter.

## 9. Direct promotion by the State

### (a) Official policy

In Venezuela State management of enterprises is limited to those activities:11/

"(a) which, as being concerned with public services (railways, telecommunications, electricity, and gas), are from their nature within its sphere of action; and

"(b) which, as basic industries, require large investments and are the source of special raw materials for a large number of other industries, by which means they exercise a powerful influence on the whole economy.

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10/ National Commission for Financing of Small and Medium Industry.

11/ Statement on Fundamental Aspects of Economic Policy. Miraflores, 30 May 1962.

"As regards category (a), it includes various private enterprises operating under contracts and authorizations conforming to law, which will be respected within the legal rules binding on them. In this way an important sector of private enterprise will co-exist with a growing sector subject to the direct action of the State.

"As regards category (b), it is useful to give separate treatment to the iron and steel and petrochemical industries, since in each of these there is one enterprise which, on developing further within the public sector, will, together with the inherent resources of power of the country, constitute a chief foundation of the industrialization of Venezuela.

"In addition to its activities in these sectors of industry, the State will, according to circumstances, be able to take part in forming specific enterprises whose promotion may be necessary to public interest, especially in cases where these cannot attract sufficient private capital by reason of their small initial dividends. Such promotional action on the part of the State will be conducted in particular through the Venezuelan Development Corporation, the Venezuelan Guayana Corporation and the Venezuelan Petrochemical Institute and will be for the most part of a temporary nature, the state interests being transformed to the public at some suitable time so as to free the funds invested and use them in other activities more in need of State support.

"State or mixed enterprises must, like those founded on private capital, be conducted according to principles of sound and effective administration. Their mode of operations with, therefore, be subject to continued revision so that they may reach, in as short a time as possible, a high degree of financial self-sufficiency".

(b) Existing public enterprises

(i) Orinoco Iron and Steel Company (SIDOR). In accordance with the powers granted it by its constitutive statutes, the Venezuelan Guayana Corporation has entrusted the administration of the Orinoco Iron and Steel Works to a subsidiary enterprise set up on 1 April 1964.

Viz., on the above date the enterprise C.V.G. ORINOCO IRON AND STEEL C.A. (SIDOR) was registered, in accordance with the dispositions of articles 11 and 29 of the Founding Statute of the Venezuelan Guayana Corporation whereby it has the functions of "constituting, directing, managing and exploiting its own enterprises, especially such as may produce iron and steel, or those of other public or private persons, to this effect entering on any relevant agreements and carrying out all other actions belonging to the conduct of industry and commerce in any field, without limitation whatsoever".

The company has a share capital of 200 million bolivars divided into 19,500 shares owned by the Venezuelan Guayana Corporation and 500 owned by EDELCA, the other subsidiary enterprise of the C.V.G. SIDOR is itself

/essentially an

essentially an administrative enterprise since the equipment, machinery and installations constituting the capital of the iron and steel works are the exclusive property of the C.V.G. The fixed assets of SIDOR consist of certain kinds of equipment such as rolling equipment, cylinders, rollers, moulds, etc., which depreciate and are worn out in relatively short periods of time.

After setting up this enterprise the Corporation transferred to it the responsibility of running the works and selling its products. At the same time it provided it with the instruments necessary for the proper fulfilment of its duties, such as the requisite degree of administrative and economic autonomy. This is laid down in its registration certificate, which also serves as its founding statute, published in the Municipal Gazette of Federal District N° 11,256, 8 April 1964.

SIDOR's financial resources have turned out to be insufficient as working capital and it is now being faced with progressive decapitalization. Book losses for the financial year 1964 were 40 million bolivars.

At the end of 1964 the total of the fixed capital investments in iron and steel industry belonging to the Venezuelan Guayana Corporation was 1,350 million bolivars.<sup>12/</sup>

(ii) Venezuelan Petrochemical Institute (I.V.P.). The Venezuelan Petrochemical Institute was founded on the 1st of July 1959 as a subsidiary of the Ministry of Mines and Hydrocarbons; its purpose is "to study, establish, operate and develop industries for exploitation of minerals, hydrocarbons and any other products related to petrochemical industry".<sup>13/</sup>

The Venezuelan Petrochemical Institute operates as an autonomous institution; its capital has been formed from budget grants provided by the Executive. Its fixed capital investment is estimated at 580 million bolivars for the end of 1964.

