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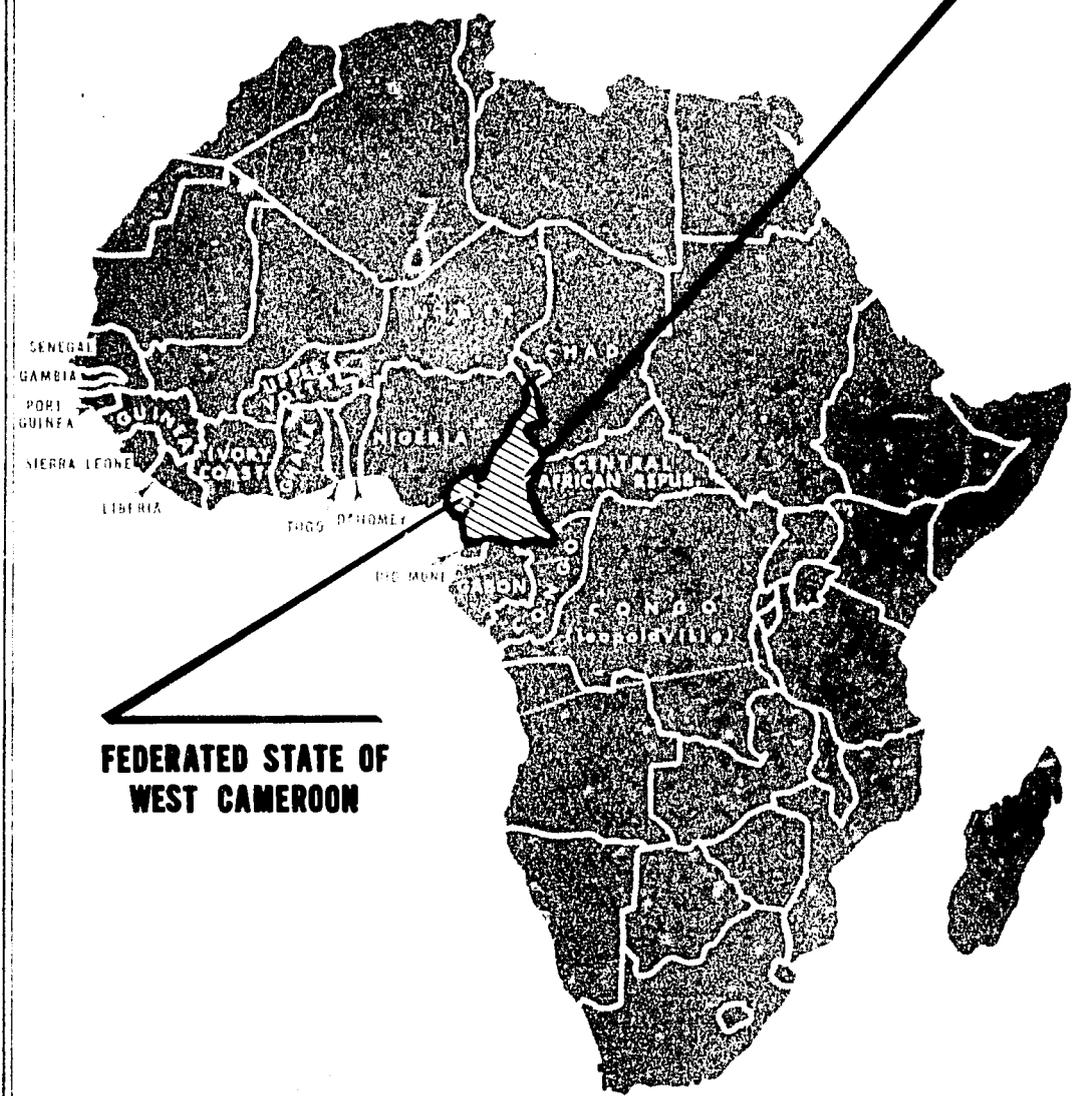
THE ECONOMIC POTENTIAL OF WEST CAMEROON-- PRIORITIES FOR DEVELOPMENT

Prepared for:

THE GOVERNMENT OF THE
FEDERAL REPUBLIC OF CAMEROON
AND
THE GOVERNMENT OF THE
FEDERATED STATE OF WEST CAMEROON

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**FEDERAL REPUBLIC OF
CAMEROON**



**FEDERATED STATE OF
WEST CAMEROON**

PREFACE

This report is Volume I of a study prepared by Stanford Research Institute entitled The Economic Potential of West Cameroon--Priorities for Development. The study has been made for the Federal Republic of Cameroon and the Federated State of West Cameroon, under a contract dated May 19, 1964, with the Agency for International Development of the United States Government.

The purpose of the contract was to cooperate with Government agencies at both the Federal and State levels in preparing a regional plan for the economic development of West Cameroon. Such a plan was prepared for East Cameroon in 1961, but economic planning for West Cameroon has only begun. It is hoped that the suggestions made in the Stanford Research Institute study will be helpful in drawing up the long range plan for West Cameroon.

The study consists of a general report and six sectoral reports; on agriculture; public health; transport and telecommunications; tourism; industry; and education and manpower. Two supplements, Bibliography and Gazetteer of Place Names, have also been prepared for reference purposes.

Data used for the study were collected in the Cameroon during an eight-month period from June 1964 to February 1965. During most of this period, eight members of the research team lived in the capital of West Cameroon, Buea, but traveled in all six Divisions of the State and in sections of East Cameroon as well.

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Chapter 1

INTRODUCTION

This report is Volume I of The Economic Potential of West Cameroon--Priorities for Development, a study in seven volumes prepared by Stanford Research Institute under agreements with the Government of the Federal Republic of Cameroon, the Government of the Federated State of West Cameroon, and the U.S. Agency for International Development (USAID).

The report provides background information on the economic development of West Cameroon, the agencies of the State Government concerned with economic development, the structure of the economy, the population, and the distribution of the labor force.

The recommended development program described in the other volumes is summarized for agriculture, health and medicine, transport and telecommunications, tourism, industry, and education and manpower. Included as Appendix B is a recapitulation in tabular form of the capital requirements for the development program.

The impact of the proposed development program is then assessed in quantitative terms. In the final chapter, suggestions are made regarding the means whereby the development program can be carried out.

The authors of this report wish to acknowledge the help and advice of the following persons during field work in the Cameroon: S. J. Epale, Financial Secretary, Ministry of Finance; Walson M. Ntuba, Planning Officer, Ministry of Finance; Dr. Frits Snapper, UN Adviser to the Ministry of National Economy, Victoria office; Dr. Hermann J. Buttkus, Economic Adviser, Office of the Prime Minister; Mademoiselle Nicole Etienne, National Accounts Economist, Centre d'Information, de Documentation, et d'Etudes du Plan; James L. Roush, AID Affairs Officer, American Embassy, Yaounde; and Charles R. Morrison, AID Affairs Coordinator, Buea, West Cameroon.

Chapter 2

SUMMARY AND CONCLUSIONS

West Cameroon has suffered from a lack of continuity in the management of its economic development. The period of the German protectorate ended in 1914; the British occupation, mandate, and trusteeship, although extending from 1914 to 1961, was interrupted by two world wars; and further development has only begun to take place since the reunification of West Cameroon with East Cameroon on October 1, 1961.

Per capita product in West Cameroon and the level of infrastructural development presents an unfavorable contrast when compared with East Cameroon. This has given rise to a sense of urgency in moving forward with planning for future development in West Cameroon. The inaugural meeting in January 1965 of the Regional Development Council in Buea suggests that planning for development on an integrated basis with East Cameroon is now being accelerated. Despite these favorable developments, there are a number of economic problems likely to impede the growth of West Cameroon's economy. The impending harmonization, that is, the equalization of taxes and duties, is essential to long term growth; it may, however, bring about a short term rise in prices and wages. West Cameroon exports have not yet been restored to the levels prevailing before independence. Foreign investment has declined, and uncertainties as to Government's treatment of future foreign investment may retard the pace of future development.

There are, however, grounds for optimism that West Cameroon's economy will continue to grow at an accelerated pace. New roads are being financed by the Fonds d'Aide et de Coopération (FAC), Fonds Européen de Développement (FED), and the U.S. Agency for International Development (AID). A new agreement has been reached whereby the price of bananas is stabilized and a guaranteed market for 45,000 tons (about 90 percent of 1964 exports) has been assured. An agricultural extension program has been initiated which can help achieve improvements in the per capita output of an estimated 173,000 farm households.

The development program proposed for the ten-year period 1965-75 will require a capital investment of 48.8 billion CFA francs (\$194.8 million). The recommended program stresses improvements in agricultural productivity and the growth of the cattle population, one of West Cameroon's most valuable resources. To accomplish substantial gains, improvements in the transport system are essential. Capital also will be required

for the development of industry, education and manpower, health and medicine, and tourism, as shown in Table 1.

The potential impact of the proposed investment program will be to raise the gross domestic product (GDP) from the 1962/63 level of 19.5 billion CFA francs to an estimated 51.4 billion CFA francs by 1975; on a per capita basis the GDP is forecast to rise from 19,615 CFA francs to 37,744 CFA francs by 1975. This means an average annual increase in per capita GDP of 5.2 percent. This rate is comparatively rapid by standards prevailing in most developing countries. However, in view of the economic potential, the anticipated impact of the new projects already being financed, and the determination of the Cameroonian leadership to expedite development, such a rate of growth appears to be feasible.

(End of Summary and Conclusions)

Table 1

COMPARATIVE EMPHASIS, BY SECTOR, IN SUGGESTED DEVELOPMENT PROGRAM
1965-1975
(CFA Francs and U.S. Dollars)

<u>Sector</u>	<u>1965-75 (billions of CFA francs)</u>	<u>Equivalent in Millions of U.S. Dollars</u>	<u>Percent of Total</u>
Agriculture, livestock, and related processing industries	21.0 CFA fr	\$ 84.0	43%
Health and medicine	1.4*	5.6	3
Transport and telecommunica- tions	20.2	80.8	41
Tourism	0.1†	0.2	1
Industry	4.4	17.6	9
Education and manpower	<u>1.7‡</u>	<u>6.6</u>	<u>3</u>
Total	48.8 CFA fr	\$194.8§	100%

* 1,436 million CFA francs.

† Actual amount is 41.7 million CFA francs (\$166,800) for 1965-69 only and includes administrative costs.

‡ 1,652 million CFA francs.

§ Conversion rate used: 1,000 CFA francs = 4 dollars; total dollars is sum of conversions--not total CFA francs converted to dollars.

Source: Stanford Research Institute.

Chapter 3

BACKGROUND FOR ECONOMIC DEVELOPMENT

As mentioned earlier, a lack of continuity in the management of West Cameroon's economic development resulted from interruption of German and British efforts between 1885 and 1961. Other interruptions of continuity occurred when former German planters repurchased their land holdings in 1924, only to withdraw again in 1939 at the outbreak of World War II.

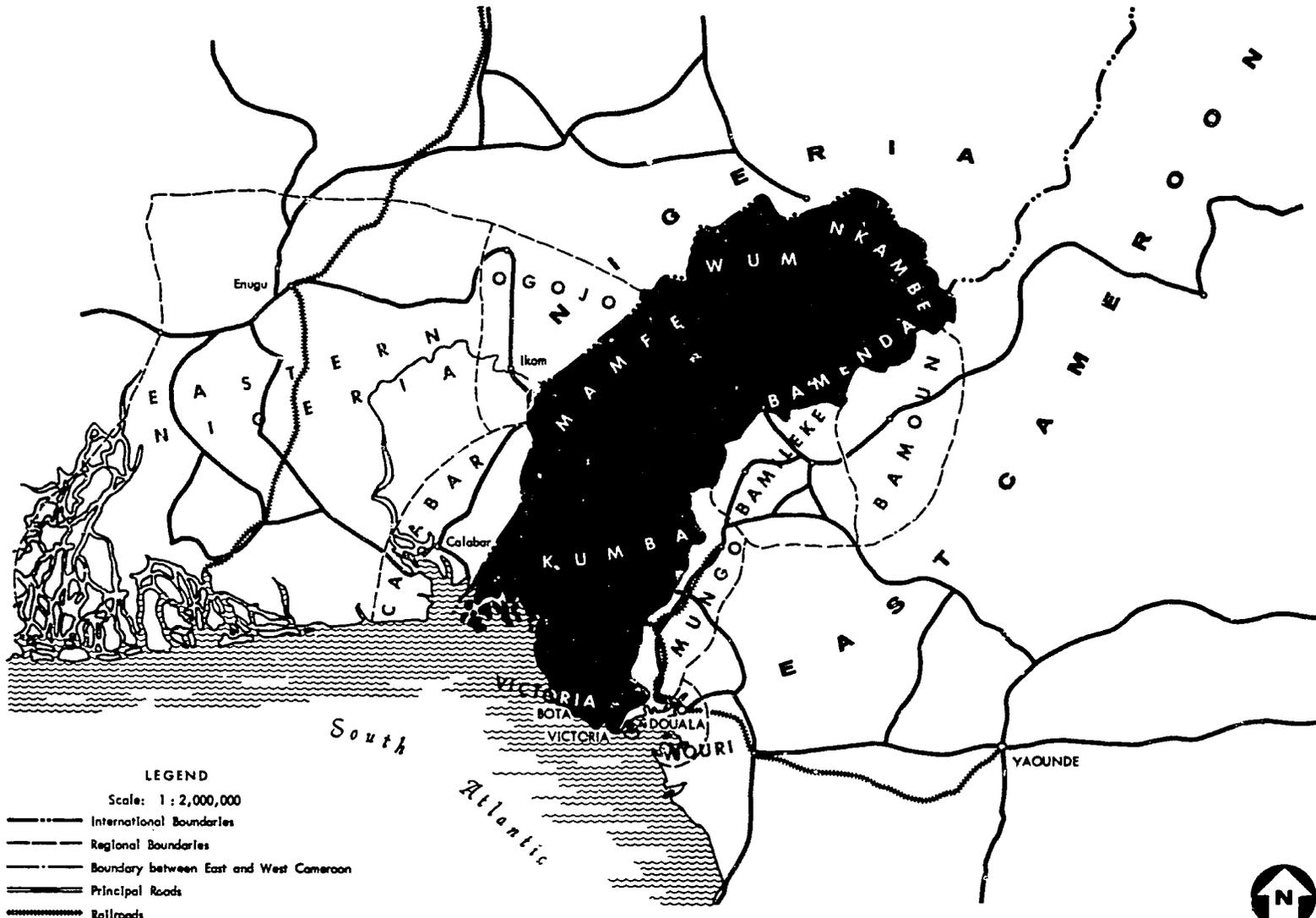
During most of the period of British administration, West Cameroon--then called the Southern Cameroons--was administered as a part of Nigeria. In terms of land area and population, the Southern Cameroons was only a fractional component of its giant neighbor, and as a claimant to limited British resources, Southern Cameroons efforts in seeking development funds met with only limited success. Figure 1 shows West Cameroon in its geographic context.

During both the German and British periods, developmental efforts were unevenly distributed. Victoria Division, with its commercial plantations, became the focus of economic activity, and Buea became the center for administration. The grassland region, composed of the three northern divisions, was by comparison overlooked in development programs, despite its larger population.

Regardless of the interruptions and the neglect of certain regions, some modest strides were made in the Territory's economic development. Agricultural co-operatives were initiated in the early 1950s and for the first time began to bring peasant farmers into the money economy. The town of Victoria was expanded, and a steel pier for oceangoing vessels was installed during the German administration; the port of Bota was built by the British; and plantings of the Cameroons Development Corporation (CDC) were increased to over 50,000 acres. Both the Germans and the British added cargo handling facilities at the port of Tiko. During the final years of the British trusteeship, the primary road system was expanded from 617 to 675 miles, and the mileage of subsidiary roads was increased from 430 to 1,003. The base for public health and educational systems, and public administration was well laid, and a cadre of educated Cameroonians attended universities in Nigeria, Ghana, and Britain.

FIGURE 1

WEST CAMEROON AND ADJACENT REGIONS



Unfortunately, however, West Cameroon's standards of living infrastructure, and levels of educational attainment are lower than in the sister State of the Federation, East Cameroon. The French Government has made major investments in East Cameroon railways, roads, airfields, and the port of Douala; and important private investments have been made in industry and plantations. The estimated annual per capita product in East Cameroon is 30,000 CFA francs (\$120), as compared with about 20,000 CFA francs (\$80) in West Cameroon. The degree to which the French language has penetrated in East Cameroon is greater than the penetration of English in West Cameroon. These contrasts have intensified the urgency which Government in West Cameroon attaches to its requirements for economic development.

East Cameroon inaugurated its first five-year development plan in 1961,* and substantial progress toward its execution has been achieved. West Cameroon, however, has not as yet had the benefit of a development plan. The only plan thus far prepared for West Cameroon was drawn together in the waning months of the British Trusteeship and, after the Territory's separation from Nigeria, was virtually abandoned. This plan† called for capital investment amounting to £8.8 million (\$24.6 million or 6.1 billion CFA francs) for the five-year period 1961-66, and placed principal emphasis (69 percent) on road construction and public works.

In January 1965, the inaugural meeting of the Regional Development Council in West Cameroon‡ was held in Buea, chaired by the Honorable Victor Kanga, Federal Minister of Finance and Planning. This collaboration between Federal and State Governments has begun to quicken the pace of economic development in West Cameroon.

* Premier Plan Quinquennal de Développement Economique et Social.

† The Southern Cameroons Five-Year Development Plan, 1961-66.

‡ Conseil Régional de Développement.

Chapter 4

ORGANIZATION OF GOVERNMENT

The executive head of West Cameroon's Government is the Prime Minister, who, under the Federal Constitution, serves concurrently as Vice-President of the Federal Republic. The Prime Minister serves as President of the Executive Council, commonly referred to as "Exco," and thus makes policy decisions on the advice of Council membership. Members of the Executive Council are the Secretaries of State in charge of the seven Ministries, the principal agencies of the Executive Branch. These Ministries and their relationship to Exco and the Prime Minister are shown in Figure 2.

