

UNITED NATIONS

ECONOMIC
AND
SOCIAL COUNCIL



LIMITED

E/CN.12/L.24
June 1967

ENGLISH
ORIGINAL: SPANISH

ECONOMIC COMMISSION FOR LATIN AMERICA
Santiago, Chile

THE INDUSTRIAL DEVELOPMENT OF ECUADOR

prepared by the
National Council for Economic Planning and Co-ordination
of the Government of Ecuador

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

Note: This document has been distributed in Spanish for the United Nations International Symposium on Industrial Development, Athens, 29 November-19 December 1967, as document ID/CONF.1/R.B.P./3/Add.8.

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

THE RELATIVE IMPORTANCE, STRUCTURE AND GENERAL CHARACTERISTICS OF MANUFACTURING INDUSTRY

1. The gross manufacturing product in the total gross product

Manufacturing industry's share in total gross domestic production in 1963 was 14.6 per cent. This represented a decline over the period studied, 1950-1963, reflecting the lack of dynamism in the sector whose progress depends on the over-all growth of the economy instead of being a determining factor in it (see table 1).

Table 1

ECUADOR: CONTRIBUTION OF MANUFACTURING INDUSTRY TO THE GROSS DOMESTIC PRODUCT, 1950-63

(Thousands of dollars at 1960 prices)

Year	Gross domestic product		Percentage share
	Total	Manufacturing	
1950	470	75	16.0
1951	475	77	16.3
1952	532	84	15.3
1953	567	89	15.7
1954	592	90	15.2
1955	620	93	15.0
1956	635	97	15.4
1957	666	100	15.1
1958	710	111	15.6
1959	727	113	15.5
1960	786	124	15.7
1961	759	117	15.4
1962	765	108	14.1
1963	820	120	14.6

Sources: Central Bank and National Economic Co-ordination and Planning Board.

Industry in Ecuador is, therefore, not playing the dynamic role which it ought to in economic development, since, as demand for manufactured products is increasing more quickly than demand for other types of goods and it has access to a wider range of import substitutes than other sectors, it ought to show a more accelerated growth, so that its share in the economy would increase.

Within the manufacturing sector, manufacturing industry is the dynamic activity. Its average rate of growth, between 1950 and 1961, was 8.4 per cent. In the increase in manufacturing industry, it is clear that the various activities had different shares, due to factors which will be analyzed below with particular attention paid to the most significant. (See table 2.)

Table 2

ECUADOR: GROWTH RATE OF PRODUCTION BY BRANCHES OF
MANUFACTURING INDUSTRY, 1950-61

(Annual averages)

Branch of Industry	Growth rate 1950-1955	Growth rate 1955-1961	Growth rate 1950-1961
Food	11.1	10.1	10.5
Beverages	15.4	6.6	10.6
Tobacco	-2.1	2.5	0.4
Textiles	8.5	5.9	7.1
Footwear and clothing	4.5	-1.8	1.1
Wood	6.4	0.7	3.3
Wooden furniture	8.4	8.3	8.3
Paper and paperboard	18.6	18.5	18.5
Printing	6.3	8.0	7.2
Leather products	5.3	-2.1	1.2
Rubber products	16.5	9.4	12.6
Chemical products	4.6	9.9	7.5
Petroleum products	5.7	14.7	10.6
Non-metallic mineral products	21.0	8.2	14.0
Basic metals	-	-	-
Metal-transforming	13.6	9.0	11.1
Other manufacturing activities	20.7	25.6	23.4
<u>Total</u>	<u>8.4</u>	<u>8.3</u>	<u>8.4</u>

Source: National Economic Co-ordination and Planning Board.

2. Evolution of the main types of industrial activity

In this period food production has grown constantly, with an annual average rate of increase of 10.5 per cent, showing, between 1950 and 1955 a slightly higher increase than this average. The relatively high rate of growth of this branch of industrial activity has been favoured by developments achieved in the principal components: sugar - milling, wheat - milling, and edible vegetable oils and fats. This is particularly true in the case of the sugar - mills which, in recent years, besides supplying the domestic market, have succeeded in exporting significant quantities abroad.

Beverages production, like food, has also shown a high average rate of increase (10.6 per cent) but with appreciable differences in the two periods illustrated by table 2: 15.4 per cent in the first period and a drop to 6.6 per cent in the second. In recent years, the development of its main activities (production of beer, soft drinks and mineral waters) has been limited by the imposition of state taxes on production which have raised the price of these articles.

Tobacco production has shown an average rate of increase of 0.4 per cent per year, there having been in the first five years a decrease which was made up for in the rest of the period by a slightly higher increase. This may be interpreted as a consequence of the creation of a mismanaged monopoly, which did noticeable harm to a previously flourishing activity. In 1960, the monopoly was abolished and this accounts for the recovery which this industry has shown in recent years.

Textile production grew at an annual average rate of 7.1 per cent. Between 1950 and 1955 its annual rate of expansion was 8.5 per cent, going down to 5.9 per cent between 1955 and 1961. This lower rate of increase is explained by the smuggling of textile products from Colombia, which became acute from 1956 because of the greater productivity of the Colombian, as compared to the Ecuadorean textile industry.

The growth rate of footwear and clothing production was one of the lowest in manufacturing industry: 1.1 per cent as a result of the decrease between 1955 and 1961. Although the clothing industry showed a moderate growth, factory-made leather footwear suffered an obvious decline, this being compensated far by an increase in hand-made production. This has been one of the few artisan activities which in this period has shown a sustained growth, one to the liquidation, one after the other, of a number of industrial concerns, because of the former's particular efficiency, as will be explained below.

Wood production, with an average rate of growth of 3.3 per cent, went through two different stages of development: firstly at a rate of 6.4 per cent, a period of relatively rapid expansion encouraged by the rise in exports (especially of balsa wood), and, a second when exports fell and the production of manufacturing industry for domestic consumption was almost at a standstill, showing an annual rate of growth of 0.7 per cent.

The manufacture of wooden furniture, limited to a few small businesses, almost indistinguishable from artisan activities, showed a growth of 8.3 per cent in this period.

Paper and paperboard production, with a rate of growth of 18.5 per cent, shows one of the highest of all manufacturing industry. This development is not due to the production of paper which has still not begun in Ecuador, but to the substitution of manufactured imports of paper and paperboard products, in the form of bags and packing cases.

Printing is an activity which has expanded at an average annual rate of 7.2 per cent. In the second period, 1956-1961, the average rate of growth was higher than in the first.

Leather manufacturing has shown similar characteristics to that of footwear and clothing and, like them, shows a low rate of growth (1.2 per cent). In the period 1950-55, growth was 5.3 per cent, but in the later period declined to 2.1 per cent. This is another of the activities in which the closing down of a number of industrial plants has been compensated for by greater artisan activity.

Industrial rubber production grew at a rate of 12.6 per cent, this being much higher in the first period than in the second when, for reasons of demand and diversification of production, its development was slowed down.

With an average rate of growth of 7.5 per cent, chemical production in the period 1955-61 succeeded in doubling the growth achieved in the years 1950-1955. Besides being due to an appreciable increase in the production of paints and a rise in exports of pharmaceutical goods, this can be accounted for by a new industrial activity, with many prospects for the future, i.e., pyrethrum-based insecticides.

The petroleum products industry, with an average rate of growth of 10.6 per cent, also shows two periods with differing rates: the first of 5.7 per cent and the second of 14.7 per cent, the change being attributable to the setting up in 1960 of the new refinery. Nevertheless domestic production of crude petroleum has stagnated, which has made if necessary to import large quantities of this product for refining locally.

The non-metallic minerals industry showed an annual average increase of 14 per cent, one of the highest in the whole manufacturing sector. After an initial period of rapid increase of 21 per cent between 1950 and 1955, the rate dropped in the second period to 8.2 per cent. The principal activities of this branch of industry are the production of cement and cement products. The construction industry underwent an appreciable contraction after 1957 which adversely affected the industry.

In the metal-transforming industry, average annual growth was 11.1 per cent, which is above the average for manufacturing industry. Nevertheless, the growth rate in the second period has been low, perhaps because of the development of artisan industries.

As for other manufacturing industries, their growth has been the highest of all, the rate in both periods and the annual average being 23.4 per cent. This rapid growth can, for the most part, be accounted for by the development of the plastics industry.

3. Structure of industrial production

An analysis of the structure of industrial production by types of activity shows the marked over-all preponderance enjoyed by the industries most typically productive of consumer goods. In fact, as far as manufacturing industry is concerned, food, beverages, tobacco and textiles represent 60.5 per cent of total production (see table 3).

The production of the artisan industries mainly consists of footwear and clothing, wood and furniture, metal-transforming activities and other manufactured products.

Industry in Ecuador has shown a marked tendency to concentrate its efforts on the production of consumer goods, and has been relatively slow to develop intermediate and capital goods industries. It is thus following the process which has been demonstrated as typical of almost all the developing countries in their first stages of industrialization.

Once a high level of domestic self-sufficiency has been reached, this tendency should be modified in the next few years, especially by factors directly related to income elasticity of demand and greater import substitution.

4. The share of manufactured products in foreign trade

Because of the part it plays in the balance of payments, the share of manufactured products in foreign trade deserves serious attention.

A marked contrast may be observed between the composition of the country's imports and exports. On the one hand, manufactured goods accounted on an average, for 86.5 per cent of total imports in the years 1961 to 1963, a high percentage maintained throughout the last decade, whereas the percentage of manufactured goods among total exports was, in the years 1961 to 1963, an average of 10.4. This is an insignificant proportion and represents an appreciable drop since 1950, when manufactured goods represented 16.4 of total exports (see table 4).

Table 3

ECUADOR: MANUFACTURING INDUSTRY, 1963

(Value in thousands of dollars)

Branch of industry	Number of enterprises	Number of persons employed	Wages and salaries	Gross value of production	Raw materials	Fuels, lubricants and electric power	Value added
Food	186	8 960	6 371	75 176	47 360	1 703	26 119
Beverages	44	2 018	1 920	19 452	8 847	397	10 208
Tobacco	3	257	296	4 781	1 215	10	3 556
Textiles	93	8 155	4 724	22 301	10 931	762	10 608
Footwear and clothing	35	1 378	525	2 805	1 583	37	1 185
Wood	30	1 113	722	2 299	877	144	1 278
Wooden furniture	5	62	26	119	51	1	67
Paper and paperboard	6	441	209	4 578	3 619	30	929
Printing	55	1 664	1 131	5 733	2 538	73	3 122
Leather products	18	524	275	2 079	1 437	29	613
Rubber products	14	707	456	3 822	1 843	97	1 882
Chemical products	60	1 804	1 445	12 536	6 217	163	6 156
Petroleum products	2	1 564	1 979	12 430	7 064	206	5 160
Non-metallic mineral products	28	1 310	986	7 899	2 241	1 446	4 212
Basic metals	-	-	-	-	-	-	-
Metal transforming	40	1 258	691	4 223	2 650	102	1 471
Other manufacturing activities	20	668	354	2 903	1 390	53	1 460
Totals	622	31 883	22 110	183 136	92 863	5 253	78 020

Source: 1963 industrial survey.

Table 4

ECUADOR: IMPORTS AND EXPORTS OF MANUFACTURED GOODS, 1961-63

Year	Imports (C.i.f. value in millions of dollars)			Exports (F.o.b. value in millions of dollars)		
	Total	Manufactures	Manufactures as a percentage of the total	Total	Manufactures	Manufactures as a percentage of the total
1961	98	92	93.9	83	6	6.8
1962	89	84	94.4	108	14	13.0
1963	124	94	75.8	123	12	9.8
Average 1961-1963	104	90	86.5	106	11	10.4

Source: National Economic Co-ordination and Planning Board, on the basis of data from the Ministry of Finance foreign trade yearbooks.

(a) Growth of imports of manufactured products and the extent to which substitution has occurred (See table 5.)

Within the general industrial framework, it is in the food industry that the most important substitutions have been achieved in the period studied and, of these, that of wheat flour has been the most appreciable.

In the beverages industry there has also been an appreciable process of substitution, in spite of the fact that liquor is smuggled in significant quantities. The most important type of substitution in this field has been in malt for brewing; imports in recent years have been particularly of liquors.

The tobacco industry has shown high import figures and a rapid growth in the period, even though the figures given refer to legal imports and do not include contraband, which is very sizeable. Only in recent years has considerable import substitution, especially in pipe tobacco, been discernible.

Imports of textiles increased rapidly up to 1954 and from 1956 to 1961 were kept at a constant level. Since 1961 an increase has once more been apparent. Although domestic industry in the same period grew in a moderate way, textile smuggling in the last five years has undoubtedly accounted for the more or less stationary behaviour of imports.

Imports of footwear and clothing are insignificant in the total, especially in recent years when they fell appreciably.

Imports of wood showed a tendency to rise, especially imports of plywood and wood strips.