Its organization includes a Governing Council seated in Caracas, which consists of five members and the Minister of Mines and Hydrocarbons as president. This council is its highest organ and is responsible for working out general policy, long range plans and other matters relating to the complete fulfilment of the Institute's objectives. It also includes an Executive Board, seated in Morón, which consists of a Director General, who presides over it, and 3 directors; this is responsible for organization and administration, functions which may not be carried out by the Governing Council.

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<sup>12/</sup> Estimate by CORDIPLAN.

<sup>13/</sup> Statutes of the Venezuelan Petrochemical Institute.

During 1964 and 1965 the Venezuelan Petrochemical Institute has notably improved its productive organization and has lowered it by a considerable proportion. It is estimated that in 1966 petrochemical industry will no longer need state contributions towards its normal operations, only requiring them for financing new projects.

These estimates also indicate that after 1970 the Institute will be in a position to finance new investments single handed from its profits.

(iii) C.V.F. - Sugar Mills C.A. This enterprise is affiliated to the Venezuelan Development Corporation and operates as a public company with a capital of 100 million bolivars. It has five mills in various parts of the country whose production for the 1964-1965 season was 72,000 tons, that is, 22.1 per cent of national production. In addition, the company owns 75 per cent of the capital of the Rio Turbio Mill, which is 20 million bolivars. The remaining 25 per cent is privately owned. The production of this latter was 60,000 metric tons for the same agricultural year. About 40 per cent of national production, therefore, is financed by the public sector.

Over the whole period of its existence Sugar Mills C.A. has made a loss of slightly under 20 million bolivars. This is partly due to the fact that it has had to buy up private mills which have been in an economically unsound condition.

(iv) Other enterprises. Besides the state enterprises mentioned above, there are other manufacturing activities belonging to the public sector, such as Dykes and Dockyards, subsidiary to the Ministry of Defence, Araya Salt Mines, subsidiary to the Ministry of Finance, and various repair workshops, subsidiary to the Ministries of Public Works and Communications and to other public services.

Another important enterprise is Caroni Aluminium S.A., in which the Venezuelan Guayana Corporation has a 50 per cent interest.

#### 10. Regional industrial development policy

The Venezuelan Government is at present fostering the development of the interior of the country so as to counteract the disproportionate growth and importance of the cities, particularly those in the centre.

The execution of this policy is chiefly in the hands of the Venezuelan Development Corporation, but its basic premises, which are concerned with bringing about the formation of regional corporations, are dictated by the Ministry of Development and the Executive.

The regional development policy, as executed by the Venezuelan Development Corporation, involves the following methods: decentralization of industrial credit, industrial zones programmes, and promotion on the part of regional bureaux.

/(a) Decentralization

(a) Decentralization of credit

The Development Corporation's credit decentralization policy is designed to further a more direct and planned type of action on the part of the provinces and to improve the exploitation of their potentialities for development.<sup>14/</sup>

This has achieved positive results, as is shown by the fact that in 1964 77.1 per cent of the credits approved by the C.V.F. were for use in the provinces.

(b) Industrial zones programme

This programme is carried out by the Venezuelan Development Corporation, the Venezuelan Guayana Corporation, the municipalities and, in certain cases, by private initiative. Its most important features, as concern the main industrial zones are described in what follows:

(i) Industrial allotments in Santo Tomé de Guyana. The Venezuelan Guayana Corporation is constructing three sites for industrial allotments so as to encourage the establishment of medium and small industries in Santo Tomé de Guyana.

The policy of the Corporation is in every case to fix prices at a level which enables it to recover the installation costs plus one bolivar (Bs. 1) per square metre.

The financial procedure is: 10 per cent payment on signing the contract, and the rest in 20 equal and consecutive half-yearly instalments, the first to be paid at six months from the date on which the urban facilities are brought into service.

Interest is charged on balances unpaid at a rate of six per cent a year.

(ii) Industrial zones in Maracaibo. The city of Maracaibo possesses a planned industrial zone for use as a site for any new industries established in the area.