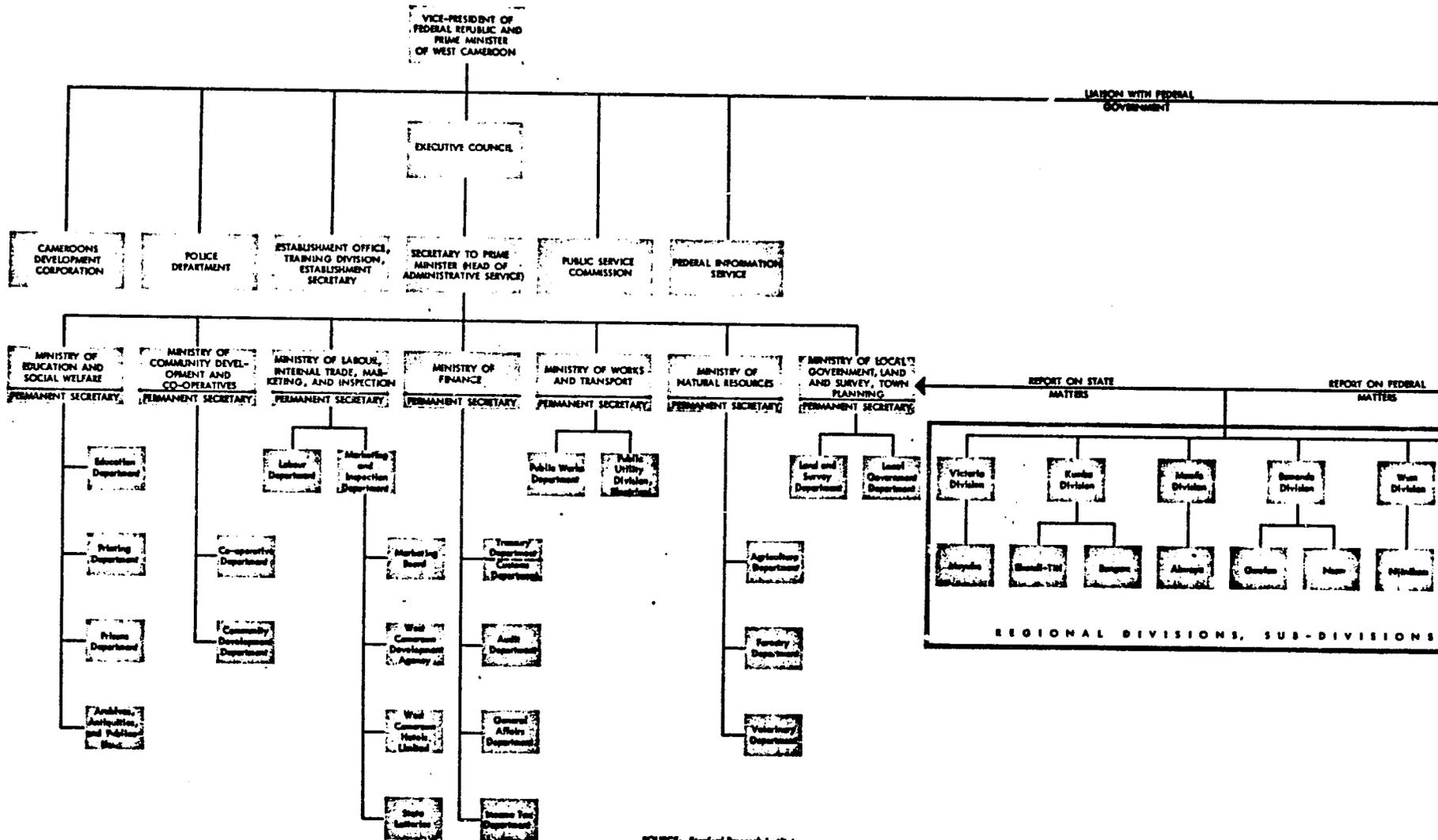
A permanent secretary is assigned to each of the Ministries. These officials, unlike the ministers, are nonpolitical appointees and continue to hold office even though the ministers change. There are a number of agencies that perform both Federal and State functions. The Education Department is responsible for primary education--a state function--and also has executive responsibility for technical and postsecondary education--a federal function. At the present time the secondary education system is concurrently the responsibility of both the Federal and the State Governments.

Certain agencies in Buea exercise exclusively Federal functions and are shown in Figure 2 under "Federal Departments." These agencies report to the Prime Minister and also to a Federal Inspector, a representative of the President's Office in Yaounde. Certain of the Federal departments are shown twice in the figure to show they have concurrent State and Federal responsibilities.

The legislature of West Cameroon consists of two houses, the House of Chiefs, having 21 elected members; and the House of Assembly, having 40 elected members. Until April 25, 1964, ten members of the House of Assembly in West Cameroon served in Yaounde as members of the Federal National Assembly. Members of the Federal National Assembly are now selected on the basis of general elections, the first of which was held on April 26, 1964. Membership in the Federal National Assembly is divided between East and West Cameroon in a ratio of 4 to 1, based on the generally accepted population estimates for the two States. These estimates

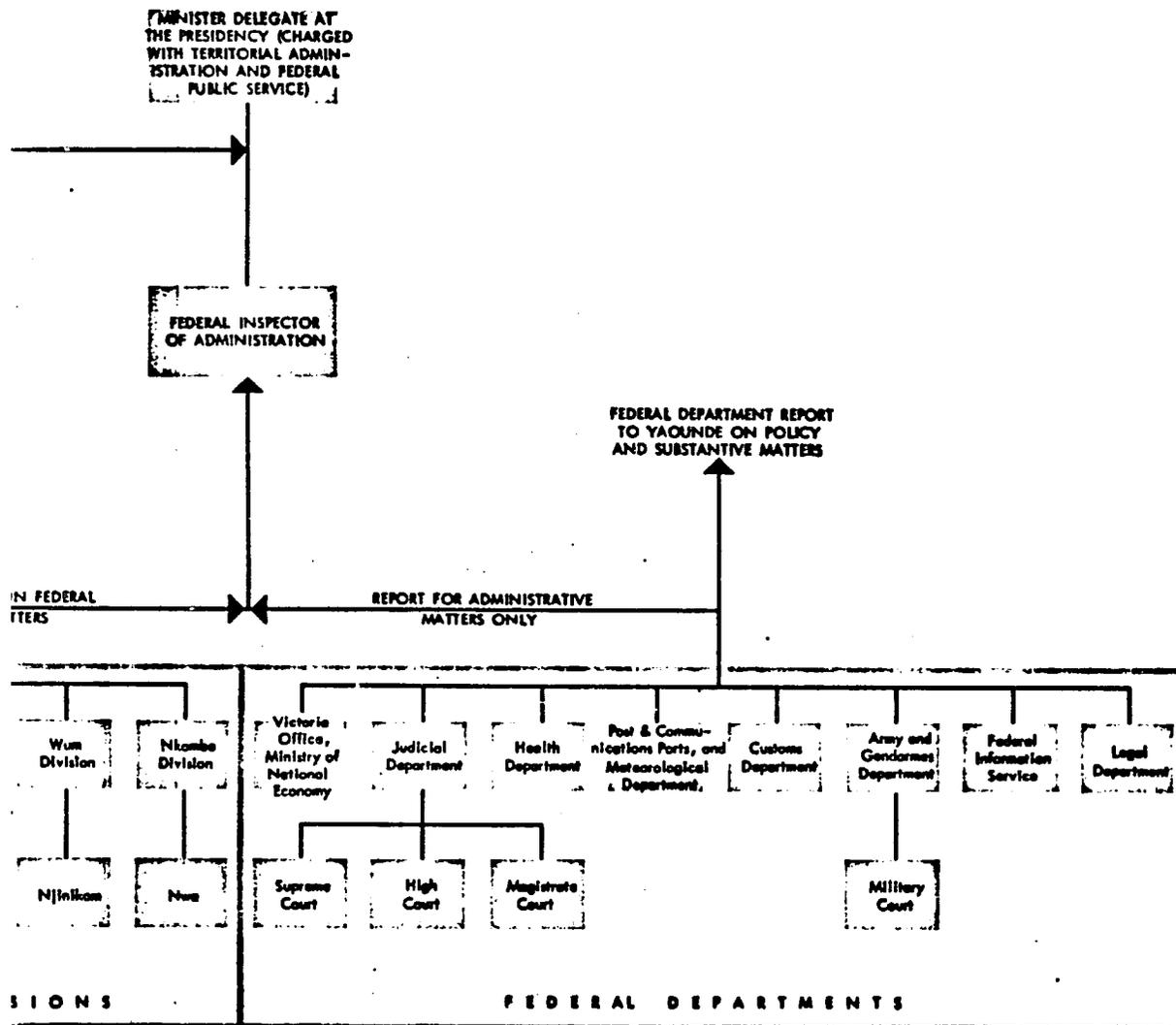
FIGURE 2

EXECUTIVE AGENCIES OF THE WEST CAMEROON GOVERNMENT AND RELATIONSHIPS TO THE FEDERAL GOVERNMENT
SEPTEMBER 1964



SOURCE: Standard Research Institute.

SHIPS



assume that the population of East Cameroon is about 4 million, as compared with 1 million in West Cameroon. Thus there are 50 members in the Federal National Assembly, 40 from East and 10 from West Cameroon.

Several of the Ministries in Buea play active roles in the planning of economic development. The Ministry of Natural Resources is concerned, through its Agriculture, Forestry, and Veterinary Departments, with the problems of peasant farming, the cattle herdsmen, and fishery projects. The Ministry of Labour, Internal Trade, Marketing, and Inspection is concerned with the growth of industry, commercial plantations, and tourism. The Ministry of Local Government, Land and Survey, and Town Planning is concerned with land disputes involving farmers and cattle owners and has coordinating responsibilities regarding local governments in the six geographical Divisions.

The Ministry of Works and Transport, supported by its Public Works Department and Public Utility Division, is concerned with the development of the transport system and the operations of the government-owned West Cameroon Electricity Corporation. The Ministry of Community Development and Co-operatives encourages the growth of agricultural co-operative societies. This same ministry takes primary responsibility for developing subsidiary roads through its community development activities and therefore coordinates such programs with the Ministry of Works and Transport.

In the Prime Minister's office, the Economic Division prepares feasibility studies and is seeking to attract investment. The Ministry of Finance exercises the major coordinating function with regard to aid received from abroad.

There are several Government corporations or agencies having commercial functions. The West Cameroon Marketing Board handles the export of cocoa, palm oil, palm kernels, and coffee in behalf of the peasant farming community. The CDC is responsible for the management of former German-held plantations consisting of 23,411 hectares as of December 31, 1964.

Chapter 5

STRUCTURE OF THE ECONOMY, POPULATION, AND LABOR FORCE

During 1964, pioneer efforts were made by two organizations to prepare estimates of West Cameroon's national accounts. The Ministry of National Economy, Victoria Office, with the aid of a United Nations statistical adviser, collected basic data on the commercial plantations, peasant farmers, agricultural co-operatives, the livestock sector, exports and imports, and Government finance at all levels. This information was used by the Centre d'Information, de Documentation, et d'Etudes du Plan (CIDEP), an economic advisory agency for the Ministry of Finance and Plan in Yaounde, to prepare basic tables of the Territory's production and consumption as shown in Tables 2 and 3.

The contribution to GDP of agriculture, chiefly the peasant farming sector, is estimated at 60 percent. This contribution is composed of the Sector 0 in Table 2, labeled "Animal and Vegetable Products," and a portion of the group, "Processed Agricultural and Livestock Products." The contribution to GDP of manufacturing and services is estimated at 29 percent.* This is higher than might be supposed and is attributable to the processing of rubber, cocoa, and palm oil undertaken by the commercial plantations, notably CDC and Pamol, Ltd.

The growth of urban areas and the requirements for construction in major towns resulted in the 8 percent component (included in the above 29 percent) attributable to construction, public works, and building materials.

The total GDP shown in the table is 19.6 billion CFA francs (\$78.4 million), indicating a per capita GDP of 19,615 CFA francs (\$78), assuming a population of 997,050 persons in the fiscal year 1962/63.

The per capita gross domestic product figure of 19,615 CFA francs compares with the East Cameroon estimated per capita gross domestic production of 30,000 CFA francs (\$120) for the same year, Nigeria's figure of 21,000 CFA francs (\$84), 13,000 CFA francs (\$52) for Tchad, and 12,000 CFA francs (\$48) for the Central African Republic. These figures are not completely comparable because of different methodologies employed.

* See Table 6 in Volume VI, Industry, of this report series.

Table 2

GROSS DOMESTIC PRODUCT, BY GOODS AND SERVICE*
1962/63
(Millions of CFA Francs)

Sector Code	Goods and Services	Total			Gross Domestic Product [†]	
		Availabilities	Imports	Intermediate Consumption	Total	Percent
0	Animal and vegetable products	10,301 CFA fr	-262 CFA fr	-412 CFA fr	9,627 CFA fr	49%
1	Processed agricultural and livestock products, and palm oil	4,467	-1,073	-72	3,322	17
2	Energy	1,010	-114	-206	690	3
3	Raw materials and semiprocessed goods	1,425	-397	-610	418	2
4	Mechanical and electrical goods	2,413	-1,058	-863	492	3
5	Leather and textile products	997	-492	-70	415	2
6	Miscellaneous industrial products	1,299	-632	-321	346	2
7	Construction and materials	1,726	-16	-121	1,589	8
8	Services	2,493	-0	-1,395	1,098	6
9	Labor [‡]	<u>3,770</u>	<u>-0</u>	<u>-2,210</u>	<u>1,560</u>	<u>8[‡]</u>
	Total	29,881 CFA fr	-4,044 CFA fr	-6,280 CFA fr	19,557 CFA fr	100%

* The system of national accounting used in the Cameroons differs from the standardized United Nations system. In particular, it should be noted that wages and salaries are treated as payments for labor services.

† Gross domestic product (GDP) = total resource availabilities less imports and intermediate consumption.

‡ Sector 9, Labor, includes general administration and domestic services, which are not covered by Sector 8, Services.

Sources: Centre d'Information, de Documentation, et D'Etudes du Plan (CIDEP), Yaounde; Ministry of National Economy, Victoria Office.

Table 3
AVAILABILITY AND USE OF RESOURCES IN WEST CAMEROON*
 1962/63
 (Millions of CFA Francs)

Sector Code	Resource	Resource Availability						Use of Resources							
		Imports		Local Production			Total	Intermediate Consumption	Final Consumption			Equipment		Report	
		Unofficial	Official	Commercial	Noncommercial	Margins			Commercial	Noncommercial	Government	Private	Government	Official	Unofficial
0	Animal and vegetable products	250 CFA fr	12 CFA fr	4,010 CFA fr	4,314 CFA fr	1,715 CFA fr	10,301 CFA fr	412 CFA fr	2,305 CFA fr	4,274 CFA fr	-- CFA fr	-- CFA fr	-- CFA fr	3,140 CFA fr	170 CFA fr
1	Food products	--	1,072	1,779	279	1,338	4,467	72	3,655	279	32	--	--	429	--
2	Energy	--	114	213	480	203	1,010	206	228	480	82	--	--	17	--
3	Raw materials and semi-processed goods	--	397	829	--	189	1,425	610	130	--	80	--	--	605	--
4	Mechanical and electrical products	--	1,058	1,000	--	358	2,413	963	323	--	122	961	96	38	--
5	Textile and leather products	--	492	250	--	238	977	70	898	--	12	--	--	--	--
6	Miscellaneous industrial products	--	622	400	--	267	1,299	321	848	--	109	--	--	21	--
7	Buildings and public works	--	16	1,425	280	5	1,726	121	148	280	202	596	379	--	--
8	Services	--	--	2,483	--	--	2,483	1,385	740	--	338	--	20	--	--
T	Subtotal	250 CFA fr	3,794 CFA fr	12,409 CFA fr	5,353 CFA fr	4,308 CFA fr	26,111 CFA fr	4,070 CFA fr	9,269 CFA fr	5,313 CFA fr	977 CFA fr	1,577 CFA fr	485 CFA fr	4,250 CFA fr	170 CFA fr
9	Work	--	--	3,770	--	--	3,770	2,210	830	--	1,030	--	--	--	--
8	Total	250 CFA fr	3,794 CFA fr	16,179 CFA fr	5,353 CFA fr	4,308 CFA fr	29,881 CFA fr	6,280 CFA fr	9,799 CFA fr	5,313 CFA fr	2,007 CFA fr	1,577 CFA fr	485 CFA fr	4,250 CFA fr	170 CFA fr

* Gross domestic product (GDP) is derived from the table as follows:
 Total availability (29,881 CFA francs), less unofficial imports (250 CFA francs), less official imports (3,794 CFA francs), less intermediate consumption (6,280 CFA francs), equals GDP (19,557 CFA francs).
 The GDP divided by the estimated population of 997,050 in 1962/63 gives per capita GDP of 19,615 CFA francs.

Sources: Centre d'Information, d'Etudes et de Documentation du Plan; Ministry of National Economy, Victoria Office.

Population

The basis for estimating West Cameroon's present population is the 1953 Population Census of the Eastern Region of Nigeria, the only census ever taken of the Territory. This census reported a total population of 752,800 people. During the past year, statistical analyses by the Victoria office of the Ministry of National Economy and the Education Department in Buea disclosed the need for a correction in the number of persons in school-age groups as reported in the 1953 census.* As the result of the correction, 1953 population is now assumed to have been 781,000 persons, or 4 percent higher than the 752,800 originally recorded.

The growth rate of West Cameroon's population is thought to be about 2.25 percent, a rate which compares with 2.4 percent in the Congo (Leopoldville), 2.3 percent in Kenya, 2.5 percent in Uganda, and nearly 2 percent in East Cameroon. Using the adjusted 1953 census as a base, 1964 population is estimated at 1,058,000 persons. Assuming continued growth at the same rate, population by 1975 should be 1,363,000 persons, as shown in Table 4.

However, the population of the six geographical Divisions is rising at different rates, more slowly in Victoria, Mamfe, and Nkambe, and faster in Kumba, Bamenda, and Wum. Migration, especially of males in the working age group, has been one cause of the uneven growth; farmers in the northern grassland regions have moved to the southern forest region seeking employment on commercial plantations or in urban communities. This has also given rise to regional imbalances as between males and females and has created unemployment problems in towns such as Victoria and Kumba where young men have tended to concentrate.

Urban Population

The percentage of total population residing in urban areas is low by world standards but is rising rapidly. In 1964 there were 13 urban clusters having populations of 3,600 persons or more. The total urban population is estimated at 144,300, or 14 percent of the total population of the Territory. The largest urban community is the town of Kumba, which appears to be growing at an average annual rate of about 9 percent. Assuming a slight decline in the future growth rate, the population of Kumba should easily reach 65,000 in 1975. The cluster of villages in the

* The number of girls in the 7-14 year age group was too low.

