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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

ECONOMIC GROWTH
AND PROSPECTS
OF
THE IVORY COAST
(summary and four volumes)

VOLUME III
INDUSTRIAL DEVELOPMENT

July 24, 1970

Western Africa Department

CURRENCY EQUIVALENTS

(a) Until August 11, 1969

US\$ 1.00	= CFAF	246.85
French Franc 1.00	= CFAF	50.00

(b) After August 11, 1969

US\$ 1.00	= CFAF	277.71
French Franc 1.00	= CFAF	50.00

IVORY COAST
INDUSTRIAL DEVELOPMENT
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This report is based on the findings of an economic mission headed by Mr. L. de Azcarate which visited the Ivory Coast in November-December 1969. This volume was prepared chiefly by Mr. Ph. Laville, Consultant.

SUMMARY AND CONCLUSIONS

1. A great deal has been said about the industrial development of the Ivory Coast, a development that is clearly substantiated by the fivefold increase in gross sales in industry proper between 1960 and 1968 (at current prices) and the only slightly slower, fourfold increase in the value added over the same period. However, the start off point was very low and even today the contribution of industry proper (i.e. enterprises with gross sales of at least CFAF 15 million a year, excluding the building trades and the production and supply of water and electricity) to the gross domestic product remains less than 10 percent. Thus, the 1968 GDP of CFAF 320 billion, the share of the secondary sector comprising manual trades, building, power and industry was CFAF 63.5 billion, i.e. 20 percent. The share of industry alone, some CFAF 27.4 billion, thus amounted to 8.5 percent. In 1960 this share constituted only CFAF 6.7 billion of the gross domestic product of CFAF 140.7 billion, i.e. 4.7 percent. In 1968 industry employed 30,000 persons; the cumulative value of investments at the end of that year reached CFAF 42 billion and investments in 1968 amounted to CFAF 5 billion.

2. It may therefore be said that although its performance is undoubtedly superior to that of most of its neighbors, the Ivory Coast remains little industrialized and its economy is still based on agriculture. Some further interesting features of the present situation are summarized below.

Present Situation

3. One striking feature is the weakness of the value added in relation to the level of gross sales (only 36 percent) and the similar weakness revealed in inter-industry flows. The development of Ivory Coast industry has been based on the rudimentary processing of agricultural products, indispensable in some cases (palm oil, cotton ginning, latex) and adding little to the value of others (sawn timber, canned pineapples) and also on import substitution, although in this latter case it is the final stages of manufacture, the processing of imported semifinished products, that have been introduced.

4. Another characteristic is the relative underdevelopment of certain branches or subsectors of industry that might have been expected to have made greater progress, such as the engineering industry (excluding motor vehicle assembly), which is principally represented by the manufacture of metal containers and a little ship-repair, the latter remaining on a very small scale in relation to the opportunities offered by the traffic at the Port of Abidjan. The textile industry is another example. It is still based on the final stages in the manufacturing process with semifinished products being imported at the same time as the country's output of raw cotton is being exported. Although a very large project will shortly close this gap and direct this industry into a new channel so that it is expected

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to be able to export some 8,000 tons of woven cotton material to Europe. Finally there is the timber processing industry that handles only a quarter of the country's output of logs, which rose in 1968 to 3.4 million m³.

5. The high level of industrial exports, which in 1968 amounted to 20 percent of total exports and 30 percent of gross industrial sales in the broadest sense, is deceptive, as 40 percent of these exports of industrial products are made up of mineral products and of agricultural products to which little value has been added until recently.

6. Finally, the very limited scale on which the people of the Ivory Coast themselves participate in their own industrial activities is perhaps the most striking feature of the present situation. This is true for example of manpower. Only 6 percent of those holding managerial and professional appointments in business and only 35 percent of the supervisory grades and foremen are Ivorians or Africans and among the laborers, Africans from outside the Ivory Coast are as numerous as Ivorians. This is equally true of capital since aside from State participations which amount to only some CFAF 800 million (excluding a similar sum in electric power), Ivory Coast private capital invested in industry does not exceed CFAF 200 or 300 million. This is also true at the entrepreneurial level, where at present only two heads of private businesses are Ivory Coast nationals. The country's industry is therefore being created almost without the direct participation of Ivory Coast nationals. And this situation has persisted for 10 years, the Government having so far made little effort to change it until recently.

Industrial Policy

7. An industrial policy based on free enterprise has been consistently pursued since independence and the present Government is determined to adhere to it. Its main feature is a general legal structure that is very favorable to both foreign and domestic private investment, with a moderate 33 percent tax on industrial profits, 5-year exemption from this tax for all new enterprises, the possibility of reducing taxable profits by a percentage of the investment made and moderate market protection in the form of an import tariff averaging 30 percent on industrial products (except capital goods) coming from the Common Market. All these elements serve to create a competitive climate. This structure is sound and, together with political stability, provides the foundation for the reputation for vitality the Ivory Coast presently enjoys. In addition the Investment Code grants approved enterprises automatic exemption from import duties on raw materials over a period of 10 years, the effect of which is that the lower the value added by an enterprise, the higher the protection accorded. As a result a number of enterprises have been set up whose contribution to the economy is very small. A revision of this Investment Code is needed and the Government is examining a draft in which the advantages to be

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granted in addition to those available under the laws generally applicable (which there is no intention of changing) would be negotiated with each enterprise.

8. Also the Ivory Coast Government, in agreement with the French monetary authorities and like all the other States of the West African Monetary Union, has sought to maintain the price of money at its present low level, which has not been affected by the recent increases in interest rates in European countries.

9. Outside these few fundamental measures, the activities of the State have not been governed by any clearly defined policy. Three shortcomings should be noted. The State has not had any policy for capital participation in enterprises and has approved or sought such participations without defining the criteria for its decisions. It has no policy for the industrial subsectors as a result of which it has missed certain opportunities for development. Lastly and principally the State has so far shown little interest in bringing into being a skilled labor force at all levels and in fostering the emergence of a class of Ivorian entrepreneurs. The situation is now becoming difficult since, between the pressure of claims for "Ivorization" which has been evident for some time, and the risk of dislocating industry by a too hasty "Ivorization" with poorly trained people, the scope for maneuver is limited. Even a realistic policy of "Ivorization" would have little impact for a number of years during which this serious gap will weigh heavily on the country's political life.

10. In the middle of 1968 the Ministry of Planning completed its first draft of the Plan for 1971-75. In the case of industry two fundamental choices have been made, i.e. to continue the policy of free enterprise and to direct industry towards the export field.

11. It is believed that the very high growth rate of industry between 1960 and 1970, averaging 20 per cent a year, ^{1/} has been largely due to the creation of import-substitution industries. As this stage of industrialization is now coming to an end, the only way of maintaining a high growth rate will be to direct industry towards the export field to a greater extent than at present. The plan document therefore provides for an increase in industrial exports from CFAF 23 billion in 1968 to CFAF 30 billion in 1970 and CFAF 72 billion in 1975, when they should constitute 45 per cent of total exports as against 21 per cent in 1968.

12. It is likely, however, that this approach will be somewhat modified when the final version of the Plan is brought out around mid 1970. It appears, on the one hand, that the rate of growth of end consumption of industrial products may have been slightly underestimated and, on the other hand, that two major projects, iron ore and pulp, themselves expected to account for CFAF 10 billion of exports, will not actually be started up until after 1975.

^{1/} At current prices, with price increases of about 3 percent p.a. on the average.

13. But on balance the choices made have been sound. The Ivory Coast has major resources that it can exploit and the reputation it enjoys enables it to aspire to the role of an industrial pole in Western Africa. In addition to the export of such processed natural resources as canned foodstuffs, instant coffee, cocoa butter, pelletized iron ore, textiles and forest products, lumber, veneers and paper pulp, the Ministry of Planning is already envisaging the part Abidjan will be able to play in the strategic plans of major international firms for establishing themselves in Africa and throughout the world.

14. The intentional orientation towards export calls, however, for an awareness of the importance of an improvement in productivity, which can be achieved by tightening up management procedures and by better training. The limited scale of Ivorian participation in the development of industry has already been stressed and it might be added that the cost of European managerial and supervisory personnel is very high. Furthermore, the human resources the authorities have at hand to encourage vigorous action on the part of the private sector to reach target levels are extremely small (one Ivory Coast director and some ten technical assistants) and it is to be feared that, as in the past, for want of enough trained men, a bold idea is being matched by an average performance resulting in a failure to grasp a number of opportunities for development. If, however, in the past the opportunities available have compensated the availability of talent, in the future the conquest of foreign markets will call for more highly skilled men at all levels of business as well as government to formulate and carry out national policies and take advantage of every opportunity offered. If the Ivory Coast follows this path, it should certainly have every chance of success. The only thing to be feared is that, because it takes time to change human beings and because immense energies will be devoted to the San Pedro and Kossou operations over the forthcoming 5 years, such a success will demand more than the coming 5 years.