In the wood furniture industry, although substitution in certain years has been almost complete, imports have been recorded at the end of the period which could be replaced by domestic production.

Imports of paper and paperboard have, throughout, shown a tendency to grow, because of the lack of paper mills in the country.

In printing, imports are not significant; nevertheless, there are some goods, especially lithographical, which have maintained this activity's volume of imports and have increased it slightly.

Imports of leather and leather articles have (except in 1954 and 1955 when they were exceptional) been constant and supply specialized demand only, because the respective customs duties are high.

In the rubber industry the main types of imports are tyres, inner tubes and treads, and these have shown a rapid growth. The new plant which began production in 1963 is giving rise to an appreciable process of import substitution.

Table 5

ECUADOR: IMPORTS OF MANUFACTURES, 1950-63

(F.o.b. value in thousands of dollars)^{a/}

Branch of industry	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
<u>Typically producing consumer goods</u>														
Food	3 212	4 440	5 172	4 966	6 930	5 553	4 307	4 042	4 224	4 189	4 056	3 915	4 266	3 960
Beverages	506	610	744	831	1 218	952	658	669	556	349	256	213	212	220
Tobacco	536	692	1 041	995	716	1 194	1 383	2 194	2 439	2 580	2 298	18	99	72
Textiles	3 992	5 504	8 450	8 329	12 664	9 535	5 596	6 366	6 144	4 968	6 133	6 404	7 092	8 593
Footwear and clothing	199	331	213	214	316	529	373	471	488	215	241	204	232	293
Wooden furniture	41	11	64	82	17	10	6	4	2	14	33	100	38	21
Printing	112	127	224	204	452	471	444	306	234	470	1 302	784	509	812
<u>Total</u>	<u>8 598</u>	<u>11 715</u>	<u>16 208</u>	<u>15 621</u>	<u>22 303</u>	<u>18 244</u>	<u>12 767</u>	<u>14 052</u>	<u>14 087</u>	<u>12 785</u>	<u>14 319</u>	<u>11 638</u>	<u>12 448</u>	<u>13 971</u>
<u>Typically producing intermediate and capital goods</u>														
Wood and cork	39	31	79	86	125	91	112	90	113	134	211	157	182	247
Paper and paperboard	1 259	1 944	2 608	1 831	2 399	2 695	2 404	2 700	2 692	2 940	3 321	3 176	3 314	3 175
Leather products	61	48	68	51	237	197	81	95	104	85	108	92	81	113
Rubber products	1 021	1 417	1 685	1 748	2 769	2 466	2 492	2 993	2 906	2 996	3 564	2 894	2 863	2 499
Chemical products	4 076	5 849	6 338	6 802	11 155	11 332	12 807	14 704	13 343	12 168	14 261	13 005	14 437	17 228
Petroleum products	1 022	1 471	1 901	1 635	4 884	1 699	4 627	1 660	2 466	2 269	3 421	3 083	1 646	3 422
Non-metallic mineral products	1 139	1 345	1 349	1 432	2 785	2 004	1 926	1 908	1 974	2 122	2 379	2 403	2 046	2 520
Basic metals	2 069	2 252	2 885	4 455	5 400	5 996	6 712	6 039	5 450	4 949	5 877	6 031	4 960	6 164
Metal transforming	14 370	20 997	19 882	23 772	37 174	34 731	32 244	31 515	37 713	32 338	40 139	35 945	29 471	40 068
Other manufacturing activities	905	918	1 183	1 117	3 250	2 810	2 190	2 516	2 851	2 683	3 481	2 733	2 628	3 856
<u>Total</u>	<u>25 961</u>	<u>36 272</u>	<u>37 928</u>	<u>42 909</u>	<u>70 178</u>	<u>64 081</u>	<u>65 595</u>	<u>64 220</u>	<u>69 612</u>	<u>62 684</u>	<u>76 762</u>	<u>69 519</u>	<u>61 628</u>	<u>79 832</u>
<u>Grand total</u>	<u>34 559</u>	<u>47 987</u>	<u>54 186</u>	<u>58 530</u>	<u>92 492</u>	<u>82 235</u>	<u>78 362</u>	<u>78 272</u>	<u>83 699</u>	<u>75 469</u>	<u>91 081</u>	<u>81 157</u>	<u>74 076</u>	<u>93 803</u>

Source: National Economic Co-ordination and Planning Board, on the basis of data from the foreign trade yearbooks of the Department of Customs and Ministry of Finance.

a/ Converted into dollars at the average exchange rate for each year.

Imports of chemical products show one of the most significant increases. Items such as basic chemicals, pharmaceutical products and cosmetics, man-made fibres, fertilizers and insecticides have grown rapidly in the period studied.

In the field of petroleum products the tendency has always been for imports to rise, due to the lack of, or deficiencies in national production.

Imports of non-metallic mineral manufactures fluctuated violently in the first few years, perhaps because of the very nature of the imported goods. Then, in recent years, they maintained a more or less stable level. Two groups of manufactures are the most representative in the total imports in this field, i.e., glass products and pottery.

Imports of steel products grew especially rapidly in the first five years of the period and this growth was maintained afterwards with slight fluctuations. The lack of a national industry has forced the country back on supplies from abroad, which have varied in direct relation to fluctuations in the construction industry and to the availability of foreign exchange.

In the metal-transforming industry, imports have grown consistently, and only in simple metal manufactures has there been some substitution. In imports of electrical machinery and transportation materials, the increase has been rapid and sustained; with industrial machinery, on the other hand, there has been in certain years a decrease.

Imports of other manufactures have shown a significant increase, despite the fact that the development of national production has also been pronounced.

In general, it has been imports in the branches that are most typically productive of consumer goods that have shown the least growth in the period studied. In some, such as the food and beverages industries, appreciable reductions can even be discerned, corresponding to the growth registered by domestic production in these branches of industry.

In the branches of industry that are most typically productive of intermediate and capital goods, the small amount of substitution which has occurred in certain fields has been imperceptible compared with the rapid increase in imports of the majority of these goods. Especially prominent on account of their growth are the chemical and the metal-transforming industries. These form the most dynamic part of industry since their products show a higher elasticity in the process of economic development.

(b) Evolution of exports of manufactured goods

The analysis of the share of manufactured goods in the country's exports established that little progress had occurred in manufacturing industry from this stand point. An examination will now be made of the past evolution of these exports, their trends and in which branches of industry changes of importance have taken place (see table 6).

Table 6

ECUADOR: EXPORTS OF MANUFACTURES, 1950-63

(F.o.b. value in thousands of dollars) ^{a/}

Branch of industry	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
Food	364	10	21	438	289	198	290	1 736	3 438	2 263	1 734	2 721	9 721	7 797
Beverages	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Textiles	268	121	46	49	69	40	14	19	25	21	6	7	5	2
Footwear and clothing	3 196	2 962	2 698	3 068	1 554	931	1 365	1 000	824	732	1 030	456	576	379
Wood	694	1 090	953	959	902	992	965	1 814	1 461	1 437	1 257	1 161	1 152	1 556
Wooden furniture	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paper and paperboard	3	6	-	-	-	-	-	-	-	-	-	3	5	76
Printing	1	-	1	-	2	1	1	-	-	-	-	-	-	-
Leather products	105	139	107	119	137	111	127	90	107	97	117	101	102	116
Rubber products	2	1	1	-	1	-	-	-	-	-	17	-	6	-
Chemical products	388	559	823	735	957	820	684	397	891	741	1 041	1 436	1 356	1 777
Petroleum products	8	2	9	14	15	-	-	-	-	-	-	-	-	-
Non-metallic mineral products	2	5	2	1	1	1	1	-	3	-	1	-	-	-
Basic metals	61	-	-	-	29	18	187	214	142	10	31	28	30	25
Metal transforming	878	235	25	25	105	5	588	175	43	112	77	111	56	218
Other manufacturing activities	102	141	73	88	49	89	31	12	12	9	8	3	735	96
Totals	6 012	5 271	4 759	5 496	4 109	3 206	4 253	5 457	6 946	5 422	5 320	6 027	13 744	12 042

Source: National Economic Co-ordination and Planning Board, on the basis of data from the foreign trade yearbooks of the Department of Customs and Ministry of Finance.

^{a/} Converted into dollars at the average exchange rate for each year.

/Specifically, there

Specifically, there are four branches in which exports of manufactured goods are relatively important; food products, processed wood, chemical products and footwear and clothing.

An appreciable growth has taken place in sales of food products abroad, mainly because of larger exports of sugar in recent years.

Exports of textiles, footwear and clothing, which, at the beginning of the period, were relatively important in exports of manufactured goods, have become almost negligible in recent years. This decline is explained by the fall in exports of Panama hats, which sharply affected the areas where they are produced.

Wood has been a staple item in Ecuadorean exports, but, nevertheless, in the period analysed, there was first stagnation, and then from 1957 (when export figures were at their peak) a continual decline. Exports consist, for the most part, of balsa wood which the country is especially fitted to produce; nevertheless, demand from abroad for this product has shown a lack of stability.

Exports of chemical products have fluctuated appreciably in this period, but, in relation to other goods, their value has always been significant. The main chemical products sold abroad have been pharmaceuticals, in which the country has specialized to a certain extent. Nevertheless, the market has not been a safe one, as the importing countries, especially Colombia, have developed their own domestic production, giving it high tariff protection.

In recent years there has been a slight reaction in exports of pharmaceutical products, while as pyrethrum extraction has provided a new type of export, with good prospects for future growth.

Recorded exports of basic metals consist of scrap, which, in the years 1956-58, was of significant volume. Domestic plants now exist for the melting down of scrap metal and so, in the future, these exports will cease.

Exports in the metal-transforming field consist for the most part of re-exports, as is also the case with the greater part of sales of other manufactured products.

(c) Unrecorded imports of manufactures

Illegal trade in manufactured products, which, in this type of item, affects Ecuador almost unilaterally, through clandestine imports, represents an important part of total foreign trade and provides competition for many branches of domestic production. An estimate made by the National Planning Board, for 1961, of the principal items affected by this type of smuggling gave approximate values as follows (in millions of dollars): textiles 5.5; metal-transforming products 2.5; tobacco 1.7; chemical products 1.4; beverages 1.4; other manufactures 3.0.

/Although the

Although the figures given do not include illegal operations such as false declarations and other forms of contraband which are difficult to quantify, the importance of this clandestine trade is obvious from the fact that the total estimated amount is equal to 17 per cent of all imports of manufactures recorded that year.

The effects of this illicit trading have become a depressing and disturbing feature of the economic development of the country.

(d) Domestic and imported supplies of raw materials and intermediate products

The proportions of national and imported supplies of raw materials and intermediate goods used by manufacturing industry, broken down by types of industry, are given in table 7.

It will be seen that 43 per cent of the raw materials used by industry are imported. Those branches of industry whose operation depends on a high utilization of national resources are: wood, wooden furniture, leather and non-metallic minerals. The paper, printing, metal-transforming and other manufacturing industries depend almost completely on foreign raw materials. In the petroleum products branch, the percentage is distorted by the fact that the value of domestic petroleum used in refining cannot be properly estimated.

Many of the raw materials at present imported by the country could be produced domestically without great effort, especially those originating in the agricultural sector: wheat, cotton, tobacco, rubber, etc. Those branches of industry using paper and iron as raw materials depend entirely on imports, as there is no national production of these basic items. Future economic and industrial development will have to put special emphasis on the greatest possible import substitution of raw materials and intermediate goods, if it is hoped to reduce the extent to which these items figure in the balance of payments, and allow a much broader margin for the imports of the capital goods which will be so badly needed for development purposes.

Delay in raw material substitution for industry would reduce the latter's contribution to national income, and thus weaken the influence it could have on other sectors of economic activity if those were to supply the raw materials in question, apart from the adverse effects that would ensue for the balance of payments.

5. Investment in and financing of manufacturing industry

(a) Private investment

It was calculated in 1961 that approximately 3,736 million sucres of fixed capital were invested in manufacturing industry. This sum, measured against the 1,181 million sucres produced, gives a capital-product ratio of 0.32 per cent.

/Table 7

Table 7

ECUADOR: CONSUMPTION OF RAW MATERIALS IN
MANUFACTURING INDUSTRY, 1963

Branch of industry	Total consumption (Thousands of dollars)	Percentage composition of raw material consumption	
		Domestic	Imported
Food	47 360	71.5	28.5
Beverages	8 847	76.6	23.4
Tobacco	1 215	44.4	55.6
Textiles	10 931	41.5	58.5
Footwear and clothing	1 583	41.5	58.5
Wood	877	99.3	0.7
Wooden furniture	51	80.4	19.6
Paper and paperboard	3 619	2.8	97.2
Printing	2 538	0.1	99.9
Leather products	1 437	84.8	15.2
Rubber products	1 843	14.5	85.5
Chemical products	6 217	30.6	69.4
Petroleum products	7 064	55.7	44.3
Non-metallic mineral products	2 241	83.0	17.0
Basic metals	-	-	-
Metal transforming	2 650	9.4	90.6
Other manufacturing activities	1 390	8.8	91.2
<u>Total</u>	<u>99 863</u>	<u>57.0</u>	<u>43.0</u>

Source: National Economic Co-ordination and Planning Board.