Table 4

WEST CAMEROON POPULATION ESTIMATES, BY DIVISION
1964, 1970, and 1975
(Thousands of Persons)

	Victoria			Kumba			Mamfe			Bamenda			Wum			Nkambe			Total		
	1964	1970	1975	1964	1970	1975	1964	1970	1975	1964	1970	1975	1964	1970	1975	1964	1970	1975	1964	1970	1975
Total population of Division	143	161	178	195	226	256	122	137	151	378	438	496	111	129	146	109	123	136	1,058	1,214	1,363
Urban population*	46 [†]	60	82	45 [‡]	66	91	8 [§]	8	8	28**	41	54	14 ^{††}	20	26	4 ^{**}	5	6	144	200	267
Rural population	97	101	96	150	160	165	114	129	143	350	397	442	97	109	120	105	118	130	913	1,014	1,096
Assumed average annual growth rate of Division population, 1964-1975		2.0%		2.5%			2.0%			2.5%			2.5%			2.0%			2.3%		
Division population as a percent of total West Cameroon population	14%	13%	13%	18%	19%	19%	12%	11%	11%	36%	36%	36%	10%	11%	11%	10%	10%	10%	100%	100%	100%

* Includes towns with an estimated 1964 population of 4,500 persons or more.

† Victoria Division towns: Tiko, Buea, Muyuka, Victoria-Bota.

‡ Kumba Division towns: Mbonge, Kumba-Piango-Three Corners, Tombel.

§ Mamfe Division: town of Mamfe only.

** Bamenda Division towns: Bamenda-Mankon-Bafreng, Kumbo (Banso).

†† Wum Division towns: Njinikom, Wum.

** Nkambe Division: town of Nkambe only.

Source: Stanford Research Institute.

Victoria-Bota area is the second largest community, with a 1964 total estimated population of 22,300. The third largest urban area is composed of three towns--Bamenda, Mankon, and Bafreng--and has about 18,700 inhabitants. The estimated populations of these and other towns are shown in Appendix A.

African cities in general are showing rapid rates of growth. Leopoldville and Elizabethville are growing at nearly 7 percent annually. Lome, in Togo, and Douala in East Cameroon appear to be growing at rates in excess of 8 percent annually. West Cameroon urban communities (shown in Appendix A) have risen since 1953 at rates ranging as high as 10.8 percent for Buea and Wum, and 9 percent for Kumbo (Banso) and Kumba. Only the town of Mamfe has failed to show any appreciable growth, because of the diversion of trade relations away from Nigeria and the British Commonwealth toward East Cameroon and the Franc Zone. Many of the entrepot functions previously performed in Mamfe are now being handled in Bamenda and Kumba.

Labor Force

In September 1963, the Ministry of Labour in Buea conducted an employment census. The results of this census showed that 30,443 persons were engaged by Government or private organizations having ten or more employees. Using the employment census of 1963 and the population census of 1953 as points of departure, the total working-age group has been estimated at 586,000 for 1964. Of this number, 66 percent are thought to be self-employed in agriculture, 27 percent are craftsmen, traders, artisans, or are unemployed; 3 percent are employed in commercial plantations, 2 percent are Fulani cattle owners or fishermen; and 2 percent are employed by Government. These estimates are shown in Table 5.

Table 5

ESTIMATED OCCUPATIONAL DISTRIBUTION OF WORKING-AGE POPULATION*
1964
(Thousands of Persons)

<u>Occupational Group</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>	
			<u>Number</u>	<u>Percent</u>
Self-employed in agriculture	173	216	389	66%
Cattle owners, fishermen	9	--	9	2
Employed by registered plantations†	15	1	16	3
Employed in registered companies or Government agencies†	14	--	14	2
Unemployed, or employed in nonregis- tered firms or agencies outside the agricultural sector	<u>86</u>	<u>72</u>	<u>158</u>	<u>27</u>
Total working-age group	297	289	586	100%
Population outside working-age group	<u>227</u>	<u>245</u>	<u>472</u>	<u>--</u>
Total population	524	534	1,058	--

* Working age: 15-49 years.

† Registered in the September 30, 1963, survey by the Department of Labour, Buea.

Sources: Derived by Stanford Research Institute from Population Census of the Eastern Region of Nigeria, 1953; Cameroons Province, Bulletin No. 3; Bamenda Province, Bulletin No. 2; and from preliminary conclusions of the Demographic Survey of West Cameroon by the Société d'Etude pour le Développement Economique et Social (SEDES).

Chapter 6

THE SUGGESTED DEVELOPMENT PROGRAM

Capital requirements of the suggested development program during the ten-year period 1965-75 are 48.8 billion CFA francs, or the equivalent of \$194.8 million (see Appendix B for detailed calculations). During the ten-year period, principal stress is recommended for improvements in agricultural productivity, both in the commercial plantations and in the peasant farming sector. Of the total capital requirements, 43 percent, amounting to 21.0 billion CFA francs (\$84.0 million), is proposed for agriculture, livestock, and related processing industries. Capital requirements of the transport sector are the second largest, suggested at a level of 20.2 billion CFA francs (\$80.8 million), or 41 percent of the total. The industrial sector, excluding processing industries linked directly with agriculture, is suggested at 4.4 billion CFA francs (about \$17.6 million), constituting 9 percent of the total. The program for education and training is proposed at 1.7 billion CFA francs (about \$6.6 million), and programs in the health and medical field are suggested at 1.4 billion CFA francs (\$5.6 million). Recommendations for improving the tourist plant would require only a small capital outlay amounting to less than one percent of the total. These amounts and the percentage of the total which they constitute are shown in Table 6.

Each of the component programs proposed is described in a separate volume in this report series. Volume II describes the agriculture program and certain proposals for the industrial processing of agricultural products; Volume III, the health and medical program; Volume IV, transport and telecommunications; Volume V, tourism promotion; Volume VI, industrial development; and Volume VII, a program for education and training. A brief recapitulation of these programs is presented below.

Agriculture

Two systems of agriculture exist side by side in the Territory. The location of producing areas is shown in Figure 3. One is the highly developed and technically advanced agriculture of commercial plantations; the other is peasant farming, characterized by low productivity and the cultivation of subsistence crops. The suggested program envisages courses

Table 6

**CAPITAL REQUIREMENTS, BY SECTOR, FOR SUGGESTED DEVELOPMENT PROGRAM
1965-1975
(CFA Francs and U.S. Dollars)**

<u>Sector</u>	<u>1965-75 (billions of CFA francs)</u>	<u>Equivalent in Millions of U.S. Dollars</u>	<u>Percent of Total</u>
Agriculture, livestock, and related processing industries	21.0 CFA fr	\$ 84.0	43%
Health and medicine	1.4*	5.6	3
Transport and telecommunica- tions	20.2	80.8	41
Tourism	0.1†	0.2	1
Industry	4.4	18.0	9
Education and manpower	<u>1.7‡</u>	<u>6.6</u>	<u>3</u>
Total	48.8 CFA fr	\$194.8	100%

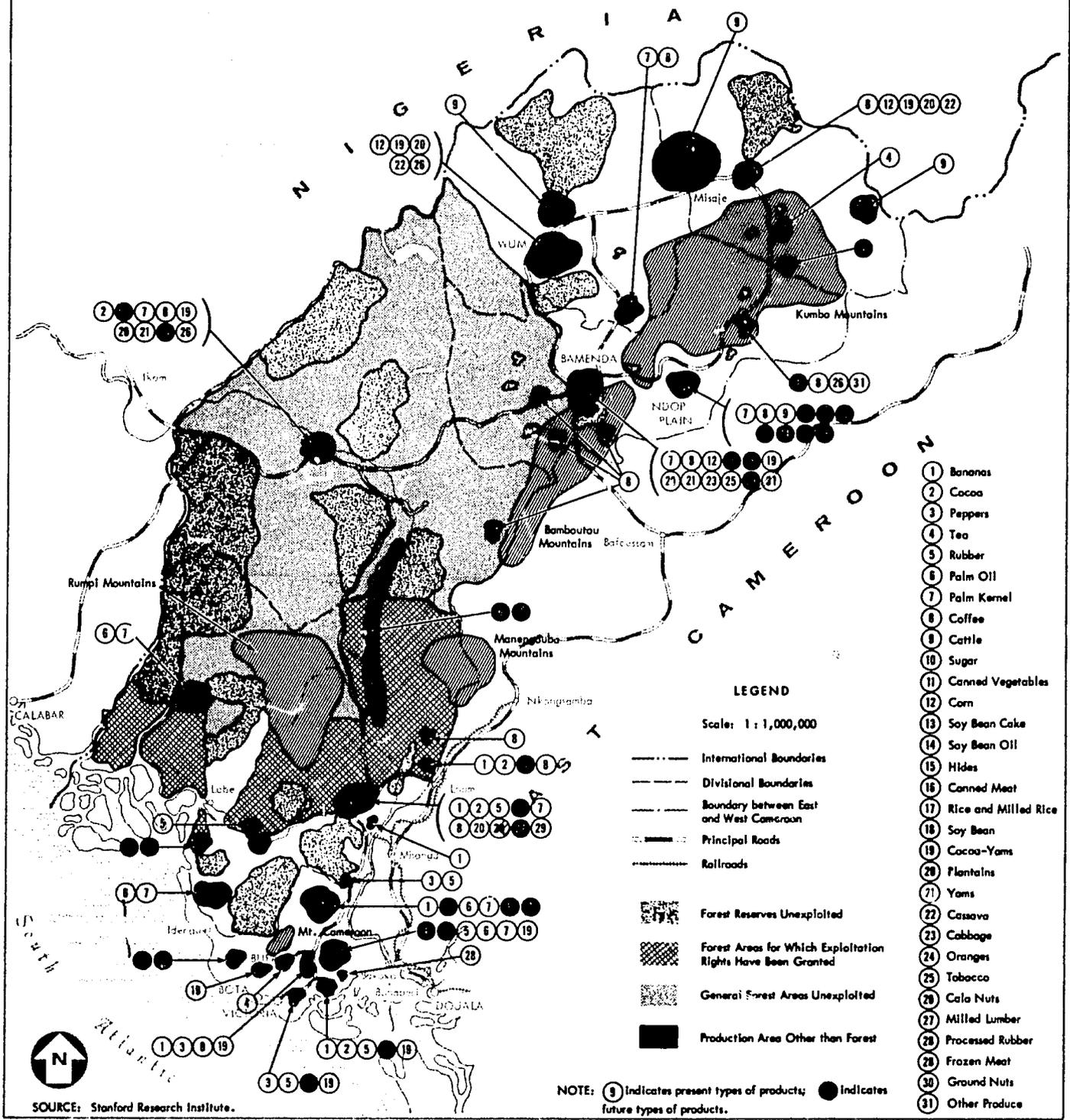
* 1,436 million CFA francs.

† Actual amount is 41.7 million CFA francs (\$166,800) for 1965-69 only and includes administrative costs.

‡ 1,652 million CFA francs.

Source: Stanford Research Institute.

FIGURE 3
LOCATION OF PRODUCING AREAS



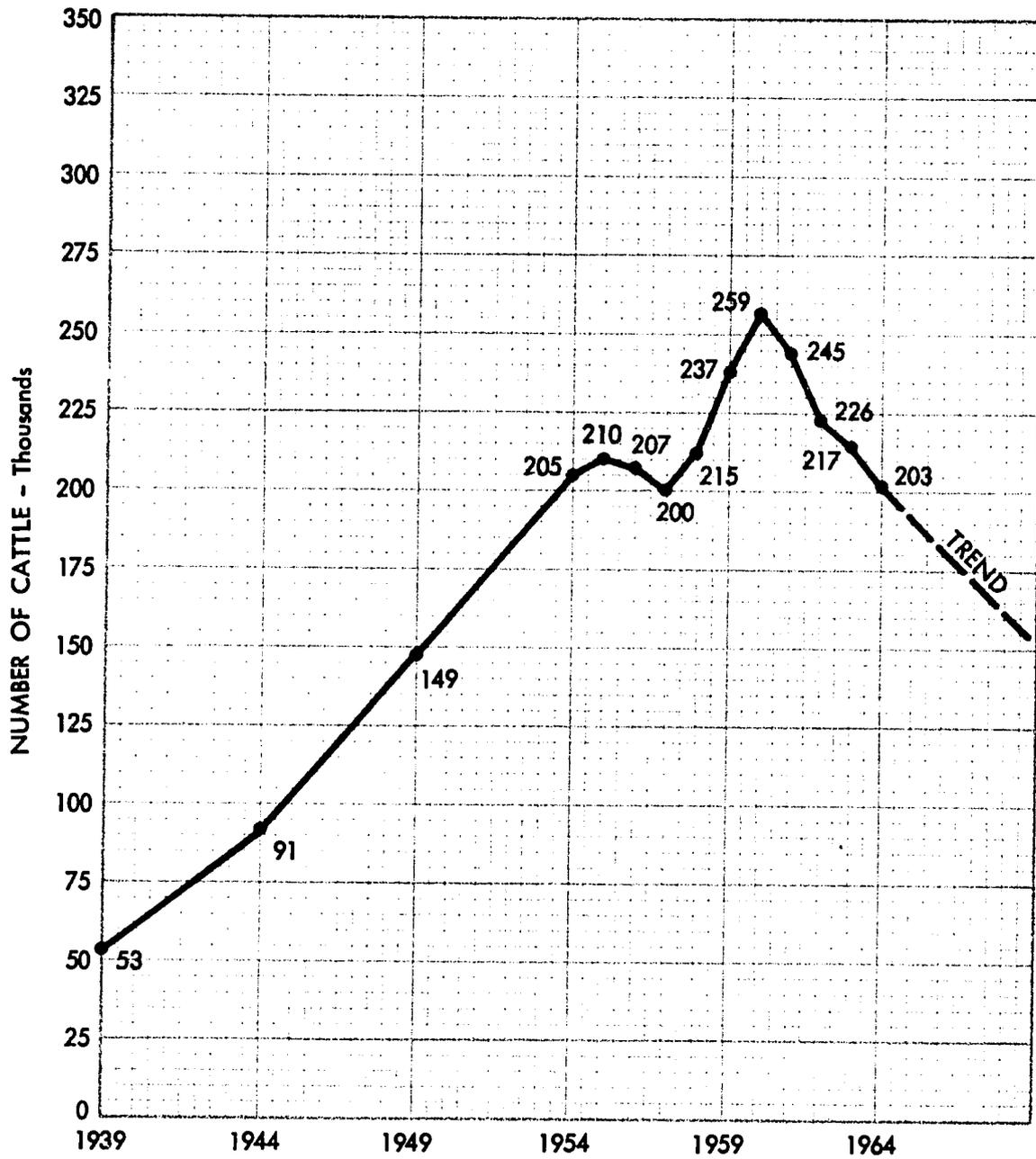
of action for improving both types of agriculture. Given 173,000 peasant farm households, a slight per capita increase in output can result in a major improvement of gross domestic product. Consequently, programs involving the settlement of peasant farmers on unutilized lands, the provision of supervised credit for purchasing fertilizers and insecticides, land clearance, and freshwater fish ponds are contemplated. Loans to farmers are proposed in the form of supplies and services rather than cash.

In terms of capital, the plantation sector is assigned a higher priority under the proposed program. This is because the prospect of major financing seems favorable, and the resulting benefits to the economy are substantial. The CDC has already requested loans from the Fonds Européen de Développement and the World Bank.

The agriculture program places further stress on the livestock sector. West Cameroon's cattle population rose steadily, according to tax records, from 35,876 head in 1930 to 258,976 in 1960. Since 1960, however, the cattle population has steadily declined at an annual average rate of 5.9 percent (see Figure 4). The estimate for 1964, again based on the tax statistics, is 202,754 head. The decline means a loss of about 12,000 head annually, or a reduction in gross domestic product of about 240 million CFA francs (\$960,000). With this disappearance of livestock, evidently due to migration out of the Territory, the prospects for establishing meat canneries and leather products industries diminish. The program assumes, however, that the administrative arrangements now adversely affecting the marketing of cattle will be improved and that in the future the cattle population will be restored to a level sufficient to support these industries.

A basic objective of the proposed agriculture program is the encouragement of peasant farmers and Fulani cattle owners to improve their husbandry of poultry, hogs, and beef cattle. In this way, West Cameroon can increase its supply of animal protein and take advantage of the growing meat and hide deficits of the European Economic Community. This in turn will require the development of an animal feed supply utilizing local raw materials. The valley of the Nun River in the Ndop Plain, east of Bamenda, appears to be eminently suited for the cultivation of maize, probably soybeans, and other ingredients for cattle feed. The program therefore suggests a major development scheme in the Ndop Plain, based on the Sudanese Gezira concept.

FIGURE 4
TREND IN CATTLE POPULATION OF WEST CAMEROON
1939-1964



SOURCE: Stanford Research Institute.

The Transport Program

The capital requirements for the transport program proposed for the ten-year period represent 41 percent of the total as shown in Table 6. This emphasis, second only to agriculture, is warranted because of the urgency of overcoming the neglect in road development of prior years. Certain major improvements in the transport system have already been launched, notably, the road from Tiko to Douala, the Bolifamba-Kumba road, the road from Mile 47 to Mamfe, and the rail spur connecting West Cameroon with the East Cameroon system. Other top priority roads are those from Bamenda to Bafussam, and a portion of the Ring Road from Bamenda to Jakari. This latter project is needed to prepare the way for a major development scheme mentioned above for the Ndop Plain.

In order to execute the major transport projects contemplated, the principal action agency, the Public Works Department (PWD), will need substantial reinforcement. An intensified program of training involving the augmentation of the expatriate contract staff now serving the PWD is envisaged.