The cost of the work required to install the services of this zone is more than 5 million bolivars; it began in 1963. It is financed by interest on invested capital supplied by the Venezuelan Development Corporation and the Municipal Council, and also by a credit of 3.5 million bolivars granted by the former.

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<sup>14/</sup> In the list of priorities on which the Venezuelan Development Corporation's promotional programme is based appears the following item which is, to quote: "With reference to the siting of new industries aid will be given to such as may be established in the provinces".



The sector of the zone at present being developed is part of the so-called stage "A" which involves 132 allotments in an area of 187 hectares.

There is also an area available for the siting of general services, such as will be a passenger terminal, a post-office, a telephone exchange, a five station, etc.

(iii) Industrial zone of Barquisimeto. On the 17th of December 1963 the enterprise "COMBIBAR" (Company for the Development of the Industrial Zone of Barquisimeto) was founded in the city of Barquisimeto. This company has a capital of 2 million bolivars, one million of which was supplied in money by the Venezuelan Development Corporation, the rest in the form of a million square metres of land, which is of equivalent value, by the Iribaren District Municipality.

As laid out in the pilot plan there are 710 hectares reserved for industrial use. What is called the first stage involves an area of about 310 hectares. Within this sector about 100 hectares have been chosen for use in a pilot development.

Besides the capital it has supplied, the Venezuelan Development Corporation has granted a credit of 1.5 million bolivars. These supplies from the Development Corporation will be used in providing all the services of what is known as the "remodelling sector".

(iv) Industrial zone of Maracay. The industrial zone development company of Maracay will be founded with a gift of 600 hectares of finest quality land which at present is the property of the Girardort District Municipal Council; the value of this land, or an approximately equivalent sum in cash, will be provided by the Venezuelan Development Corporation; and the capital made up to the total required with special shares purchaseable by private individuals or enterprises through the Chambers of Industry and Commerce of Aragua State.

The whole four stages of the Maracay industrial zone will be 8 kilometres in length; on its long sides it will run parallel on the North to the Caracas-Valencia highway, nerve centre of a highway system equidistant from the ports of La Guaira and Puerto Cabello, and on the South to the future railway, a trunk line of the system projected by the present National Railways Plan.

(v) Guaneras Industrial Zone. The Guaneras Industrial Zone is intended to provide facilities for new enterprises and also for enterprises wishing to move their plants from the metropolitan area of Caracas. The industrial nucleus of the zone has an area of 260 hectares. So far

/67 hectares,

67 hectares, divided into lots from 2,400 square metres to 100,000 square metres have been developed. These are provided with all the requisite services of water pipes, sewers, drainage, electricity, telephone, curbs, paving, etc. Another 45 hectares has been provided with main sewage and water pipes.

(c) Industrial promotion

The Venezuelan Development Corporation has, for promotional purposes, divided the country into 7 zones, in each of which there is an office of the Corporation directed by an economist who has the functions of Promotion Delegate. His duties are:

(i) To keep in permanent touch with industrialists and prospective investors in the zone, with the object of developing the Promotions Programme and directing private initiative in the preparation and execution of industrial projects.

(ii) To assist industrialists in filling in the questionnaires involved in applications for promotional credit, and also to supply any information they need on economic and marketing conditions.

(iii) To receive and check all applications for financial support of promotion schemes presented in his zone.

(iv) To make known in his zone the Venezuelan Development Corporation's Promotions Programme.

(d) Development Corporations

The Executive, in conjunction with the private sector and the regional executives, has promoted the formation of various regional bodies whose main task is to plan the development of their respective zones.

Venezuela has at the moment 4 large regional corporations which together cover about 45 per cent of the country. These are:

The Venezuelan Guayana Corporation

The Zulian Planning Council (CONZUPLAN)

The Foundation for Central-Western Development

The Andes Development Corporation

A fifth body is being promoted, which will be known as the "Eastern Development Corporation".

The work of the Venezuelan Guayana Corporation has been of particular importance in regional development of industry. It has prepared a complete industrial development programme for its own zone.

CONZUPLAN has also made active progress in promoting industrial projects.