/The productivity

The productivity of manufacturing industry and the capital-product ratio are in direct relation to the greater or lesser utilization of equipment. From two studies made about this level of industry, in 1959 and 1961, figures have been obtained for unutilized capacity and are presented in table 8. From these, it can be concluded that manufacturing industry in Ecuador employed only about 60 per cent of its productive capacity, which indicates that with only a small amount of investment, this activity could attain better productivity indexes in the future.

Table 8

EQUADOR: UNUTILIZED CAPACITY IN MANUFACTURING INDUSTRY

(Percentages)

Branch of industry	1959 survey	1961 survey
Food	36.5	34.0
Beverages	37.6	51.9
Tobacco	50.0	22.1
Textiles	40.0	52.4
Footwear and clothing	63.8	47.8
Wood	59.9	57.5
Wooden furniture	50.0	52.1
Paper and paperboard	34.2	59.3
Printing	45.4	50.4
Leather products	40.3	55.3
Rubber products	61.5	53.8
Chemical products	53.9	40.2
Petroleum products	50.0	-
Non-metallic mineral products	32.6	24.1
Metal-transforming	43.3	53.9
Other manufacturing activities	44.7	33.1
<u>Total</u>	<u>40.7</u>	<u>41.2</u>

Source: National Economic Co-ordination and Planning Board.

Nevertheless, any progress obtainable in this field will depend largely on the elimination of those obstacles which cause under-utilization of equipment.

/The causes

The causes of the low utilization of productive capacity are:

- (i) Lack of demand due to the small size of the market or to the low income of large sectors of the population;
- (ii) Over-investment in activities which already show unutilized capacity;
- (iii) Provisions in labour legislation, which though on the one hand very just, penalize overtime; and
- (iv) The legal constitution of firms, the majority of which are under single ownership, although many are disguised as corporations.

The irregular nature of industrial investment in 1950-61 may be gathered from the figures for imports of industrial and mining machinery and equipment (see table 9). Their value increased appreciably between 1950 (4.6 million dollars) and 1954 (10.2 million dollars) with an annual average increase of 9.5 million dollars in the rest of the period.

Table 9

ECUADOR: IMPORTS OF INDUSTRIAL AND MINING MACHINERY AND EQUIPMENT, 1950-61

Year	Tons	F.o.b. value (Thousands of dollars)	Year	Tons	F.o.b. value (Thousands of dollars)
1950	6 160	4 592	1956	7 825	11 158
1951	5 821	5 981	1957	6 249	9 247
1952	7 682	6 671	1958	7 719	10 731
1953	6 449	7 052	1959	4 931	7 483
1954	8 065	10 200	1960	5 431	9 336
1955	7 279	9 314	1961	7 009	9 899

Sources: Estimates based on customs statistics and foreign trade yearbooks,
1950-54: National Economic Co-ordination and Planning Board;
1955-61: Central Bank.

/Although the

Although the policy of low tariffs for imports of machinery and equipment has been continued throughout the period studied and, at the same time, first the Industrial Protection Law and then the Industrial Development Law exempted industries wholly and partly from duties on imports of this equipment, investment in industrial and mining machinery and equipment has failed to grow to an acceptable level as the figures in table 9 show.

This has resulted, and will result even more so in the future, in the supplementing of tariff incentives for machinery exports by others of a different kind and may also lead to endeavours to remove structural obstacles, in order to reach the desired level in investment and so speed up the industrialization process.

(b) Financing of private investment.

A rough idea of the structure of the sources of industrial investment can be obtained from the sample for thirty-eight enterprises based on balance sheets for the years 1953 to 1957. Although the sample is small and its time span may not be representative of the period studied, the relation established will give an idea of how industrial investment is financed and may point to mayor changes that ought to be made in future (see table 10).

It will be seen that financing from sources external to the enterprises themselves outstripped contributions from internal sources. Among the internal sources, it is clear that only a small part was played by reinvested profits which barely represent 14 per cent of the total net amount obtained in the period. Of the external sources of financing, credit was more important than capital contributions.

Table 10

EQUADOR: SOURCES OF INVESTMENT FUNDS IN INDUSTRY

	Thousands of dollars	Percentage
<u>Domestic</u>	<u>1 818.1</u>	<u>41.5</u>
Reserves	1 481.4	33.8
Undistributed profits	336.7	7.7
<u>External</u>	<u>2 564.5</u>	<u>58.5</u>
Loans	1 352.4	30.9
Capital contributions	1 212.1	27.6
<u>Total</u>	<u>4 382.6</u>	<u>100.0</u>

Source: National Economic Co-ordination and Planning Board.

/(c) Bank

(c) Bank credit

Bank credit has been a very important factor in industrial development. In the period 1950-61 it increased by 176 per cent; nevertheless, in certain years, its relation to total credit hardly expanded at all (see table 11).

Table 11

ECUADOR: BANK CREDIT FOR INDUSTRY, 1950-61

Year	Total (Millions of dollars)	Industrial (Millions of dollars)	Industrial credit as a percentage of the total	
			Percentage	Growth
1950	120	13	10.9	100.0
1951	129	16	12.4	125.4
1952	144	21	14.5	156.0
1953	181	26	14.4	195.2
1954	201	23	11.6	174.6
1955	225	23	10.3	178.0
1956	244	23	9.3	176.1
1957	248	31	12.4	238.3
1958	246	34	13.9	258.4
1959	257	32	12.3	246.9
1960	307	37	12.0	287.1
1961	286	32	11.3	275.6
1962	282	29	10.4	222.9
1963	333	38	11.5	291.6

Source: National Economic Co-ordination and Planning Board, on the basis of Central Bank data.

In the composition of bank credit for industry, there was a substantial increase in loans from private banks and the Central Bank, especially the former, whose share rose from 4.5 per cent in 1955 to 13 per cent in 1963.

The Development Banks, on the other hand, have kept their credit operations for industry at much the same level, chiefly because they have been concentrating to a much greater extent on the agricultural sector. This trend is compensated for by the resources which the National Finance Corporation provides especially for industry.

/The current

The current credit patrons are as follows:

<u>Institution</u>	<u>Interest Rate</u>	<u>Term</u>	<u>Security</u>
Commercial Banks	10	Up to 6 months	Any type
Development Banks	9	1 to 10 years	Any type
National Financing Corp.			
For fixed investment	10	Up to 10 years	Mortgage and collateral
For working capital	10	Up to 5 years	Mortgage and collateral
		Period of grace: 2 years	
Private financing			
For fixed investment	10	Up to 10 years	Any type
		Period of grace: 3 years	
For working capital	10	Up to 3 years	Any type
		Condition: 50 per cent in dollars	

It may be said that in Ecuador's case the credit needs of the industrial sector are to a large degree satisfied. The loans granted by the international organizations (Inter-American Development Bank, International Development Agency, Atlantic Community Development for Latin America, etc.) to the domestic financial institutions are very considerable. Unfortunately they are not needed to the extent which might be desired. The entrepreneurs show considerable reluctance to ask for credits from the Ecuadorian financial organizations, chiefly because the conditions required by the IDA for credit grants to users are difficult to satisfy: purchase of North American machinery, importation in ships flying the United States flag, etc. For this reason IDB loans, which allow the entrepreneur greater freedom of choice in purchasing machinery, have been much more widely used. These restrictions on the providing loans for credit grants have limited the normal growth of the sector, and especially that of medium- and small-scale industry, the most suitable machinery and equipment for which is produced in the European countries.

(d) Public investment

The contribution of public capital to the financing of Ecuadorian industry has been small.

/At first,

At first, it played a direct part, financing and administering enterprises. Lately, with the weakening of the Development Corporation and Development Bank, this policy has been modified and replaced by one of participation to a differing extent in the capitalization of enterprises, leaving administration in private hands, and in recent years it has been the saving bank which, on a share basis, have invested in industry. Furthermore, the Ministry of Development has financed and supported subsidized industrial enterprises where these have fulfilled a non-profit development function.

The value of public capital invested in industry may be estimated at 85 million sucres for 1961, which is a very small proportion of the total capital of the sector.

(e) Foreign investment

The share of foreign capital in the financing of Ecuadorian industry has also been limited. The small size of the market has been the main reason why the country has been unable to benefit from the flow of foreign capital which has played an active part in the development of other countries of the region. Nevertheless, in certain fields of activity, the part played by such capital has been very valuable. Table 12 shows the distribution of this investment by branches of industry in the years 1955 and 1961.

Besides extending to only a few enterprises, foreign investment in 1955 was concentrated in certain activities; nevertheless, in recent years, as the figures for 1961 show, a diversification of investment to other fields has taken place, and foreign capital has shown greater interest in investing in industry, as a result not only of very favorable institutional circumstances, but of the prospects of the Latin American Free-Trade Association, which overcomes the major obstacle caused by capital's lack of interest in investing in Ecuador. Moreover, today, there are many countries which send their capital to the developing regions in search of remunerative investments.

/Table 12

Table 12

ECUADOR: FOREIGN INVESTMENT IN INDUSTRY

(Thousands of dollars)

Branch of industry	1955	1961
Food	1 978	3 005
Beverages	6 471	9 948
Textiles	-	1 077
Paper and paperboards	-	436
Chemical products	-	1 938
Petroleum products ^{a/}	9 764	14 113
Non-metallic mineral products	2 095	1 167
Metal-transforming	-	397
Other manufacturing activities	-	242
<u>Total</u>	<u>20 308</u>	<u>32 323</u>

Source: Central Bank.

a/ Approximate distribution of industrial investment.

6. Geographical location of industry

The country's lack of geographical unity and structural shortcomings have led to a concentration of industrial activity. An uneven distribution of industries means great differences in the development impetus which the different areas and regions receive from this dynamic sector. (See table 13.)

Manufacturing industry is concentrated in two provinces in particular: Guayas and Pichincha. In 1963 they accounted for 77 per cent of all employment, 83.5 per cent of wages, 87.4 per cent of the product and 80.6 per cent of the gross value of production.

An examination of the regional distribution of production by branches of industry reveals a certain specialization of the different areas in particular activities. The whole of the petroleum industry is concentrated in Guayas, as is 86 per cent of the tobacco industry, 78 per cent of wood and 75 per cent of non-metallic mineral production. Pichincha has 80 per cent of the footwear and clothing industry, 78 per cent of paper and paperboard production and 70 per cent of the textile industry. In the rest of the country only rubber, leather and textiles are of any importance with 36, 31 and 23 per cent of the total respectively.

/Table 13

Table 13

ECUADOR: LOCATION OF MANUFACTURING ESTABLISHMENTS IN THE PROVINCES, 1963

(Value in thousands of dollars)

Provinces	Number of establishments	Persons employed (Number)	Wages and salaries	Gross value of production	Raw materials	Fuels, lubricants and energy	Value added
Guayas	236	13 159	11 507	100 128	49 673	3 226	47 229
Pichincha	249	11 398	6 969	47 434	25 351	1 094	20 989
Others	154	7 326	3 634	35 574	24 839	933	9 802
<u>Total</u>	<u>639</u>	<u>31 883</u>	<u>22 110</u>	<u>183 136</u>	<u>99 863</u>	<u>5 253</u>	<u>78 020</u>
Percentage ratios							
Guayas	36.9	41.3	52.0	54.7	49.7	61.4	60.5
Pichincha	39.0	35.7	31.5	25.9	25.4	20.8	26.9
Others	24.1	23.0	16.5	15.4	24.9	17.8	12.6
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Source: Industrial survey, 1963.

7. The industrial labour force and its productivity

Labour employed by the manufacturing sector was estimated at 32,000 people in 1963.

A relevant fact which it should be clearly established is that manufacturing industry is not well equipped to give much employment or to provide relief for redundant labour from other sectors. Industry is becoming more and more mechanized and, consequently, its need for personnel is declining at the same time as higher qualifications are being called for. This constitutes a serious problem, for which appropriate planning is necessary, since the labour force is growing each year, while work is becoming less and less available.

Within manufacturing industry, productivity varies appreciably in the different kinds of activities (see table 14).

The cigarette and petroleum products industries show fairly high productivity averages compared with other activities, due, firstly, to the taxes levied on production and, secondly, to the difficulty of separating the extraction of petroleum from the industrial activity of refining.

Productivity is at its lowest among those branches of manufacturing industry which face strong competition from artisan activities: the footwear and clothing, wood, wooden furniture, leather and metal-transforming industries. Strictly speaking, these mostly consist of small industrial enterprises which have evolved from crafts.