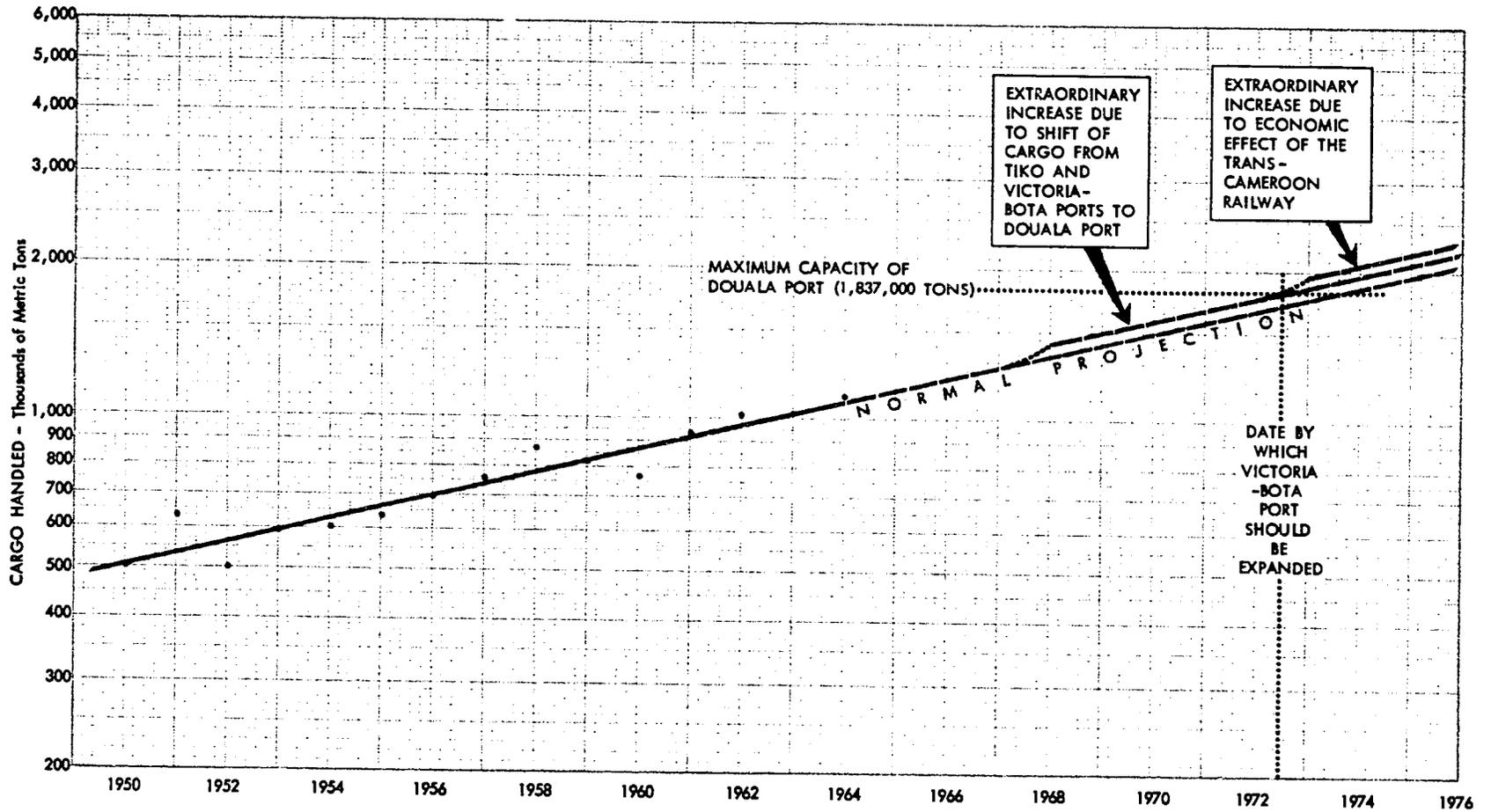
With regard to seaports, the program assumes that the requirements for cargo handling will continue to rise as they have in the past at a rate of about 6 percent annually. However, an extraordinary increase in the cargo handling requirements over and above this growth rate is likely to occur after the completion of the Trans-Cameroon railway and also to result from the tendency on the part of shippers to utilize the port of Douala in preference to Bota and Tiko. These increases in cargo handling will result in the gradual surfeiting of port capacity in Douala. By 1972, it appears probable that the upper limits of Douala's capacity to handle cargo economically will be reached (see Figure 5). Studies already completed by the Société Générale d'Exploitations Industrielles (SOGEI) in Paris show that the site of Victoria-Bota in Ambas Bay will be satisfactory for a deepwater port serving the Cameroon and probably the landlocked republics to the North and West. The Victoria-Bota site can accommodate many of the vessels composing the world tanker fleet, and therefore the new port should specialize in handling petroleum products. This in turn could lead, at the end of the planning period, to the establishment of a petroleum refinery near Victoria.

The program anticipates the utilization of Tiko as a specialized banana port capable of handling major tonnages in the future likely to be exported to European countries where consumption is continuing to rise at about 6 percent annually.

Planning and financing already envisaged by the Federal Director of Aviation seems nearly adequate to cope with the volume of traffic foreseen

FIGURE 5

PROJECTED TONNAGES TO BE HANDLED AT THE PORT OF DOUALA



SOURCE: Stanford Research Institute.

for West Cameroon's air fields. However, additional improvements are recommended such as: modernization of the air terminal at Tiko, and the installation of radio navigation equipment at Mamfe, Bali, Nkambe, and Akwaya.

Telecommunications

As in other West African countries, the demand for telephone service in West Cameroon has risen rapidly, at an annual average rate of 12 percent from 1955 to 1964; in the last two years, however, demand has risen by 34 percent on an annual average. The shortage of circuits, the demand for long distance calls, and the importance of effective liaison with outlying regions dictate a vigorous expansion of the telephone system.

Industry

Two broad types of activity are proposed in the industry field. The first is a program for the improvement of small industries, based on the concept that small loans for machinery and raw materials, carefully supervised by a specialized agency in the Ministry of Labour, can gradually bring about an expansion of the small industry sector. Loans would be administered through a commercial bank and borrowers would receive machinery and raw materials rather than cash. A small staff of industrial extension agents would supervise the installation and operation of the equipment. Close coordination with the Government Technical College at Ombe would help assure that graduates of that Institution would be able to establish viable new industries.

The second type of industry contemplated by the program is of medium and large scale, intended to serve national, Union Douanière et Economique de l'Afrique Centrale (UDEAC), or export markets. By the end of the planning period in 1975 an integrated plywood and timber mill is foreseen. The prospects for manufacturing certain other products also appear favorable, such as: soap, carbonated beverages, beer, canned fruit, leather goods, work garments, rubber products, plastics, and cement pipe. By the end of the planning period, if requirements warrant, a petroleum refinery having an annual throughput of 180,000 tons of crude oil might be considered as well. All these possibilities will require careful preinvestment feasibility studies.

In support of the industrial program an expansion of the electric power system is proposed. Based on the population growth, first priority should be placed on the electrification of Kumba, Bamenda, Wum, Tombel, Kumbo, and Mamfe.

Mineral exploration is being undertaken systematically by the Federal Directorate of Mining and Geology. Special emphasis is needed on the analysis of limestone deposits, for example, those lying between Lip and Mbiam located East of Kumbo in Bamenda Division.

In view of the success achieved in nearby regions in Nigeria with the exploitation of offshore oil deposits, exploration of the sedimentary basin and offshore regions of West Cameroon should be encouraged. A French firm, Société de Recherche et d'Exploitation des Pétroles du Cameroun (SEREPKA), is already working in a concession near Rio del Rey, but other parts of the Territory could also be explored if licenses were extended to the major oil companies.

Tourism

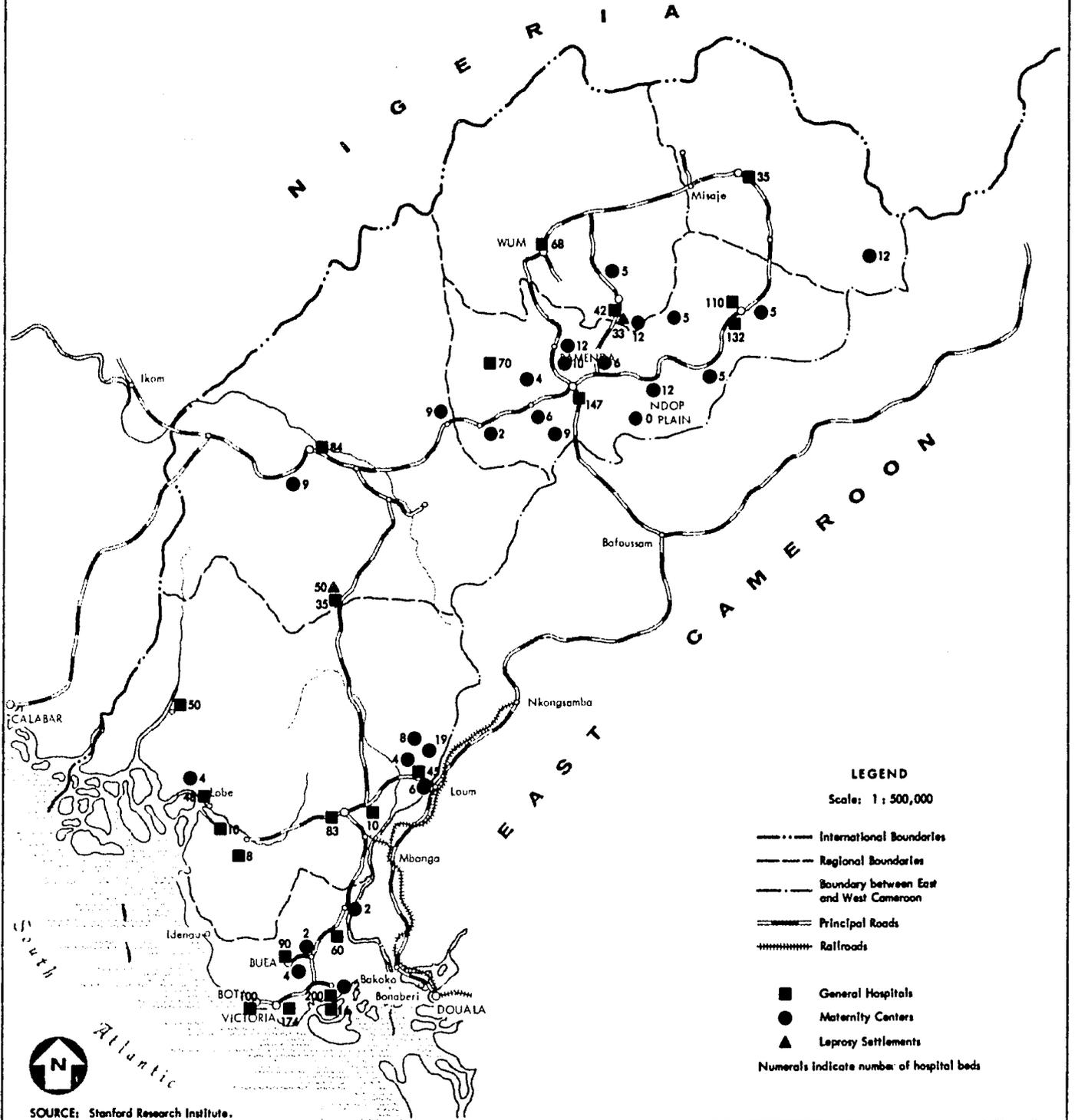
Travel by tourists to the Cameroon for both recreation and business is rising, and the numbers of air travelers and visas issued have increased in both Nigeria and the Cameroon. From 1960 to 1964, the number of tourist visas issued by the Cameroon rose at an average annual rate of 31 percent. Blessed with some unique climatic, scenic, and cultural attractions, West Cameroon should also be able to participate in the growing tourist markets. Although probably not a major attraction for African tourists, the cool climates near Mt. Cameroon and the northern plateau region should prove attractive to the 52,500 expatriates residing within the radius of 950 kilometers of West Cameroon. To attract these potential tourists, a modest investment in the tourist plant will be required to raise the standards of hotel accommodations and services. For an investment of 41.7 million CFA francs (\$171,000) during a four-year period, West Cameroon should be able to receive revenue from tourism amounting to 127.0 million CFA francs (\$518,000).

Health and Medicine

Public health in West Cameroon is at an intermediate stage of development; widespread epidemics are not a threat, but some groups of diseases are still uncontrolled and continue to sap the vitality of the populace. Leading causes of death, which stem in part from the lack of ready access to medical facilities, are: pregnancy complications, malaria, tetanus, dysentery, infections arising from wounds, intestinal obstruction, hernia, and measles. Health facilities and trained personnel are, by world standards, seriously deficient. There is one hospital bed for every 565 inhabitants and one physician for 32,061 inhabitants, and only two dentists practice in the entire Territory. However, there is widespread

FIGURE 6

MEDICAL FACILITIES IN WEST CAMEROON



SOURCE: Stanford Research Institute.

enthusiasm for health improvements and 5 percent of gross domestic product is being spent by the public and private sectors for health care. Considering the level of the economy, however, this expenditure is inadequate. The proposed program suggests the need for much closer rapport with the health agencies at the Federal level to overcome such problems as varying health policies, disease nomenclature, and duplication of research; such rapport would also assist in the initiation of costly and widescale malaria and measles control programs.

The traditional medical practitioners, known as native doctors, and the commercial community of druggists can be helpful in elevating health standards. More supervision is needed, however, to avoid the sale of medicines and medical services which have little therapeutic value and may even be harmful.

A program of lay education through women's associations and schools, supplemented by the issuance of low-cost and illustrated brochures, is recommended so that the populace can improve the general level of health through their own efforts.

Education and Manpower

Manpower requirements during the planning period to 1975 indicate a need for changes of emphasis in the curricula of secondary schools, an expanded primary school enrollment, and, in particular, a vigorous effort to raise the number of qualified teachers.

Although persons with professional training will be needed, the more urgent manpower requirement is for persons of middle-level or subprofessional qualifications. Approximately eight persons qualified for middle-level functions will be needed for each professional worker. These persons are needed to relieve trained administrators and managers of routine tasks. The secondary school system, which will bear much of the burden in this area, is handicapped by the absence of vocationally oriented courses in agriculture, business, and the sciences. Preparation of students for entering universities is now overstressed. More laboratory equipment, audiovisual aids, and reference works are needed to enliven classroom instruction and compensate for the shortage of qualified teachers.

Primary school enrollment has risen at an annual average of over 10 percent, from 64,076 students in 1959 to 116,852 in 1964 and has reached 47 percent of the school-age population. Further growth appears certain, especially as the increase in the enrollment of girls has begun to outpace that of boys. There is an urgent need for more qualified

teachers, which can be met only by fuller utilization of existing teacher training schools--that is, "double-streaming"--and by the establishment of additional teacher training colleges.

Expansion of the Government Technical College at Ombé (Victoria Division) for vocational training and the Cameroon College of Arts, Science and Technology at Bambui (Bamenda Division) can serve a valuable purpose by strengthening the qualifications of persons needed for middle-level assignments and persons seeking advanced university training.

Capital requirements for the education program are 1.7 billion CFA francs (\$6.6 million), small when compared with the suggested programs for other sectors. However, the recurrent costs implicit in a major expansion of primary education and teacher training will rise substantially by 1975. By that year, primary education grants-in-aid may reach 405 million CFA francs (\$1.6 million), other Education Department costs could well be three times current levels, reaching 314 million CFA francs (\$1.3 million), and grants-in-aid for teacher training may rise as high as 70 million CFA francs (\$280,000)--nearly double current levels.

Chapter 7

RESULTS OF THE SUGGESTED DEVELOPMENT PROGRAM

The purpose of this chapter is to indicate in quantitative terms some of the likely consequences of the investment program, if implemented. For this purpose, the gross domestic product estimates shown in Table 2 have been used as the point of departure. The overall consequence envisaged amounts to almost doubling the per capita gross domestic product, from 19,615 CFA francs to 37,744. Taking account of the 13-year span between 1962 and 1975, this implies an annual average growth of 5.2 percent in per capita gross domestic product. This growth rate is comparatively rapid by the standards of most developing countries. For example, during 1951-57, reported increases for other countries were 8.6 percent for Venezuela, 5.8 percent for Greece, 4.8 percent for Burma, 2.5 percent for India, 2.2 percent for Brazil, 1.8 percent for Turkey, and 1.6 percent for Thailand.*

The anticipated growth for West Cameroon is shown in Tables 7 and 8. The forecast of gross domestic product shown in the tables was arrived at in the following manner. Producing groups or organizations that account for most of the 1964 value-added were identified. These producing groups were the plantations such as those of the Cameroons Development Corporation, Pamol, Ltd., Ndu Tea Estate, Cadbury & Fry, Ltd., and the Santa Coffee Estate; and the major co-operatives, such as the Bakweri Co-operative in Victoria Division, the Kumba Federation, the Bakossi-Tombel in Kumba Division, the Bamenda Central, and others.

Three timber firms were consulted to determine their production plans and anticipated cutting of new concessions.

A forecast of changes in production was then made. For example, the forward planning of the CDC was taken into account. A near doubling of CDC acreage under cultivation is being planned, and if targets are reached, the CDC is expected to move substantially more tonnage in the future than in 1964.

* United Nations, Yearbook of National Accounts Statistics.

Table 7

FORECAST OF GROSS DOMESTIC PRODUCT
1962/63 and 1975
(CFA Francs)

Sector Code	Goods and Services	Value Added in 1962/63		Assumed Value Added in 1975		Increase in 1975 over 1962/63 (millions of CFA francs)
		Millions of CFA Francs	Percent	Millions of CFA Francs	Percent	
0	Animal and vegetable products	9,627 CFA fr	49%	19,740 CFA fr	38%	10,113 CFA fr
1	Processed agricultural and live- stock products, and palm oil	3,322	17	15,529	30	12,207
2	Energy	690	3	937	2	247
3	Raw materials and semiprocessed goods	418	2	2,755	5	2,337
4	Mechanical and electrical goods	492	3	906	2	414
5	Leather and textile products	415	2	1,143	2	728
6	Miscellaneous industrial products	346	2	2,733	5	2,387
7	Construction and materials	1,589	8	3,307	7	1,718
8	Services	1,098	6	1,822	4	724
9	Labor	1,560	8	2,574	5	1,014
	Total	19,557 CFA fr	100%	51,446 CFA fr	100%	31,889 CFA fr

Source: Stanford Research Institute.

Table 8

FORECAST OF PER CAPITA GROSS DOMESTIC PRODUCT
1962/63 and 1975
(CFA Francs and U.S. Dollars)

<u>Year</u>	<u>Gross Domestic Product (millions of CFA francs)</u>	<u>Population</u>	<u>Per Capita Gross Domestic Product</u>	
			<u>CFA Francs</u>	<u>U.S. Dollars</u>
1962/63	19,557 CFA fr	997,050	19,615 CFA fr	\$ 78
1975	51,446	1,363,000	37,744	151
Average annual increase	7.7%	2.4%		5.2%

Source: Stanford Research Institute.

The West Cameroon Government's Agriculture Department was consulted regarding the anticipated growth in per farmer output of various crops in the light of the expected impact of the agricultural extension program now getting started in West Cameroon. The analysis of the agricultural production of peasant farmers necessitated calculation of the effect of four growth rates: (1) the growth in the number of farmers (about 2.5 percent on an annual average), (2) the growth in membership of marketing co-operatives (about 4.0 percent on an annual average), (3) the growth in per member output of co-operatives (ranging from about 4 to 8 percent annually), and (4) the growth in output of farmers who are outside the co-operative system, assumed to be considerably slower than for farmers in co-operative societies.

The combined effect of the above growth rates was then estimated, resulting in the prediction that substantial gains in total farmer output will probably occur.

