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SIERRA LEONE

VOLUME I

Overview and Strategy

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VOLUME I

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DAP SUBSTITUTE REPORT: SIERRA LEONE

PREFACE

This report was compiled by an AID Development Assistance Program (DAP) reconnaissance mission to Sierra Leone in November and December 1975. Members of the mission were James A. Brown, Jr., PPC - AID/W, team leader; Peter K. Daniells and J. P. Keeve, M.D., USAID/Liberia; and Elliott Morse, Donald Jackson, and Craig Olson, consultants, Development Alternatives, Inc., Washington, D. C. AID does not now have a resident mission or a bilateral program in Sierra Leone, and bilateral activities there during the next few years are not likely to exceed a modest level. For these two reasons, plus the availability of recent comprehensive reports on Sierra Leone by the World Bank and the FAO, a full-fledged DAP is neither feasible nor appropriate at this time.[1] The Sierra Leone DAP Substitute Report follows standard DAP outlines and adheres to the general DAP spirit, with two significant departures: In the first place it is an internal AID document with no claim of collaborative preparation by GOSL counterparts. This departure is justified not only because of the absence of a resident mission in Sierr Leone with established counterpart relationships, but also because at the time of writing AID is not in a position to commit

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[1] In this connection, one should note that the sector papers for agriculture, education, and health-population-nutrition are strictly "assessments" and not "analyses", as AID uses the terms. They have developed no original data; and, due to the team's limited time in the field, they make no claim of in-depth analysis.

itself to the specifics of a new bilateral program in Sierra Leone and should not generate false expectations in any particular GOSL offices. On the other hand, the report is entirely consistent with GOSL priorities as they are stated in the National Development Plan, and it generally reflects the thinking of well-informed GOSL personnel with whom the team spent many hours. In the second place, it discusses at length the current (1975-76) financial and balance of payments crises, since these problems may well be the most troublesome ones AID encounters in trying to design new bilateral Sierra Leone projects. Therefore, even though standard AID practice recognized that the DAP should always be a "continuous process with rolling horizons" and is always subject to revisions, this report must be regarded as much more tentative than the ordinary DAP. The eventual assignment of a resident AID officer to Sierra Leone would no doubt lead to the qualification of many judgments herein and to the inclusion of relevant new material overlooked or purposely omitted by the reconnaissance team.

Thanks for assistance to the team goes especially to Ambassador Michael Samuels, DCM Daniel Sullivan, and their staff at the American Embassy, Freetown; to Stanley Siegel and staff, USAID/Liberia; and to Dalton Griffith, Paul Saenz, and James Wedberg of the office of Central and West African Affairs, AID/W.

I. BACKGROUND

A. The History of Sierra Leone

A brief glance at Sierra Leone's unique and interesting history helps considerably in understanding some of the cultural and political factors that influence the country's economic development. For all intents and purposes, the modern era for Sierra Leone began in 1787 when a small group of freed slaves from England settled at Freetown. They were joined later by freed slaves from Nova Scotia, who had earlier fought in the American Revolution with the British, and from Jamaica. But during the first half of the nineteenth century, these original settlers were outnumbered by "liberated Africans" taken by the British navy on the high seas from ships bound for America after Britain outlawed slavery. The liberated Africans came from regions often far down the coast and spoke literally hundreds of tribal languages, but they gradually merged with the original settlers and adopted their Westernized customs. The merged group has been known since then as "Creoles" although it has always had and continues today to have a gradual infusion of tribal Africans migrating from the interior of Sierra Leone to Freetown). It was a "society which exhibited many of the values, attitudes, and skills of the British middle classes."[1] The area around Freetown became a Crown Colony in 1808, whereas the hinterlands that today comprise most of Sierra Leone geographically became a British protectorate only in the 1890's. The

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[1] John Lee Collier, "Selected Themes in the History of Sierra Leone," unpublished paper, January 17, 1975.

British followed a strict policy of indirect rule through tribal authorities in the Protectorate up until Independence. This dual political structure, colony-protectorate, reinforced the dual social structure, Creole-tribal, that persists today.