Table 14

ECUADOR: LABOUR FORCE AND PRODUCTIVITY IN
MANUFACTURING INDUSTRY, 1963

Branch of industry	Gross product (Thousands of dollars)	Labour force (Number of persons)	Productivity (Dollars)
Food	26 113	8 960	2 914
Beverages	10 208	2 018	5 058
Tobacco	3 556	257	13 836
Textiles	10 608	8 155	1 300
Footwear and clothing	1 185	1 378	859
Wood	1 278	1 113	1 148
Wooden furniture	67	62	1 080
Paper and paperboard	929	441	2 106
Printing	3 122	1 644	1 876
Leather products	613	524	1 169
Rubber products	1 882	707	2 661
Chemical products	6 156	1 804	3 412
Petroleum products	5 160	1 564	3 299
Non-metallic mineral products	4 212	1 310	3 215
Basic metals	-	-	-
Metal-transforming	1 471	1 258	1 169
Other manufacturing activities	1 460	668	2 185
<u>Total</u>	<u>78 020</u>	<u>31 883</u>	<u>2 447</u>

Source: National Economic Co-ordination and Planning Board, on the basis of data from the 1963 industrial survey.

Chapter II

INDUSTRIAL DEVELOPMENT PLANS OR PROGRAMMES

Two years have now gone by since the adoption by the Government of Ecuador of the General Development Plan as its overall economic policy, and it may be said that the most difficult stage in the execution of the plan has been passed: that is, the establishment of the foundations and adjustment of the whole administrative machinery to the requirements of the programmes. Common to the various economic sectors in the country, this situation has also obtained in the case of manufacturing industry. Industrialization policy, guided by measures such as the Industrial Development Law, the Companies Law, the Handicrafts and Small Industries Development Law, as well as by the creation of bodies for channelling of credit, such as the National Finance Corporation Securities Commission and the Ecuadorean Development Corporation (the first a public and the second a private body) has succeeded in fulfilling the role required of it by industrialization which will make this sector the motive force in the country's growth.

1. Industrial Programme

Within the general development programme, the central aim of the industrial sector is to achieve a rate of growth related to general economic development and, at the same time, to become the dynamic factor behind the expansion and growth of the remaining sectors of the economy.

Within this framework, industry has three functions to fulfil:

- (a) To contribute, by its production, to the supply of manufactured goods;
- (b) To make available and to generate foreign exchange, through import substitution and the growth of exports; and
- (c) To contribute to the provision of employment and especially to the creation of more productive forms of employment.

But, apart from these functions related to economic theory and general development, the industrial programme will fulfil an important social objective by helping to reach the targets set for the supply of food, clothing and housing for the Ecuadorean people.

For the full implementation of the industrial development programme, the following important points must be met:

- (a) Production to meet established targets of domestic and foreign demand through traditional and new industry. An important feature of the

/programme will

programme will be the transformation of a considerable part of the artisan sector into a small but dynamic industry, and the allocation to that sector of fields of activity really suited to its development.

(b) Investment requirements to carry out this programme and the forms of domestic and foreign financing.

(c) The necessary industrial inputs in terms of raw materials and domestic and imported equipment, fuels, energy, etc.

(d) The employment to be generated by industry and the suitability of labour to carry out the tasks assigned to it.

The use of an interindustrial matrix, by branches of industry, will ensure the programme's coherence, and the soundness of the projections and related requirements.

Industrial policy will complement the industrial programme. The former will establish industrialization strategy and policy measures to achieve the aims proposed for the industrial plan.

2. Possibilities of growth in the manufacturing sector

In the development plan, the manufacturing sector and, more specifically, manufacturing industry have a great responsibility to fulfil. An examination, follows in general terms, of the possibilities for growth shown by the sector and, particularly, the manufacturing field, as regards the development objectives assigned to it.

(a) Development resulting from better provision for the basic needs of the population

The high demographic growth characteristic of Ecuador, the increase in per capita income and the better distribution envisaged by the programme, together with the greater elasticity of manufactured products, will bring about a very substantial increase in the requirements of the domestic market.

The basic needs of the people - food, clothing and housing - which at present are catered for at too low a level, represent a high potential demand for manufactured goods. The fulfilment of this demand, at the level foreseen in the plan, will call for and stimulate the growth of industry and of the primary activities which supply it with raw materials.

The industrial sector will provide the manufactured foodstuffs needed to satisfy the diet requirements laid down in the plan: meat, dairy products, vegetable oils and fats, flour and preparations of flour, and refined salt and sugar.

In clothing, the main burden lies with the textile industry, which has to provide fabrics of suitable quantity, quality, and price. The programme estimates a 42 per cent increase over the 1961 figure in consumption per capita of textile materials.

/Where housing

Where housing is concerned, the industrial sector will provide the materials needed to meet the proposed construction goals. The programme estimates that the demand for construction materials such as cement, structural steel, iron fittings for construction, electrical installation materials, etc. will be completely satisfied by domestic production, although some of the raw materials will have to be supplied from abroad.

(b) Industrial development through import substitution

Import substitution is of great importance for the country's industrial development, for achieving production goals, and above all for freeing foreign currency for uses compatible with the needs of economic growth.

The field is a broad one, and the effort of substitution, apart from being directed towards consumer goods (especially durable consumer goods), will bring special attention to bear on intermediate goods of top priority, and the substitution of some capital goods will also be undertaken.

(c) Development of export industries

As previously stated, the export of manufactured products is at present a relatively unimportant item, and the industrial enterprises that have operated in foreign markets are few and far between. The industrial development programme plans for a considerable increase in the exports of manufactured goods, bearing in mind the actual possibilities of the country, which will be put into operation by means of a more vigorous policy.

Agricultural production will continue to be of prime importance as a future export item; however, high agricultural productivity and quality will be made use of to industrialize and export agricultural produce in the form of manufactured goods either in a semi-processed state, or ready for consumption. These goods will undoubtedly be the main export items for the industrial sector, but to an even greater extent than has been the case in the past.

The Latin America Free-Trade Area offers great scope for the expansion of export industries, the development of which is not yet clearly foreseen, but which may exceed the estimates already made, since these estimates mainly took the country's traditional exports and foreign markets into account. A detailed survey which is now being carried out will give a more precise picture of the future possibilities.

If Ecuador made full use of the skill and traditions of its craftsmen, it could develop precision industries which in Latin America have not yet been fully launched. This is a fact which industrial promotion will take highly into account, as representing a field of specialization with a promising future. If the high proportion of manual labour required for production is taken into consideration, the structural shortcomings characteristic of developing countries would then be of less importance.

/(d) Development

(d) Development through displacement of the production of the artisan sector in favour of manufacturing industry

This is a structural change which has to be carried out within the manufacturing sector itself, and in accordance with the established programme. Such a displacement offers an important possibility of boosting the production of manufactured goods.

There are certain activities in the artisan sector which have little possibility of future development, and although the country has a worthy tradition in craftsmanship which must be made use of in its industrial development, some production methods will have to be changed. Changes are particularly necessary in the case of articles of everyday use, which industry is in a better position to supply at a lower cost, and which can consequently be made available to a larger number of consumers. The competition that the artisan sector can offer manufacturing industry is in many cases due to the low wages paid to craftsmen, or to the marginal conditions under which artisan work or cottage industry is carried out as a complementary activity to agricultural labour.

Industrial development through displacement of the artisan sector in favour of manufacturing industry is shown by a comparison of the estimated growth rates in the programme for the two items. While manufacturing industry with an annual growth rate of 10.5 per cent, is expected to increase its production by 145 per cent between 1964 and 1973, the artisan sector, with an annual growth of 5.4 per cent, will be increasing its production by only 61 per cent.

This displacement will become an important factor in boosting manufacturing industry, and will therefore be encouraged or even brought about where such a displacement is deemed necessary. However, in cases where manual labour gives the finished product a special quality and a higher price, it will be maintained and encouraged as true craftsmanship.

Several considerations, of course, will arise during the gradual displacement which will be put into operation when the programme is carried out: the development of manufacturing industry, which will give good scope to a number of artisans; the transformation of workshops into small dynamic industries; the improvement of those workshops which have future possibilities, and displacement in the direction of other productive activities.

(e) Development by means of industrial integration

This refers to the promotion of certain kinds of industry, the setting up of which is important mainly because of the possibility of development they would permit in other industries.

A small market like the one existing in Ecuador, which, in the case of certain commodities is shared among many centres of production, shows in several instances the need for industrial integration by means of factories which carry out production with suitable quality and prices. Examples of

/this type

this type of integration in industrial fields would be the textile and metal-transforming industries, where finishing, forging or smelting equipment which would not be practical to install in small individual plants, would carry out work for all of them. The same would apply, for example, to mouldings needed by a number of enterprises, or to heavy presses with high production capacity and which, because of the high cost involved, have not been installed in the country so far.

Industrial integration and development along these lines are of special importance to countries like Ecuador which do not have huge sums of capital available and must therefore make the utmost of each and every investment.

3. Programming organization, and organizations responsible for carrying out industrial development.

Industrial programming in Ecuador, which forms part of the country's General Development Plan, is carried out by the National Committee for Programming and Economic Co-ordination. This committee is an organization registered with the Presidency of the Republic in an advisory capacity, which supervises the realization of programmes by means of an annual laying down of priorities for the carrying out of projects.

The organizations responsible for carrying out the industrial development programme are:

(a) the Ministry of Industry and Trade, which is in charge of administrating the Law of Industrial Promotion and the Law of Small-scale Industry and Artisan Industry, through the Government Department of Industry. The Ministry's responsibilities also include the governmental control of industrial enterprises as well as the assessment of projects to be put into operation;

(b) the Development Centre (CENDES), whose programmes for working out promotion, market, and engineering surveys are co-ordinated with plans laid down by the National Programming Committee, promotes industrialization and gives technical assistance to existing enterprises or to specific new projects.

(c) the National Finance Corporation and the Ecuador Development Corporation have the specific function of financing the Manufacturing Programme by granting loans to enterprises which are starting up or which need to expand their installations. The National Promotion Bank has a similar credit system for small-scale industry and artisan industry; and

(d) organizations at a regional level such as the promotion centres of Azuay, Cañar y Morona Santiago, Manabí, Esmeraldas, Loja, Carchi, El Oro, etc. which carry out projects on a local scale for their respective zone or province.

4. The general strategy of industrial development

The group of principles relating to industrial development strategy and to industrial policies which are part of the proposals contained in the general programme form the broad guidelines for industrial development.

/(a) The

(a) The industrial programme

The industrial programme is compatible with and relevant to the general programme, and covers the complete manufacturing sector as a form of sectoral programming. It incorporates the fixing of objectives, of general and sectoral production targets, investment, financial resources, import substitution, exports, etc., as well as including the drawing up and analysis of practical industrial projects.

(b) The role of industry in economic development

The plan intends to get rid of economic stagnation; provide work for a large proportion of the labour force at present unemployed; reduce the serious gaps in the balance of payments, and increase the country's general productivity level, by means of an organized effort aimed at finally overcoming the country's main difficulties.

Industry will in fact, directly or indirectly, provide employment for a considerable proportion of Ecuador's population. Economic growth will bring about changes in the employment structure which favour the non-agricultural sector, will raise the level of average productivity of the whole economy, and will increase the population's income. Industry will make great efforts to substitute imports in order to free means of payment abroad for purposes more in line with the goals stipulated in the plan. Industrial development will produce a series of repercussions which will reach both the sources of raw materials as well as the consumers of goods, thus bringing about a general resuscitation of the economy, with consequent fresh impulses to industry itself.

(c) The objectives of industrial development

The analysis of the industrial programme clearly showed the essential role to be played by industry in the country's future development: its contribution to the supplying of manufactured goods, the freeing and earning of foreign currency, and the absorption of manpower and increase in productivity.

The goal laid down in programmes is the achievement of an average annual development rate in the manufacturing sector of 8.5 per cent between 1964 and 1968, and of 8.7 per cent between 1968 and 1973; the figures for the manufacturing industry over the same period are 10.2 per cent and 10.7 per cent respectively. The growth registered in the sector would be in the region of 110 per cent more than the 1964 production level, and the gross product of manufacturing industry would increase from 1,443 million sucres in 1964 to 3,540 million in 1973 - representing a growth of 145 per cent. The growth in artisan and home industries in the same period would be 61 per cent.

This vigorous development of the manufacturing industry would enable it to produce 68 per cent of the total gross product of the manufacturing sector in 1973, as opposed to 58 per cent in 1964. The structural change will also to some extent be caused by the gradual transformation of artisan industries into small and more dynamic industrial units.

/The scheduled

The scheduled growth would tend to make manufacturing industry a highly dynamic unit which would set the pace for economic development.

(d) Private initiative

Industrial development will be chiefly carried out with private enterprise and investment. The government's position will be to help and encourage such private activity through industrial policy. The government will make industrial investments only in exceptional cases where basic projects for economic development are concerned, especially in industrially backward areas; its main role will be to invest in infrastructure, to remove any institutional obstacles to investment, and to encourage and actively promote industrial investment.