Estimates of future production of other commodities, such as corn and soybean cake, are based on the development recommendations made in Volume II of this series for the Ndop Plain to the east of Bamenda. The sector-by-sector forecasts, derived as outlined above, are given in Appendix C.

The percentage contribution of individual sectors to gross domestic product will change if the investment program is implemented. The industry sector (6) will raise its contribution from 2 to 5 percent. This is because the program assumes that by 1975 an integrated timber and plywood plant will be in operation, and that other plants manufacturing such products as carbonated beverages, beer, canned fruit, processed fish, leather goods, and plastics will have been established. The sector covering palm oil and meat products (1) will raise its contribution from 17 to 30 percent because of rising palm oil production, a proposed soybean crushing mill, and mixed feed for cattle, hogs, and poultry. The contribution of the unprocessed agricultural products sector (0) will decline from 49 to 38 percent, indicating that a higher proportion of value-added will be derived from the processing industries.

Optimism is warranted with respect to the growth of West Cameroon's gross domestic product. Starting from a low base, West Cameroon's estimated 173,000 farm households can increase their per capita output substantially with the help of agricultural extension agents and supervised credit. Farmers in the Bakweri Co-operative near Victoria now produce less than 10 percent of the yield achieved by the CDC's high density plantings of Giant Cavendish bananas. Cocoa farmers in the Kumba region produce about 20 percent of the cocoa yield attained by the commercial plantation of Cadbury & Fry. These yields indicate substantial room for future growth.

As mentioned earlier, applications for loans to permit a major expansion of CDC plantings have already been submitted by Government to the Fonds Européen de Développement and to the World Bank. This expansion program alone can result in an increase of value-added by CDC from 1.3 billion in 1964 to 4.9 billion in 1975, as shown in Table 9. The Unilever affiliate, Pamol, Ltd., has begun the expansion of plantings, so that by 1975, 30,900 acres of mature or nearly mature palm and rubber plantings will be in production.

In January 1965, a new agreement for marketing bananas was approved by the West Cameroon Government and the United Fruit Company affiliate, Elders & Fyffes, Ltd. The agreement provides a stabilized price for the first time and a guaranteed outlet for 45,000 tons of fruit, plus an opportunity to sell a further 20,000 tons at a slightly lower price. Thus the arrangement assures the sale of tonnages nearly equivalent to the total export volume in 1964. Shipments will not be limited to a single market destination such as the United Kingdom, but can now be distributed by the United Fruit Company to any one of several European markets, chiefly Italy, France, the Netherlands, and the United Kingdom. Combined with price stabilization, this marketing flexibility should operate as a major stimulus to the peasant farmers in increasing their output.

Table 9

ANTICIPATED PRODUCTION RESULTS OF THE CDC EXPANSION PROGRAM
 1964 and 1975
 (Millions of CFA Francs)

<u>Product</u>	<u>1964</u>		<u>1975</u>	
	<u>Metric Tons*</u>	<u>Millions of CFA Francs</u>	<u>Metric Tons</u>	<u>Millions of CFA Francs</u>
Bananas	17,200	295 CFA fr	35,708	664 CFA fr
Rubber	4,860	598	18,327	2,144
Palm oil	5,918	363	27,224	1,367
Palm kernels	1,935	--	5,586	179
Cocoa	171	17	1,798	220
Tea	198	52	1,136	308
Pepper	44	<u>8</u>	263	<u>44</u>
Total		1,333 CFA fr		4,926 CFA fr

* One metric ton = 2,205 lbs.

Source: Stanford Research Institute.

A general reason for optimism stems from the fact that the climate of uncertainty which prevailed during the days immediately following reunification in 1961 has now been dispelled. Although rapport between French-speaking Yaounde and English-speaking Buea could be improved, the unification is no longer experimental, and internal political stability has been firmly established.

During the initial months of reunification, the Federal Government in Yaounde, and its French technical advisers, were able to extend only limited help to West Cameroon. During 1963 and 1964, however, major assistance has been forthcoming--for example, a demographic survey was conducted during 1964 by Société d'Etudes pour le Développement Economique et Social (SEDES) in Paris; a thorough study of deepwater port possibilities has been prepared by the Société Générale d'Exploitations Industrielles (SOGEI) in Paris; a forest enumeration survey costing 135 million CFA francs (\$540,000) is under active consideration by the Fonds d'Aide et de Coopération (FAC); and the Direction des Mines et de Géologie, aided by expert geologists, is systematically exploring mineral possibilities in the Territory. The Banque Camerounaise du Développement and the Société Nationale d'Investissements (SNI) have recently extended or are considering the extension of their activities to West Cameroon. FAC financing seems assured for important new highways from Tiko to Douala. Funds for at least part of the Kumba-Bolifamba road have been approved by the Fonds Européen de Développement (FED), and by 1966 a new rail extension from Ediki in West Cameroon will connect the Territory with the rail network of East Cameroon for the first time.

On May 4, 1965, the U.S. Agency for International Development announced approval of a loan of \$3.2 million (800 million CFA francs) to reconstruct a 66-mile highway which will help open the central region of West Cameroon for the removal of timber, citrus fruits, coffee, cocoa, and other products.

The momentum of these developments will stimulate growth of the economy. The forecast of gross domestic product shown in Tables 7 and 8 assumes that progress will continue and accelerate. There are problems, however, that will require continuing attention if the anticipated rate of growth is to be attained. Private investment showed a marked decline during the years immediately following reunification. The failure of one large timber company (Kamerun, Ltd.) added to this difficulty, of course, but the general level of investment declined from 215 million CFA francs in 1958 to 113 million in 1962. An apparent reversal of this trend is evidenced by a rise in investments to 188 million in 1963, and can be attributed to investments by two timber companies, a trading firm (Emen Textiles), the Ndu Tea Plantation, and the extensive expansion program

of Pamol, Ltd. However, one private firm, John Holt and Company, withdrew its investment during 1964.

A successful program to attract new capital in future years will require the creation of a climate favorable to private investment. The industrial strength of East Cameroon rests on such investment. Some examples of success are industries such as the aluminum plant at Edea, capitalized at 8.2 billion CFA francs (\$32.8 million); the Société Africaine Forestière et Agricole (SAFA), capitalized at 1.1 billion francs (\$4.2 million), producing rubber at Dizangue; and the Brasserie du Cameroun, capitalized at 1.3 billion (\$5.2 million), producing carbonated beverages and beer near Douala. Unfortunately, there are no similar examples of private investment in West Cameroon.

Another problem requiring careful attention is an increase in prices resulting from the anticipated development program itself, a shortage of consumer goods, and the impact of "harmonization"--that is, the raising of import duties and taxes in West Cameroon to the level prevailing in East Cameroon. Careful adjustment in the allocation of foreign exchange for import goods, possibly including borrowed foreign capital to purchase consumer goods, may become necessary to offset any sharp rise in prices and wages. Between February 1961 and April 1962--the period of reunification--prices of basic foods rose nearly 22 percent, and it was concluded by Government in Buea that a 20 percent increase in the basic wage rate was necessary. This type of increase could very well recur, thereby destroying much of the per capita increase in gross domestic product discussed above.

Exports have not yet recovered to the levels prevailing in 1960 and will need continuing attention (see Appendix D).

Chapter 8

MOBILIZING FOR DEVELOPMENT

The program for economic development will require careful planning and vigorous, day-to-day execution. To accomplish this, the collaboration of four agencies or groups is suggested below. This suggestion proceeds from the premise that whatever arrangements are adopted to execute plans for industrialization, existing organizations--rather than new ones--should be utilized as much as possible.

This means the following agencies or members of their staff should play important roles: The Regional Development Council (Conseil Régional du Développement) of West Cameroon also known as the Regional Planning Committee;* the Société Nationale d'Investissement (SNI);† the Economic Division of the Prime Minister's Office; the various ministries in Buea having an interest in economic development; and the West Cameroon Development Agency (WCDA).

The further assumption is made that additional organizations would be created only to perform functions not being handled at present. Given these assumptions, four key organizations and their suggested functions are described below.

Regional Planning Committee

The West Cameroon Regional Planning Committee, inaugurated in January 1965, would review individual projects in order to agree on a total program for development. Certain projects in the program, affecting national or Union Douanière et Economique de l'Afrique Centrale (UDEAC) markets, would require careful coordination with the Ministry of Finance in Yaounde. All proposed projects would require coordination with ministries in West Cameroon because agriculture, transport, finance, and industry are closely interrelated. There have been cases in the past

* Order No. 157/Minfi/Plan/6, 25 January 1965.

† Decree No. 64/DF/486, 16 December 1964.

where development proposals, impinging on the responsibilities of several ministries, have been approved without full intragovernmental concurrence. This suggests that proposals under review by the Regional Planning Committee be given the widest possible circulation to the agencies concerned.

Financing Agency

Successful financing of the program will require the services of an institution having direct access to international sources of funds and having authority to operate at both the Federal and regional level. The institution should have capital of its own to supplement, if needed, the funds of private investors, or to capitalize projects by itself.

The institution would seek to acquire a reputation for cautious and competent financing, to foster sound relations with national and international sources of finance, and be able to provide assurance that funds lent would be well used. It would also seek to acquire a public reputation that would enable it to raise finance through the issuance of bonds.

The institution in the Cameroon best able to meet these criteria is the Société Nationale d'Investissement (SNI) established December 16, 1964. SNI was capitalized at 250 million CFA francs as of December 1964; it is empowered to (1) carry out studies to promote development, (2) make loans and guarantees, (3) invest capital in companies, and (4) issue bonds and raise funds within and outside of the Cameroon from public or private sources.

Through its Board of Directors, the SNI is connected with the Banque Camerounaise du Développement, the Banque Centrale, the National Assembly, the National Credit Council, and the President's Office.

Objectives

The SNI's first objective in West Cameroon would be to ensure that any investment project or credit program presented to it by the Regional Planning Committee was sound in concept, feasible in operation, and would be effectively managed. Its second objective would be to promote the establishment of the organization that would undertake the project and raise the necessary finance. Its third objective would be to watch over the execution of projects to ensure compliance with the original intentions of the SNI and the Planning Committee. Since the SNI would not be directly involved in day-to-day operations of projects, it would be able to apply the critical judgment of a banker to the operations it finances.

Hopefully, the SNI would establish a branch in Buea; otherwise, it would work through its technical support staff, described below, to keep in close touch with the Planning Committee, and with local needs and viewpoints.

Functions

Specifically the functions of the SNI in West Cameroon would be as follows:

1. To raise finance for development purposes from Government, the Banque Camerounaise du Développement, and national and international agencies, and through issuing of bonds.
2. To undertake promotion work, commission feasibility studies, and carry out negotiations with private investors for major investment projects such as the veneer core stock mill, the meat cannery, the tannery, the tire retreading plant, and other major projects of a profit-making nature involving substantial investment and the prospect of foreign participation in investment, financing, and management.*
3. To participate if necessary in the financing of such major investment projects.
4. To provide lines of credit for subsidiary financing agencies. These would include agencies extending credit to farmers, the co-operative societies, the manufacturing and service industries, and for housebuilding.
5. To make arrangements with the commercial banks for the disbursement and collection on a commission basis of loans made under the authority of any subsidiary financing agencies.
6. To audit the loan-making operations of the subsidiary financing agencies to ensure that their activities conform with the purposes for which the lines of credit were extended.

* This is the type of promotional activity systematically being undertaken in the capital-exporting nations by capital-importing nations such as India, Israel, China (Taiwan), and in recent years by the Netherlands.

The SNI would operate exclusively as a development promotion and financing agency. It would not be involved in the executive or day-to-day operations of projects which it finances except insofar as equity participation might involve membership on the Board of Directors of the enterprise or agency concerned. SNI would take over the West Cameroon Development Agency (WCDA) participation in successful projects but would not take over the WCDA's responsibilities for day-to-day operation of projects. WCDA projects could either be disposed of to the highest bidder, reorganized and refinanced on a commercial basis, or passed to a Government agency for operation as development or demonstration projects.

SNI activities in West Cameroon would require a competent and responsible manager experienced in development promotion and financing. The SNI would need to be flexible in its ability to engage consultants to advise on technical aspects of projects submitted to it by the Planning Committee. However, SNI should have a nucleus staff to provide continuing technical support, as described below.

Technical Support Staff

Essential to the success of the development program are professional appraisals of projects to ascertain their potential viability. In turn, documentation of such appraisals needs to be prepared for submission to financing institutions or private investors. To assist the Planning Committee and the SNI in appraising and documenting proposals, a small staff is needed to analyze and prepare feasibility studies for the numerous projects that lie ahead. The resident staff in Buea might include two experts--a marketing economist and an industrial engineer. These two persons would serve under contract and would be employees of a large, well-staffed research and engineering firm located abroad. The home office of the contracting firm would, when requested, supply additional specialists to the SNI or the Planning Committee, send out technical or market data, and approach the lending institutions or investors when required to clarify proposals from West Cameroon.

The technical support staff would undertake studies as directed by the SNI in consultation with the Planning Committee. The success of the technical support staff would be measured by the quality and number of feasibility studies prepared. Feasibility studies are already being prepared in Buea by the Economic Division of the Prime Minister's office, the Ministry of Natural Resources, the Public Works Department, and CDC. The suggestion above regarding technical support staff is intended as a means of expanding the number of studies and facilitating the training of Cameroonians in the methodology of feasibility analysis.

The technical support contract might be entered into by the SNI with any one of the numerous well-known organizations such as the Société d'Etudes pour le Développement Economique et Social (SEDES), Paris; the Bureau Centrale d'Etudes pour les Equipements d'Outre Mer (BCEOM), The Max Planck Institutes, Goettingen; the Battelle-Institut E.V., Frankfurt/Main; Fulmer Research Institute, at Stoke Poges, Buckinghamshire; Sondes Place Research Institute, at Dorking, Surrey; Battelle Memorial Institute, Columbus, Ohio; Arthur D. Little, Inc., Cambridge, Massachusetts; or Stanford Research Institute, Menlo Park, California.

One organization could be selected to serve as a prime contractor and a second organization selected as a subcontractor. This would have the advantage of broadening contacts to include both Europe and the United States. In view of the importance of liaison with the Federal Government of Cameroon, the FAC, the Banque Centrale, and the UDEAC countries, either the prime or the subcontractor should be a French organization.

The work of the technical support staff would benefit substantially from inclusion of WCDA personnel on the staff. Having a detailed knowledge of economic conditions in the territory and experience in industrial development, these persons could provide valuable information to lending institutions and private investors. Also the assignment of experts from an economic and engineering research group abroad would be an interim measure and their replacement by Cameroonians should take place as the development program gathers momentum.

Small Industry Agency

Small industry financing and advisory assistance would be handled by a special organization, a Manufacturing and Services Industries Agency operating as part of the Ministry of Labour in Buea.

Experience has shown that the promotion of small industry requires special attention. If officers in a development agency are confronted simultaneously with a problem relating to large industry and another problem relating to small industry, the former is usually given higher priority and often the small industry problem remains unsolved.

For this reason a special agency concerned uniquely with small industry is suggested. The loan funds for the agency could be furnished by the SNI or some other institution. Capitalization should be small at first, possibly no more than 10 million CFA francs (\$40,000), and funds

increased as experience might warrant. Hopefully repayments would begin to replenish loan capital by the second year.

Further details regarding this proposed agency are provided in Volume VI of this report series.

Financing the Development Program

This report series has concentrated on the formulation of an investment program designed to realize the production potential of West Cameroon. The program is estimated to cost 48.8 billion CFA francs spread over a period of ten years. This implies an annual rate of investment approaching 14 percent of gross domestic product by 1975 compared with the rate of just over 10 percent which applied in 1962/63. Thus it will be necessary to raise annual investment from the 1962/63 level of just over 2 billion CFA francs to about seven billion CFA francs by 1975.

The program strongly emphasizes investments in agriculture, industry, and transport, relatively little weight to investment in health and education. Thus 94 percent of the suggested investment program is allocated to the former and only 6 percent to the latter. This emphasis reflects both the high productive potential of the material resources of West Cameroon and the high priority assigned to strengthening the productive capacity of the economy.

The emphasis on productive capacity is doubly significant in terms of the financing of the development program. First, it has entailed the formulation of projects which are likely, once preinvestment surveys are completed, to attract either international development financing or foreign investment. Second, it means that progress with the development program will itself generate increased savings and tax revenues from expanding incomes, increasing exports and imports, and increased domestic production.

It has not been possible, in the time available, to undertake a comprehensive assessment of the means of financing the proposed development program. Nor would it be realistic to attempt to do so; first, because the impending harmonization of the fiscal regime of West Cameroon with that of East Cameroon will certainly involve major changes in the sources and rates of taxation and in the allocation of revenues; and second, because progress with raising finance for the program will be very much contingent on the rate at which it is possible for the Government of West Cameroon to improve its capacity for organizing its development effort. In particular, it will depend on the capacity of the government

to formulate development projects in detail, to obtain assistance in making surveys and feasibility studies, and to attract international development finance and foreign investment.

The suggested program will entail substantial additional recurrent expenditure; principally for education, for the maintenance of the road system, and for agricultural and animal husbandry extension services. The Ordinary Budget of West Cameroon provided for recurrent expenditure of 2.2 billion CFA francs in 1963/64. By 1975, it will be necessary to budget for recurrent expenditure of at least 4.5 billion CFA francs. Revenues will need to be raised accordingly. Table 10 presents a pro-forma forecast of recurrent revenue and expenditure for 1975 compared with the estimate for 1964/65. This forecast is illustrative of the budgetary implications of the programs envisaged in this report series. It does not attempt to anticipate decisions on the harmonization of the fiscal regimes of East and West Cameroon, nor to provide a definitive forecast of the probable growth of revenues and expenditures.

Estimates of the capital costs of the program are provided in each of the sectoral reports and are summarized in Table 10. The sectoral reports also include discussion of the prospects and problems of obtaining financing for particular projects, and the foregoing sections emphasize the importance of creating a strong financing institution capable of mobilizing both international and domestic finance. The pro-forma forecast of revenue and expenditure in Table 10 assumes an increasing contribution from general revenues to the development fund. This government saving will need to be supplemented by domestic private and institutional savings. The objective should be to finance as large a proportion as possible of the local costs of the investment program by domestic savings.

The proposed development program emphasizes projects that will lead to increased production of export produce, that will substitute domestic production for imports, and that will attract international development finance and foreign investment. Thus priority has been given to projects which will have a favorable effect on the balance of payments of the country as a whole. It is anticipated that the contribution to the balance of payments of such projects will more than offset the increased demand for foreign exchange for both producer and consumer goods generated by the development program.