INTRODUCTION

1. A preliminary examination of the provisional national accounts for 1968 shows that the secondary sector contributed 20 per cent to total gross domestic product:

Primary Sector	CFAF	99,085 million	30.9%
Secondary Sector	CFAF	63,497 "	19.8%
Tertiary Sector	CFAF	126,483 "	39.5%
Government Services	CFAF	<u>31,356</u> "	<u>9.8%</u>
Gross Domestic Product	CFAF	320,421 million	100%

A more detailed examination shows that the share of industry proper is in fact a more modest one. If we eliminate manual trades (CFAF 15.9 billion), building (CFAF 11.5 billion), electric power and water (CFAF 8.8 billion), the value added by industry is reduced to CFAF 27.4 billion, i.e. to 8.5% of the gross domestic product. This definition of industry includes the simple processing of agricultural produce such as the production of palm oil, curing of latex, cotton ginning, the hulling of rice in rice mills, etc. If we further consider that part of this value added is transferred out of the Ivory Coast in the form of corporate earnings, savings of European managerial and professional personnel etc. and that another part merely represents losses in national tax revenues and increases in prices charged to the consumer, the actual net value added in the case of industry and remaining in the country, i.e. the "national" value added as opposed to the "domestic" value added, less the tax loss, is reduced to some CFAF 17 billion. The Ivory Coast therefore remains a country very little industrialized, with its economy still based on agriculture.

2. The present report commences with an account of the status of the various subsectors of the economy, the main problems they have to face and the projects underway or under study, together with a number of general remarks on Ivory Coast industry as a whole. The second part is devoted to a description of industrial policy, its impact on the current situation and its future direction. A third part deals with the progress made by the major projects.

I. THE STATUS OF INDUSTRY

A. The overall picture

3. The following table illustrates the pattern of development since 1960:

CFAF millions					
	Gross Sales		Value added		Gross Domestic Product
	Secondary Sector	Industry	Secondary Sector	Industry	
1960	37,653	13,978	19,877	6,668	140,700
1965	87,262	41,982	40,590	17,122	239,586
1968	139,188	73,571	63,497	27,410	320,421
1969		82,000			

Industry's share of the GDP has increased from 4.7% in 1960 to 8.5% in 1968, and in absolute terms (but in current CFA Francs) the value added has been multiplied by 4.1 and the level of gross sales by 5.2, representing average annual growth rates of 19 per cent for the value added and of 23% for gross sales. In 1968, industry employed 30,000 persons, the cumulative value of investment (material and civil engineering works) amounted to CFAF 42 billion and the total sum invested during the year was CFAF 5 billion.

B. The industrial subsectors

4. The national accounts of the Ivory Coast distinguish 19 individual branches of industry belonging to the secondary sector; numbered from 05 to 23, the last of which includes building and civil engineering enterprises. The table on page 3 illustrates the changing pattern of gross sales, value added and industrial exports, as well as indicating the value of investments and the numbers in employment in 1968. In commenting on this table there will be some regrouping of the subsectors.

5. The food industries correspond to four subheads of the National Accounts: flour and rice milling; canned foods, instant coffee and cocoa butter; beverages and ice; dairy products and tobacco. The following data relate only to industrial enterprises with gross sales equal to or greater than CFAF 15 million a year:

(in CFAF million)

	Gross sales	Value added
1960	3,563	1,684
1965	10,880	4,371
1968	18,907	7,076
Mean annual growth rate (1960-68)	23.2%	19.7%

6. The value of investments stood at CFAF 11 billion at the end of 1968 and that of exports at CFAF 8.5 billion. The most vigorous branch of industry is canned foods, with 70,000 tons of pineapple canned per year and further expansion planned: the capacity of the largest canning plant is to be doubled from 60,000 to 120,000 tons a year and a new 50,000 tons a year plant is to be brought into being by a German/Ivorian group. The Nestlé group produces 1,200 tons of instant coffee a year and is doubling its capacity. Another company processed 30,000 tons of cocoa beans in 1968, extracting 7,800 tons of cocoa butter and another plant of the same size is being considered. The expansion of wheat flour consumption is meeting with competition from rice which is highly favored by the people. The output of beer, which reached 200,000 hl in 1961, has fallen back as a result of the loss of markets in neighboring countries and competition from imported wine. The manufacture of dairy products is at an early stage. The three main enterprises, pineapple canning, instant coffee and cocoa butter alone account for 40 per cent of the production of the food industries as a whole and for practically all the exports. These activities are expanding vigorously, although the Government had to grant major concessions to the last two of these in order to bring them into existence, i.e. exemption of cocoa and coffee from export duties. It will not be long before projects under consideration or in course of realization fill some of the gaps in this subsector, i.e. noodles, biscuit making and sugar refining. A French group plans to establish a cane sugar refinery with a capacity of 25,000 tons a year and even this will only meet 60 per cent of the consumer demand in 1975.

7. The energy subsector covers the production and supply of water and electric power and the refining of petroleum products. The start-up in 1965 of a refinery having a capacity of 700,000 tons of crude oil a year represented an investment of CFAF 3,750 million. Its gross sales reached CFAF 4,448 million in 1968 with a value added of CFAF 1,500 million: the increase in consumption has been such that in 1969 light products had to be imported and it is planned to increase the refinery's capacity to 1,000,000 tons of crude oil per year by January 1, 1972 and rebuild it to a capacity of 2 million tons a year by around 1976.

8. Two mineral products are extracted on an industrial scale: the annual production of diamonds is 200,000 karats and of manganese 150,000 tons. These two activities are stagnant as a consequence of the scarcity

of reserves. It is expected that the present output can only be maintained for a further 7 or 8 years.^{1/} On the other hand, a major project for the extraction and pelletization of iron ore is under consideration by an American company, Pickands Mather, which has entered into an agreement with the Ivory Coast Government for this purpose. This company is studying the possibility of producing at least 5 million tons a year of pellets, possibly more, from deposits located 300 km north of San Pedro. The total investment would certainly exceed CFAF 40 billion, including a transportation link with the coast and development of a loading facility. The management of Pickands Mather is optimistic and expects to make a start on installing the capital equipment in 1972. It is, however, possible that the present abundance of iron ore on the world market will push back the date for this project.

9. In the forest industry, 75 enterprises are producing lumber, veneers, plywood, particle board, wood crates, joinery and furniture. The growth pattern of this sector has been as follows:

	Gross sales	Value added	Total output of logs	Percentage delivered to industry
1960	1,683	863	1,060,000 m ³	20.8%
1965	6,938	3,177	2,605,000 m ³	26.9%
1968	10,616	4,462	3,470,000 m ³	24.5%
Mean annual growth rate (1960-68)	25.9%	22.8%		

Three-quarters of the log production is exported as is and this situation has changed little between 1960 and 1968. It is due to the fact that the French importers who take most of the Ivory Coast's wood exports possess substantial milling capacity in France and have therefore imposed a price structure which largely discourages imports of finished lumber from the Ivory Coast, whereas most of the other European countries, especially Great Britain and Italy, import sawn timber. The rather unfavorable position of the Ivory Coast does not seem likely to change in the future for, although some officials at the Ministry of Planning are aware of the difficulty and deplore the underdevelopment of this subsector in relation to its potential, they are largely without the resources needed to formulate a policy and put it into effect.

10. The metal processing industries include the simple processing of semifinished products, sheet and wire, the assembly and repair of motor vehicles and cycles, the manufacture of metal containers, a little mechanical and electrical construction work and a small amount of ship repair.

^{1/} The manganese mine was closed in early 1970.

	Gross sales	Value added
1960	2,980	1,492
1965	8,713	3,187
1968	12,451	4,429
Mean annual growth rate 1960-68	19.6%	14.6%

The most important activity is the assembly and repair of motor vehicles and here gross sales exceeded CFAF 6.5 billion in 1968, - CFAF 1.5 million for assembly and CFAF 5 million for repair. 2,800 vehicles were assembled in 1968 but this form of activity, brought into being in 1960 by Renault at the request of the Ivory Coast Government, has led to a slight increase in price to the consumer and to a loss to the State of substantial tax revenues, exceeding the value added by the enterprise itself, as a result of exemption from import duty on sets of imported parts and exemption from one-half of the value added tax. Special action, now under consideration, will probably be taken to ensure the continuation of this activity when its classification as a priority enterprise expires in about a year's time.

11. The second form of activity is the manufacture of metal containers for the canning industry and the packaging of various products, i.e. petroleum products, edible oils, etc. Four other enterprises should be mentioned: a cycle factory which is making an effort to manufacture some components locally and has taken up participations in similar enterprises in neighboring countries; a small ship repair yard which lacks the financial resources to expand its activities to a level consistent with the needs of the Port of Abidjan; a plant manufacturing trailers and logging wheels for the movement of timber and, lastly, a small company financed by Ivorian private capital, manufacturing some unsophisticated agricultural equipment. This subsector is therefore underdeveloped in relation to its potential, particularly in the fields of ship repair and the manufacture of simple equipment, whilst its more impressive undertakings, such as the assembly of motor vehicles, the manufacture of metal containers and the corrugation of sheet, are those that contribute the least to the economy. The country is nevertheless continuing to follow the same path, since a rolling mill for imported blooms, which will also be very costly in terms of import duty exemptions, is in course of assembly, although it must be added that it is being financed with Ivorian capital.

12. In the building materials subsector there is nothing apart from a crushing plant for imported clinker, since no deposits of workable limestone have been found in the Ivory Coast. In 1968 two enterprises shared a market of 350,000 tons of cement and grew with it. It is the Government's intention to participate in setting up

a cement plant in Togo with an output of 1 million tons a year: this would provide the Ivory Coast and other neighboring countries with clinker.