This means that the greater the private sector's responsibility of direct action becomes, the more dependant the application of the industrial programme will be on the efficiency of economic policy to encourage private enterprise to operate in accordance with the basic outlines of the plan.

(e) Location and decentralization

A survey of manufacturing industry has shown that a very high proportion of its personnel and of an even higher proportion of its total value are concentrated in two provinces: Guayas and Pichincha. A balanced development of the country as a whole must aim at avoiding a concentration of the benefits of industry in certain areas. The industrial projects listed in the programme include a high percentage of industries which are extremely flexible as far as choice of location is concerned. In this respect a suitable promotion programme will be carried out with the following policies as a basis:

- (i) regional survey and publishing of available raw materials and the other resources useful to industry;
- (ii) promotion of "industrial parks" which will provide indispensable amenities and services for the installation of industries in the area selected in the programme;
- (iii) establishing in such areas branches of leading banks and government offices interested in industrial promotion, and of institutions for employment guidance and labour training;
- (iv) easier credit terms, and/or special tax relief in the selected areas, and
- (v) investment in strong power-generating plants to bring "wandering" industries to the selected areas.

The measures intended to decentralize industrial development will only be taken to favour provinces which have been selected as areas for the location of projects included in the industrial programme. The effort of decentralization will mainly be aimed at two new industrial areas;

Manabí-Esmeraldas, a coastal region in the north of the country, and Azuay-Cañar in the southern sierra. These two areas would represent an efficient national distribution, and organized industrial growth would result.

(f) LAFTA

Ecuador's membership of the Latin American Free-Trade Association (LAFTA) has meant a serious responsibility for the economy as a whole, and for the industrial sector in particular, as well as an opportunity for expanding the economy abroad, thus removing the problem of restricted markets which has been a serious obstacle to industrialization.

The policy to be followed by Ecuador and the other LAFTA nations has not yet been decided as negotiations began a short time ago, and it is still too soon to judge their results.

The lack of research in the field of intergration is undoubtedly responsible for the slow and very tentative advance of negotiations, which neglect the very fields in which specialization at an international level is required in order to achieve a suitable distribution of sources of income which would permit graduated economies and reduction in investments. Only when the spirit of nationalism and initial reluctance have been overcome by the ideal of a Latin American Free-Trade area, can integration be accelerated.

As mining resources are unexplored and because of the lack of basic raw materials such as iron, coal, gas, petroleum, etc., the country's present possibilities in LAFTA are to concentrate on industries based on the development of agricultural, animal and forestry resources. This will be the position until the programmes of prospecting and assessing the country's resources are finally carried out, when new possibilities can be mapped out which are still not easy to define because of the country's small industrial experience.

One field which must be studied and encouraged and which Ecuador may be able to specialize in is the precision instruments industry, which has been developed only to a small extent in Latin America, and which would make use of the skill and spirit of dedication characteristic of certain sectors of the population.

The policy of reducing tariffs will mean facing progressive competition from LAFTA countries. Many products manufactured in Ecuador today and which have their place in the market because of tariff protection will have to reduce costs in order to stay in the market, or run the risk of being eliminated by competition. This is a very serious matter for industry, which must make national manufacturers concern themselves with the progress and future of LAFTA negotiations.

On the other hand, the fact that Ecuador is considered as the relatively least developed country within LAFTA gives it a certain right to obtain special concessions from the other members. However, the situation has not been fully taken advantage of, partly because of the lack of negotiation, and also because several member countries do not recognize such concessions granted to Ecuador.

/The setting

The setting up of a technical department of the LAFTA Office in the Ministry of Industries and Trade is a step designed to give efficient supervision of negotiations, analyse their present and future consequences, co-ordinate regional integration policy with development plans and shape their future action.

The Latin American Free-Trade Association raises new problems for the industrialization of Ecuador. Fields of specialization, location of industries with LAFTA markets in mind, exploitation of resources and of geographical position, low degree of development, etc., are all points which will be studied in great detail in order to establish the position of Ecuador's industry with regard to these new circumstances.

All available methods of negotiation will have to be fully used: the schedules for negotiation, complementarity agreements, special concessions for being the least developed country; these must all be dealt with by means of flexible mechanisms for high-level negotiation, and systematic preparation of basic technical studies.

Chapter III

POLICY MEASURES AND THE INSTITUTIONAL FRAMEWORK FOR INDUSTRY

There can be no doubt that the industrial growth rate will not be able to reach the programmed level unless governmental measures and conditions affecting industry are modified. It is the government's task to create a suitable institutional framework for industrial investment, which will remove obstacles and establish sufficient encouragement for investment to be increased by the required amount. This will be carried out in the same systematic way as other measures of economic policy contained in the plan for each sector.

1. Law of industrial promotion

The new Law of Industrial Promotion of 29th December, 1964, includes a number of modifications and recommendations added to the Law of 1962, and has set up very favourable incentives for investment in the sector.

The most important changes contained in the new law are, among others: the creation of a special category for industries which are considered as necessary for the country's industrial development, and which are affected by technical and economic difficulties; greater amenities for the installation of assembly industries; tax relief for the formation of companies, and in general, greater incentives in categories where enterprises are classified according to their importance in the country's development.

A relative streamlining of procedures for application for protection has already been achieved, and it is hoped to do the same for procedures granting benefits derived from industrial classification.

A strict application of the law and of the benefits laid down therein will depend to a great extent on study, approval, and application of rules which will include programming in sectors, as well as on strict control of development of those industries under their jurisdiction.

2. Regional laws for industrial promotion

In Ecuador the following organizations are responsible for regional development: the Austro Reconversion Centre, the Marabí Rehabilitation Centre, the Loja and Zamora Chinchipe Restitution Centre, the El Oro Province Development Board, and most recently created, the Development Corporation of the North. The work of these five regional development corporations is producing excellent results for those regions of the country which need to be stimulated into development. It is also more fruitful

/and effective

and effective than of other organizations at the provincial level, which have a certain amount of political influence but have not consistently fulfilled the functions which have been assigned to them.

The granting of special tax concessions for regions of poor industrial development is one of the decentralization policies under consideration. The Law of Azuay and Cañar, of 1954, extended to the provinces of Loja, El Oro, Esmeraldas and the Eastern Region, has been an effective step forward in this respect. However, it needs remodelling and the inclusion of dynamic specifications which help industrial development.

There is no industrial activity in Ecuador except in the provinces of Guayas, Pichincha, Tungurahua, Manabí, Chimborazo, Imbabura and Azuay, and even among these, in Tungurahua, Manabí, Chimborazo, Imbabura and Azuay, industrial development is very poor. On the whole, provinces with no industrial development should be the ones to receive special legal concessions to encourage investment for the location of new industries. The policy adopted up to now has been one of protecting frontier provinces (except Carchi) with special laws - provinces with no industrialization. This policy was originally established for Azuay and Cañar, which suffered a severe depression caused by the slump in exports of straw hats.

The policy of protection is a fair one, and the law will be remodelled in accordance with the following points:

- (i) that concessions granted be made subject to a progressive scale of reduction which aids the dynamic development of enterprises and gradually prepares them to compete on equal terms with other industries in the country.
- (ii) duplication of concessions to be avoided under the General Law of Industrial Promotion.
- (iii) to modify the formalities for the granting of concessions, taking the Law of Industrial Promotion as a basis for the procedures to be adopted in each case.

3. Tariff policy

The present tariff might be called protectionist, since it imposes suitably heavy duties on products which compete with the domestic production.

The official tariff in force can be varied according to any changes or modifications which may be needed in the tariff items and thus forms an instrument of industrial promotion. However, in spite of the substantial change which has been made in the official tariff, administrative procedures have in most cases rendered it inoperative and have given it a lack of flexibility in face of the changing conditions of the economy such that, instead of being an instrument of promotion, it has become an obstacle to industrial development.

/The organization

The organization which controls implementation of the tariff is the Central Bank of Ecuador; its executive activities in this sphere are co-ordinated with exchange policy on the basis of previous deposits and import lists. Products of necessary consumption and luxury articles are listed separately with the latter liable to higher changes.

It may be said that the tariff policy measures have had good results as regards the orientation of industrial activity. The import restrictions have on many occasions accelerated or given the first impulse to the installation of industrial enterprises which are now contributing to overall economic growth of the country.

The use of tariffs as an instrument of economic policy will be a valuable element in achieving the goals laid down for the industrial sector. In this respect, measures which have already been put into action with the passing of the Law of Industrial Promotion, and which will be strengthened and maintained in the future, are:

- (i) partial or total exemption from import duties for capital goods which aid production; reduction or increase in duties for certain raw materials or intermediate products, according to the progress of industrial development; imposition of suitable tariffs on products which would cause harmful competition for national production.
- (ii) to foster assembly industries where this is practical, by lowering the import duty on individual parts and increasing it on assembled units; to encourage the use of a greater proportion of home-produced parts by increasing the duty on those which can be manufactured in the country; to encourage a home packaging industry of those articles where it may be practical and economical to do so, by lowering duties on materials and products imported in bulk, and increasing the duties on the same products imported in packaged form;
- (iii) Tariff protection, apart from being for a fixed period and one which cannot be prolonged, will be granted to industries which satisfy certain requirements of quality and price.

In order to achieve the objectives proposed, the Foreign Trade Council will create a permanent technical department (with a representative of the National Programming Committee on its staff) which will use tariffs as an instrument for industrial development. In this way, the National Programming Committee and the technical department will act in close co-operation with the aim of ensuring that its policy is compatible with the goals and objectives laid down in the General Plan for Economic Development.

/4. Taxation

4. Taxation policy

Article 23 of the Industrial Development Law clearly states the benefits which industrial enterprises can derive from accelerated depreciation of their machinery (during 5 years 20 per cent of the value of the investment). This principle, which is intended to encourage equipment renewal and thus to keep industry up to latest technological advances, has perhaps not fulfilled its purpose in Ecuador, since industrial machinery and equipment, except in a very few cases, is never renewed in such a short period.

The Industrial Promotion Law includes within its general benefits the special tax deductions - according to which the taxable basis of income tax is determined - which may be made for sums reinvested or new investments in all enterprises which have been granted protection. These deductions have been of considerable effort in channelling the profits of industrial enterprises into reinvestment, and have thus helped produce a considerable expansion of existing industry.

The adoption of a taxation policy favourable to industrialization will result in a suitable allocation of funds in accordance with the general proposals of the plan.

This taxation policy will be based on the following:

- (i) removal of tax barriers which affect or slow down industrial development.
- (ii) adoption of positive incentives for re-investment or for new investments in industry;
- (iii) application of taxation measures to discourage investment in activities which are socially less productive.

Many aspects of current tax legislation act as serious obstacles to industrial development. For this reason, in order to reach the aims assigned to the manufacturing sector, the government will introduce certain reforms in industrial taxation with the aim of easing the influx of capital. Although the new Law of Industrial Promotion includes certain modifications of this kind, changes are needed in the taxation system directly affecting industry. Above all, action is also required outside industry with a view to directing investment towards industry as opposed to less productive sectors.

The removal of taxation barriers will operate in the following new fields:

- (i) changes in the collection system of sales tax by applying the tax to the aggregate value of an article, and not to the sales price. This avoids double taxation in the production process of an article, which is against the interests of specialization and increase in productivity.

/(ii) simplification

- (ii) simplification and reduction of additional import duties, especially for industrial machinery and certain raw materials, by establishing a single rate of duty and avoiding new taxes, and
- (iii) progressive implementation of payment of income tax in advance, which is paid 75 per cent in advance and calculated on the previous year's profit.

The following taxation measures will be adopted to reduce speculation and to direct available capital towards industry:

- (i) the inclusion of income from ordinary mortgage certificates in income tax declarations.
- (ii) periodical revision of real estate, in accordance with the law, in order to apply taxes based on the actual commercial value of property;
- (iii) improvement in the system of payment of construction rights for buildings which are to let, and
- (iv) income from the letting of property to be considered taxable as "unearned income from capital".

Most of the incentives for industry in the field of taxation are included in the Law of Industrial Promotion; the new Income Tax Law also contains items which encourage investment in industry.

5. Treatment of foreign investment

Foreign capital receives no special treatment in Ecuador; the same laws are binding on the foreign investor as on the Ecuadorian entrepreneur.

As was mentioned above, foreign private investment in industry increased by 70 per cent between 1955 and 1964. All the same, the country will need a greater contribution of foreign capital than it has had in the past if the proposed industrial development targets are to be reached. Such capital, especially when of private origin, brings with it technological, administrative, and market know-how which is spread among, and becomes part of, national industrial experience, and which is just as important for development as the investment itself.