Formal independence came to Sierra Leone in 1961, after a gradual and relatively smooth process of Africanization that began in the early 1950's. The Sierra Leone Peoples Party held office until voted out in the 1967 General Elections by the opposition All Peoples' Congress, one of the few times such an electoral event has occured in Black Africa since the end of colonial rule. The APC has held office most of the time since then, with brief interruptions.

Current bilateral relations between Sierra Leone and the United States are good and seem to be steadily growing, although there was a cool period in the early 1970's after the USAID Mission was closed and during which time there was no American ambassador in Freetown for about sixteen months. Sierra Leone's voting stance in the United Nations and other international bodies is genuinely nonaligned, and her politics at home is distinctly non-ideological.

B. Non-Economic Factors Affecting Development

The Creole-tribal duality in Sierra Leone merely intensifies several problems common to many low-income countires, especially the excessively academic orientation of the educational system and the

bureaucracy's sluggishness in responding to rural (relative to urban) needs. Although tribal groups gained political control at the time of independence and have held it ever since, the Creoles' dominance of Sierra Leone's intellectual life and of her bureaucracy has never been seriously challenged. The educational and bureaucratic problems are closely linked, insofar as the educational system tends not to produce skills that are directly relevant to the needs of the 75% of the nation's people that live in rural areas, and therefore tends to perpetuate the operating style of the nation's bureaucracy. Apparently some politicians have been unable or unwilling to break the vicious circle. In the opinion of two American scholars, a "major consequence has been the political system's seeming inability to deal with fundamental problems facing the society. These would include unemployment and underemployment, migration to diamond areas and urban centers, a stagnant agricultural sector, overreliance on minerals as earners of foreign exchange, outdated educational institutions, and a host of others. The Government in Sierra Leone has not yet sufficiently been able to deal fully with these problems."

On the other hand, Sierra Leone's current political system offers the considerable advantage of being distinctly non-ideological and philosophically pragmatic. A further advantage is that national politicians have firm rural ties, as witnessed by trips from Freetown to the rural areas on weekends by most Ministers. Foreign aid donor

agencies find no shortage of counterparts willing to work collaboratively on projects of mutual interest, spanning a wide variety of activities.

C. U. S. Assistance to Sierra Leone

The U.S. does not at present have an AID bilateral program in Sierra Leone. There was such a program in early 1960's which from FY 1960 thru 1968 provided $12.6 million (all in grants). A major part of this program was a contract with University of Illinois for experts, services, and equipment to Njala University College and for related advanced training in the U.S.A. There was also a series of PL 480 Title I loan agreements, totalling about $3 million from before FY 65 thru FY 72, but there have been no more since FY 72.

For most of the period since FY 68 (except for the Title I loans), US direct assistance to Sierra Leone has been limited basically to the following categories:

(1) Peace Corps, with a program of about $1.5 million per year.

(2) PL 480 Title II (thru CARE and CRS), totalling about $1.2 million per year.

(3) Embassy Self Help Program, running less than $100,000 per year. (Last year's total was $64,700 after the previous two years at about $75,000 - $94,000.) Applications for Self Help assistance are made to the Embassy by community leaders, Peace Corps Volunteers and the representatives of the voluntary agencies. Applications are judged according to their capacity for generating goodwill, the number of people who benefit, the degree of the local initiative and support, the quickness of impact and the effect on basic

socio-economic conditions at the local level. In recent years the Embassy has put increased emphasis on projects in agriculture to reflect the new priority placed on this sector by the GOSL. All projects receive the approval of the GOSL before they are implemented. In many cases Government joins with contributions of cash, materials or expertise. In all cases the Embassy requires a local contribution in cash or kind totalling at least 25% of the total cost of the project.

(4) Small regional or centrally funded programs that happened to cover Sierra Leone or that it was possible to tap, such as the Education Project for Africa, the West Africa Regional Math Program, Census activities, and Michigan State Agricultural economics research with Njala.

In 1975 there was an increase in USG assistance to Sierra Leone. Two major new items were:

(1) An AID agreement with the West Africa Rice Development Association (WARDA), signed in January 1975 which provides for USAID support over three years to WARDA research activities. Total first year funds were $737,000 of which $237,000 were designated to support WARDA activities at the Rokupr Rice Research station in Sierra Leone. This amount covers construction costs for labs, seed storage rooms, consultant services and salaries, and commodities.