13. The textiles and footwear industries are substantial:

	Gross sales	Value added
1960	1,693	795
1965	5,159	2,144
1968	10,555	4,006
Mean annual growth rate (1960-68)	25.7%	22.4%

The manufacture of footwear is represented by a Bata Factory which supplies 3/4 of the market and exports a little. The textile industry consists of 6 cotton ginning plants which in 1968 produced 13,000 tons of cotton fiber, a spinning mill which has only produced some 3,800 tons of thread and woven goods, representing its maximum capacity, two dyeing and printing plants and a third in course of assembly, working on unbleached imported materials, and three enterprises manufacturing knitted goods. Finally, there are three industrial textile undertakings making twine, sisal bags and jute bags with imported raw materials.

14. What marks this industry out is the fact that it is based on the final operations of the manufacturing process: dyeing, printing and making up imported fabrics, although the greater part of Ivorian cotton production is exported. Differences in quality might justify such a situation but it appears, in point of fact, that the reason for it is the higher profitability of these final operations. However, a little more than a year ago the Government made enquiries with a view to setting up a spinning and weaving plant capable of producing for export at competitive prices: five groups submitted bids for a plant with a capacity of the order of 12,000 tons a year including the French Agache Willot group, the most dynamic textile group in France today, which has already set up three factories in other African countries. Furthermore, one of the clothing manufacturers has made an agreement with the French group to manufacture under subcontract 130,000 pairs of slacks a year for the French market. Lastly, a plant for weaving articles in tergal cotton is under construction. It will not, therefore, be long before the structure of this subsector can be regarded as satisfactory and, in addition, an export trade in manufactured products to European markets is to be developed representing a transfer of industrial activity from these countries to the Ivory Coast, a cotton-producing country in which labor costs are relatively low.

15. Under the heading of chemical industries, fats and miscellaneous industries, the chemical industries are only represented by the handling and packaging of pesticides, the production of oxygen and acetylene and the manufacture of matches. A fertilizer plant should soon come into service producing some 60,000 tons by about 1975, and a small sulphuric acid plant will make it possible to manufacture superphosphates from imported ore. The fats industry includes the production of palm oil, its refining and soap manufacture. Some thousands of tons of miscellaneous seeds (especially cotton) are today exported unprocessed. The Government is anxious to set up a major seed-oil plant which would increase by some 20 per cent the value of the unprocessed seeds - the value added by the oil plant would be CFAF 500 million from the processing of 40,000 tons of palm kernel and 60,000 tons of cotton seed - but this project has not yet found a backer. The Blohorn group, which manufactures oils and soaps, also produces 1,500 tons of detergents each year.

16. The rubber industry comprises the preparation of latex and the recapping of tires. New hevea plantations are planned for the San Pedro region: a motor vehicle tire factory would be set up later. In plastics, the standard forms of processing are to be found: sandals, wrappings, household articles.

17. Finally, among the miscellaneous industries there are two projects of some importance: the first is the manufacture for export of pulp from tropical woods at the rate of 200,000 tons a year. This project may well run up against some difficulty in face of the limited market for deciduous wood pulp. The second is a bottle plant with a capacity of 10,000 a year. The printing and manufacture of cardboard packing cases for banana exports are also included under miscellaneous industries.

C. General Characteristics of Industry

18. Some major characteristics should be highlighted in order to complete this picture of an industry which, although still on a modest scale, has achieved a level of activity and especially a growth rate substantially higher than those of industry in the majority of neighboring countries.

19. The relative underdevelopment, i.e. in relation to their potential, of the 3 industrial subsectors of forest products, engineering and textiles is the first of these characteristics. In the case of forest industries this appears to be linked with the continuance of a certain aftermath of colonial status that the Government does not possess the resources to change and of which it has only recently become aware. Underdevelopment in the textile industry is in the process of being remedied. The engineering industry suffers from structural weaknesses and the development of activities that contribute little to the national economy has been allowed to take place or even been

encouraged. Little has been done to find attractive projects and assist certain activities such as ship building or structural engineering and metal sheet work, which have not shown the vitality they should possess, the former because of a lack of funds and the latter as a result of the effect of import duty exemptions granted under the Investment Code on capital equipment. If the Government is not careful, another subsector will find itself in a position similar to that described above: the output of oil seeds will increase substantially with the coming into production of oil and coconut palm plantations and the continued development of cotton crops - 100,000 tons of seed are expected by 1975. So far the Government has failed to find a partner to set up the oil works required.

20. A further characteristic of industry in the Ivory Coast is the weakness of inter-industry flows. These flows are presented in table form in the national accounts but as the principal intention is to show ultimate consumer uses, there is no means of distinguishing the part of supplies purchased from other Ivorian enterprises from the part that is imported. Import substitution is principally effected through the establishment of final processing facilities. For this reason inter-industry flows only affect metal containers (to the extent of some CFAF 2 billion), carburants as well as oxygen and acetylene, supplies of flour mainly to small local bakers' shops, crude edible oil to the refinery (both enterprises belonging, however, to the same group), sawn timber for joiners' shops and furniture factories that do not have their own saw mills. Very approximately it can be estimated that of an industrial consumption of intermediates of CFAF 40 billion; excluding electric power, in 1968, some CFAF 8 billion, i.e. 20 per cent, came from Ivorian industries and 80 per cent was imported.

21. Industrial exports have already reached a high level, as the following table shows:

	Gross Industrial Sales	Total Exports	Exports of industrial Products		
			Value	% of gross sales	% of Exports
1960	13,978	44,418	4,498	35.6	11.2
1965	41,982	70,932	13,820	33.1	19.5
1968	73,571	108,380	23,106	31.4	21.1

The percentage of exports in relation to gross sales is actually somewhat overvalued as the figure for exports contains certain trading margins that are not included in the first column. The result is nonetheless impressive. It should, however, be noted that 39 per cent of 1968 exports were agricultural products requiring little processing, such as canned pineapples, canned fish, lumber and veneers, latex, ginned cotton, crude palm oil and raw mining products.

22. In determining the extent of industrialization, a distinction should be made between those primary commodities that must necessarily, for technical reasons, be subject to some measure of processing before being exported (for instance cotton, palm oil, latex) and those that are processed although it may be technically unnecessary to do so (for instance, canned pineapples, sawn timber). In addition, in most cases, even when the product has been subject to an initial form of processing, it remains semi-finished and, as it stands, is not yet ready for consumption. The table below indicates the value of exports of these products:

Value of exports of certain products in 1968

(in millions of CFAF)

Ginned cotton	1,450	Sawn timber	3,409
Latex	634	Canned pineapples and pineapple juice	2,003
Palm oil, coconut oil, feed cakes	269		
Canned fish	<u>365</u>		
	2,728		5,412
Mineral products	813		
Total value of all products :		8,953	

It is also noteworthy that these exports have grown at a less rapid pace than industry itself, confirming the fact that the increase is largely due to import substitution. Exports to neighboring countries, which made up a large part of all exports in 1960, due to the fact that the Ivory Coast had made an earlier start, subsequently fell back when these countries in turn began to industrialize: beer, motor vehicles and cycles, matches, textiles and footwear and soap have all been progressively affected, a situation which has led those in charge of enterprises in the Ivory Coast to set up or participate in the formation of similar enterprises in all the countries in which they have customers, either to keep some part of these markets or to supply semi-finished products (matchsticks, spare parts for cycles). The Ivory Coast is therefore acting as a kind of bridge-head in the industrialization of the entire geographical region.

23. The size of enterprises varies very widely, the gross annual sales of the 310 industrial enterprises ranging from CFAF 15 million to several billion. In 1968, fifteen enterprises exceeded CFAF 1 billion. These are the Grands Moulins d'Abidjan, the cocoa butter factory, the

SALCI pineapple canning plant, the refinery (CFAF 4.5 billion), the two cement works, two saw mills, automobile assembly, a metal container factory, three textile factories, the oil and soap works and the banana packaging plant. These 15 enterprises have gross overall sales of CFAF 28 billion, i.e. 38 percent of the total. They represent an investment of CFAF 17 billion, i.e. 40 percent of the estimated total (CFAF 42 billion). In addition, a survey undertaken by the Department of Industrial Development (Ministry of Planning) provides the following figures in respect of 63 enterprises, 52 of which have been approved under the Investment Code:

Gross sales:	CFAF 38.7 billion, i.e. 66 percent of the total
Investments at the end of 1968:	CFAF 28.8 billion, i.e. 69 percent of the total
Employment:	19,500, i.e. 66 percent of the total

The 15 largest enterprises therefore make up almost 40 percent of Ivorian Industry; the 63 largest enterprises constitute two-thirds. Industry in the Ivory Coast is therefore already quite highly concentrated.

24. The following table shows that Ivorian industry can be classed in a light industry. Taking industry as a whole an investment of CFAF 1 million produces gross annual sales of CFAF 1.75 million, whereas the investment for each new job created amounts to only CFAF 1.4 million, and while in the case of the 15 largest enterprises the investment for each new job created is double that of industry as a whole, it corresponds as well to a level of gross sales per job almost double. It is unfortunately not possible to make a similar study of the ratios of value added in the case of the three groups of enterprises for, whereas the value added for the enterprises as a whole is provided by the national accounts, that for the other two groups is furnished by the Department of Industrial Development in the form of a value added gross sales coefficient, which appears to be overestimated as it indicates a figure of CFAF 24 billion value added for the 63 enterprises. The refinery represents in fact the only investment in heavy industry, amounting to CFAF 3,750 million with gross sales of CFAF 4,445 million (without including fuel taxes), a value added of CFAF 1,510 million (giving a capital output ratio of 2.5), and only employing 200 persons. Even in the case of this industry annual gross sales exceed the level of investment.