#### 11. Manpower training programmes

The shortage of trained manpower has been and continues to be a bottleneck in the process of industrial development, in spite of the fact that immigration has brought some alleviation to this problem.

The accelerated development of industry has produced a large demand for skilled manpower which has emphasized deficiencies of the educational system of the country, not only at the level technical training, but even at that of basic knowledge.

A clear indication of these deficiencies is the fact that in the period 1950-59 only about 500 persons graduated from vocational schools.

Until a few years ago only the petroleum industry and a few large scale manufacturing enterprises 15/ provided systematic courses for the training of personnel.

The shortage of skilled manpower has been more obvious in Venezuela than in other Latin American countries because in the former there was no widespread artisan activity in existence before factory industry, as was the case in most of the other countries in the continent. On the other hand there has arisen an excess of unskilled manpower, which has increased further with the fall in the amount of public works and private construction being undertaken.

An important step towards improving the supply of trained manpower has been the creation in 1959 16/ of the National Institute of Educational Corporation (INCE), whose aims are: to provide professional training for workers, to take part in the struggle against illiteracy and to contribute to agricultural and rural development activities.

This body possesses ample finances, 17/ which will enable it to build up in the next few years a large number of projects operating in the different fields of apprenticeship and manpower training.

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15/ Chiefly motor vehicle assembly enterprises.

16/ Law of 22 August 1959 and Decree of 31 March 1960.

17/ 1 per cent of the salaries, wages and bonuses paid to workers by enterprises employing 50 or more persons, and 1 1/2 per cent on the yearly incomes of the workers; in addition there is a contribution from the state.

The work of quantifying supervisors and foremen, training manpower, organizing apprentice courses, preparing rural education programmes, and setting up instruction centres should begin during the period 1964-66 to reach a considerable degree of intensity and range of action.

Professional training for manpower at all different levels has only in the last few years begun to be conducted through intensive programmes covering a broad range of activities.

The work of the National Institute of Educational Co-operation (INCE) comes as an addition to that of the universities and the industrial and technical schools.<sup>18/</sup>

Between 1961 and 1964 INCE trained 121,507 workers, 116,797 of these in its ordinary programmes and 4,710 in its special programmes. The highest degree of activity was reached in 1964, when 60,154 workers were given instruction; the number of those going through ordinary programmes was 55,444 and the entrance figure for the special programmes was 4,710.

In 1965 INCE gave 4,717 courses in its ordinary programmes and 1,033 in its special programmes; these gave instruction to 63,708 and 16,151 workers respectively. Among the chief programmes developed were The Industrial Training Programme, The National Apprenticeship Programme, The Programme for Training of Supervisors, rural training programmes and business and in service training programmes.

INCE's ordinary programmes, paid for chiefly by collections of contributions from patrons, workmen and staff, had a total budget of 57.13 million bolivars, and the special programmes, financed by the State one of 18.6 million. The special programmes involve such expenditure as subsidies in cash to those taking part in them, for their food, transport, shoes and working equipment.

INCE has also taken measures towards training instructors and directors for the various centres so as to have a supply of suitably trained teaching staff.

It is worth noticing, however, that until 1964 INCE's main activities were directed towards training manpower for construction and services. In their programmes for the next few years, on the other hand, special emphasis will be given to the industrial apprenticeship programme and to various skills useful in manufacturing industry.

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<sup>18/</sup> There are 32 schools of industrial education which altogether have 21,053 pupils and 1,176 teachers; there are also 59 artisan schools with 9,403 pupils and 471 teachers (figures for 1961).

The Study Centre for Development (CENDES) created and organized by the Central University in conjunction with CORDIPLAN, and a dependent of the former, is carrying out work of special interest in teaching and research. CENDES was formed under the need to train professionals in the techniques of economic development, in particular fitting them to deal with Venezuelan problems. It gives graduates courses for which the teaching staff consists of carefully chosen Venezuelan and foreign experts. Various courses have now been organized for the training of technicians, most of these being public administration officials, through them have been some from the private sector.