(2) A grant agreement signed in MAY, 1975 between AID/W and CARE/NY under the new PVO grant authority, to support

feeder road construction in Sierra Leone. This program grew out of earlier and smaller, but very successful, CARE road-building projects over several years, partly funded by Embassy Self-Help Funds. The present project covers three years and envisages construction of 900 miles of roads, principally farm-to-market roads opening up new areas with potential for inland swamp rice development. Total cost of the project is about $3.8 million -- of which the GOSL is committed to provide $1.8 million. CARE will provide $668,000, AID will provide $1.2 million, and other donors $200,000.

Smaller AID-Financed activities started in 1975 were:

(1) To replace West African Regional Mathematics Program (WARMP) in Sierra Leone, the Ambassador signed on behalf of AID an agreement with the GOSL in June providing the services of an American Mathematics educator for two years and $13,000 for workshops and training materials. The project is basically for training Sierra Leonean teachers.

(2) In response to a special request from the Vice President of Sierra Leone, AID has financed an IRS tax administration expert for a one-month study on means to improve tax admininstration and collection. The study was conducted in November and December, 1975.

(3) During 1975, about ten Sierra Leoneans went for short-term U.S. training under central AID funding. Courses were mainly in family planning and trade union activities.

D. The Economy

1. General Characteristics

The economy of Sierra Leone is essentially dualistic -- an industrial sector based on mining coexists with an agricultural sector operating at the subsistence level. Roughly three-quarters of the population live in the rural areas, but the agricultural sector is responsible for only about thirty percent of the Nation's income.

GNP per capita is estimated at $190 which puts it considerably ahead of Guinea ($90), its northern neighbor, but less than Liberia ($250), its southern neighbor.[1] Over the 1965-72 period GNP per capita has grown at an average annual rate of 1.8 percent. As Table 1 indicates, recent growth in the agricultural sector has lagged far behind growth in the other sectors.

Economic growth has traditionally depended on exports which account for about twenty-five percent of the country's income. Table 2 shows that the country has moved from exporting primarily agricultural produce to a situation in which heavy reliance is placed on the mining industries.

Development of the agricultural sector has been hindered by government policies that show a clear urban/industrial bias: Low expenditures for agricultural development, heavy taxes on agricultural exports, low progressivity of income taxation, the exemption of diamond dealers and miners from income taxation and consumer subsidies for rice, petroleum products, and electircity. The situation has been made

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[1] World Bank Atlas, 1974.

TABLE 1

GROSS DOMESTIC PRODUCT, ITS SECTORAL DISTRIBUTION AND GROWTH RATE

	Shares (Percent) 1963/67	Shares (Percent) 1970/71	Average Annual Growth in Real Terms (Percent) 1963/64-1970/71
Commodity Producing Sectors	65.2	58.8	2.8
Agriculture	38.6	31.6	1.6
Mining	17.2	15.9	3.3
Manufacturing	5.6	5.2	3.0
Utilities	0.5	0.8	11.8
Construction	3.3	5.0	10.7
Services	26.4	31.8	6.9
Trade	13.6	15.6	6.1
Transport	6.8	9.9	9.8
Finance	6.0	6.3	5.1
Government and Social Services	8.4	9.4	5.6
Gross Domestic Produce	100.0	100.0	4.6

Source: National Accounts of Sierra Leone 1964/65 to 1970/71, Central Statistics Office, 1972.

TABLE 2

SIERRA LEONE: COMPOSITION OF EXPORTS, 1910-73
(Percent)

	1910	1920	1930	1940	1950	1960	1973
Minerals	-	-	-	73	44	81	76
Diamonds	-	-	-	37	23	64	62
Iron Ore	-	-	-	23	19	16	11
Other Minerals	-	-	-	13	2	1	3
Major Agricultural Products	73	68	71	19	36	16	20
Palm Produce	73	68	71	19	34	11	5
Cocoa	-	-	-	-	2	3	5
Coffee	-	-	-	-	-	2	10
Other Exports	27	32	29	8	20	3	4

Source: Central Statistics Office.

worse by poorly conceived plans for the development of the agricultural sectors.