	310 enterprises	63 enterprises	15 enterprises
Gross sales (GS)	73,500	46,700	28,600
Investment (I)	42,000	28,800	17,000
Employment (E)	30,000	19,500	6,100
Value added (VA)	27,400	(24,000)	(11,200)
GS/I	1.75	1.7	1.69
GS/E in millions of CFAF	2.45	2.5	4.67
I/E in millions of CFAF	1.4	1.48	4.67
VA/GS	0.37		
VA/I	0.65		
VA/E	0.91		

25. The value added by industry is small and amounts to only 36.2 percent of its gross sales. Ivorian industry is founded on the simple processing of a few agricultural products and on import substitution based only on the final stages in the manufacturing process (motor vehicles assembly, textiles, paints and pesticides).

26. The profitability of enterprises varies within very wide limits. Marketing difficulties are significant causes of failure. Thus at least one major enterprise, which moreover had received the manufacture of dairy products, had to go out of business after two years, the failure being attributable to poor marketing decisions and this notwithstanding the fact that it was launched by the wellknown French group Gervais Danone. A number of others are encountering serious difficulties as, for example, a brick works -- bricks are still unknown as building materials in the Ivory Coast -- and a jute sack factory set up by the Industrial Promotion Service group (linked to the Agha Khan's interests). In the latter instance, the difficulties -- it is only operating at 10 percent capacity -- are the result of failures in the areas of technical and commercial management. On the other hand a certain number of enterprises are showing very high gross returns such as one of the cement works, and one of the dyeing and printing plants, both of them priority undertakings with gross earnings in 1968 that amounted respectively to 33 and 46 percent of the total investments. An examination of the Department of Industrial Development's General Report on priority enterprises for the 1968 financial year shows that the Government regards normal gross earnings as 15 to 30 percent of the total investment, representing a recovery period for investments of 4 to 7 years. It shows concern whenever gross earnings fall below 15 percent, an indicator of bad management, or rise above 30 percent in the case of a priority enterprise, suggesting that the benefits conferred on it have been excessive.

27. Another serious problem is the very limited scale of Ivorians participation in industrial development. The share of the Ivorian in the sum CFAF 42 billion invested in industry up to 1968 consists of about CFAF 1 billion in the form of State participations in the capital of various enterprises (excluding the CFAF 850 million capital participation in the Ivory Coast Electric Power Enterprise); CFAF 120 million in the form of participations and CFAF 4.7 billion in the form of loans of the Ivory Coast Industrial Development Bank, 1/ which was formed at the instance of the Ivorian Government with the participation of a large number of foreign private and public banking institutions (including IFC); CFAF 2.3 billion in the form of loans made by the banking system rediscounted by the Central Bank; and lastly, about CFAF 300 million in the form of Ivorian private capital principally invested in four large-scale industrial enterprises, whose corporate capital ranges from CFAF 40 million to CFAF 200 million. A private finance company is seeking to interest the Ivorians in investment: it consists currently of 60 Ivorians participants, mostly senior government officials. It has taken the initiative in the building of a rolling mill and it is at present considering setting up a ceramics factory and a cocoa butter plant in association with foreign participants. In addition, it is investing in the building of real property and those participating in it have borrowed part of their contributions from local banks.

28. With regard to entrepreneurship, only two Ivorians are in charge of large scale industrial enterprises, these being two of the four enterprises referred to above. For two years now the Government has been operating two agencies designed to promote small and medium scale enterprises in the Ivory Coast. One of these is merely an association, with scanty resources, of some 50 building and transportation enterprises. The other, the Bureau for the Encouragement of Ivorian 2/ enterprise has a directing and professional staff of about 50, mostly young technical advisers full of good intentions but lacking experience: it seeks to provide small Ivorian enterprises with technical assistance and to encourage the formation of new enterprises. In practice all these enterprises are at the artisan level. Its activities have been limited to bakeries, joiners' shops and service trades (plumbing and tailoring). The results are difficult to assess but so far do not appear to be commensurate with the efforts made. Moreover, it is open to question whether the manual trades represent the most likely source of material for top industrial management positions. Amongst others, the example of the Indians in East Africa would suggest that commerce represents a more likely source. Parents who have done well in business are succeeded by children who have inherited a feel for business, some capital, the attributes of culture and managerial talent, but this process takes a generation.

29. Manpower Bureau statistics for 1968 covering 44,000 wage earners in the industrial subsectors (Nos. 05 to 22) including electric power and trades show that only 6 percent of the managerial and professional

1/ Banque Ivoirienne de Développement Industriel - BIDI

2/ Office de Promotion de l'Entreprise Ivoirienne - OPEI

technical staff of enterprises are Ivorians or non-Ivorian Africans ^{1/} (in 1965, one half were Africans; in 1968, only a quarter), whereas the corresponding figure for supervisory technical personnel (foremen) is 35 percent (one-quarter of these are Africans). Thirty-four percent of the employees at higher levels (bookkeeper, personal secretary, etc.) are still Europeans; and whereas 35 percent of the skilled workers are Africans, in the case of unskilled workers the proportion rises to as much as 60 percent. It is no exaggeration to say that at the higher levels industry is in the hands of non-Africans, for the most part Europeans, and at the lower levels in those of non-Ivorian Africans. This situation has remained practically unchanged since 1965.

	<u>Total</u>	<u>Ivorians</u>	<u>Africans</u>	<u>Europeans</u>
Managerial personnel	503	20	4	479
Professional technical personnel	792	31	13	748
Supervisory technical personnel (foremen)	1,659	435	157	1,067
Supervisory personnel	1,233	581	230	422
Subordinate personnel	2,818	1,759	1,018	41
Skilled workers	5,668	3,769	1,831	68
Semi-skilled workers	15,638	9,989	5,647	2
Unskilled workers (laborers)	<u>15,751</u>	<u>6,230</u>	<u>9,515</u>	<u>6</u>
Total	44,062	22,814	18,415	2,833

30. This situation constitutes a very serious problem of which public opinion is just beginning to become aware. At the lower levels the trouble that developed in the Treichville district in October 1969 is an indication of the resentment felt by the Ivorians towards African foreigners, who are accused of taking jobs away from them (and of monopolizing petty trade). As for the trained elite, the Government has now filled all its posts, and students coming onto the labor market have to look to private enterprise, a field they have previously neglected. However, seeing the careers of their predecessors, these younger men are prone to ambitions unwarranted by their previous experience. Managers are therefore unwilling to take on staff of this kind, the more so because they fear the possible reactions in the event of dismissal. All this can, of course, only aggravate the malaise.

31. The formation of the Ministry of Training in January 1970, at the time of the Government reshuffle, is an indication of the Government's new awareness of these problem. This Ministry will initiate measures to

^{1/} Subsequently the term "African" will be used to describe non-Ivorian Africans.

encourage private management to give more attention to the problems. These might take the form of fellowships covering long periods of study in foreign companies; possibly tax exemptions; making it a requirement for all approved enterprises to submit a staff training program; and the formation within the Ministry of an advisory division for the follow-up and guidance of young Ivorian managerial and supervisory personnel in the early years of their professional lives. But the Ministry itself will also have to show firmness in seeking to persuade these young professionals to take a more realistic view of private industry.

II. INDUSTRIAL POLICY

A. The Basic Choice

32. Industrial policy is based on free enterprise. This was the choice made by the Government at the time of independence, and this is what has enabled the Ivory Coast, which suffers to an exceptional degree from a lack of men trained in work habits common in the developed countries, to achieve a growth rate greater than that of all other countries in this part of Africa during the past decade.

33. At the same time, although this has been of more recent introduction, the monetary authorities -- in common with those of the other members of the West African Monetary Union -- have voluntarily kept the cost of money at a low level, unaffected by the rise in interest rates in European countries. This has been possible only with the agreement of the French monetary authorities and as a result of the policy of direct controls instituted by the Central Bank of the States of Western Africa designed to prevent a flight of bank loans to France.

34. The policy of free enterprise is in the first place reflected in freedom of establishment for everyone, whether Ivory Coast national or foreigner, without discrimination on grounds of nationality, together with freedom of movement of capital between the other member countries of the franc zone; this freedom is, however, subject to restrictions imposed since 1968 by the French monetary authorities as regards transactions with countries outside the franc zone.

35. This policy is also reflected in a number of other important measures. In particular, taxation is relatively light: until the end of 1967, industrial profits were taxed at a rate of 25 percent; on January 1, 1968 this rate was raised to 33 percent. The General Tax Code also provides for substantial exemptions. All new enterprises are exempted from paying tax on their profits for a period of 5 years counting from the date on which they commence operations. Enterprises are in addition authorized to write off 40 percent of the cost of housing constructed for their personnel in the first year following completion; furthermore, they may deduct from their taxable profit 1/ 50 percent of the sum of their industrial investments, which deduction may be spread over four years, subject to a limit of 50 percent of taxable profit, together with the total amount invested in housing, either directly or by subscription to shares or bonds issued by semi-public property companies. These advantages may be regarded as excessive; they are, however, the keystone of the Ivory Coast's reputation. If they were to be questioned, it would certainly tarnish the country's reputation and break the momentum of industrial development; the Government is, in any case, not thinking along these lines.