Table 10

**PRO-FORMA FORECAST OF THE BUDGETARY IMPLICATIONS FOR WEST CAMEROON
OF THE PROPOSED DEVELOPMENT PROGRAM
1964/65 and 1975
(Millions of CFA Francs)**

Recurrent Revenue	Estimated 1964/65	Forecast 1975	Remarks
Direct taxes	149 CFA fr	400 CFA fr	Tax yield on higher incomes plus proceeds from improved tax collection.
Sales taxes	105	420	Increase proportionate to increase in production of taxed produce.
Other revenues	305	650	Increase proportionate to increase in gross domestic product.
Federal Government subvention	<u>1,400</u>	<u>3,000</u>	Subvention assumed to be related, after harmonization of fiscal regimes, to taxes the yield of which will increase at about the same rate as gross domestic product.
Total	1,959 CFA fr	4,470 CFA fr	
Recurrent Expenditure			
Agriculture, Forestry and Veterinary	186 CFA fr	500 CFA fr	Increase principally to provide for the cost of expanded agricultural and animal husbandry extension services.
Maintenance Works and Services	342	700	Increase to provide for increased cost of maintenance of an improved road system.
Education	423	720	Increase to cover cost of expanded education program.
Manufacturing and Service Industries Agency	--	30	To meet the cost of advisory services.
Contribution to Development Fund	100	870	15% of recurrent revenue.
Other Expenditure	<u>1,148</u>	<u>1,850</u>	Provision for "Other Expenditure" will be limited to the difference between necessary provision for development programs and total revenues.
Total	<u>2,199 CFA fr</u>	<u>4,470 CFA fr</u>	
Deficit	-240 CFA fr	--	

Sources: Estimates of West Cameroon, 1964-65; Stanford Research Institute.

A P P E N D I X E S

Appendix A

ASSUMED GROWTH OF PRINCIPAL URBAN AREAS IN WEST CAMEROON

Appendix A

**ASSUMED GROWTH OF PRINCIPAL URBAN AREAS IN WEST CAMEROON
(Number of Inhabitants)**

<u>Urban Communities, by Division</u>	<u>1953</u>	<u>1964</u>	<u>1953-64</u>	<u>1970</u>	<u>1964-70</u>	<u>1975</u>	<u>Assumed Annual</u>	
	<u>Census Figures for Population of Urban Areas</u>		<u>Estimated Population</u>		<u>Annual Average Growth (percent)</u>		<u>Annual Average Growth (percent)</u>	<u>Assumed Population</u>
Bamenda Division								
Bamenda-Mankon-Bafreng	9,765*	18,700	6.1%	27,300	6.5%	37,000	6.3%	6.4%
Kumbo town (Banso)	3,462 ⁺	9,000	9.1	13,500	7.0	17,200	5.0	6.1
Kumba Division								
Mbonge	n.a.	4,700	n.a.	6,300	5.0	7,700	4.0	4.6
Kumba town-Fiango- Three Corners	11,672 [±]	31,000	9.3	46,500	7.0	65,000	6.9	7.0
Tombel	n.a.	9,000	n.a.	13,500	7.0	18,000	5.9	6.5
Mamfe Division								
Mamfe town	6,539 [§]	7,600	1.4	7,600	0.0	8,400	2.0	0.9
Nkambe Division								
Nkambe town	2,145**	3,600	4.8	4,800	4.9	6,000	4.0	4.8
Victoria Division								
Victoria-Bota	15,875 ^{+†}	22,300	3.1	26,600	3.0	37,000	6.8	4.7
Tiko	5,337 ^{±‡}	9,800	5.7	13,100	5.0	16,700	5.0	4.9
Buca	3,009 [§]	9,300	10.8	14,000	7.1	20,000	7.4	7.2
Muyuka	2,095	4,900	8.0	6,600	5.1	8,000	4.0	4.6
Wum Division								
Wum town	3,202 ^{***}	9,900	10.8	14,000	6.0	18,000	5.0	5.6
Njinikom	1,929	4,500	8.0	6,400	6.0	8,000	4.0	5.4
Total	n.a.	144,300	n.a.	200,200	5.6	267,000	6.0	5.8

Explanatory notes and supplementary data are given on the pages immediately following table.

Source: Stanford Research Institute.

Notes to Appendix A

ASSUMED GROWTH OF PRINCIPAL URBAN AREAS IN WEST CAMEROON

- * 1953 census data for the population of the Bamenda urban area included Bafreng (3,821 persons), Mankon (12,804), and Bamenda Government Station (1,455); the total inhabitants in this group was 18,080. However, part of the Bafreng and Mankon populations were outside the urban cluster. Therefore the figures used here are: 1,910 for Bafreng, 6,400 for Mankon and the entire population of Bamenda Station, 1,455; the total of these elements is 9,765. The forecast for 1970 assumes an increased population growth rate due to improved roads leading to the urban area, the installation of a power generator serving the urban area, improved secondary schools and a growth of commercial activity.

- † 1953 census data used for Bansa town included the Chief's Area of Kimbaw-Gham only.

- ‡ 1953 census data used for the Kumba urban area included Kumba town (7,778), Fiango (2,370), Three Corners (1,524); the total number of inhabitants was 11,672.

- § 1953 census data used for the Mamfe urban area included Besongabang (1,046), Mamfe town (5,107), and Okoyong (386); the total number of inhabitants was 6,539. The forecast for 1970 and 1975 assumes very little growth because of the continued low level of imports from Nigeria due to the proposed imposition of the Common External Tariff raising duties on Nigerian goods to the level of other non-Franc Zone countries.

- ** The 1953 census data used for the Nkambe urban area included Nkambe village only.

- †† The 1953 census data used for the Victoria-Bota urban area included the following communities (the numbers denote the recorded inhabitants for each component community):

Appendix B

CAPITAL REQUIREMENTS OF THE SUGGESTED
DEVELOPMENT PROGRAM, BY FIELD OF ACTIVITY

Table B-1

**ESTIMATED NONRECURRENT AND RECURRENT COSTS
OF THE AGRICULTURAL DEVELOPMENT PROGRAM IN WEST CAMEROON
1965-70 and 1970-75**

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
Nonrecurrent costs						
1 Expansion of CDC plantings	To expand acreage from 56,873 to 96,044 by 1973, and increase value of production from about 1.3 billion CFA francs in 1964 to 4.8 billion in 1975.	7,565* CFA fr	\$30,260	5,600† CFA fr	\$22,400	Assumes (a) Phase I initial capital requirement of 7,565 million, CFA francs met in part from self-generated funds; borrowings of 3,806 million will be required. This is approximate amount of loan requests already made in February 1965, to FED and IERD; (b) Phase II would expand plantings by further 50,000 acres to total of 146,044 acres at a development cost of 112,000 CFA francs per acre, and total cost would be 5,600 million CFA francs of which 2,800 million would be borrowings; (c) Phase I and II borrowings mentioned above do not include interest.
2 Smallholder programs	Settlement of (a) 961 farmers on unutilized CDC lands when plantings are nearing maturity, (b) 1,890 farmers near CDC lands, and (c) 957 farmers on lands to be called "nucleus estates" (a + b + c = 3,608 farmers).	1,662	6,648	728	2,912	Assumes development of 23,556 acres by 1974, consisting of (a) 3,180 acres planted in tea; (b) 12,400 acres in rubber, and (c) 12,976 acres in oil palm; (d) figures taken from CDC Report of the Agricultural Mission 1964, but costs for 1967-80 have been deducted.
3 Bananas program	Supervised credit to 458 farmers willing to plant 15 acres of banana with objective of rotating planting, harvesting, and fallow so that 10 acres are yielding each year after operation. Resulting output of estimated 23,000 tons would help restore exports to 1961 levels.	343	1,372	--	--	Cost of land development will vary depending on amount of farmer labor; BCUP estimate is 27,560 CFA francs per acre with farmer labor; after adding spraying, cost becomes 45,420 CFA francs per acre. This estimate uses 50,000 CFA francs per acre. Assumes (a) 458 farmers with 15 acres each, 5 of which lie fallow every fourth year; (b) total of 6,870 acres; (c) total development cost is 6,870 acres x 50,000 CFA francs = 343 million CFA francs.

Note: All footnotes will appear on the last page.

Table B-1 (continued)

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
Nonrecurrent costs (cont.)						
1 Ndog Plain development, preproject feasibility analyses	The Ndog Plain, located in Bamenda Division about 20 miles (32 km) east of Bamenda Town, is a river valley of about 384,000 acres (155,000 hectares) capable of growing temperate zone crops. A development program, similar to the Gezira Scheme in the Sudan is possible to cultivate crops such as rice, sugar, maize, soybeans, and vegetables. After a topographical survey and a period of pilot farming on a commercial scale to determine costs and markets, larger scale farming would continue and processing plants would be erected, such as a soybean crushing mill, rice mill, sugar mill. Each phase would be preceded by feasibility studies. The agricultural part of the plan would involve participation of 6,533 farm households on 73,994 acres (30,000 hectares).	62 CFA fr	\$ 248	-- CFA fr	\$ --	Assumes topographical, meteorological, and technical feasibility studies for cultivation of (a) rice, (b) sugar cane, (c) corn for animal and poultry feed, (d) soybeans, and (e) vegetables and related studies of processing facilities. Studies assumed to cost 62.5 million CFA francs (\$248,000).
5 Ndog Plain pilot cultivation on commercial basis	Pilot farming to determine costs and feasibility, and to demonstrate methods.	115	460	--	--	Assumes (a) pilot cultivation on commercial basis of rice, maize, soybeans, vegetables, sugar; (b) 3 man-years of expatriate assistance at 7.5 million CFA francs per man-year; (c) 6 houses for senior staff at 3 million CFA francs each; (d) pilot farm development costs totaling 75 million CFA francs and covering 600 acres of land and development at 112,000 CFA francs per acre plus equipment.
6 Ndog Plain rice growing and milling	Cultivation of rice to help meet deficit of Cameroon.	834	3,336	885	3,540	If warranted by studies, rice growing and milling could proceed in Phase I, balance of projects would await Phase II. In Phase I, estimated costs assume (a) 4,000 acres having development costs of 94,000 CFA francs per acre in Phase I, or a total of 752 million CFA francs; (b) 1 rice mill costing 19 million CFA francs; (c) machinery costing 63 million CFA francs; (d) private investment for the rice mill.

Table B-1 (continued)

Project	Description	Phase I (1963-70)		Phase II (1970-75)		Assumptions or Remarks	
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars		
Nonrecurrent costs (cont.)							
7	Ndop Plain maize cultivation	Cultivation of maize as ingredient in feed for hogs and poultry.	733 CFA fr	\$ 2,932	733 CFA fr	\$ 2,932	Assumes (a) 22,000 acres developed at 25,000 CFA francs per acre, or total of 550 million CFA francs; (b) machinery costing 183 million CFA francs; (c) same costs in Phases I and II.
8	Ndop Plain soybean cultivation and crushing	If found feasible, cultivation of soybeans as ingredient in feed for hogs and poultry.			372	1,488	Assumes (a) 9,661 acres developed at 25,000 CFA francs per acre, or total of 242 million CFA francs; (b) crushing plant costing 50 million CFA francs; (c) agricultural machinery costing 80 million CFA francs; (d) private investment assumed for crushing plant.
9	Ndop Plain vegetable growing and canning	Growing vegetables for canning.	--	--	470	1,880	Assumes (a) development and irrigation of 3,333 acres at 130,000 CFA francs per acre, or a total cost of 433 million CFA francs; (b) canning plant capable of 18,000 tons annual output of canned vegetables, requiring initial capital of 9 million CFA francs; (c) machinery and equipment for farms costing 28 million CFA francs; (d) private investment assumed for cannery.
10	Ndop Plain sugar growing and grinding (project costs not included in total)	Growing of sugar cane and establishment of sugar central.	--	--	(987)	(3,988)	Assumes (a) development and irrigation of 2,000 acres of 137,500 CFA francs per acre, or a total cost of 275 million CFA francs; (b) sugar refinery with capacity of 8,779 tons costing 555 million CFA francs; (c) agricultural machinery costing 167 million CFA francs; (d) private investment is assumed for refinery. The cost of this project is not included in the totals because similar sugar proposals are being reviewed by the Ministry of Rural Development in Yaounde for a region 120 kilometers north of Yaounde where a private investor, Société Industrielle et Agricole du Niari (SIAN), may initiate plantings large enough to supply national requirements. Until the comparative advantage of the Ndop and SIAN sites are known, this project should be deferred.

Table B-1 (continued)

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
Nonrecurrent costs (cont.)						
11	Canning and tannery, preproject feasibility study	12 CFA fr	\$ 48	-- CFA fr	\$ --	Assumes 6 months and 2 technicians.
12	Livestock meat cannery	88	352	--	--	Assumes private investment would be possible, as in Kano, Nigeria.
13	Tannery	25	100	--	--	Assumes (a) processing of hides for export sales, and (b) private investment.
14	Livestock and meat products marketing board	7	28	4	16	Assumes principal office would be located in Bamenda. Cost estimates cover (a) 5 million CFA francs for office and quarters, and (b) 2 million CFA francs for vehicles.
15	Veterinary clinics	27	108	10	40	--
16	Cattle upbreeding	8	32	8	32	--
17	Spray races	12	48	10	40	--
18	Fencing	33	132	33	132	Assumes cost of fencing is 27,000 CFA francs per mile plus 20% for posts and ocean freight, totaling 33,000 CFA francs.

Table B-1 (continued)

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
Nonrecurrent costs (cont.)						
19 Cattle finishing stations	Fattening of cattle prior to slaughter.	2 CFA fr	\$ 8	-- CFA fr	\$ --	Cost estimates assume only one station for meat cannery in Ndop area during Phase I.
20 Feed mixing plants	10 feed mixing plants to prepare feed from corn, soybeans, and imported antibiotics to be used for cattle, hogs, poultry.	11	44	26	104	Assumes (a) cost per plant is 3.7 million CFA francs, and (b) 2 plants would be installed in Phase I and 7 in Phase II.
21 Farm credit agency	Loans would be extended to farmers on a supervised credit basis; repayments will be used to form a revolving fund for future operation. Loans would stimulate cultivation of export crops, freshwater fish culture, mixed farming. Almost no loans would be made in cash.	250	1,000	256	1,024	Cost estimates assume (a) funds required for CDC out-growers are included in Project 2, for banana farmers in Project 3, for freshwater pond fish in Project 22; (b) individual loans would range from 75,000 CFA francs to 750,000 CFA francs; (c) funds shown here cover 500 Famol, Ltd., outgrowers, 300 Manfe Resettlement Scheme Farmers, 200 farmers in grasslands cultivating crops and raising livestock, miscellaneous agricultural loans.
22 Freshwater fish ponds	Development of 750 acres of ponds in ten years yielding about 1 ton of fresh fish per acre; funds to be loaned and repayments used to finance additional pondage.	29	116	--	--	Assumes (a) development costs of 200 acres of ponds at 70,000 CFA francs per acre; (b) fisheries advisers serving for 2 years at 7.5 million CFA francs per man-year. (c) loan repayments could be used to finance a total of 750 acres in 10 years.
23 Offshore fishing	Development of offshore fishing and supporting shore facilities	39	156	--	--	Assumes (a) trawler at 28 million, (b) ice plant at 5 million, (c) smoking plant and pier improvement 6 million CFA francs, and (d) private investment.
Total nonrecurrent costs		11,857 CFA fr	\$47,428	9,135 CFA fr	\$36,540	

Table B-1 (concluded)

Project	Description	Annual Costs by 1970		Annual Costs by 1975		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
Recurrent costs (cont.)						
R-1	Cattle upbreeding and finishing programs	5 CFA fr	\$ 20*	5 CFA fr	\$ 20	Cost estimates for 1970 assume (a) equipment, breeding stock, and material are 1 million CFA francs; and (b) staff costs are 4 million CFA francs.
R-2	Livestock and meat products marketing board (LMPMB)	8	32	10	40	Cattle owners would continue to drive cattle on foot to markets for interim period, but export sales would be aided by international payments and border crossing agreements negotiated by board. As roads improve, board would encourage transport of cattle by truck and arrange shipments of frozen meat to foreign destinations. Cost estimates are for staff and administration only.
R-3	Training overseas	7	28	9	36	Assumes (a) 1 man-year of training abroad costs 623,000 CFA francs; (b) by 1970, 12 persons will be in training at all times; (c) by 1975, 15 persons will be in training at all times; (d) trainees are sent to learn agricultural and poultry subjects; veterinary subjects are included in Volume III.
R-4	Agricultural extension program	56	224	62	248	Assumes (a) 1 agent per 1,000 households by 1970; (b) 199,000 households by 1970 and 220,000 by 1975, requiring 199 agents by 1970 and 220 by 1975; (c) average cost per agent is 280,000 CFA francs.
R-5	Agricultural journalism	6	24	7	28	Assumes (a) man-year of expatriate service would have been completed to 1970 and thus is not shown here; (b) Cameroonian staff of 4 persons and drafting equipment.
Total recurrent costs		82 CFA fr	\$328	93 CFA fr	\$372	

* Borrowings assumed to be 3,806 million CFA francs.

* Borrowings assumed to be 2,800 million CFA francs.

Source: Stanford Research Institute.