The following measures, which have already begun to be put into practice, will be furthered in order to attract foreign capital:

- (i) a comprehensive survey of projects in the programme which are considered industrially practical, based on a system of priorities, and the selection of projects worthy of investment;

/(ii) as far

- (ii) as far as a "friendly economic atmosphere" for foreign investment is concerned, conditions in Ecuador can be claimed to be favourable there is no discrimination of foreign capital - it enjoys the same guarantees as national capital, a friendly disposition towards foreign investment, tariff privileges, etc., general and specific promotion laws are the same for foreign and national entrepreneurs. The country is historically and traditionally better disposed towards foreign investment than many other developing countries; the fact that there has never been a single case of expropriation of foreign funds or property bears this out; indeed, special contracts involving incentives and privileges for foreign investment have been granted.
- (iii) as part of the guarantee and incentives offered to foreign investment, efforts will be made in agreements with industrialized countries to avoid double taxation, and to have Ecuador income tax exemption recognized in the country of origin of the investment. Specifications will be laid down concerning guarantees against expropriation or nationalization (for a period of 20 years), and remittance of dividends, interest, royalties and salaries, exchange and withdrawal of capital invested in the enterprise, and the rights to introduce a reasonable number of foreign technicians and executives, (for a period of 10 years), and
- (iv) systematic promotion will be carried out with the aim of publicizing abroad the guarantees and incentives Ecuador is offering to foreign investment, of propagating projects which are industrially practical, and of helping investors in pre-investment procedures. The organizations in charge of this work have already been formed, and have begun their activities.

6. Study and protection of natural resources

Obviously, the existence of natural resources would make the setting up of industries more likely and more attractive. For this reason, systematic prospection, surveying, and inventory of the country's natural resources is being organized and carried out under special government sponsorship, as one of the most important factors in industrialization.

A detailed survey of the country's natural resources would take more time than the period covered by the development programme; however, with the survey carried out methodically according to priorities, as is being done, systematic results can be made use of in a few years as the survey progresses.

Some surveys have already been started, and others will begin when the plan is put into operation; all have detailed programmes and include:

- (i) an aerophotogrammetric map of the country;
- (ii) detailed mining prospection, with priorities according to zones and products;

/(iii) survey

- (iii) survey of hydrological resources for hydro-electric schemes, irrigation canals, and water supply;
- (iv) inventory of forestry resources, and forestry development plan, and
- (v) survey of fishery resources.

These programmes and their operation are all of vital importance for the industrial and economic development of Ecuador. However, there are some partial surveys which will have priority for the country's industrial future: the forestry inventory of Esmeraldas, for the installation of wood-pulp and paper mills; a thorough research into the availability of natural gas, for use either as fuel or for the development of important petro-chemical industries; prospecting and locating of sufficient iron ore and coal for the installation of steel-manufacturing plants, etc.

For the carrying out and supervision of the survey programmes for natural resources, a Department of Resource Surveying has been formed in the Ministry of Agriculture, and it is likely that a Resource Surveying Sector will be formed in the National Programming Committee.

Some programmes have already been started with the technical and financial assistance of international organizations, and steps are being taken to put the remaining programmes into effect.

7. Employment Administration

The most important of Ecuador's resources is probably its manpower; however, because of its apparent abundance, it has been rather neglected.

A well-defined policy of employment administration will be carried out under the Ministry of Labour and Social Security, and will mainly concern the following points: the setting up of an employment service and employment centres in the country's principal cities; training of the manpower required by economic and industrial development; and industrial hygiene and safety.

(a) Employment services and mobility of manpower. Mobility of manpower is essential for industrial development, so much so that a clearly defined policy is required, and one which is co-ordinated with development plans.

The general projects of the development plan, when broken down into different sectors, show a required rate of growth for the manufacturing sector in which a certain rate of growth in labour force is also involved. For this reason, it is not sufficient merely to direct the necessary total of investment resources towards industry, but also to impose upon it the additional need to absorb manpower.

/In order

In order that the manufacturing sector may suitably meet this requirement, a detailed policy will be put into operation which eases the mobility of manpower according to the needs of industrial development.

The central government will establish employment centres with suitable technical control in the most important cities throughout the country, with the aim of achieving the proposals outlined above.

The industrialization of Ecuador needs human material skilled in industrial labour, and because of the shortcomings in the present educational and labour-training systems, promotion policy will lay special emphasis on measures which remove these obstacles and which can supply industry with the necessary personnel for dynamic development.

(b) The training of executives. The executive and administrative side of industry has not been fully developed because of factors such as the poor level of development of the manufacturing sector, the legal constitution of enterprises, the lack of training establishments, and the absence of large-scale enterprises with capital contribution from large groups of shareholders, etc.

It is therefore necessary to take action to remedy a situation which could hold up industrial development and programming.

The training of technical and administrative personnel will be carried out in two fields: improved training of executives in present enterprises, and the training of new personnel to satisfy the requirements caused by future growth in industry.

Improvement in the technical level of executive staff will be carried out with short courses at varying levels under the direction of the Development Centre (CENDES) with the help of the International Labour Organization.

The training of administrative technicians will be scaled according to the time available, and other to conditions prevalent in the country.

The following short-term measures will be adopted:

- To send pre-selected graduates on training courses abroad.
- Specialization of teachers in technical subjects, in order to improve teaching conditions in existing technical institutions.
- The introduction of foreign technicians to co-operate in the training of nationals, and to administer or help in the administration of new enterprises.

The long-term policy for the development of executive training will be the formation and improvement of university faculties for this type of education.

/University engineering

University engineering and economics syllabuses will become integrated for administration subjects, with the aim of training graduates for executive posts in industries.

The armed forces will also co-operate in the training programme, by organizing courses on administration for high-ranking officers.

(c) Manpower training programmes. Training and instruction programmes for industrial manpower have been supplied by the fiscal, municipal and private technical colleges and schools. There are 27 of those institutions in Ecuador, which with their different specialized courses (mechanics, carpentry, radio technics, electricity, plumbing, tailoring, motor vehicle mechanics, industrial mechanics and general pre-vocational education) have been making isolated contributions to industry's needs. It is also worth mentioning that, apart from these technical schools, there are 37 centres whose work might be considered a contribution to industry or as providing the educational basis (e.g. in their courses on cloth cutting and sewing, embroidery and dressmaking in general) for the future formation of small-scale enterprises.

It is not yet possible to assess the services applied by these training centres in relation to the manpower demands of the industrial sector because it is only recently that Ecuador has begun to undertake training and instruction work on the basis of the needs which are arising. Nevertheless, some contribution has been made to the training of manpower belonging to existing manufacturing enterprises or to enterprises recently established.

The circumstances in which the training programmes came to be organized put their financing into the hands of the State; they are financed as a part of the public expenditure, in accordance with the budget allocations established every year.

Up till now there has been no link between the private sector and the training programmes. The private sector has only sporadically taken part in the programmes or provided facilities for the training of their personnel. Nevertheless, the entrepreneurs are now beginning to alter their attitude and it is hoped that a climate of understanding will be created by the specific programmes.

Training courses in shoemaking and ceramics have been established for artisan and small-scale industrial manpower with the help of IDA experts. These courses will be supplemented with others in mechanics, cabinet-making, wearing apparel, etc.

The creation of a design centre, to be attached to the Faculty of Architecture of the Central University, is being considered as a possibility for the immediate future. The most important contribution to manpower training will be the creation of the professional training service.

Another project which is being considered for the future concerns the field of training for the small-scale industrialist. The first steps towards

/preparing this

preparing this project and applying for aid from the United Nations Special Fund through the International Labour Organization are now being made.

As regards professional training, the creation of the professional training service (SECAP) has already been fixed for 1967. This organization will have a grant from the budget and will also receive a contribution from workers and labourers.

Shortcomings in manpower training are noticeable at all skilled levels, from semi-skilled workers up to top-level technicians. It is intended to put industrial policy into action at all these levels in order to fill present vacancies and account for future deficits.

The following systematic measures will be put into practice:

- The organization of training courses for skilled or semi-skilled workers to become technicians or assistants. These courses would give instruction in new industrial production techniques according to the needs of industry, and at the same time have the effect of raising the cultural level of personnel.
- The directing of technical education in technical schools and higher education establishments towards the requirements of economic and industrial development; and the supply of enough equipment, teaching aids, and laboratories suitable for all-round training of skilled professional men and technicians.
- Scholarship programmes based on priorities according to employment and qualifications, for training within the country or for specialization abroad, of skilled workers, technicians, foremen and supervisors, and engineers, as well as for the specialization of teaching staff of educational establishments.

Industry will need skilled help from abroad in the form of supervisors and technicians, particularly to fill short-term needs. Similarly, the government will contract the foreign personnel needed in educational establishments and in advisory capacities for enterprises. Special migration of selected personnel will also be encouraged.

The Ministries of Social Welfare and Education, as well as the National Programming Committee and the Development Centre, will be the organizations responsible for carrying out the personnel training programmes and for co-ordination work with industrial legislative bodies, enterprises, and trade union organizations.

(d) Industrial hygiene and safety. Industrial hygiene and safety are social and economic necessities. Labour accidents and damage to equipment adversely effect the country's economy and the health of its citizens. Apart from its duty to protect the welfare and health of the population, the government has a vital economic interest in promoting industrial security as part of its industrial development policy.

/The policy

The policy to be put into effect by the government through its specialized technical organizations (the Ministry of Social Welfare and CENDES) covers the following points:

- Modern industrial safety legislation which protects the worker and helps to improve the productivity of enterprises.
- The limiting of industrial zones in cities in order to protect the inhabitants as a whole from dangers such as air and water pollution, noise, etc.
- A permanent educational campaign for industrial safety, as part of the programme to increase productivity in enterprises.
- Training of specialists and inspectors in industrial safety, for the instruction of workers in safety practices, and to keep personnel constantly aware of the dangers by means of publicity and safety posters.
- The setting up of industrial hygiene centres under the health plan, which will include the cities of Guayaquil, Quito, and Cuenca in its first stage, and will eventually spread to the other industrial cities.

8. Promotion policy for manufacturing exports

Ecuador provides no joint, organized promotion for exports of industrial products, as it does for artisan production, which is centrally promoted by a specialized organization, OCEPA.

It can be said that promotion of the industrial sector, by which it is helped to win markets in LAFTA and other parts of the world, exists, but only on an individualistic basis.

It is expected, however, that if the concrete short- and medium-term possibilities which have been analysed are realized, the value of manufacturing exports will rise from 114 million sucres in 1964 to 275 million in 1968 and to 523 million in 1973. Among the manufactures showing the best prospects are semi-processed chocolate, fruit juices and preserved fruit, castor oil, plywood, pellitory extract. (See statistical annex.)

9. Provisions in aid of small-scale industry

The organizations responsible for carrying out development programmes in aid of small-scale industry are: the Ministry of Industry and Trades Department of Artisan Activity and Small-Scale Industry, the Industrial Extension Section of the Development Centre, OCEPA and, as the credit institution for the sector, the Development Bank. It is important to notice that a serious obstacle to the normal growth of small-scale industry arises from the lack of uniformity in these organizations' criteria for distinguishing small-scale enterprises from artisan workshops and medium-scale industrial establishments. The Development Law for Artisan Activity and Small-Scale Industry defines the latter as industry which has a predominance of mechanical

over manual operation, is engaged in processing, including alteration of the form of, raw materials and semi-manufactured products so as to produce final or intermediate goods, and whose fixed assets excluding land and buildings, do not exceed 200 thousand sucres. The Development Bank, bases its loans to this sector on a definition of the small-scale industrialist or small-scale artisan as a person engaged in any of the above activities, which is of small economic capacity, whose fixed assets, depreciated as to date, in machinery, equipment and tools do not exceed 50 thousand sucres, and whose gross annual production value does not exceed 150 thousand sucres.

The National Finance Corporation's regulation 6 for the operations of its special development and securities fund for small-scale industry states that for the purposes of the operations of the fund any industrialist whose net capital does not exceed 200 thousand sucres will be classified as small-scale.

By net capital is understood the difference between the entrepreneurs assets and his liabilities to third parties, that is, the whole of the private resources which the industrialist, whether of real or legal personality, has contributed to the exploitation of his enterprise (paid-up share capital, capital reserves, accumulated profits, additional furnishings of capital).

The disparity of these criteria for determining what is to count as small-scale industry is extremely obvious.

A basic factor in the transformation of present artisan activity or incipient small-scale industry into dynamic and productive small-scale industry is the training of small-scale entrepreneurs, who may either be drawn from the present class of manufacturing artisans or from young people who desire to dedicate themselves to these activities. We believe that a positive step towards the training of the small-scale entrepreneurs of the future would be the creation of a training centre with assistance from ILO given under the United Nations Special Fund Programme. If backed up by sufficient credit with suitable conditions this would enable the programmed development in this field gradually to be achieved.

The Development Law for Artisan Activity and Small-Scale Industry constitutes a fundamental industrial policy measure in aid of small-scale industry, since it establishes tax incentives and special provisions for encouraging artisan manufacturing to develop into dynamic small-scale industry. Besides this legal instrument, there is a specialized organization - OCEPA - concerned with promoting exports of articles produced by artisan activity and small-scale industry. OCEPA's budget derives from the Ministry of Industry and Trade and it is governed in matters of policy and field of action by a board of directors.