1/ Taxable profit is the enterprise's gross profit less legally permitted write-offs.

36. Protection of industry takes the form mainly of import duties, rarely of a quota system for imports. The Government avoids the latter as much as possible, taking the view that Ivorian industries should be exposed to competition, even if this precludes the setting-up of certain new manufacturing plants. It recently rejected requests for a quota system or an excessive increase in import duties made by two enterprises planning to set up plants for the manufacture, respectively, of electric batteries and condensed milk. This did not prevent the two companies from continuing with their projects. Only some half dozen companies have benefited from a quota system imposed on competing imports or an increase in import duties as compared with the previous situation. The Government thus generally adheres to the general system of import duties and to the advantages offered in the Investment Code.

37. The import duties are four in number: import tax and special import levy, imposed on all products; a customs duty of 5 to 10 percent for products not coming from the Common Market or the associated African States; and the value added tax at the same rates as for local products. The cumulative rates for the first two duties together lie in the range from 0 to 40 percent. They average approximately 30 percent for industrial products, except for capital goods, which are taxed at 0 to 10 percent only. In addition, products from member countries of the West African Customs and Economic Union pay only 50 percent of the lowest rates of duty. These duties have varied very little during the past ten years. The major change has been the reduction of the duties levied on products from members of the EEC other than France to the lowest level charged on French products, in application of the association agreements between the EEC and the associated African countries. In most cases, the duties levied on semi-finished articles are slightly lower than or the same as those levied on finished products. In some cases they are, however, higher. If one measures the real amount of protection afforded in relation to the value added, the level resulting from the general system is not very high: between 20 and 40 percent for industrial products capable of being manufactured in the Ivory Coast, even less for food products, e.g. flour and milk products. The moderate level of these duties, in relation to what is customary in other countries, considerably reduces the risk of creating in the Ivory Coast, under the general system, industries that will be non-profitable for the economy of the country.

38. The principal advantage offered by the Investment Code is the ten-year exemption from import duties for imports essential for the enterprise, such as plant and equipment and above all raw materials. The lower the value added by the enterprise, the larger this advantage. If we measure the protection afforded by this exemption in relation to the value added, we find the following picture: with import duties of 40 percent (as is the case with the assembly of motor vehicles), if the value added by the enterprise is 70 percent, the protection amounts to 40/70 or 57 percent, while if the added value is only 30 percent, the protection amounts to 40/30 or 133 percent; this latter is more or less the case with the motor

vehicle assembly plant, SAFAR. Such a rate of protection becomes excessive when the contribution to the economy of the country, which can be measured in terms of the value added by the enterprise less loss of fiscal receipts and transfer of company profits and savings by expatriate personnel, is negative; again, this is the case with SAFAR which, in addition, has had to raise slightly its prices to the consumer despite benefiting from a reduction in the value added tax rate. This consequence of the Investment Code does not seem to have been noticed until 1967, the year in which the Ministry of Planning started to apply economic calculations showing benefits to the community as a whole as a tool for appraising applications submitted to it. Previously, it had been considered sufficient to make a simple calculation of the loss of income to the State, setting this against the vaguely defined benefit of having an industrial enterprise come into the country.

39. In return, the Government reserves the right to exercise control over management and investments. The Ministry of Planning is currently making greater use of these economic criteria to formulate its recommendations. Political considerations can, of course, also play a role. However, this element of rigidity which the Government has introduced into its approval system, together with the limited advantages which the Investment Code gives to enterprises that do not import their raw materials and the fear of overly strict controls, are currently inducing certain enterprises to establish operations without requesting official approval.

40. Furthermore, the Ministry of Planning is preparing a draft law which will make important changes in the provisions of the Investment Code. At the present moment, 100 percent exemption from import duties is automatically granted for a period of 10 years. This automatic granting of exemption and the fact that these exemptions do not decline gradually over the years are in fact proving to be an obstacle to the establishment of healthy industries. Either an enterprise is healthy and does not require favored treatment as extreme and as protracted as at present -- which often leads to excessive transfers of income outside the country -- or the enterprise cannot survive except as a result of these advantages -- in which case 10 years represent an ample period of time for the entrepreneur to recover his capital, amass profits and leave the country as soon as the enterprise becomes subject to the general system. The first official approvals granted will be expiring in 1970 and the possibility of some enterprises closing down or being sold is not altogether excluded. The Ministry of Planning's bill thus envisages replacing the current automatic procedure by a system of negotiations with each applicant which will enable the benefits granted by the Government to be adapted to the assistance required by the enterprise during the initial period. Technically, this is an excellent plan. It is, however, to be feared that outside pressures will sometimes distort the results of economic calculations and that the Government may be short of men who are able to study complex data and at the same time possess sufficient authority to resist unwarranted

pressures. This plan points, nonetheless, in the right direction: in future it will be known what each approved project will cost the community and what benefits it will bring to the community.

41. The effects of nine years of application of the Code in its present form are not, however, negligible. Fifty-eight enterprises were approved between 1960 and August 1969. Their gross sales in 1968 amounted to CFAF 35 billion, or one-half of total industrial sales (6 of these enterprises had not yet started production in 1968). According to the inspection report of the Industrial Development Department, their value added amounted to CFAF 15.2 billion. This figure would seem to be on the high side, and the way in which it has been calculated certainly differs from that employed by the National Accounts. CFAF 13 billion would probably be closer to the National Accounts figure. The exemptions from import duties on raw materials have been estimated at CFAF 2.3 billion, the import duties which would have been levied on imported finished goods at CFAF 3.6 billion, and transfer of company profits and savings by expatriate personnel at CFAF 4 billion (see table annexed). The "national" value added 1/ of these enterprises is thus in the order of CFAF 5.4 billion, which can be compared with the figure for investments, CFAF 21 billion, giving a "national" capital-output ratio of 3.9.

42. Extrapolating this calculation to the totality of industrial enterprises, the value added of which in the sense employed in the National Accounts amounted to CFAF 27.4 billion in 1968, i.e. including CFAF 14.4 billion for enterprises other than the 58 already discussed, the value of transfers and losses of fiscal receipts to be deducted from the figure of CFAF 14.4 billion can be estimated at CFAF 3 billion. The "national" value added of industry can thus be estimated at approximately CFAF 17 billion.

43. The Government's policy of free enterprise does not have only advantages; it also entails certain disadvantages. Apart from certain consequences of the application of the Investment Code, three major shortcomings are to be noted. The first relates to policy for development of individual branches of industry: the Government lacks the means to ascertain in detail the situation in each branch of industry, to establish the level of utilization of existing capacity, to identify weaknesses and opportunities, to define a policy and objectives and to provide the means of achieving them (measures to encourage entrepreneurs to realize these objectives, or failing this, more or less direct intervention by the State). Attention has already been drawn to the relatively underdeveloped state of the engineering industries, the woodworking industries and the textile industry (in the last-mentioned case an inexpensive initiative by the State allows us to hope that the situation will be improved in a few years' time) together with the risk of a similar situation appearing in the vegetable oils sub-sector. The Industrial Development Department and the Bureau of Industrial

1/ In the sense defined in paragraph 1. of the first section.

Development, the bodies responsible for implementing industrial policy, are staffed by only some 10 officials, almost all technical assistants, under the supervision of an Ivorian Director. These resources are manifestly inadequate, but the situation is unlikely to change in the immediate future.

44. The slight contribution made by local Ivory Coast capital to the financing of industry has also been pointed out. As regards participation, the State does not appear to have any clearly defined policy. It has asked for participations when the projects appeared to be profitable, or granted participations to those requesting them as a guarantee, without laying down any criteria. It is, admittedly, encouraging the activities of SOCIPEC, a private Ivorian financing company which recently embarked on an industrial investment program of several hundred million francs; but this activity remains very low-key and to date only Ivorian officials appear to be involved.

45. In particular, however, the Government has not so far followed a very active policy of Ivorization. The situation described in the first section has been in existence for a long time already and the Government is only now, under the pressure of public opinion, turning its attention to Ivorization. The recent setting-up of a Ministry of Training is an encouraging sign. The training of top-echelon staff is, however, a lengthy process, and the Government is fully aware of the risk that overhasty Ivorization, with insufficiently prepared men, would entail for the growth of industry and for the economy in general. As a result, its room for maneuvering is extremely small. Efforts have also been made during the past two years to promote the emergence of a class of small businessmen; the resources devoted to this campaign are sizeable, as has already been seen. The staff of the bodies, specially set up for this purpose, however, do not appear to be entirely up to the special difficulties of their job, and the results so far can hardly be said to reflect the good intentions these bodies show. Moreover, it is not certain that this is the right way to produce heads of genuine industrial enterprises.

46. In addition, heads of enterprises and expatriate staff also need to perfect their knowledge and skills in order to retain a taste for innovation and improved productivity. The existence of an important industrial center at Abidjan (only half of the business enterprises are, however, located there) is a favorable factor and various plans for the creation of a "refresher institute" are under study.

47. This problem of talent is fundamental for the future development of industry, and of the entire economy of the Ivory Coast. It will not be easy to make up the delay in planning and implementation, and Ivory Coast industry will long remain in the hands of foreigners.

48. The general thinking behind industrial policy is good. To date, however, implementation has only been average (but nonetheless considerably better than in the other West African states), due to lack of resources.