Table B-2

**ESTIMATED COSTS OF PUBLIC HEALTH IMPROVEMENT PROGRAM IN WEST CAMEROON
1965-70 and 1970-75**

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
1 Base line survey of disease prevalence in West Cameroon	This project would continue for 3 to 5 years in order to: (a) determine disease prevalence by diagnoses, on a sample basis, (b) introduce standardized nomenclature for diseases and injuries, and (c) determine requirements for health facilities.	18.4 CFA fr	\$ 75	18.4 CFA fr	\$ 75	Foreign aid financing from private foundations or governmental sources is assumed. Possibly this project should be undertaken by a leading university as a part of its own research program; 5-man-years of effort are assumed at 7.3 million CFA francs (\$30,000) each. Local costs would be defrayed from recurrent budgets.
2 Medical research unit, Kumba	Improvement of physical plant, laboratories, and animal housing for Federal Government-supported research program in onchocerciasis.	2.0	8	--	--	Assumes cost of engineering and architectural design, building materials, and construction.
3 Compulsory medical insurance feasibility survey	Survey in East and West Cameroon of feasibility of compulsory medical insurance program.	2.4	10	--	--	Assumes 2 months field work and 2 months analysis by 1 foreign technician.
4 Hospital expansion in West Cameroon	Provision of additional hospital beds to keep pace with population increase of about 2.3 percent annually. Further expansion would be justified on the basis of findings under Project 1 above.	134.7	550	128.9	526	Phase I assumes expansion of hospital capacity by 275 beds; Phase II assumes a further 263 beds. Costing assumes that additional hospital capacity would be built to standards prevailing in such hospitals as the Cameroon Baptist Hospital in Kumba where per bed costs are about one tenth of U.S. costs, or 490,000 CFA francs (\$2,000).
5 Training abroad of physicians, dentists, veterinarians	Sending of persons abroad for training as physicians, dentists, and veterinarians for periods ranging in duration up to 9 years.	70.1	286	131.8	536	Until the medical school is established at the Federal University, professional training in medical, dental, and veterinary fields will have to be accomplished abroad. Before the extent of the training program is decided, a detailed review of the number of candidates available for training will be required. In the absence of such a review, the costs of the project are presented here on the basis of certain

Table B-2 (continued)

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
5 Training abroad of physicians, dentists, veterinarians (cont.)		CFA fr	\$	CFA fr	\$	assumptions as follows: (a) beginning in 1966, 5 persons would be sent abroad each year for training as physicians or dentists, (b) beginning in 1973, the number sent each year would rise to 6, (c) training periods would average 7 years for each person sent as a physician or dentist trainee, (d) a total of 279 man-years of training for dentists or physicians would be required during the 1966-75 period, costing 612,000 CFA francs per man-year (\$2,500), (e) 50 man-years of training for 10 veterinarians would be required, costing 612,000 CFA francs (\$2,500) per man-year, (f) the average training period for veterinarians would be 5 years.
6 Training of paramedical personnel	Sending of nurses, laboratory technicians, and sanitary engineers abroad for training.	12.2	50	12.2	50	The training program is based on the following assumptions: (a) 40 persons would be trained by 1975 for one year each abroad representing a total of 40-man-years of training, (b) training would cost 612,000 CFA francs (\$2,500) per man-year.
7 Training in West Cameroon of nurses and other paramedical personnel	Establishment of expanded training facilities for nurses and other paramedical personnel, utilizing College of Arts, Science, and Technology at Bamui.	57.3	234	57.3	234	The training program is based on the following cost assumptions: (a) 1 foreign technician serving in West Cameroon for 2 years, costing a total of 14.7 million CFA francs (\$60,000), (b) scholarships for 800 students costing 125,000 CFA francs (\$510) each. In addition to organizing course of instruction, technicians would prepare illustrated brochures on health preservation for dissemination to schools, civic organizations, and native doctors.

Table B-2 (continued)

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
8 Popular literature on health preservation	Preparation, publication, and distribution of brochures on health preservation.	2.4 CFA fr	\$ 10	3.7 CFA fr	\$ 15	This project assumes that the technician under Project 7 above would write, supervise publication, and help plan distribution of illustrated brochures, assumed to cost 122 CFA francs (\$0.50) each and that 50,000 copies would be printed.
9 Physicians from abroad	Continued employment in key positions of at least 2 foreign physicians to supplement Cameroonian and missionary physician.	49.0	200	49.0	200	This project assumes 20 man-years of foreign physician services during the 1966-70 period, at a cost of 4.9 million CFA francs (\$20,000) each, recruited from the U.K. or European countries.
10 Demonstration program for environmental sanitation	Demonstration of construction and operation of oxidation ponds for sewage disposal and methods for improving public sanitation.	14.7	60	--	--	Assumes the services of 1 technician from abroad for two years, costing 14.7 million CFA francs (\$60,000).
11 Malaria eradication program pre-eradication activities	Making organizational arrangement and training staff for malaria eradication program.	7.3	30	--	--	Assumes the services of 1 technician from abroad working part time in East Cameroon and part time in West Cameroon, costing 7.3 million CFA francs (\$30,000) for one man-year.
12 Malaria eradication program (Victoria, Kumba)	House-to-house coverage to contact persons subject to malarial infection in Victoria and Kumba Divisions	147.0	600	171.5	700	Costs of this program are based on the following assumptions: (a) a program of 10-year duration, (b) coverage of Victoria and Kumba Divisions at first having population of 374,000 by 1975 (c) the cost per person covered by the program would be 857 CFA francs (\$3.50), 25 percent of which would be foreign exchange and 75 percent costs in CFA francs.

Table B-2 (concluded)

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
13 Malaria eradication program (Mamfe, Bamenda, Wum, Nkambe)	House-to-house coverage to contact persons subject to malarial infection in urban communities of Mamfe, Bamenda, Nkambe, Wum as first stage in total coverage.	-- CFA fr	\$ --	80.6 CFA fr	\$ 329	Costs of this program are based on the following assumptions: (a) program would begin in 1970, (b) cost per person covered would be 857 CFA francs (\$3.50); see Project 12 above, (c) 94,000 people in urban areas of Mamfe, Bamenda, Wum, Nkambe Divisions by 1975 would be covered at first and program extended to rural areas as rapidly as funds permit.
14 Measles vaccination program	Vaccination of persons to render immune to measles.	98.0	400	99.2	405	Costs of this program assume: (a) 10-year duration, (b) vaccination of about 700,000 younger persons, (c) cost per vaccination 282 CFA francs (\$1.15).
15 Water treatment plants	Installation or improvement of water treatment plants in about 15 towns.	51.4	210	17.1	70	Assumptions on which the cost estimate is based are shown in Appendix E-3 of Volume III of this report series.
Total		666.9 CFA fr	\$2,723	769.2 CFA fr	\$3,140	

Source: Stanford Research Institute.

Table B-3

**ESTIMATED COSTS OF THE DEVELOPMENT PROGRAM FOR ROADS, PORTS,
AVIATION, AND TELECOMMUNICATIONS IN WEST CAMEROON
1965-70 and 1970-75
(CFA Francs and U.S. Dollars)**

Projects	Phase I (1965-70)		Phase II (1970-75)		Total		Average Annual Budget (1965-75)		Remarks
	Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
Highest priority roads not yet being financed	1,882 CFA fr	\$ 7,682	1,545 CFA fr	\$ 6,307	3,527 CFA fr	\$13,989	343 CFA fr	\$1,399	
Other road improvements	10,704	43,694	777	3,172	11,481	46,866	1,148	4,687	
Road program training	771	3,147	300	1,225	1,071	4,372	107	437	Assumes temporary augmentation of expatriate support up to 21 staff members, at \$30,000 each with phaseout by 1975.
Road-building and maintenance machinery									Careful field survey needed to make estimate.
Subsidiary road program	--	--	--	--	--	--	--	--	Costs largely covered by Local Authorities.
Victoria-Bota port	3,500	14,287	--	--	3,500	14,287	350	1,429	
Tiko port	165	674	--	--	165	674	16	67	
Airfield improvements not yet being financed	34	139	3	12	37	151	4	15	
Telephone system	319	1,302	206	841	525	2,143	52	214	Includes telegraph and telex system.
Telecommunications training	15	61	15	61	30	122	3	12	Assumes 12 engineers trained abroad at \$5,000 each (at 1.2 million CFA francs) 60 technicians trained locally at \$1,000 each (at 245,000 CFA francs).
Total	17,390 CFA fr	\$70,986	2,831 CFA fr	\$11,557	20,236 CFA fr	\$82,604	2,023 CFA fr	\$8,260	

Source: Stanford Research Institute.

Table B-4

**ESTIMATED COSTS DURING PHASE I OF TOURISM PROGRAM
1965-70
(U.S. Dollars)**

Tourist Plant improvement costs

Hotel Improvements*	Buenos Mt. Hotel	Victoria Bay Hotel	Bamenda Ringway Hotel	Cost
Lounge furniture in rooms	42 x \$40 = \$1,680	10 x \$40 = \$400	30 x \$40 = \$1,200	\$ 3,280
Venetian blinds	42 x \$30 = \$1,260	10 x \$30 = \$300	30 x \$30 = \$ 900	2,460
Air conditioning	(not required)	(Phase II)	(not required)	
Water purification (Ultra Dynamics Corp., 500 gallons hour one unit)	\$400	--†	\$400	800
Ice-making equipment	\$500	\$500	\$500	1,500
Hotel room telephones	30 x \$50 = \$1,500	10 x \$50 = \$500	30 x \$50 = \$1,500	3,900
Laundry and pressing equipment	\$600	\$600	\$600	1,800
Dry cleaning equipment	\$500	(joint use)	\$500	1,000
Ground transport (passenger vehicles; supplemented by local taxis)	\$7,000	(local taxis available)	\$7,000	14,000
Window screens for hotel rooms	\$820	\$200	\$500	1,520
Reading room with Cameroon literature	\$800		(Phase II)	800
Modernization of hotel kitchens	\$2,000	\$500	\$1,500	4,000
Fishing vessel for tourist hire (could become self-liquidating project)	--	\$1,000	--	1,000
Cocktail lounge and dance floor (space and orchestra)	\$1,800	(Phase II)	\$1,000†	2,800
Cinema (projectors and film rental; partially self-liquidating project)	\$2,500	(local cinema available)	\$2,500	5,000
Office machinery to mechanize bill calculation	\$1,000	(Phase II)	\$1,000	2,000
Youth hostel type lodging for 10 persons	\$8,000		(Phase II)	8,000
Conference room and furnishings	\$3,000		\$2,000	5,000
Retail store for handmade artifacts	\$1,000	(joint use)	\$1,000	2,000
Teletype service from hotel to main post office for cable transmission	\$2,000	(Phase II)	\$1,500	3,500
Branch post office (cost of space only)	\$800		\$800	1,600
Beauty parlor (cost of space and equipment)	\$1,500	(joint use)	\$1,500	3,000
Barber shop (cost of space and equipment)	\$1,000	(joint use)	\$1,000	2,000
Outdoor sports (tennis, horseback riding, golf, squash, etc.)	\$2,000	(joint use)	--	2,000
Swimming pool, lounging area, equipment	\$4,000	(Phase II)	(Phase II)	4,000
Children's playground	\$800	\$300	\$800	1,900
Indoor sports including game room and equipment	\$5,000	\$300	\$3,000	<u>8,300</u>
Subtotal				\$87,160

Note: All footnotes will appear on the last page.

Table B-4 (concluded)

Tourist Plant improvement costs (cont.)

Miscellaneous cost items	Description	Cost
Museum improvement	Hamanda historical museum improvements.	\$ 3,000
Scenic Drive 1	Paved single-lane road to VHF Station, 14.5 miles (23.3 kilometers).	-- [†]
Scenic Drive 2	Paved road from Bota to Mile 12 along west coast, 11 miles (17.7 kilometers).	-- [‡]
Tourist information service	Salary for one person, space in hotel.	3,000
Game reserve, rest house and vehicles	Rest house at Kimbi and Mbi game reserves plus vehicle.	6,000
Modernization of Tiko airport waiting room		-- [‡]
Catering rest house at Lake Mbuluwo		7,000
Subtotal		<u>\$ 19,000</u>
Total tourist plant cost		\$106,160

Public Relations

Publicity and advertising	Description	Cost
Tourist brochure	Describing means of travel to West Cameroon, local tours, hotels and rates, with illustrations.	2,000
Posters	1,000 @ 50¢ plus art work.	500
Regional travel	By two persons to inform travel agents, carriers, and official tourist offices of West Cameroon facilities and arrangements (one month × 2 persons × \$20/day = \$1,200 plus fares).	1,600
Overseas travel	For same purpose (one month × 1 person × \$20/day = \$600 plus \$1,400 in fares).	2,000
Newspaper advertising	In Douala, Yaounde, Port Harcourt, Lagos, Ibadan, Libreville, and Porto Novo.	3,500
Magazine advertising	At later stage, in U.S., French, and German travel magazines.	500
Promotional articles	Prepared for publication in magazines and newspapers.	500
Radio advertising	In same cities as newspaper advertising above.	500
Travel agent expenses	West Cameroon's share in the cost of inviting representatives of selected travel agencies to visit West Africa (5 visitors × 14 days × \$20/day plus travel of \$6,000) prorated between Nigeria, Cameroon, Gabon, and Congo (Brazzaville).	600
Subtotal		<u>\$ 12,000</u>
Training and conference participation		
Training	Five IUOTO correspondence courses @ \$75.	375
Conferences	Participation in regional and international conferences on tourism.	3,000
Subtotal		<u>\$ 3,375</u>
Total public relations costs		\$ 15,375

* Hotels in the private sector are not included.

† Victoria water is purified.

‡ Improvements only.

§ Not included in totals on assumption costs would be shared by agencies other than the Tourist Board.

Source: Stanford Research Institute.

Table B-5

INDUSTRIAL DEVELOPMENT PROJECTS
(Millions of CFA Francs)

	<u>Phase I</u> (1965-70)	<u>Phase II</u> (1970-75)	<u>Total</u>
Extension of power generating capacity to major towns and expansion of existing capacity	1,488 CFA fr	300 CFA fr	1,788 CFA fr
Small industry loan fund	50	100	150
Small industry loan supervisory staff	57	--	57
Industrial estates	18	24	42
Forest enumeration survey	135	--	135
Feasibility studies of manufacturing plants	45	63	108
Veneer core stock mill	200	--	200*
Brewery	--	200	200*
Soap plant	--	19	19*
Carbonated beverage plant	18	--	18*
Fruit cannery (possibly oranges)	--	22	22*
Leather goods plant (possibly footwear)	--	47	47*
Integrated timber and plywood plant (expansion of veneer core stock mill)	--	62	62*
Ceramic goods (cement pipe and tile)	54	--	54*
Petroleum refinery	<u>--</u>	<u>1,500</u>	<u>1,500*</u>
Total	2,065 CFA fr	2,337 CFA fr	4,402 CFA fr

* Financing should be obtainable from private investment.

Source: Stanford Research Institute.

Table B-6

**ESTIMATED NONRECURRENT AND RECURRENT COSTS
OF THE EDUCATION PROGRAM IN WEST CAMEROON
1965-70 and 1970-75
(CFA Francs and U.S. Dollars)**

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
Nonrecurrent costs						
1	Replacement of temporary classrooms in primary schools	75*CFA fr	\$ 300	22*CFA fr	\$ 8K	Cost estimates assume: (a) each permanent classroom costs 250,000 CFA francs (1,000), (b) 50% of the financing is furnished by West Cameroon State budget and 50% furnished by Local Authority budgets.
2	Replacement of semi-permanent classrooms in primary schools	65*	260	15*	60	Cost estimates assume: (a) replacement or improvement of each classroom costs an average 112,000 CFA francs (\$450), (b) 50% of financing is furnished by West Cameroon State budget and 50% by Local Authority budgets.
3	Expansion in number of classrooms in primary schools	78*	312	179	716	Cost estimates assume: (a) enrollment will reach 175,000 by 1970 and 225,000 by 1975, (b) each classroom will accommodate an average of 35 children, (c) 4,373 classrooms were available in 1964, (d) 627 new classrooms will be required by 1970, and 1,430 by 1975, (e) 50% of the financing will be furnished by the West Cameroon State Government and 50% by the Local Authorities, (f) classrooms will cost 250,000 CFA francs each (\$1,000).
4	Rehabilitation of teacher training centers	165	660	--	--	Assumes a budget for 11 teacher training centers ranging from 10 to 20 million CFA francs (\$40,000 to \$80,000), each to accommodate enrollment increase from 1,374 in 1964 to 4,000 in 1970 and to 4,500 in 1975.
5	Rehabilitation and expansion of Government Teacher Training Center in Kumba	140	720	60	240	Assumes major effort to alleviate teacher shortage and upgrade teacher qualifications will be made at Government Teacher Training Center in Kumba.
6	Pilot radio instruction program	17	6K	--	--	Costs cover instruction program and foreign technicians only. Estimate assumes Radio Buea wattage will be raised as now planned and costs covered elsewhere.
7	Audiovisual center	12	4K	--	--	Cost estimates assume: (a) one foreign technician to train Cameroonian manager for 1 year costing 7.5 million CFA francs (\$30,000), (b) Center building, projectors, slides, film charts will cost 3.0 million CFA francs (\$12,000), (c) Landrover-type vehicle to assure distribution and collection of teaching aids on loan to school will cost 1.0 million CFA francs (\$4,000).

Note: All footnotes will appear on the last page.

Table B-6 (continued)

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars	
Nonrecurrent costs (cont.)						
8	Primary school curriculum revision	15 CFA fr	\$ 60	-- CFA fr	\$ --	Assumes 2 man-years of effort by foreign technicians costing 7.5 million CFA francs (\$30,000) per man-year.
9	Publication of new syllabus	12	48	--	--	Cost estimates assume: (a) publication of 25,000 copies, (b) distribution of 4 copies per primary school or a total of 17,500 copies, (c) 300 copies to each of 12 teacher training centers or a total of 3,600 copies, (d) 4,900 copies held in reserve, (e) cost per copy will be 500 CFA francs (\$2.00).
10	Equipment for secondary schools	14	56	6	24	Assumes: (a) 14 secondary schools in 1964, 17 by 1970, and 20 by 1975; (b) 1.0 million CFA francs (\$4,000) each.
11	Expansion of secondary school capacity	73	292	13	52	Cost estimates assume: (a) secondary school enrollment will continue to rise but at a declining growth rate, (b) the number of students living at home will gradually increase, (c) 73 additional classrooms will be needed by 1970 and 14 more by 1975, costing 250,000 CFA francs (\$1,000) each, (d) 52 additional dormitories housing 43 students each by 1970 and 9 additional dormitories by 1975 costing 1.0 million CFA francs (\$4,000) each, (e) 11 additional dining halls by 1970 and 1 additional by 1975 costing 300,000 CFA francs (\$1,200) each.
12	Comprehensive secondary school	200	800	100	400	Assumes: (a) Kumba population will rise from 1964 estimate of 31,000 to 65,000 thus justifying major secondary school; (b) classrooms will accommodate 500 students and dormitories 300 students on assumption increasing number will live at home.