Ecuador has no enterprises working under sub-contract. The existing industrial enterprises carry out the whole of process of manufacturing or purchasing raw materials (usually from others of their own activity) as can be seen in the case of smooth fabric yarns. The installation of further larger-scale enterprises in the country will probably create new opportunities of sub-contracted work for small-scale industries.

Industrial complexes for both medium scale industry and small-scale groups are now beginning to be installed in Ecuador. An example is that programmed for the city of Cuenca, which is now under construction. The programme has also got under way in the city of Ibarra where it comprises activities of the footwear, furniture and metal-transforming branches; it is planned to extend it to further branches. In the city of Tulcan a complex consisting of 7 industrial wings for small-scale industries of the footwear, wearing apparel, carpentry, metal-transforming, hard fibre and other branches is to be installed.

These complexes have been organized under the auspices of regional entities, of the Government and of the production co-operatives. For the Cuenca complex assistance from the United Nations Special Fund has been applied for.

As regards co-operative organizations, the Programme of Artisan Activity established that the development of artisan activity into small-scale industry should be furthered by bringing together groups of a certain number of workshops which, under a co-operative system, would then all together be transformed into a single small-scale industry. The same programme contains a far-reaching project for co-operatives which assist production by providing common services. The essential pattern of these co-operatives will be common use of machinery whose high cost would have prevented individual purchase.

Production co-operatives have so far been established in the provinces of Tungurahua (wearing apparel and footwear), Imbabura (metal-transforming, carpentry, saddle and harness making and footwear, fibres), Loja (wearing apparel and carpentry). There are sales co-operatives in Guayas, Imbabura and Carchi. Even though the National Development Bank provides an ample credit hire for small-scale industrialists, there are no credit co-operatives in the field of small-scale industry in Ecuador. Practice has proved that, given the very special characteristics of the artisan and small-scale industrialist, though production co-operatives may not give satisfactory results, common services systems for assisting production and sales most certainly do.

Technical assistance for small-scale industries is provided through the Industrial Extension Section of the Development Centre.

The technical assistance supplied by this institution reaches as far as the level of the workshop or small-scale industry itself. Besides this CENDES makes feasibility studies on which projects conforming to the special conditions and peculiarities of each province and of each particular branch of industry selected can be based.

10. Technological research

In industry, technological research has been practically non-existent; new techniques and processes have all been introduced into Ecuador from

/industrialized countries,

industrialized countries, without taking into account the differences which exist in available resources. Higher education establishments have not been able to give sufficient support in this field owing to education deficiencies and lack of necessary means and equipment.

In order to achieve a gradual removal of these obstacles, the country will establish a definite programme of technical research and study based on the following:

- Donation of equipment, laboratories, and materials to research institutes, universities, and technical schools, with the aim of supplementing students' education with applied technical research. During the first stage of the programme, this equipment will also be used for technological research at post-graduate and professional level.
- Waste of human resources will be avoided by specializing the different faculties in certain fields of research, as well as by gearing research work to pre-established aims. A technological research programming committee formed by research centres and by representatives of government technical organizations will plan and supervise the work to be carried out. This committee will later become the directorate of the Technological Institute, which has not yet come into being.
- A second stage in the technological research programme, according to the list of priorities, will be the creation of the Technological Institute. The main task of this Institute will be to advise industry and to solve technical problems which may arise; this will supplement the economic programme to be carried out by CENDES.

11. Industrial standardization

Nothing has yet been done towards preparing technical standards in the field of industry. The Manufacturing Programme, however, includes a preliminary survey of what needs to be done in connexion with the standardization of industrial products.

A programme for determining standards, particularly quality standards, is to be carried out by the Ministry of Industry and Trade, which ought to give it high priority.

12. The government's role in industry

The policy of the development programme is that private enterprise should take on the main responsibility for industrialization. On this principal, the government will examine its investments in this sector, and consider industries from the point of view of their social utility and efficiency, with the aim of either handing industries over to private enterprise, or keeping them under government control, but at a high level of efficiency - this step will be carried out on the basis of management contracts.

/The government

The government will make industrial investments only in exceptional cases: to protect the interests of the community, or to carry out pioneer work in basic projects for industrial development, particularly in backward areas, where heavy investments are involved, and which private enterprise would find difficult to make.

There are some important practical industrial projects included in the industrial development programme which are essential factors for its completion because of the effect they have on industry itself and on other economic activities. Such projects are, for example, the naval dockyard for shipbuilding and shipping repairs; the coal-processing plants, which make up for the insufficient exploitation of petroleum; the wood-pulp and paper plant, to satisfy the high consumption required by the manufacture of cardboard boxes for banana export. An intensive campaign will be carried out in national and foreign private investment circles to promote these projects; however, in a certain amount of time lapses, and no interest in the projects is shown, the government will take charge of putting into operation projects considered of basic importance for the normal evolution of the country's economic development plan.

In accordance with established principles the government is at present developing the Tobabuela sugar-mill and the Guapán cement factory projects by means of social security funds. A technical aid mission is studying these and other government industrial enterprises, in order to establish a working policy.

The industrial programme also includes the creation of a Finance Corporation, dependent on the government, designed to put into practice projects which need government intervention, either in the form of helping to start up or finance enterprises, or of directly taking over their organization and operation and to hand them over to private enterprise after a suitable period of time.

13. Financial policy in industry and its organization

(a) Financing of the industrial programme

In order to achieve the planned increase in gross product for the manufacturing sector, it has been estimated that net investment in industry will have to reach the figure of 463.7 million sucres per year between 1964 and 1973.

In addition to the net investment figure, stock replacement or increase has to be considered; this would make a total of gross investment and necessary stock increase for the decade 1964-1973, of 786.9 million sucres per year. If the amount of financial investment, such as acquisition of old assets, bonds, etc, is added to the above figure, the total amount of resources needed to attain the high levels of investment would reach 858 million sucres per year. This is the financial objective which will have to be met by national saving and foreign capital.

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In the chapter referring to projections of capital requirements and financment, general explanations are given which may prove useful in defining a finance policy.

The effort behind investment will be intense, and for this reason it is necessary to construct a suitable legal framework, and to modernize, modify or create the necessary institutions for a massive movement of funds directed towards industry.

(b) Financial institutions, legislation, and mobilization of capital

Government financial policy will be guided along two main lines. The first concerns the formation of a suitable legal framework for the organization of modern institutions, both public and private, which would direct the large-scale movement of capital towards industry; the second deals with the government organizations and the promotion of private organizations which are considered to be of immediate necessity, and which will be mentioned later.

On the legal side, government action will include commercial and banking legislation, and specifically, the introduction of reforms considered as indispensable in the Commercial Code, the Monetary Control Law, and the General Banking Law.

(i) Commercial Code reform. The Commercial Code at present in force is out of date, and many of its articles are obstacles which must be removed in the interests of accelerating the process of industrialization. The general aspects of the reform are:

- (a) Changes in the classification of "businesses" and activities under the heading of "commercial transactions", whereby authorization to carry out industrial activities automatically permits the practice of "commercial transactions";
- (b) Provisions concerning the use of modern systems of mechanized accounting;
- (c) Appropriate regulations concerning labelling, text (sales literature and instructions), trade marks and patents; and
- (d) Popularization of the system of credit buying, at the same time setting up efficient legal proceedings for cases where the buyer fails to honour his agreement.

Reforms will be introduced in legislation concerning the structure of companies which will permit the formation of groups of persons or capital into companies, capable of attracting private savings and canalizing them towards industry. The more relevant are:

- (a) Limited liability companies, into which category would be admitted enterprises in the hands of a small number of persons who wish to

/operate jointly

operate jointly and privately, in a company with legal autonomy, and with the advantage of a liability limited to the value of their capital contribution; and

- (b) Stock companies with registered shares, with rights to sell shares to the public, thus making possible the formation of large-scale enterprises owned by a large number of shareholders.

Legislation concerning limited liability companies would enable enterprises with a small number of partners, or family concerns (which formed themselves into stock companies with the main object of limiting liability to the amount invested, and of making the transfer of goods easier) to retain their essentially private nature and to continue enjoying the benefits which induced them to form themselves into stock companies without really being in such a category. On the other hand, the new legislation concerning stock companies would make capitalization of the more important companies through the public issue of stocks and shares easier, because of the confidence that government supervision inspires in the investing public.

As a counterpart of these legal measures, the Department for Supervision of Stock Companies has been organized to give public supervision or control of the financial practices of companies which offer shares to the public.

The legal reforms concerning capital societies are indispensable for a prosperous and active stock market. No other measure of government finance policy will be able to stimulate such a market unless a sufficient number of share certificates becomes available under suitable control. In this respect, stock companies under proper supervision should form in the future important sources of securities. It would be preferable for the circulation and issue of stocks by companies not to be restricted merely to ordinary shares of variable dividend, but to include preference shares and bonds with a fixed rate of interest.

(ii) Reform of the General Banking Law and the Monetary Control Law. These laws stipulate the character, functions, and interrelations of financial institutions, and in particular banks, which are authorized to operate in Ecuador. Unfortunately, these laws restrict banking transactions and services to operations and periods of time which are only suitable for commercial transactions. Such restrictions prevent banks from suitably serving the needs of industry, and form obstacles for the creation of specialized organizations for industrial financemnt within the present banking system.

A reform of the banking laws is therefore considered a fundamental part of government policy for financing industry, in order to allow greater flexibility of transactions in existing banks, and principally to permit the formation of industrial banks and investment banks in their own right. The setting up of such private banking institutions is indispensable for the mobilization of national, and especially foreign capital towards industry, and is a necessary instrument for the development of a stock market.

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There can therefore be no doubt that a reform of banking legislation, and in particular of the Monetary Control Law and of the General Banking Law, is the only way of creating a modern and co-ordinated financial structure. This structure is not only required for furthering productive activity at the rate required for development, but also as an instrument for a better administration of monetary and loan policies.

In the administrative field, direct government action for creating instruments to control industrial programme financment has been aimed at the creation of a National Finance Corporation on the basis of the National Stocks and Shares Commission; the organization of a stock market, and improving the system of promotion banks. In the private sector the ^{1/} government will also take part in the promotion of industrial banks, of finance companies for credit selling, and of other financial organizations which are considered necessary to direct capital towards industry, make capitalization easier, and activate production and distribution.

The National Finance Corporation, acting as a government organization, and the industrial banks as private institutions, have similar purposes fundamentally. In any case, it is desirable that no monopoly in financial investment can exist. The two fields of action do differ however, since the National Finance Corporation (as explained previously) will mainly deal with the promotion of essential industries which are beyond the scope of private enterprise because of their size or complexity, or which in spite of their high social importance, may have little immediate interest from a commercial point of view; while industrial banks will mainly be concerned with projects that are practicable without government aid.

The projects designed to launch the above institutions will be financed principally by the creation of stock companies having their shares totally or partially absorbed at the beginning, and afterwards circulated among the public. Another possibility open to these institutions is to issue their own certificates for circulation in or outside the country.

The stock market will arise as a spontaneous result of the legal changes and administrative reforms in the field of finance. The greater availability of share certificates and their increased liquidity due to the presence of organizations and individuals prepared to negotiate them, will intensify the flow of financial transactions, accustom the public to this type of investment, and will also attract to this country national capital invested abroad in search of greater security or liquidity, in spite of the low dividend.

^{1/} The names under which such banks are legally constituted might be: industrial development banks; private industrial-finance corporations; industrial finance companies, etc.

14. Industrial promotion

(a) The organization of industrial promotion

In order to achieve the high level of investment in the private sector which was referred to previously, high pressure promotion will be carried out, capable of attracting capital and of channeling it towards the industrial projects laid down in the programme.

Promotion of the programme, of the projects, and of foreign loans are three different phases of industrial promotion which will be closely linked together. The National Programming Committee and the Industrial Development Centre share the responsibility of performing the task of promotion, and the government will continue to support these two institutions and supply them with the necessary means to carry out their duties efficiently.

(b) Promotion of the industrial programme

The industrial development programme will be made known and debated among ministries and other government departments as well as among private sector institutions, so that a clear impression can be formed of the effort that industrial development means.

The Programming Committee will be in contact with the government officials belonging to organizations active in industrial promotion, in order that they may feel themselves closely identified with the programme; The Committee will explain to them development plans and projects, the goals which have to be reached, the difficulties which have to be overcome, etc. The government will give full support to this diffusion of the industrial programme.

Similarly, promotion in the private sector will be carried out at top-level meetings of industrial entrepreneurs, according to their different industrial activities, to explain the goals to be reached, projects in which investments have to be made, the incentives offered and those which can be accepted, the services that different governmental departments are able to offer industry at present and in the future, etc.