B. The Plan for 1971-75

49. In 1968 the Development Studies Department of the Ministry of Planning prepared a first draft of the Plan for 1971-75. Changes are currently under study, but they will not be completed before the middle of 1970. For industry, this first draft envisages a growth rate of 13 percent per annum in industrial gross sales and of 14.4 percent per annum in the value added during the period 1971-1975. Exports of industrial products (including agricultural produce that has undergone only a minor degree of processing) will reach CFAF 72.5 billion or 45 percent of total exports. Investments during the period will amount to some CFAF 85 billion (excluding investments in electrical energy). The draft thus expects industry to continue to grow apace, albeit at a slightly lower rate 1/:

	Gross sales	Value added	Exports	Value of investments	Employment
1968	73.5	27.4	23	42	30,000
1970	105	43	30.5		
1975	194	84	72.5	127	60,000
Average growth 1968-75	14.9%	17.4%	17.8%	17.6%	10.5%

50. It will be seen that this plan places a marked emphasis on exports: in 1975 exports will represent 38.4 percent of industrial sales turnover as compared with 31.4 percent in 1968, and 45 percent of total exports as against 21.1 percent in 1968. The choice made by the authors of this industrial plan derives from recognition of the fact that the possibilities for import substitution are nearing an end; it also reflects their intention to maintain a high rate of industrial growth. The development of industry has in large measure been due to the substitution of imports by local manufacturers during the period 1960-70. The planners have correctly recognized that this phase of industrialization was nearing its end but that at the same time the Ivory Coast held a number of trump cards that would enable it to embark on a new course, as an exporting country: the

1/ Figures in CFAF billion taken from the draft after deducting the electrical energy and construction sub-sectors. Figures in present day CFAF for 1968 and in 1965 CFAF for the years 1970 and 1975.

existence of an already sizeable industrial nucleus, the area of rapid development centered on Abidjan, with its port facilities, the momentum of rapid growth, and the Ivory Coast's reputation for political stability and encouragement of free enterprise. Last but not least, the moderate degree of protection enjoyed by industry and the climate of competition that already exists has prepared businessmen to face the difficulties of exporting.

51. The authors of this plan have likewise defined the conditions under which such a program can be carried out: maintenance of a liberal attitude vis-à-vis foreign investors; maintenance of political stability, a factor that induces confidence; improvements in the productivity of enterprises; an active campaign to find commercial outlets and to attract investors; more reasoned intervention by the public authorities, with a careful weighing-up of the benefits granted and concentration of financial resources on a small number of high-productivity projects.

52. Finally, the authors of the plan listed the various steps to be taken. In the political and administrative sphere: 1/ activities to support and encourage business (organization of marketing, incentives to increase productivity); establishment of an investment promotion body (the Bureau of Industrial Development, which, although set up in 1968, did not really start to operate until 1969); setting up of a regional industrialization commission (Member States of the Council of the Entente and Ghana); campaign in the industrialized countries to channel their aid in the desired direction and implementation of a training policy; in the legal and regulatory field: amendment of the Investment Code; revision of the customs tariff and various provisions governing price control and product quality; in the economic and commercial field: encouragement of domestic consumption of local products, review of commercial margins, improved productivity; and in the financial field: concentration of State intervention, development of private savings.

53. It will likewise be noted that the Plan foresees a very high level of investment: between 1970 and 1975 total investments are to amount to twice the value of existing investments at the end of 1968. However, two projects alone will account for half of this total: iron ore and paper pulp. These are the first two projects for heavy industry proper, if this is defined as an industry having an investment/annual sales ratio considerably higher than 1, or, better, having a capital/output ratio of at least 3.

54. It may be considered surprising that this Plan practically fails to mention the possibilities for industrialization within the framework of a regional grouping, more particularly together with the four other member countries of the Council of the Entente (Upper Volta, Niger, Togo and Dahomey) plus Ghana. A study carried out under the auspices of the Guarantee Fund of the Council of the Entente did not produce many new ideas, and of eleven projects recommended by the authors of the study, only one -- paper pulp -- was allocated without discussion to the Ivory Coast; this project being based on raw material resources not possessed by the other countries.

1/ After substantial completion of this report, it was learned that the Government was also considering setting up an agency to assist industrial exporters ("Centre National du Commerce Extérieur"), presumably along the lines of the French institution of the same name.

The Ivory Coast will probably carry out three or four other of these projects -- ceramics, bitumen, tomato concentrate and sugar -- without worrying too much about the study's recommendations. Only three of the projects have led to agreements: Upper Volta will manufacture bicycle tires for itself and the Ivory Coast in exchange for supplies of latex from the Ivory Coast; a large, 1 million t/a, cement works is planned for Togo, the only country with suitable limestone deposits, which will supply clinker to crushing units in the various neighboring countries; the Ivory Coast will purchase 10,000 t/a of sugar from the Upper Volta, but will also set up its own sugar refinery. Two factors explain the little significance attached to a regional policy. The market formed by the five countries referred to is only about twice as large as the Ivory Coast market. This is not sufficient to increase significantly the number of profitable import substitution projects, and moreover the Ivory Coast market will undoubtedly continue to expand more rapidly than the other market, so that as a result additional outlets in neighboring countries are comparatively less important. Secondly, the political agreements between the six countries and the changes required in customs systems for this coordination of investments (particularly with Ghana) cannot but delay realization of these projects and discourage potential private investors. Last but not least, relations with Ghana raise difficult monetary problems.

55. Comparison of the actual results for 1968 with the 1970 base-year forecasts for the 1971-75 industrial plan, drawn up early in 1968, shows that the planners were over-optimistic. Allowing for inflation of roughly 3 percent per annum, gross industrial sales were to grow by 25 percent per annum between 1968 and 1970 and exports by 23 percent. The figures to be taken as a starting point will therefore undergo substantial changes when the plan is reviewed in April-May 1970. Certain branches of industry will also experience difficulties in attaining the production targets fixed for 1970, notably cereals and flour (05), other food industries (08), extractive industries (10), metals (11), other mechanical and electrical industries (17), rubber and plastics (21), and miscellaneous industrial products (22). Other sub-sectors, however, will surpass their targets: beverages and ice (07), forest industries (15), and assembly and repair of motor vehicles (16).

56. The target for industrial exports for 1975 is ambitious. It is in fact linked in large measure to realization of the agricultural production programs since, of the forecast figure of CFAF 72.5 billion (on a grand total of CFAF 160.4 billion), 21 billion is accounted for by agricultural produce in relatively unprocessed form: canned pineapple, latex, sawn wood and veneer, cotton fiber, and palm oil; a further CFAF 11.7 billion represents the value of exports of iron ore and paper pulp, both projects which have run into delays as compared with the estimates made in 1968, and neither of which will be in production by 1975. If we deduct a further CFAF 1.6 billion for export of diamonds and manganese, the value of exports of other industrial products would thus be CFAF 38 billion. This is a high target which will call for sustained efforts in market research and

increased productivity. In the light of the momentum displayed by industry in the Ivory Coast, this target is not unattainable, but it will require a period somewhat longer than 5 years. It is likely that improved methods of management and higher industrial productivity, to which no significant attention has been paid yet, will require more than 5 years to make their effects felt. It is therefore to be feared that here again the human factor will present a barrier to the complete realization of the targets of the Plan. It is, however, difficult to define the precise measures to be recommended for achieving an increase in productivity. Productivity is the end result of a large number of factors and in the absence of detailed branch analyses it is impossible to know, for each individual sub-sector, on which of these factors emphasis should be laid.

57. It would certainly appear that the industrial plan was drawn up on the basis of an analysis of the production potential, with a subsequent check that the household consumption figures implied by this potential were reasonable. More detailed studies are currently in progress; on the basis of family budget surveys, they have shown that the consumption income elasticities resulting from the draft were greater than 1 for basic foodstuffs and less than 1 for luxury foodstuffs and all other industrial products, a result which appears to be at odds with experience both in the Ivory Coast and in the rest of the world. The studies in question thus take the form of selecting more probable elasticities and calculating new household consumption targets, which will be lower for foodstuffs (sub-sector 1, 2, 4 and 5), and 15 to 40 percent higher for the products of the following branches of industry: (6) canned foods, coffee and cocoa, (9) energy, (12) building materials, (14) chemicals, (15) forest industries, (16) motor vehicle assembly, (17) engineering and electricity, (19) footwear, and (21) rubber and plastics. This consumption can be satisfied by imports or, in part, by local production. The production targets for Ivory Coast industry for the domestic market will therefore be revised upward.

	1960	1968	1975
Gross industrial sales for domestic consumption (in CFAF billion)	9	50.5	121.5
Average annual growth		24%	13.4%

These figures are, however, of little significance, as growth in the first period was due in large measure to import substitution, while that in the second period will be the result mainly of increased demand for products already manufactured in the Ivory Coast.

58. After this industrial plan has been revised, the emphasis placed on exports will be a little less marked than in the present draft. Nevertheless, the choice has been made, and it is a good one. It does not, of course, preclude continued growth of existing industries working largely or solely for the domestic market. Taking an even longer view, some experts are already contemplating the role that Abidjan could play in the strategy of the major international concerns as a focus of industrial development in Western Africa. These experts are already suggesting Abidjan as a center for the chemicals and pharmaceutical industries and, in the tertiary sector, for the head offices of companies having a number of establishments in the area and service companies such as insurance companies, design offices, computer centers, etc.