The result has been that in recent years growth in agricultural production (1.6 annually) has not kept pace with the rate of population growth (more than 2.5 percent annually). Agricultural income has consequently grown very little, and this situation is partially responsible for pronounced income inequalities, even by African standards. The World Bank estimates that the poorest forty percent of the population receives just over ten percent of the nation's income, while the highest five percent earn nearly thirty percent of the income total.

The past failure of agricultural sector development is attributable in large degree to low and inefficient allocation of resources to agriculture. It appears that mobilizing resources to develop the sector will present a serious future problem. In the course of this decade, the country's earnings from diamonds (roughly sixty percent of export proceeds) will decline with depletion of diamond resources. The development of other parts of the mining sector will provide additional earnings, but because of other demands (the employment of a fast growing labor force and the provision of increased social services), resources will be tight. And yet, increasing agricultural production will determine the extent to which the country can employ and feed the growing population. In addition, agricultural exports will have to expand rapidly if the country's projected foreign earnings requirements are to be met.

With the assistance of the UNDP, the government recently finished a development plan to cover the 1974/75-1978/79 period, with highest

priority for development of agriculture. Unfortunately, the plan is too ambitious for the available financial, institutional, and manpower resources. Implementation will probably also be hampered by the absence of agreement among key ministries as to priorities in the plan and mechanisms for implementation.

Over the five year plan period, growth in real output is targeted at 6.2 percent. (A more reasonable goal is probably close to four percent.) The plan also calls for a substantial increase both in foreign assistance and in domestic resources for development. It already appears that neither goal will be met. Domestically, government finances, due primarily to the absence of effective expenditure control, are currently at such a critical stage that covering government wages and making other essential payments are daily recurring crises. As regards foreign assistance, delays in project preparation and their funding by donor agencies will make it impossible to meet the targets set forth in the development plan.

2. Major Sectors of the Economy

A. Agriculture

Agriculture accounts for about one-third of the country's GDP; it provides the main occupation for three-fourths of the population and generates somewhat less than one-fifth of total export earnings. Since independence, agricultural production has grown at less than two percent annually, with most of this growth attributable to the cultivation of more land. The slow growth rate appears attributable in large measure to government policies that have retarded rather than promoted higher productivity in the sector.

Agriculture is based on bush-fallow farming (seventy percent of total crop acreage), most of it outside of the monetized economy. As indicated in Table 3, rice and palm products are the most important crops by value.

TABLE 3

SIERRA LEONE: RELATIVE IMPORTANCE OF INDIVIDUAL AGRICULTURAL CROPS IN 197[illegible]

Product	Percent Contribution to Output Value
Rice	41.5
Palm Products[1]	13.2
Coffee	7.1
Cocoa	4.7
Groundnuts	1.1
Other Subsistence Crops and Livestock	32.7

[1] Consisting of palm oil (9.5%) and palm kernels (3.7%).

Source: National Accounts, 1970/71.

Rice, the staple food, is grown by eighty percent of all farmers on over fifty percent of all land under cultivation. Roughly a quarter of the rice is grown in the swamplands, but the majority is grown in the uplands. Over the last two decades, the country has rarely been able to meet consumption needs from local production. In the last two years, however, rice imports have not been required, primarily because of over-importation in prior years, higher farm prices, and good weather. If farm prices are maintained at current levels, it seems likely that Sierra Leone already is or will soon be self-sufficient in rice.

B. Fisheries

The annual catch from all types of fishing in Sierra Leone is estimated at 40,000 to 50,000 metric tons with a landed value of five to nine million dollars. The bulk, accounting for seventy percent of the total, is caught by about 10,000 "artisanal" fishermen, who cast beach seines and drift nets mostly from small one-to five-man "Ghana"-type planked canoes. Most "industiral" fishing is done by foreign boats, only a few of which actually land fish in Freetown.[1] Inland fishing is carried out by about 2,000 to 3,000 people, mostly women. The annual catch is estimated at 4,000 to 5,000 tons, which is well below fresh-water potential. There are also small-scale shrimp and lobster fishing and possibilities for a mangrove oyster aquaculture. About twenty percent of Sierra Leone's total supply of fish is imported. The imports are frozen and distributed by the monopoly importer through eleven cold storage depots. Fish caught in the artisan sector are smoked and dried and sold mostly by female traders for local consumption or transport inland.