In addition to this, the universities of Venezuela during the last few years have substantially altered their study programmes as to produce the experts needed by the country for its economic development. The coming foundation of the Polytechnic Institute with technical and financial assistance from the United Nations will also help to improve the future supply of certain types of middle grade technicians.<sup>19/</sup>

## 12. Productivity and industrial extension services

Productivity services are in the hands of the Venezuelan Productivity Foundation Institute,<sup>20/</sup> a subsidiary body of the Ministry of Development, which began work in 1962.

This body has been mainly concerned providing courses and seminars in different parts of the country in the fields of supervising techniques, human relations, marketing techniques, control and administration for management personnel, engineering methods, production planning and control, maintenance, etc.

It has also carried out technical assistance programmes for certain enterprises and a regional productivity development programme.

In 1965 INPRO's budget was 2.6 million bolivars of which 2.4 million consisted of fiscal contributions.

Jointly with the United Nations it is carrying out a special fund programme which will chiefly involve combined training and technical assistance programmes.

In 1965 it hopes to complete five sectorial studies on productivity, a study on cotton mills and an analysis of productivity in petrochemical plants.

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<sup>19/</sup> Chiefly mechanical engineers and electricians.

<sup>20/</sup> Its functions have been described on page 66 of the present work.

In addition to this the Industrial Department contains an industrial extension division, which, as was seen above, is basically concerned with propagating industrial development.

### 13. Technological research

Apart from what is done in the universities, there are two special bodies concerned in technological research.

(a) The Venezuelan Institute of Scientific Research (IVIC), active since 1959 <sup>21/</sup> and a dependent of the Ministry of Health and Social Assistance. Its functions are:

(i) To conduct theoretical and applied research in the various fields of biology and chemistry and to serve as an advanced training and advisory centre for these fields, particularly to serve the needs of the Executive.

(ii) To stimulate interest in science and patronize persons undertaking advanced studies or those who dedicate themselves wholeheartedly to scientific research.

IVIC's budget for 1965 was 18.5 million bolivars, of which 16.9 millions consisted of fiscal contributions.

(b) The Venezuelan Institute of Technological and Industrial Research (INVESTI)

The Venezuelan Institute of Technological and Industrial Research (INVESTI) was set up in 1958 on the joint initiative of the Venezuelan College of Engineers, the Venezuelan Construction Association and the Venezuelan Association of Industrialists, to answer the needs which arise in this field in every developing country.

At present INVESTI relies on the services of a group of university experts and skilled technicians.

It is financed by donations, investment contracts and rewards for its services.

INVESTI has carried out interesting research on industrial clays, low cost prefabricated housing, refractories and special ceramics, and foods.

Ever since its foundation INVESTI has suffered from inadequate finances which have forced it to curtail its research programmes and have prevented it from buying machinery and equipment to improve its installations.

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<sup>21/</sup> Decree 521, of 9 January 1959.

In 1965 its budget was 1.1 million bolivars and was mainly derived from tests of materials and other special work carried out on contract for industrial enterprises.

#### 14. Standardization

The Venezuelan Industrial Standards Commission (COVENIN) which is subsidiary to the Industrial Department of the Ministry of Development has been in operation since 1959.

The work of COVENIN has been limited by a shortage of financial resources and personnel. In 1965 the sum appropriated to it from the budget was 269,000 bolivars while its personnel consisted of 3 technicians, which included the executive secretary, and 5 administrative staff.

Its programmes are as follows:

- (a) classification and codifications of international standards;
- (b) ditto of recognized interamerican standards;
- (c) surveys for granting the NORVEN (Venezuelan standards) mark to enterprises fulfilling the established quality standards;
- (d) publication of a catalogue of Venezuelan standards; and
- (e) editing and publication of a quarterly bulletin.

#### 15. Other aspects of industrial promotion policy

Among other aspects of industrial promotion policy worth mentioning are the following:

##### (a) Register of projects

In 1962 a decree 22/ was passed ordering the establishment of a register of projects in the Industrial Department of the Ministry of Development, so that projects for starting industrial enterprises may be known to the authorities and subject to their direction.

Although the entry of projects for new industries or extension of existing ones have not been made obligatory, it will be indispensable for enterprises applying for state protection or credit assistance to have fulfilled this condition. It is believed that the establishment of this

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22/ Decree 698, 20 February 1962, of the Presidential Office of the Republic, countersigned by the Ministry of Development.

register will make for better orientation of investments and will prevent the setting up of industries in branches where the installed capacity is already too high.