59. A final criticism can be made concerning the draft 1971-75 Plan. The authors of the industrial plan have established the conditions for the realization of the targets set and given a list of steps to be taken. These steps have not, however, been studied in detail, nor have they been worked out in terms of cost, manpower needs and time required to make them operational. As in the past, the choice of policies is good, but the means for their realization are inadequate. Only some ten officials in the Ministry of Planning and the Bureau of Industrial Development are working on the implementation of industrial policy, and there are no plans to increase their number. The shortcomings that have already been pointed out, notably the absence of a subsector policy, will not therefore be overcome in the period covered by this plan. Since this is a foregone conclusion in the case of the forest industries, the rate of growth for this subsector is going to be the lowest for all branches of industry.

60. It is obviously important that Ivorian industry become more competitive in terms of the world market. It is encouraging that a number of enterprises are already exporting or planning to export to foreign markets. SALCI sends part of its canned pineapple production to the German market and will be exporting a very large proportion of its current increase in capacity to that country. SOFACO has proved competitive in bids to supply packaged pesticides under tenders invited by FED. MACODI has contracted for manufacture at Abidjan of trousers for the French market. The new textile group, which is to produce 12,000 tons of cotton fabric, has committed itself to export three-fourths of its production. Union Carbide plans to export half of its future production of electric batteries. There is, therefore, evidence that companies can export from the Ivory Coast, particularly if they are aware at the beginning of the need to export or if they are put under pressure to improve their management and raise their productivity.

61. The policy of free enterprise deliberately chosen by the Ivory Coast Government has undoubtedly been a success. This success must, however, be viewed in the right perspective: industry proper still represents less than 10 per cent of the GDP. The absence of precise implementation measures, in part a corollary of this policy of free enterprise but also and above all of a lack of trained men, has not, however, so far presented a serious obstacle to industrial development. This may not continue so in the future, and it is to be regretted that the planners did not stress this point in their study of the conditions for realization of the targets for the 1971-75 period. The very slight measure of involvement of Ivorian nationals in responsible positions in the enterprises could one day give rise to political tensions. A major effort should be made, but it cannot bear fruit for ten or so years. Between then and now, industry in the Ivory Coast will certainly have changed considerably in appearance, and it is to be feared that the process of Ivorianization will continue running along behind the train of industry without ever managing to take over the controls on the locomotive. This problem of training people is also extremely important for the success of the efforts which the Ivory Coast is now making to focus its industry in large measure on exports. The bulk of the necessary improvements in productivity will be achieved through training, and this aspect will become even more important when the Ivory Coast starts to serve as a base for international concerns wishing to commence operations in Western Africa. On the economic level, therefore, success is certain, and the Ivory Coast would seem to have gained a very sizeable lead over its neighbors in embarking on a new stage of development. It is essential that the Ivory Coast be assisted in its efforts in this direction, but it must be borne in mind that, as it progresses, the quality of the men available will become a factor of growing importance. A major effort must therefore be devoted to training these men.

III. THE MAJOR PROJECTS

62. The most important industrial project concerns the opening up of the Bangolo iron ore deposits, 300 km north of San Pedro. The reserves of this ore, which contains only 40 percent of iron but which can be easily enriched, are estimated at 500 million tons at least. The US company Pickands Mather has signed an agreement with the Ivory Coast Government specifying the studies and investigations to be made and setting out the fiscal and legal terms of possible exploitation. Pickands Mather envisages the production and export of at least 5 million tons of ore per annum in the form of pellets. The major items of equipment required are the magnetic separation unit with its thermal power station, the transport facilities to the coast, the pelletizing works and the shipping wharf.

63. Pickands Mather's plan is to transport the enriched ore by pipeline; the Ivory Coast Government is urging the construction of a railroad (the cost of which would be in the order of CFAF 9 billion). The total investment, including transport facilities, would be approximately CFAF 50 billion for a capacity of 5 million tons per annum, and CFAF 85 to 90 billion if the capacity were to be raised to 10 million tons per annum. Pickands Mather is actively pursuing evaluation work on the ground and the search for partners. Orders for equipment could be placed toward 1972. The Ivory Coast Government has reserved the right to participate in the capital of the enterprise. Operations cannot commence before 1976 and unfavorable developments in the world iron ore market could delay start-up if the captive market of the enterprise were too small to ensure profitability on that basis alone.

64. The second project is for a plant producing chemical paper pulp, with a capacity of 200,000 tons per annum. It would be located near San Pedro and would be supplied from the natural forest for a period of 25 years, and subsequently from pine forests to be planted. The total investment is estimated at CFAF 20 billion for the plant and the logging equipment. A number of studies have already been carried out, notably one on the European hardwood pulp market, which showed that, as demand for pulp of this type is weak, African exporters will have to meet very strict price and quality requirements if they are to penetrate this restricted market. The Government has asked the French "Fonds d'Aide et de Coopération" (Aid and Cooperation Fund) to finance further studies. This search will, it is feared, be difficult, as European papermakers have shown little eagerness so far for investments of this type (a similar project in Gabon has been under study for several years.)

65. A third project, extremely interesting on account of the novel prospects which it opens up, is for a spinning and weaving mill with a capacity of 12,000 tons per annum. Five groups replied to the invitation issued by the Government at the end of 1968, and the bids have been examined

by independent consultant engineers. The Agache-Willot group, currently France's most dynamic textile concern, which has already set up various smaller plants in Africa, is one of them. The decision should be announced shortly. The mill is to produce 12,000 tons of unryed cotton fabric, 75 percent of which will be for export and the remaining 25 percent for the local market, in particular for the existing dyeing and printing factory. The investment required is estimated at CFAF 8.5 billion.

66. The first extension to the oil refinery is planned to come on stream on January 1, 1972. This will raise crude oil capacity from 700,000 tons to 1 million tons. By 1975, this capacity will be fully employed. After that date, the present refinery will probably be dismantled or put in reserve and a new refinery of 2 million tons per annum constructed; this new investment is estimated at approximately CFAF 8 billion.

67. After consultations, the Government signed an agreement with a group made up of the Société Industrielle et Agricole du Niari, Société Générale Sucrière, CECEPAR and COFIMER for the setting up of a cane sugar refinery with a capacity of 25,000 to 35,000 tons per annum. The promotional company set up for the purpose is currently conducting cane planting trials. The investment is estimated at CFAF 4 billion (refinery plus plantation).

68. Michelin and Goodyear have interests in rubber plantations in the southwest part of the country. The Government is contemplating the setting up, but not until after 1975, of a tire factory, the cost of which is estimated at CFAF 2 billion.

69. There is also a series of likely or very likely projects involving an investment of between CFAF 500 and 800 million: a glassworks to produce 10,000 tons per annum of hollow ware, promoted by a French company which has already set up factories of this type in Tunisia, Madagascar and Indonesia; a plant producing electric batteries, for which Union Carbide recently received official approval, which is to export half of its production, estimated at 65 million units; a second cocoa butter works, on which negotiations are currently in progress with the American company Klein Chocolate; a 50,000 t/a pineapple cannery to be set up jointly by the Ivory Coast Government and a German group (in December 1969 the negotiations were on the point of conclusion); a corrugated cardboard plant; and a vegetable oils refinery. This last-mentioned project is of some significance as it is intended to utilize the rapidly growing production of oil seeds in the country. But here, too, the Government has not yet found a promoter, and this delay is having an adverse effect on the development of the fats sub-sector.

70. Finally, the Government has taken steps to make available to industrialists already developed sites in areas reserved for this purpose in the Abidjan zoning plan. Thus the Government envisages the development, from 1970 onwards, of two areas able to satisfy the estimated requirements

of 35 ha of industrial sites and 35 ha of business sites (construction firms, transport, craft industries) per annum for the period 1971-1975. The total amount to be expended on developing 250 ha in each type of area is estimated at CFAF 2.5 billion. The sites will not be sold but will be leased at a rental of CFAF 50 per sq. meter per annum for the two new areas and CFAF 100 per sq. meter per annum for the sites still available in the Vridi area. A public company is to be set up shortly to administer these industrial estates. The Government has so far shown itself anxious to provide the infrastructure called for in its zoning plan sufficiently early to ensure that development does not take place in a haphazard manner. Pursuit of this policy justifies this project, the studies for which have been entirely completed.

71. The list of studies required for the realization of these projects is a short one. The importance for the Ivory Coast economy of the iron ore project has to be evaluated; the promoter cannot be asked to carry out such a study, nor can it be made before the promoter has completed his technical documentation; on the other hand it must be made before the financing scheme has been finalized, so that its consequences can be assessed. As far as the paper pulp project is concerned, the preliminary studies will almost certainly be financed by the Aid and Cooperation Fund (FAC); its importance for the Ivorian economy cannot be assessed until the promoter has completed his technical study. The other projects do not raise any problems, except perhaps the vegetable oils refinery (palmiste, cottonseed, copra). If the Government does not find a promoter it could consider backing this project itself; in this case, a serious study of the problem of marketing the vegetable oils will be called for as this will be more difficult than marketing the oil seeds.

72. Finally, a number of studies of a more general nature would be useful. The first such study could look for export industries that the Ivory Coast could promote; it should take into account the special advantages offered by the Ivory Coast as compared with other African countries and would have to be based on a sound knowledge of the industrial processes that would be suitable for transfer from Europe or the United States in this way. The amount of detail required (what have to be considered are products, or even certain individual steps in a complete manufacturing process) makes such a study difficult to carry out. It should serve only to guide the activities of the Bureau of Industrial Development; in no case should it lead to the rejection of a promoter who should come forward of himself simply on the grounds that his project is not shown on the list drawn up.