With a large continental shelf and an abundance of streams and estuaries, there should be substantial potential for development of

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[1] The registered ships include about two dozen medium-sized trawlers from Spain, Italy and Greece, an equal number of shrimp trawlers operating from Monrovia, 16 USSR freezer trawlers, plus 23 tuna boats, 14 purse-seiners and one meal manufacturing factory ship of various registrations. An Italian company formerly had 18 60- to 70-foot bottom trawlers operating out of Freetown but the fleet has now been reduced to six. For exporting, importing, production and inland distribution of frozen fish the Government of Sierra Leone is a 50 percent partner with Mesurado Fishing Co. Ltd., of Liberia in the ownership of two firms: Sierra Leone Shrimp Export Co. Ltd., and Joint Venture Fishing Enterprises Ltd. A third company fish industries Ltd. is a 50 percent partnership between Ralston Purina Co. and Mesurado.

fisheries in Sierra Leone. Unlike several other West African states, Sierra Leone's territorial waters (recently extended to 200 miles) have been only partially exploited, so there is little immediate risk of depleting the fish stock. It is estimated that coastal waters could yield 80,000 to 100,000 tons per year in excess of local demand, to earn US $25 to 30 million per year in foreign exchange. The potential for inland fisheries is unknown, but existing yeilds appear substantially lower than what could reasonably be expected.

A principal constraint to the development of fisheries in Sierra Leone apparently is the absence of proper direction, planning and coordination by the government. The National Development Plan appears to have understated the potential for fisheries. Although the Plan outlines certain "needs" and "targets", it fails to lay out a comprehensive program for the development of the sector. The Plan makes no memtion, for example, of marketing arrangements and devotes little attentiom to upgrading technology in the artisan sector (from which most of the fish catch comes). In addition, the Fisheries Division of the Ministry of Agricultural and Natural Resources is severely understaffed, particularly in extension workers. There is an absence of satisfactory statistics on fish, and as of 1974 the Fisheries Division had published no reports on its activities for the previous nine years. Other constraints include inadequate infrastructure (refrigeration facilities, boat and engine maintenance centers, market roads, etc.); an absence of institutional credit facilities for artisan fishermen; and a lack of knowledge of production possibilities and feasible technologies for the artisan sector.

With fish as a prime source both of inexpensive protein and of potential export revenues, fisheries could be a prime target for development. To develop the sector, however, the problems mentioned above must be addressed. Organization and planning must be improved; a balance should be struck between development of industrial, coastal, and inland fisheries; infrastructure must be developed; staffing, particularly of extension services, must be expanded. An immediate and priority objective (and one which would be a natural activity for external donor assistance) should be research aimed at filling the data gaps in catch statistics, fish migration, shellfish culture, hydrographic data, and market potential.

C. Mining, Manufacturing, and Energy

These features of the Sierra Leone economy are discussed in Appendix A.

D. Commerce

Virtually all the wholesale firms and the major retail firms in Sierra Leone are controlled by expatriates -- mainly Lebanese and Europeans, along with a few Indians and others. The GOSL has had only limited success, for example by means of the 1969 non-citizens trade and business legislation, at encouraging the growth of domestic entrepreneurship. Although the DAP team made no attempt to analyze donor opportunities to help with private sector development activities, AID's congressional mandate on assistance both to rural people and to the private sector suggest an in-depth investigation of opportunities for helping develop private business activities in support of peasant agriculture.

3. The Economic Role of Government

A. Organization

The public sector in Sierra Leone includes the central government, local government bodies and several public corporations. The major public corporations are the Sierra Leone Produce Marketing Board, the Sierra Leone Electricity Corporation, the Sierra Leone Ports Authority, the Rice Corporation and the Guma Valley Water Company. The National Diamond Mining Company (DIMINCO) has a government majority ownership. Although the minority private partner exercises management control.