Projects for making new investments, or increasing existing ones by 100,000 bolivars or more, are also subject to entry in this register.

The register of projects has made it possible to rely on dependable records in making programmes for industry and has also prevented the formation of industries in branches where there is already an installed capacity sufficient for the needs of the country.

(b) Pro-Venezuelan Association

The Pro-Venezuelan Association <sup>23/</sup> has been active since 1958. Its purpose is to create a public conscience towards consumption of national products. It has conducted an effective campaign on behalf of industrialization.

Besides its basic campaign, Pro-Venezuela prepares technical surveys on the problems of industry in general and in particular, studies the requirements of certain industries which are, or may be, faced with difficult situations. Its object in this is to make known to official bodies concerned, and to public opinion in general, the objective appreciation of the facts which is essential if the difficulties obstructing the development of these branches of industry are to be overcome.

Pro-Venezuela has also done valuable work in organizing fairs, exhibitions and industrial conventions.

Its financial resources are mainly derived from public sources. It receives contributions from the Ministry of Development, the Venezuelan Development Corporation and the Department of Industry and Commerce. It also receives cash contributions from its members. In 1965 its income from the former sources was 690,000 bolivars and from the latter 400,000.

(c) The "Buy Venezuelan" decree

In January 1959 the government published Decree 512, the "Buy Venezuelan" decree, which obliges government bodies and their subsidiaries to purchase national products whenever the prices of them are not more than 25 per cent higher than their imported equivalents.<sup>24/</sup> This decree, however, has not been universally applied.

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<sup>23/</sup> Created by Decree of 7 July 1958.

<sup>24/</sup> Value c.i.f. plus duty.



## Chapter VI

### FOREIGN AID IN INDUSTRIAL DEVELOPMENT

The supply of technical assistance from international organizations and foreign governments has been constantly on the increase and has become a factor of obvious importance in the industrial development of Venezuela.

#### 1. The United Nations

The United Nations Organization provides technical assistance through the following programmes: the Extended Technical Assistance Programme, the Special Fund Programme, the Trust Funds Programme, the Ordinary or Regular Programme and the Regional Programme.

##### (a) The Extended Technical Assistance Programme

In virtue of an agreement signed between the Venezuelan Government and the United Nations Organization, this programme began to operate in Venezuela in 1954. It is intended to provide developing countries with technical advice aimed at strengthening their economies through industrial, agricultural and social development. It is projected for two years at a time the programme at present in operation being for the period 1965-66. The programme has been satisfactorily carried out by sending experts to Venezuela and granting scholarships in different fields such as public administration, planning and constructions of housing, labour administration, industrial development and productivity, forest development, fisheries development, nursing training, etc. The total sum assigned by the United Nations to Venezuela for this programme is of the order of 648,800 dollars.

##### (b) The Special Fund Programme

The most far reaching programmes conducted by the United Nations is the Special Fund, which began to operate in Venezuela following an agreement signed in 1961. This programme lays emphasis on resource evaluation projects and pre-investment studies, and also on the building up of educational and training institutions. Such projects are financed by contributions from the Venezuelan Government and from the Special Fund. Up till now the total amount invested in Special Fund programmes for Venezuela has been 22,389,500 dollars. These resources were assigned for the following programmes (which are being carried out at the moment); an agricultural survey of certain river basins, establishment of a national polytechnic institute, of an industrial engineering school and of a national productivity institute, preliminary investment study of wood exploitation in Venezuelan Guayana and establishment of a telecommunications technical centre and of courses in sanitary engineering. The time which will be taken on these projects varies between 4 and 5 years. The first of

/them will

them will be finished in the middle of 1966, and it is expected that its report will contain programmes and projects for investment and also for the building of structures for developing hydraulic resources, the financing of which will be discussed with foreign credit agencies. During the 12 and 13 February 1965 a meeting of representatives from the Special Fund and from the Government will take place which will assess the progress made in the above projects and determine the precise line of action to be taken in carrying them out. The Special Fund also recently approved two new projects: the establishment of a centre for training in community development, which will be situated in Jusepin, Monagas State, and a study of the urbanization in Venezuela. Both together will have a total cost of 3,335,700 dollars. Apart from these various new projects have been presented to the Special Fund for consideration and there are others being prepared by Venezuelan organizations.