73. The second type of general study would take the form of branch analyses, designed to highlight the strengths and weaknesses of certain branches of industry and determine what steps should be taken to enable the Plan goals to be met. The branches of industry which would seem to most require such analysis are the forest and engineering industries (sub-sectors 11, 16 and 17), followed by clothing (18), other food industries (08) and plastics and miscellaneous industries. Analyses of this type can, however, only be useful when there is a government with the means to implement the measures shown to be necessary and able to push through a plan covering a period of several years. As long as such conditions do not exist, such analyses remain mere academic exercises.

Table 1: GROWTH OF IVORY COAST INDUSTRY

(figures in CFAF million)

	Gross sales			Value added			Exports			Investments as at end 1968	Jobs in 1968	Number of Enterprises
	1960	1965	1968	1960	1965	1968	1960	1965	1968			
05 Cereals and flour processing	1,078	3,763	5,628	286	953	1,470	7	113	74	3,800	3,200	(70)
06 Canned foods, coffee, cocoa	680	3,450	8,401	191	851	2,118	665	3,287	8,487	3,280	1,437	11
07 Beverages, ice	1,139	1,421	2,112	706	816	1,345	175	97	8	2,800	916	4
08 Other food industries, tobacco	666	2,246	2,766	501	1,751	2,143	69	255	156	1,060	302	6
09 Energy	-	941	4,448	-	299	1,510	-	403	1,609	3,745	201	1
10 Extractive industries	1,038	1,804	1,346	779	1,353	857	1,133	1,794	1,337	3,645	1,362	4
11 Metals	175	340	662	91	155	203	169	215	409	300	197	4
12 Building materials	415	797	2,900	270	372	951	6	7	115	1,555	716	10
13 Fertilizers	-	33	5	-	18	1	-	5	43	220	30	1
14 Chemicals, related products, rubber	120	2,157	3,119	82	730	999	114	873	1,278	1,435	887	15
15 Forestry industries	1,683	6,938	10,616	863	3,177	4,462	680	3,492	4,352	5,300	7,500	73
16 Assembly and repair of motor vehicles	1,839	5,571	7,876	902	2,017	2,761	177	373	373	1,500	1,937	22
17 Other mechanical and electrical industries	966	2,802	3,913	499	1,015	1,465	253	1,101	720	1,600	1,642	23
18 Textile industry	1,625	4,465	10,255	773	1,886	3,793	698	657	2,744	6,350	6,000	23
19 Leather, footwear	68	694	1,840	22	258	893	11	111	175	635	792	3
20 Fats	2,101	3,688	5,568	530	982	1,601	764	785	965	3,230	1,287	6
21 Rubber and plastic articles	125	392	830	15	167	390	114	28	42	645	552	12
22 Miscellaneous industries	260	580	1,206	158	322	448	23	224	221	800	616	22
	<u>13,978</u>	<u>42,082</u>	<u>73,571</u>	<u>6,668</u>	<u>17,122</u>	<u>27,410</u>	<u>5,058</u>	<u>13,820</u>	<u>23,108</u>	<u>41,900</u>	<u>29,574</u>	<u>310</u>

Sources: Gross sales, value added, exports: National Accounts;
Investments, jobs, number of enterprises: Chamber of Industry and Industrial Development Bureau.
The latter figures are approximate.

Sub-sector 09: Only the oil refinery has been taken into account.

Table 2: MINORITY ENTERPRISES

Enterprise	Exemptions on raw materials	Gross Sales	Import duties on finished products		Value added by enterprise	Salaries of European personnel	Gross Income	Transfers	Local value added	
			%	Value					Direct	Indirect
GMA	-	2,123	4%	85	723	25	340	367	356	-
CAPRAL ^{**}	-	653	CFAP 25,735 per ton green coffee	88	272	34	212	72	200	-
SACO ^{**}	12	4,227	-	600	1,025	33	260	282	743	-
SALGI	6	2,251	-	-	1,171	90	226	100	1,070	517
BOGIP	-	130	-	-	108	9	23	26	82	-
AFRILAIT			Closed in December 1968		-	No information available				
IVOIRLAIT	4	84	4%	3	50	9	12	18	32	-
SIR	26	4,448	-	-	1,510	170	770	725	785	-
MOKTA	41	405	-	-	385	74	58	100	285	-
IWOIRAL	59	626	15%	77	220	16	48	55	165	-
SOTREC	9	184	20%	30	107	20	5	13	94	-
SCA	124	1,197	20%	198	551	15	170	120	431	-
SICK	99	949	20%	156	436	17	153	163	273	-
SOERICI	7	4	-	-	-	-	-	-	-	-
SAEC	20	358	25%	74	197	30	51	70	127	-
SIFEC	12	189	25%	39	85	11	-	7	78	-
SOFACO	51	620	15%	77	161	12	8	16	145	-
SIFLI	32	480	15%	59	134	-	54	54	80	-
SOTROPAL	7	267	CFAP 1.50 per can + 10%	100	335	24	80	95	245	-
SOTREP	--	204	-	-	110	10	22	29	81	-
SPTR	--	93	-	-	75	27	-	18	57	18
BIBOIS	--	517	-	-	398	60	-	40	358	-
CIB	--	422	-	-	257	9	-	6	251	165
SIFCI	--	480	-	-	359	93	-	62	297	-
SIMA	--	102	-	-	43	7	12	17	26	59
ADK	2	304	-	-	243	-	12	10	233	61
SCAF	-	54	-	-	43	4	28	32	11	-
MAC	70	445	30%	110	196	10	49	56	140	-
SAFAR	285	1,458	30%	360	365	24	69	85	279	-
SERIA	33	336	-	-	278	15	27	37	141	-
ABI	5	230	15%	28	110	9	23	6	104	-
CARENA	6	595	-	-	405	104	134	200	205	-
HECOA/SEBRAL	16	234	20%	38	126	7	23	5	121	-
SAR	61	349	30%	86	164	27	-	18	146	-
FILTISAC	14	337	15%	41	222	48	-	32	190	-
SOFTIS	3	237	15%	29	157	6	52	56	101	-
ICODI	224	1,191	20%	197	608	51	334	370	238	-
SOTEXI	489	1,134	20%	187	544	93	98	130	444	-
UNIMAX	2	-	-	-	-	-	-	-	-	-
SOCITAS	-	-	-	-	-	-	-	-	-	-
IRA	10	168	30%	42	77	4	6	9	68	-
SAB	54	319	30%	79	163	11	39	47	116	-
MACODI	86	547	30%	135	247	34	35	59	188	-
SAFRIC	135	750	30%	185	53	13	39	48	307	-
BATA	67	761	25%	157	435	23	148	164	271	-
RSL	160	3,013	-	-	1,150	100	279	66	1,084	-
SAFRICCSY	13	239	25%	44	155	2	29	-	155	-
MIPA	7	207	25%	43	120	7	42	47	73	-
MRP	6	144	30%	35	116	6	35	34	82	12
SONACO	111	1,022	25%	210	327	12	108	75	252	-
	2,368	35,087		3,592	15,235			4,055	11,180	832

* CAPRAL: does not pay export duties of CFAP 25,735 per ton of green coffee processed; 1,209 tons of soluble coffee are equivalent to 3,600 tons of green coffee.

** SACO: does not pay export duties on exportable cocoa processed (75% of supply).

Table 3: COMPARISON OF 1968 RESULTS AND 1970 FORECASTS

	Gross Sales			Exports		
	1968	1970	$\frac{1970}{1968}$	1968	1970	$\frac{1970}{1968}$
05 Cereals and flour processing	5,628	10,302	1.84	74	448	6.15
06 Canned foods, coffee, cocoa	8,401	10,540	1.25	8,487	9,960	1.17
07 Beverages, ice	2,112	2,150	1.02	8	203	25
08 Other food industries, tobacco	2,766	4,623	1.67	156	491	3.14
09 Energy	4,448	5,300	1.19	1,609	1,970	1.22
10 Extractive industries	1,346	2,034	1.53	1,337	1,825	1.37
11 Metals	662	2,900	3.9	409	324	0.70
12 Building materials	2,900	3,410	1.18	115	20	0.17
13 Fertilizers	5	260	52	43	-	-
14 Chemicals, related products, rubber	3,119	4,440	1.27	1,278	1,905	1.49
15 Forestry industries	10,616	9,777	0.92	4,352	4,910	1.13
16 Assembly and repair of motor vehicles	7,876	8,760	1.11	373	140	0.38
17 Other mechanical and electrical industries	3,913	6,441	1.65	720	250	0.35
18 Textile industry	10,255	19,250	1.87	2,744	4,890	1.78
19 Leather, footwear	1,840	2,070	1.14	175	90	0.51
20 Fats	5,568	8,768	1.58	965	2,990	3.1
21 Rubber and plastic articles	830	2,127	2.56	42	100	2.4
22 Miscellaneous industries	1,286	2,180	1.7	221	120	0.51
	<u>73,571</u>	<u>105,332</u>	<u>1.43</u>	<u>23,106</u>	<u>30,636</u>	<u>1.33</u>

Note: 1968 figures in current CFAF; 1970 figures in 1965 CFAF.