The public sector in Sierra Leone is dominated by the central government. In 1971/72, subnational government revenues amounted to only 8.3 percent of total government revenues,[1] which is a low percentage by African standards. In 1972, district councils were abolished, leaving a few towns, the City of Freetown and 147 chiefdoms as the remaining local governing units. This is significant because rural development efforts must work in cooperation with the chiefdoms. The two main sources of finance for the chiefdoms are grants from the central government and local taxes. In the past, a large portion of these revenues has gone for the maintenance of law and order, with very little spent on local development. Recently, however, a number of chiefs have organized self-help activities, and it appears that significant potential for development-oriented self-help projects resides with the chiefs.

[1] This includes taxes, grants from, and taxes shared with the central government. When these are excluded, the figure falls to 4.8 percent.

As regards the public corporation, the Produce Marketing Board and the Ports Authority have made profits in recent years and these profits have been used to support other government activities. The Rice Corporation and the Electricity Company apparently have not been well managed in recent years, and efforts to improve on their activities are being initiated.

B. Expenditures[1]

In Sierra Leone, as in most ex-British colonies, expenditures are classified as either current or development expenditures. As is true elsewhere, the terms are misleading. Virtually all government wages (including those paid to teachers and extension workers whose efforts are in fact "developmental") are considered current expenditures, whereas the construction of new facilities and virtually all foreign aid are included in the development budget.

This artificial expenditure breakdown is reflected in the expenditure decision-making process. As regards current expenditures government ministries make direct requests to the Ministry of Finance for their budgets on an annual basis. For development expenditures, the Ministry of Economic Development and Planning is supposed to take the initiative, with support from the individual ministries. The agreed-upon expenditure plan is then forwarded to the Ministry of Finance for final approval. In fact, the individual ministries often

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[1] In this section, attention is focused on the central government expenditures because of the overriding importance of the central government in Sierra Leone's public sector.

do not agree with the Ministry of Economic Development and Planning on either the appropriate strategy or level of development expenditures. In such cases, they will often petition the Ministry of Finance directly for funding approval. In recent years, in the absence of meaningful fiscal controls, some of the ministries seem to have obligated government funds without the legally-required approval of the Ministry of Finance. But controls have been tightened in recent months.

Table 4 gives current expenditures broken down by function and shows that between 1970/71 and 1974/75, total expenditures almost doubled. Table 5 gives development expenditures which are also broken down by function. The table shows that over the same four-year period, total development expenditures almost quadrupled. It should be noted, however, that the significant increase did not occur until 1974/75 when actual expenditures, it is now estimated, were Le 24.4 million.[1] Most of the increase was made possible by an increase in foreign assistance.

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[1] See Footnote 4, Table 5

TABLE 4

SIERRA LEONE: CENTRAL GOVERNMENT CURRENT EXPENDITURE[1]
1970/71-1975/76 (Millions of leones)

	1970/71	1971/72	1972/73	1973/74	1974/75[2]	1975/76[3]
Agriculture	1.8	2.4	2.6	3.2	4.0	4.7
Education	9.7	11.5	13.4	15.4	17.7	17.4
External Affairs	1.7	2.3	2.6	3.3	3.6	2.6
Health	4.0	4.3	5.5	6.0	6.5	7.4
Local Government Grant	1.0	0.9	1.0	0.9	1.4	0.2
Pensions and Gratuities	1.6	1.8	2.2	2.2	2.2	2.5
Public Works	3.8	4.0	4.7	5.9	6.0	6.2
Security Administration[4]	6.9	6.1	7.9	8.5	10.6	10.7
Transport and Communication	4.0	3.8	3.9	4.1	4.6	4.5
Other	8.2	9.3	10.2	18.2	23.6	23.3
Total	42.7	46.4	54.0	67.7	80.2	79.5

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1 Excludes debt amortization and transfers to the Development Budget.

2 Revised estimate.

3 Budget estimate.

4 Defense and police.

Source: Estimates of Revenue and Expenditure 1975/76 and data provided by Sierra Leonean authorities.