In November 1965 the General Assembly of the United Nations agreed to unite the Extended Technical Assistance and the Special Fund Programmes into a single one, which from the 1st of January 1966, will be known as the United Nations Development Programme. This is expected to simplify organization and to make for an improvement in general planning, thus increasing the effectiveness of the United Nations contribution in the sphere of technical assistance.

(c) The Trust Fund Programme

On 9 October 1959 an agreement was made with the United Nations, whereby technical assistance is provided on government funds, administered by United Nations Technical Assistance. Through this programme 65 experts have come to Venezuela to collaborate with the Government in various technical assistance projects such as for: electronic data processing, textiles industry, economic planning, national accounting, industrial programming, operation of telecommunications system, signalling and point switch systems, industrial productivity, statistics, etc.

(d) The Ordinary or Regular Programme

Both the United Nations Organization and its specialized international organizations devote a part of their annual budgets to providing technical aid for member states. This part is known as the Ordinary or Regular Programme. During the last financial year, as a part of this programme, United Nations sent to Venezuela experts on regional development, statistic cycle fluctuations and tropical fodder for animals.

(e) The Regional Programme

United Nations and its specialized international organizations also finance from their ordinary budgets technical assistance for regional development. On this programme several short term missions came to Venezuela in 1965 to give assistance in the fields of civilization, vital statistics, community development and labour statistics.

## 2. The Organization of American States

The OAS has given continuous technical assistance to the Venezuelan Government in the form of experts sent to the country and grants of scholarships. For the same purpose it maintains under its Technical Co-operation Programme, thirteen training centres in different Latin American capitals. This programme is basically concerned with high level professional training for the formation of technicians, specialists and research workers able to contribute to the modernization of the socio-economic structures of the member countries and thus advance the development process which is taking place in them. The Extracontinental Training Scholarships Programme also continues to be extended. Its object is the training of professional men, technicians and scientists on all levels by means of scholarships granted by non-American countries through the OAS to nationals of its member states. At the beginning of last year, in virtue of an agreement signed between the OAS and the Venezuelan Government, the Institute for Integral Development of Waters and Lands was set up in the city of Mérida and has already begun to achieve praiseworthy results.

## 3. The International Development Agency (IDA)

The United States Government provides technical collaboration through the IDA, which finances experts, scholarships and loans for projects concerned with training and education of manpower, public administration, development of the rural centre, urban modernization, public safety and technical aid.

## 4. The Government of France

Between the 7 and 18 December 1965 a meeting was held in Paris of the Franco-Venezuelan Mixed Commission, in accordance with the terms of the communiqué issued for the visit of President De Gaulle to Venezuela in September 1964. Under the arrangements made between the Venezuelan Government and the French parastatal associations ASMU-ASTEF, this commission confined itself to studying a report on current technical aid and programmes projected for 1966. It is worth making particular mention of French technical collaborations in working out a development programme for the North East region of the country. This year a study has begun to be carried out which, in its various stages and over the course of three years, will result in an assessment of the economic and social conditions of this part of the country and will establish a regional programme within the framework of the national plan, which will make for a co-ordinated approach to the development of the area.

## 5. The Government of Great Britain

Through its Ministry of Overseas Development the British Government has given scholarships to Venezuelan officials for the study of public administration and of the economics of small industry, and has also sent short term missions for aid in problems related to the motor vehicle industry, development financing and manufacture of equipment for small farmers.

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6. The Government of Israel

The Israeli Government has one more prolonged the mission which gives technical advice to the Venezuelan Government in matters relating to agrarian reform and also continues to give graduate scholarships to Venezuelan officials for the study of delinquency prevention, community development, agrarian reform, etc.

7. The Government of Italy

As a part of its technical aid programme, the Italian Government has been granting scholarships to Venezuelan officials for their training in various subjects connected with economic development and community development.

8. Other governments

The Venezuelan Government has also received from the Belgian, German, Japanese, Spanish and Swiss Governments offers of various kinds of technical collaboration.