Table B-6 (continued)

Project	Description	Phase I (1965-70)		Phase II (1970-75)		Assumptions or Remarks
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA francs	Thousands of U.S. Dollars	
Nonrecurrent costs (cont.)						
13 College of Arts, Science, and Technology, Bambui	Construction of additional dormitories and faculty housing at College of Arts, Science, and Technology at Bambui, Bamenda Division.	271 CFA fr	\$1,084	22 CFA fr	\$ 88	Cost estimates assume: (a) funds already approved will be used for a library, science laboratory, agricultural laboratory, women's dormitory, (b) enrollment at Bambui will continue to rise but at a declining growth rate as follows: 1965, 183 students; 1966, 600; 1970, 650; 1975, 700. (c) Faculty will increase as follows: 1964, 11; 1968, 39; 1970, 45; 1975, 45. (d) additional dormitories costing 400,000 CFA francs (\$1,600) per student space will be needed for 467 students by 1970 and 55 more by 1975, (e) 22 additional faculty houses will be needed by 1968 and 6 more by 1970 costing 3 million CFA francs each (\$12,000).
14 Government Technical College, Ombé	Construction of additional dormitories, classrooms, dining hall to accommodate 1972 enrollment of 660 students.	14	56	4	16	Cost estimates assume: (a) enrollment will rise from 287 in 1965 to 600 in 1970 and 660 in 1972, (b) 8 additional dormitories accommodating 40 students each will be needed by 1970 and 4 additional by 1972 costing 1.0 million CFA francs (\$4,000) each, (c) classroom block and dining hall will be needed by 1970 costing 6.0 million CFA francs (\$24,000).
15 Commercial Training College, Tiko	Construction of commercial training college to accommodate 50 students.	10	160	--	--	Cost estimates assume: (a) faculty and equipment needs will be met in part by West German Government, (b) enrollment by 1970 will be 200 students.
Total nonrecurrent costs		1,231 CFA fr	\$4,924	421 CFA fr	\$1,684	

Table B-6 (concluded)

Cost Item	Description	By 1970		By 1975		Assumptions or Remarks	
		Millions of CFA Francs	Thousands of U.S. Dollars	Millions of CFA Francs	Thousands of U.S. Dollars		
Recurrent costs							
1	Grants-in-aid for primary enrollment	Payments made by Government to support students in the primary system.	367 CFA fr	\$1.46 ^a	405 CFA fr	\$1.620	Cost estimates assume: (a) average per student grant-in-aid in 1964 was about 2,500 CFA francs (\$9.60) based on 1964-65 estimated grant-in-aid total of 290 million CFA francs divided by June 30 1964 enrollment in primary system of 116,852 students, (b) grants-in-aid per student will decline to an average of 2,100 CFA francs (\$8.40) by 1970 and to 1,800 CFA francs (\$7.20) by 1975, (c) primary enrollment will rise from the 116,852 level in 1964 to 175,000 in 1970 and 225,000 in 1975.
2	Training abroad	Training in foreign countries in education fields such as vocational teaching, audio-visual aids, physical education, advanced degrees in education.	11 ^b	44	12 ^c	4 ^d	Cost estimates assume: (a) 8 persons will be sent annually during the 1965-70 period and 10 annually during the 1970-75 period, (b) training periods abroad will last 2 years each, (c) annual costs per man-year of training abroad will average 623,000 CFA francs (\$2,500), (d) 72 man-years of training will be provided during the 1965-70 period and 98 man-years during the 1970-75 period.
Total recurrent costs			378 CFA fr	\$1.512	417 CFA fr	\$1.66 ^e	

^a State government costs only.

^b Phase II costs are not included on the assumption that the diversified curricula in the secondary system will meet the demand for instruction in commercial subjects.

^c 18 trainees abroad in 1970 x 623,000 CFA francs each = 11.2 million CFA francs.
 20 trainees abroad in 1975 x 623,000 CFA francs each = 12.5 million CFA francs.

Source: Stanford Research Institute.

Appendix C

FORECAST, BY SECTOR, OF GROSS DOMESTIC PRODUCT BY 1975

Appendix C

FORECAST, BY SECTOR, OF GROSS DOMESTIC PRODUCT BY 1975

Explanatory Comments

The purpose of this Appendix is to compare gross domestic product (GDP) by sector for the year 1962/63 with the GDP forecast for 1975.

The forecasts are shown in ten tables, one for each sector. The system of sectors used in the tables conforms in general with that used by the Ministry of Cooperation in Paris in their publication, République Fédérale du Cameroun, Comptes Economiques 1951-1956-1957-1959, January 1963, and with the system for National Accounts being used by the Ministry of Finance and Plan, and by the Centre d'Information, de Documentation, et d'Etudes du Plan (CIDEP) in Yaounde.

In January 1965 CIDEP prepared a table in collaboration with Dr. Frits Snapper, United Nations Statistical Adviser to the Ministry of National Economy, Victoria office, showing GDP for 1962/63; see Table 2 of this report. The tables in this Appendix show the same figures for availabilities, imports, intermediate consumption, and the contribution of each sector to GDP in the base year 1962/63.

The estimates of GDP for 1975 are based on the developmental projects recommended in this report. Prices used to calculate 1975 GDP are the same as for the year 1962/63 and, therefore, constant prices are assumed.

Supplementary information regarding the forecast to 1975 can be found in Appendix C of Volume IV, in this report series, A Suggested Program for Transport and Telecommunications.

Comprehensive economic statistics are not available for West Cameroon. Nor was it possible, in the time available, to develop adequate statistical material for a well-substantiated and internally consistent forecast of the potential growth of the economy. Consequently the tables in this Appendix should be treated as illustrative of the possible effects of the proposed development program rather than as a definitive forecast of the prospects for economic growth.

Table C-1

GROSS DOMESTIC PRODUCT
Value Added by Animal and Vegetable Products (Sector O)
1962/63 and 1975
(CFA Francs)

Product	1962/63			1975		
	Quantity (tons)*	Unit Value (in thousands of CFA francs per ton)*	Total Value (in millions of CFA francs)	Quantity	Unit Value (in thousands of CFA francs per ton)*	Total Value (in millions of CFA francs)
Bananas	73,179	18 CFA fr	1,317 CFA fr	188,166†	18 CFA fr	3,387 CFA fr
Cocoa	6,110	117	715	20,135	117	2,356
Pepper	27	189	5	258	189	49
Tea	150	195	29	4,554	195	888
Coffee	4,241	190‡	806	14,541	190	2,763
Palm kernels	4,323	38	164	23,033	38	1,635
Live cattle exported	4,000	20	80	15,000	20	300
Subtotal			3,116 CFA fr			11,378 CFA fr
Other animal and vegetable products			7,185			9,534 §
Total value			10,301 CFA fr			20,912 CFA fr
Imports			-262			-336 §
Intermediate consumption			-412			-836
Contribution to GDP			9,627 CFA fr			19,740 CFA fr

* All quantities are in tons, except for cattle, which are given by number of head.

† Rejects of 20% have been deducted from total production to arrive at this figure.

‡ Average export price for both robusta and arabica in 1964.

§ Assumes 2.3% annual increase, 1962-75.

Source: Stanford Research Institute.

Table C-2

GROSS DOMESTIC PRODUCT
Value Added by Processed Agricultural and Livestock Products (Sector 1)
1962/63 and 1975
(CFA Francs)

Product	1962/63			1975		
	Quantity (tons)	Unit Value (in thousands of CFA francs per ton)	Total Value (in millions of CFA francs)	Quantity (tons)	Unit Value (in thousands of CFA francs per ton)	Total Value (in millions of CFA francs)
Palm oil	10,465	43 CFA fr	450 CFA fr	67,743	43 CFA fr	2,913 CFA fr
Canned vegetables	--	--	--	17,840	59	1,059
Milled rice	--	--	--	13,380	38	508
Maize for cattle feed	--	--	--	137,368	15	2,060
Soybean cake	--	--	--	10,035	151	1,513
Soybean oil	--	--	--	2,094	6	12
Canned meat	--	--	--	6,750*	205	1,384
Other products	--	--	<u>4,017</u>	--	--	<u>8,568</u>
Total value			4,467 CFA fr			18,017 CFA fr
Imports			-1,073			-1,200
Intermediate consumption			<u>-72</u>			<u>-1,283</u>
Contribution to GDP			3,322 CFA fr			15,529 CFA fr

* This assumes the annual slaughter of 13,500 head, having a body weight of 1,100 per head and a meat recovery of 50% of the body weight.

Source: Stanford Research Institute.

Table C-3

GROSS DOMESTIC PRODUCT
Value Added by Energy (Sector 2)
1962/63 and 1975
(CFA Francs)

Product	1962/63			1975		
	Quantity (kwh)	Unit Value (CFA francs per kwh)	Total Value (millions of CFA francs)	Quantity (kwh)	Unit Value (CFA francs per kwh)	Total Value (millions of CFA francs)
Firewood	--	-- CFA fr	806 CFA fr	--	-- CFA fr	914 CFA fr
Imported fuels	--	--	114	--	--	50*
Electricity	6,804,000	13.7	<u>90</u>	19,708,029	13.7	<u>270</u>
Total value			1,010 CFA fr			1,234 CFA fr
Imports			-114			-50
Intermediate consumption			<u>-206</u>			<u>-247</u>
Contribution to GDP			690 CFA fr			937 CFA fr

* Assumes establishment of refinery and decline in imports.

Source: Stanford Research Institute.

Table C-4

GROSS DOMESTIC PRODUCT
Value Added by
Raw Materials and Semiprocessed Goods (Sector 3)
1962/63 and 1975
(CFA Francs)

Product	1962/63			1975		
	Quantity (tons)	Unit Value (thousands of CFA francs per ton)	Total Value (millions of CFA francs)	Quantity (tons)	Unit Value (thousands of CFA francs per ton)	Total Value (millions of CFA francs)
Rubber	4,507	122 CFA fr	550 CFA fr	30,000	122 CFA fr	3,660 CFA fr
Timber	58,960	9	531	110,000	9*	990
Building materials†	--	--	--	--	--	--
Other products	--	--	<u>344</u>	--	--	<u>462</u>
Total value			1,425 CFA fr			5,112 CFA fr
Imports			-397			-800
Intermediate consumption			<u>-610</u>			<u>-1,557</u>
Contribution to GDP			418 CFA fr			2,755 CFA fr

* Production of integrated timber and plywood plant is included in Sector 6.

† Included in the value of construction, Sector 7.

Source: Stanford Research Institute.

Table C-5

GROSS DOMESTIC PRODUCT
Value Added by
Mechanical and Electrical Products (Sector 4)
1962/63 and 1975
(CFA Francs)

<u>Product</u>	<u>1962/63</u> Total Value (millions of CFA francs)	<u>1975</u> Total Value (millions of CFA francs)
Mechanical and electric goods	<u>2,413</u> CFA fr	<u>4,439</u> CFA fr
Total value	2,413 CFA fr	4,439 CFA fr
Imports	-1,058	-1,946*
Intermediate consumption	<u>-863</u>	<u>-1,587</u>
Contribution to GDP	492 CFA fr	906 CFA fr

* Based on growth rate of 4.8 percent annually for machinery imports in the NDB 84 and 85 code group in East Cameroon.

Source: Stanford Research Institute.

Table C-6

GROSS DOMESTIC PRODUCT
Value Added by Leather and Textile Products (Sector 5)
1962/63 and 1975
(CFA Francs)

Product	1962/63			1975		
	Quantity (tons)	Unit Value (thousands of CFA francs per ton)	Total Value (millions of CFA francs)	Quantity (tons)	Unit Value (thousands of CFA francs per ton)	Total Value (millions of CFA francs)
Tanned hides	6	106 CFA fr	1 CFA fr	707*	106 CFA fr	75 CFA fr
Other products			<u>976</u>	--	--	<u>1,692</u>
Total value			977 CFA fr	--	--	1,767 CFA fr
Imports			-492			-500
Intermediate consumption			<u>-70</u>			<u>-124</u>
Contribution to GDP			415 CFA fr			1,143 CFA fr

* Assumes 7,800 hides per year or 707 tons, valued at 106,500 CFA francs per ton.

Source: Stanford Research Institute.

Table C-7

GROSS DOMESTIC PRODUCT
Value Added by Miscellaneous Industrial Products (Sector 6)
1962/63 and 1975
(CFA Francs)

Product	Unit	1962/63			1975			
		Quantity (units)	Unit Value (CFA francs per unit)	Total Value (millions of CFA francs)	Quantity (units)	Unit Value (CFA francs per unit)	Total Value of Availabi- lities (mil- lions of CFA francs)	Value Added to GDP (millions of CFA francs)
Integrated timber and plywood plant	tons	--	--	-- CFA fr	18,000*	67,000 CFA fr	1,200 CFA fr	600 CFA fr
Brewery	hl	--	--	--	40,000	7,500	300	250
Soap plant	kg	--	--	--	90,000	452	41	37
Carbonated beverage plant	hl	--	--	--	50,000	740	37	26
Fruit cannery	kg	--	--	--	500,000	62	31	27
Leather goods	pairs	--	--	--	50,000	1,500	85	71
Work shirt plant	shirts	--	--	--	200,000	375	75	44
Rubber sole fabric shoes	pairs	--	--	--	750,000	229	172	137
Plastic goods	--	--	--	--	Table ware, combs, bot- tles, etc.	--	162	81
Ceramic pipe plant	tons	--	--	--	15,000	4,333	65	50
Petroleum refinery (petrol)	tons	--	--	--	144,000	9,376	1,350	540
Fish processing (dried fish)	tons	--	--	--	1,300	185,000	238	150
Small industry	--	--	--	346	--	--	2,771†	720
Total				346 CFA fr			6,527 CFA fr	2,733 CFA fr

* Equivalent to 60,000 tons of logs.

† Six percent annual average growth assumed for 1962-75.

Source: Stanford Research Institute.

Table C-8

GROSS DOMESTIC PRODUCT
 Value Added by
 Construction and Public Works (Sector 7)
 1962/63 and 1975
 (CFA Francs)

Product	1962/63 Total Value (millions of CFA francs)	1975 Total Value (millions of CFA francs)
Traditional and modern construction and materials	<u>1,726</u> CFA fr	<u>3,592</u> CFA fr*
Total value	1,726 CFA fr	3,592 CFA fr
Imports	-16	-33
Intermediate consumption	<u>-121</u>	<u>-252</u>
Contribution to GDP	1,589 CFA fr	3,307 CFA fr

* Annual average growth of 5.8%, the same rate as the growth of urban population.

Source: Stanford Research Institute.

Table C-9

GROSS DOMESTIC PRODUCT
Value Added by Services (Sector 8)
1962/63 and 1975
(CFA Francs)

Product	1962/63 Total Value (millions of CFA francs)	1975 Total Value (millions of CFA francs)
Services*	<u>2,493</u> CFA fr	<u>4,140</u> CFA fr
Total value	2,493 CFA fr	4,140 CFA fr
Imports	0	0
Intermediate consumption	<u>-1,395</u>	<u>-2,318</u>
Contribution to GDP	1,098 CFA fr	1,822 CFA fr

* Excluding administration and domestic services which are included in Sector 9: Labor.

Source: Stanford Research Institute.

Table C-10

GROSS DOMESTIC PRODUCT
 Value Added by Labor (Sector 9)
 1962/63 and 1975
 (CFA Francs)

Product	1962/63 Total Value (millions of CFA francs)	1975 Total Value (millions of CFA francs)
Labor	<u>3,770</u> CFA fr	<u>6,277</u> CFA fr
Total value	3,770 CFA fr	6,277 CFA fr
Imports	0	0
Intermediate consumption	<u>-2,210</u>	<u>-3,703</u>
Contribution to GDP	1,560 CFA fr	2,574 CFA fr

Source: Stanford Research Institute.

Appendix D

TONNAGE AND VALUE OF PRINCIPAL WEST CAMEROON EXPORTS

Table D-1

**PRINCIPAL WEST CAMEROON EXPORTS
1955-1964
(Millions of CFA Francs)***

Export	1955	1956	1957	1958	1959	1960 [†]	1961 [†]	1962	1963	1964
Timber	30 CFA fr	120 CFA fr	503 CFA fr	743 CFA fr	943 CFA fr	980 CFA fr	911 CFA fr	636 CFA fr	325 CFA fr	450 CFA fr
Bananas	1,625	1,600	1,952	2,251	1,190	1,857	1,911	1,549	989	889
Cocoa	913	912	612	969	1,138	973	962	446	691	543
Palm oil	273	343	308	290	329	378	516	351	456	441
Palm kernels [‡]	136	125	162	145	213	221	180	160	165	232
Rubber	280	270	255	355	441	730	653	561	867	489
Coffee	213	225	457	507	642	802	696	529	655	1,149
Tea	--	--	--	--	6	11	22	24	37	50
Pepper	1	3	2	3	4	8	7	6	6	7
Total	3,471 CFA fr	3,598 CFA fr	4,251 CFA fr	5,263 CFA fr	4,906 CFA fr	5,960 CFA fr	5,858 CFA fr	4,264 CFA fr	4,191 CFA fr	4,253 CFA fr

* The conversion rate used in this table is £1 = 692 CFA francs (established in 1959), although between 1955 and 1959 the CFA franc devaluated considerably in relation to the pound sterling.

† For the Marketing Board years ending September 30, 1960 and 1961, export duty was not included in the f.o.b. price; therefore, 11% was added to the reported values.

‡ The 1956 value of palm kernels is based on 29,000 CFA francs per metric ton.

Sources: Data for 1956 are from Report of the Cameroon under United Kingdom Administration, United Nations, 1957. The following data were provided by the West Cameroon Marketing Board: cocoa, 1955-59 and 1962-63; palm oil, 1955-59; coffee, 1962; and palm kernels, 1955-57 and 1959. Data compiled by Stanford Research Institute.

Table D-2

PRINCIPAL WEST CAMEROON EXPORTS
1955-1964*
(Metric Tons)

Export	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Timber	1,373	5,562	38,633	81,956	129,191	133,713	116,156	88,561	44,919	49,846
Bananas	68,063	69,722	79,107	85,770	68,385	85,372	88,648	81,354	66,180	50,063
Cocoa	3,902	6,407	5,025	5,084	6,019	7,198	9,007	4,282	7,341	4,658
Palm kernels	4,593	4,192	5,520	4,860	5,432	5,604	5,857	5,532	5,335	6,143
Palm oil	5,139	6,174	5,982	6,334	6,923	7,434	10,129	8,422	9,521	10,249
Rubber	1,700	1,671	1,774	2,496	2,528	2,916	4,158	4,052	5,264	3,994
Coffee	1,057	855	1,892	2,196	3,409	3,604	4,337	3,814	3,730	6,052
Tea	--	--	--	--	24	34	80	79	207	256
Pepper	7	22	19	28	33	18	47	34	29	37
Total	85,834	94,605	137,952	188,724	221,944	245,893	238,419	196,130	142,526	131,298

* All data during calendar years except figures for cocoa during 1955-62, and palm oil and kernels during 1955-61, which are based on the Marketing Board year beginning October 1 and ending September 30.

Sources: 1960-62 figures for timber are derived from the budget speech of West Cameroon Secretary of State for Finance and Forest reports.
1962 figures for palm kernels are calculated from Marketing Board purchases of nonplantation produce and calendar year plantation production.
1963 figures for palm oil, palm kernels, and rubber are from the Victoria Foreign Trade Office, Ministry of National Economy.
Statistical Office, Ministry of National Economy, Victoria.
Adjustments, calculations, and derivations, Stanford Research Institute.

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