TABLE 5

SIERRA LEONE: DEVELOPMENT EXPENDITURE, 1970/71-1975/76
(In millions of leones)

	1970/71	1971/72	1972/73	1973/74	1974/75[1]	1975/76[2]
Economic Services	6.6	5.1	10.7	5.8	25.3	47.0
of which Roads & Bridges	(5.1)	(3.5)	(7.9)	(3.2)	(7.5)	9.5
Agriculture[3]	(1.0)	(0.9)	(2.3)	(2.2)	(12.6)	11.9
Social Services	2.2	3.0	1.6	1.4	4.4	7.0
of which Education	(0.9)	(0.8)	(1.6)	(1.0)	(2.6)	2.6
General Services	0.7	0.3	0.8	0.8	6.5	9.6
Total	9.5	8.4	13.1	8.0	36.2[4]	63.6

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1 Revised estimate.

2 Budget estimate.

3 Includes forestry, veterinary and fisheries.

4 In the government's reply to IMF Questionnaire Re: Sierra Leone - 1975 Article XIV Consultations. The estimate is made that Le 24.4 million will have been spent.

Source: Estimate of Development Expenditure, 1975/76 and data supplied by the Sierra Leone authorities.

When current and development expenditures are combined, it appears that government expenditure as a percent of gross domestic product has increased from 14.8 percent in 1970/71 to 20.7 percent in 1974/75.

One way to gauage the government's commitment to various sectors of development is to examine budgetary allocations. This is done for agriculture in Table 8 which shows that the share of current

expenditures devoted to agriculture has not increased over the last few years. The share of development expenditures going to agriculture, however, has increased steadily through time. This is due in large part to an increase of foreign assistance to the agricultural sector. Overall, the share of current and development expenditures going to agriculture is rising gradually.

TABLE 6

SIERRA LEONE: CENTRAL GOVERNMENT EXPENDITURE ON AGRICULTURE AS A PERCENT OF TOTAL EXPENDITURE

	1970/71	1971/72	1972/73	1973/74	1974/74[1]
Current Expenditure on Agriculture as a Percent of Total Current Expenditure	4.2	5.1	4.8	4.7	5.0
Development Expenditure on Agriculture as a Percent of Total Development Expenditure	10.5	10.7	17.6	26.2	34.8
Current and Development Expenditures on Agriculture as a Percent of Total Current and Development Expenditures	5.4	6.0	7.3	7.1	14.3

1 Revised estimate.

Source: Estimates and Revenue and Expenditures, 1971/72/-1975/76 and data provided by The Sierra Leonean authorities.

C. Revenues

Tax receipts contribute about 84 percent of central government revenues, and several features of this important revenue source are worthy of note. First, a recent cross-section analysis of forty-nine LDC's countries suggests that Sierra Leone's tax effort is substantially below the norm.[1] That is, given Sierra Leone's potential tax revenue base, it appears that tax collections are significantly lower than the average for other developing countries with similar tax bases.

A second feature concerns the elasticity of the tax structure -- that is, the extent to which tax revenues increase in response to increases in national income. Tax receipts in Sierra Leone depend largely on foreign trade, so there is no guarantee they will increase proportionately with national income, particularly since efforts are being made to reduce reliance on foreign trade. Between 1970/71 and 1974/75, central government expenditure doubled, while government revenues increased by only sixty percent.

If the country is to have long-term development, a major tax reform will probably be needed to reduce the tax burden on the agricultural sector and thereby increase production incentives to farmers. For example, the export tax and the profits of the Produce Marketing Board on exports constitute form thirty to forty percent of the export value of coffee and cocoa. In contrast, the export tax on

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[1] Roy W. Bahl, "A Representative Tax System Approach to Measuring Tax Effort in Developing Countries," IMF Tax Papers, March 1972, pp, 87-124.

diamonds is 7.5 percent, and diamond exporters are exempt from the income tax.

A reduction in taxes on agriculture will require increased collections from other sources. The source with perhaps the greatest potential for expansion is direct personal taxes, which presently constitute less than five percent of government revenues. Heavier reliance on this source will increase the elasticity of the tax structure and should spread the tax burden more equitably among persons earning income in Sierra Leone.