(c) Promotion of industrial projects.

Of the many specific projects which the industrial development programme has drawn up, some will be promoted within the country, and others abroad; in the latter category are included large-scale projects, or those of a complicated technological nature.

The promotion of projects will be along the following lines:

(i) Feasibility surveys of a preliminary, comprehensive, or engineering nature, depending on the importance of the project and on its priority rating;

/(ii) Propagation

(ii) Propagation of the projects among national or foreign investors, depending on the simplicity or complexity of the industries under promotion;

(iii) Government action in the form of measures which would favour the investor's decision to go through with the investment; and

(iv) Encouragement for the investor throughout all the stages: from the decision to go ahead with the project, negotiation of privileges, benefits, loans, etc., to putting the project into operation and the actual working of the particular enterprise.

The promotion department of the National Programming Committee and CENDES, will prepare a yearly promotion programme based on the industrial development programme.

(d) Promotion of foreign loans for industry

The promotion of foreign loans, which would form a part of the total financial resources needed by industry, is extremely important in furthering the industrial development policy. The object of such promotion is to ensure that Ecuador makes maximum use of available potential loans, by presenting to the banks concerned, carefully planned projects and applications.

The Foreign Loans Section of the National Programming Committee is the specialized organization which will handle applications for foreign loans, and help in preparing projects and applications in accordance with the requirements of the banks involved.

The most important duties of the Section are:

(i) to inform the private sector of the financment possibilities available in national or in foreign banks, with a recommendation of the most suitable;

(ii) to act in an advisory capacity in submitting projects and applications for loans;

(iii) to help in the formalities connected with applications in order to speed up the process; and

(iv) to co-operate with the international credit organizations in their negotiations in Ecuador.

15. The most important items in industrial expansion

This chapter deals with the most important projects of industrial expansion, which promotion and development policies will have to consider as high priority to reach the established goals.

These projects are important for the country's economic and industrial expansion because of the repercussions they have in other sectors, the amount of labour they require, their capacity to produce or save currency, etc.

/(i) Food;

(i) Food; this item represents the most important industrial activity in Ecuador. By making full use of the high agricultural productivity in many fields, industries based on food and food products will be developed, with a view to entering export markets. This would be the case of sugar, for example, which is already an important export item; milk products; tinned fruit and fruit juices; tinned fish; refined and semi-refined chocolate; flour; and dehydrated banana. There are also items which are in a favourable position for import substitution, for example: crude vegetable oils, powdered milk, and porridge oats, all of which are closely dependent on agricultural development. Furthermore, some projects will be considered to satisfy home demand: modern irrigation canals, milk products, and salt among the most important.

(ii) Cigarettes, cigars, etc. offer good scope for industrialization as a substitute for the imported product, and also for export. The first stage of the development policy in this field will be to produce cigarettes in this country using a large proportion of imported raw material; as the programme of tobacco cultivation advances, the foreign raw material will be gradually replaced, while care will be taken not to deteriorate the quality of the product. The second stage of the programme concerns the export of manufactured tobacco goods in the form of cigars, to meet the unsatisfied demand created by the withdrawal from the market of Cuban cigars.

(iii) Textiles, another of the more important industries operating at present, still has very much room for expansion and improvement in the following fields: combed cotton, closely linked to the development of agricultural production; sewing thread and knitting wool; woollen fabrics (cashmere); and hard fibre cables and fabrics which are foreseen as an important item for specialization and export in the future. The finishing plants are of special importance for development and specialization in textiles; these provide efficient service for all existing fabrics, thereby improving their quality and price and enabling them to compete on goods terms in the market;

(iv) Wood. There are important possibilities for future development in industries connected with wood: the production of veneered wood to meet the as yet undeveloped home market, with good chances for export; prefabricated wooden houses at low cost, intended to fulfil a social need in coastal towns; the manufacture of panels for buildings, etc.

(v) In paper and cardboard industries, the production of kraft paper and wrapping paper are highly important items in development plans. The exports of bananas in corrugated cardboard boxes for which paper is a raw material, is creating a demand which will reach considerable quantities within a few years.

(vi) Leather industry expansion forms the basis of achieving the production goals designed to meet the home demand for footwear. Development plans for cattle will not be sufficient for supplying enough hides for tanning, which makes the promotion of tanning industries for pigskins indispensable to make up for the consequent shortage. This item is one which has not yet been developed in the country.

/(vii) Rubber.

(vii) Rubber. The setting up and operation of the tyre factory at Cuenca is an important step in the industrialization process. However, it will have to be supplemented by home production of the principal raw material, as established in the agricultural development plan. There are also some items of lesser importance: rubber threads, sheets, and tiles for flooring, and miscellaneous articles.

(viii) The chemical industry offers varied possibilities for expansion which are highly important for the country's industrial development: in basis chemicals, the production of sulphuric acid and caustic soda for industrial consumption; in non-edible oils and fats, the setting up of plants throughout the country for producing balanced foods to satisfy a market not yet developed, and to help cover the shortage of animal food thus aiding cattle development plans together with the installation of castor oil refining plants which partly satisfy home demand and offer good possibilities in foreign markets. In pharmaceutical and toilet products there is wide scope for substitution in some items, and possibilities which have already been confirmed, of an advantageous position in Central American markets. Fertilizers and insecticides, is a field in which plants for the production of chemical fertilizers and pyrethrum extract for export have already been installed and are being installed; plans have also been made for the production of organic fertilizers and insecticides.

(ix) Petroleum products and coal products. The exploitation of the coalfields in the south of the country by means of processing and refining plants, is an extremely important item in the development plans. Its importance depends on the rather uncertain future of the production growth of crude petroleum, but exploitation of these coalfields would help to cover the huge demands for fuel contained in the plan. The mining development programme contains the preliminary work which will have to be carried out, to which high priority has been given.

(x) The non-metallic mineral manufactures offer scope for substitution as the development programme progresses. A first stage will be the development of projects for ceramic tableware and sanitary fixtures, glass containers, and tableware; and a second stage will include the manufacture of sheet glass. The Guapán cement plan, now under construction, will begin production in 1966 and together with the two other existing plants will meet the heavy demand arising from the completion of housing and private and public works programmes. Another important item in this field is the development of the project for asbestos-cement piping, of great advantage to drainage programmes, and which will even be able to replace iron and steel piping to some extent.

(xi) In basic metals industries, the country has reached no level of development whatsoever; but there are concrete projects under consideration for the manufacture of structural steel from scrap, wire-drawing, and welded tubing, all of which will prepare the field for a heavy iron and steel industry on a long-term basis.

(xii) Metal-transforming industries are probably the most important items in the country's industrial development, and for this reason development policy will lay special emphasis on their promotion and growth. The

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possibilities of expansion are extremely varied, but the most important are the manufacture of agricultural and craftsmen's hand tools, agricultural and industrial machinery of simple design, fittings for construction, iron tableware, enamel ware, and cutlery.

General assembly industries and naval dockyard project are worthy of a special mention.

The government has been backing assembly projects, and will continue to do so following an established policy of fostering those items considered beneficial to the country. Important projects are already being carried out for the assembly of refrigerators and freezers, and metal bodies for vehicles, while projects are being promoted for assembling radio and television sets, domestic electrical appliances, sewing machines and typewriters, among others.

The naval dockyard for the construction and repair of ships, taking advantage as it does of Ecuador's strategic position on the continent, could become the largest-scale undertaking in the country. The dockyard will principally make use of naval equipment, and the project will be completed in three stages which have already been established and studied.

Chapter IV

EXTERNAL ASSISTANCE FOR INDUSTRIAL DEVELOPMENT

1. Financial assistance

External financial assistance is of vital importance for carrying out the Industrial Programme. The credits which have been obtained recently are as follows:

- (i) From IDA, 5 million dollars, of which 3,224,000 has been approved for use in particular credits and 1,062,000 so far disbursed. This credit is administered by the National Finance Corporation.
- (ii) From IDB, through the National Development Bank, 6 million dollars, half of which was allocated for industrial and half for agricultural credit. The whole of the industrial share has been used; 1,800,000 dollars of the agricultural share remains.

Ever since the National Finance Corporation was first established it has been the sole state organization through which industrial credit is channelled.

Application has been made for further credits of 5 million dollars from IDA and 3 million dollars from IDB.

In addition to this, foreign governments have offered industrial credit to a total value of 3 million dollars, divided as follows: France, 1 million, Switzerland, 1 million; Italy, 1 million.

Lastly the Private Finance Corporation (COFIEC) has obtained a 3 million dollar credit from IDA and has applied for a further 3 million dollars from IDB.

2. Technical assistance

The Ecuadorian Government and those of its specialized organizations which are responsible for administering and executing the General Economic and Social Development Plan have considered it expedient that all technical assistance which the country receives from international organizations, friendly governments and private assistance institutions should be co-ordinated in order that better use may be made of it.

The first steps in carrying out the General Plan have produced a more intensive and somewhat different form of development effort from that which has hitherto taken place. In some cases, as the type of activity established or its degree of intensity has no precedent in Ecuador, the technical knowledge or experience needed for it are lacking. These limitations, which are natural to an economy of small physical dimensions and in an incipient

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stage of development, mean that specially intensive technical assistance is needed. At the moment Ecuador is receiving technical assistance from international organizations, from governments of other countries and from certain private entities; yet considerably more is needed to cover the specific projects of the Plan and, more particularly, to enable its first stage - which may be expected to be the most difficult since it requires a proportionally greater effort on the part of all sectors of the country - to be carried out.

For these reasons the Ecuadorian Government agreed with the Inter-American Development Bank, its financial agent the execution of the Plan, that a general technical assistance fund should be set up, as an indispensable instrument for enabling the country to make some response to the growing demand for technical assistance.

In order that any technical assistance obtained can be properly managed and achieve satisfactory results, the general fund will be formed out of all the means and programmes now agreed on or available in future and all resources that may be contributed by entities which intend to co-operate with Ecuador towards carrying out its social and economic plans. The State at present makes relatively large counterpart contributions, paying local costs contributions and to the organizations providing technical assistance and supplying administrative reinforcements to the national organizations which are using this assistance, and envisages that its own contribution must increase parallel to that of the entities providing assistance as new technical assistance projects are carried out. The State will in addition contribute a suitable sum to the general fund to give it the power of rapid and flexible action, particularly in connexion with the immediate local expenses which may be needed for the technical assistance projects to be better carried out.

With these aims in mind a Programme of Technical Assistance for Ecuador for 1966/1968 has been prepared. It was based on prolonged study of the capacity of the country to carry out the first part of the Plan and, in particular, to carry out the Investments Programme which is being submitted to the First Meeting of the External Financing Advisory Group. As a complement to this study, estimates were made of the technical reinforcements needed to ensure the success of the various kinds of activities belonging to the programmes and projects which form part of the first stage of the plan.

The initiative in and responsibility for promoting economic development and social improvement in Ecuador has been taken by the public sector; as a first step, therefore, this sector should be provided with suitable technical assistance enabling it to take part directly in carrying out programmes and projects, so that a favourable climate can be created for attracting private capital and entrepreneurs into the projects and for providing technical assistance to the private sector. In other words, it is proposed to increase the rationality of the public administration and rapidity and flexibility operations to make further progress in the improvement of budget techniques and of the fiscal system which has already begun, to fit

/the executive

the executive agencies for running the different economic and social projects efficiently, and to maintain a proper co-ordination between their different activities by means of careful assessments. Continued study of better use of natural resources, preparation of specific projects and the creation of other instruments of development are also envisaged. Many of these instruments, such as studies of natural resources and project studies (mainly at the pre-feasibility and feasibility levels), will be made available to the private sector. A further class of activities which deserves special attention from technical assistance consists of those concerned with the direct provision to entrepreneurs of the services, studies and other aids which may help them to take part in carrying out the projects contained in the plans mentioned above.

STATISTICAL ANNEX

EXPORT OF INDUSTRIAL PRODUCTS

(Millions of sucres)

Products	Industrial programme		
	1964 ^{a/}	1968	1973
Preserved tuna	20.7	29.8	40.8
Dehydrated banana	-	7.6	15.2
Banana meal	0.1	4.7	13.3
Butter	-	5.5	10.5
Cheese	-	5.9	10.9
Fruit juices	-	14.0	42.0
Semi-processed chocolate	-	28.5	76.0
Preserved fruit	9.6	12.8	32.0
Milk prepared for use by babies	-	2.0	12.0
Cigars	-	15.0	30.0
Straw hats	10.8	10.7	12.9
Balsa wood	26.6	24.7	30.2
Plywood	3.3	27.2	43.6
Pharmaceutical products	20.8	21.2	23.9
Pellitory extract	21.9	29.4	42.7
Castor oil	-	22.5	56.5
Products n. e. s.	-	11.2	31.0
<u>Total</u>	<u>113.8</u>	<u>274.6</u>	<u>523.5</u>

^{a/} Real exports made in the year.