In Table 7, a detailed breakdown on Sierra Leone's revenue sources is presented. The figures indicate the heavy reliance on taxes based on foreign trade. For example, for the 1974/75 year eighty percent of

TABLE 7

SIERRA LEONE: CENTRAL GOVERNMENT REVENUE, 1970/71-1975/76
(in millions of leones)

	1970/71	1971/72	1972/73	1973/74	1974/75[1]	1975/76[2]
Taxes on Income and Profits	18.1	13.5	16.0	30.4	26.1	26.0
Company Tax	(10.1)	(9.0)	(11.4)	(19.8)	(18.0)	(17.0)
Personal Income Tax	(3.8)	(3.2)	(3.8)	(4.1)	(3.3)	(4.3)
Mining Company Tax	(4.2)	(1.2)	(0.8)	(6.1)	(4.0)	(3.4)
Other	(-)	(-)	(-)	(0.4)	(0.8)	(1.3)
Excise Duties	9.3	10.3	10.7	11.5	11.4	15.2
Taxes on Foreign Trade	23.0	25.6	28.0	38.8	40.0	44.3
Import Duties	(19.2)	(21.7)	(23.1)	(30.1)	(32.8)	(34.3)
Export Duties	(3.8)	(3.9)	(4.9)	(8.7)	(7.2)	(10.0)
Total Tax Revenue	50.4	49.6	54.7	80.7	77.5	85.5
Non-Tax Revenue	7.2	9.9	6.9	11.4	14.5	21.5
Total	57.6	59.2	61.6	92.1	92.0	107.0

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1 Revised estimate.

2 Budget estimate.

Source: Estimates of Revenue and Expenditures, 1975/76 and data provided by Sierra Leonean authorities.

tax revenues came from foreign trade transactions.[1] The taxes on mineral exports appear warranted; to the extent that they are excessively burdensome, special tax allowances can be negotiated. Furthermore, given the critical balance of payments situation, import duties might be raised.[2] As mentioned earlier, export duties on agricultural products could be reduced.

D. Monetary and Fiscal Policies

The absence of fiscal control measures coupled with the shortage of trained personnel in the Ministry of Finance, has prevented the government from using monetary and fiscal policies as stabilization tools. For example, in 1973/74, government revenues increased to Le 92.1 million from Le 64.6 million in the previous year, creating a sizable current account surplus. There was at the same time a sharp increase in the availability of foreign assistance monies, which should have permitted a sharp increase in development expenditures. However, development expenditures, rather than increasing, actually fell from Le 13.1 million in 1972/73 to Le 8.4 million in 1973/74. In the following years, things went to the other extreme: due to sharp increases in debt service charges and current expenditures, a substantial current account deficit was incurred but development expenditures more than doubled.

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1 For this estimate, foreign trade taxes include the company tax, the mining company tax and taxes on foreign trade.

2 There is, however, need for a restructuring; for example, the fish nets for artisan fishermen pay very high rates, while in contrast, fishing trawlers can be imported virtually duty-free.

Not only do these swings suggest the absence of a consistent fiscal policy, but they have caused a serious government liquidity crisis. In these circumstances, the Central Bank has been unable to implement a sound set of monetary policies. Instead, it has served as lender of last resort to the government and in this role has been lending the government up to its statutory limit in recent months.

In Table 8, the wide swings in the budgetary impact of government fiscal operations are recorded. The overall deficit fell from Le 17.0 million in 1972/73 to Le 1.6 million in the following year; in 1974/75, it jumped to 33.0 million. It is projected to increase to an extremely high 65.5 million in 1975/76. The projected figures are unrealistic on several counts. Given the absence of effective fiscal controls, it is also unrealistic to project a reduction in current expenditures; on the other hand, there is no likelihood that the targeted development outlay of Le 63.6 million will be reached.

Table 8 also indicates the serious budgetary implications of the rapidly increasing public debt. Since 1970/71, debt service charges have doubled, and by 1975/76, it is estimated that external debt service requirements will constitute seventeen percent of export earnings.

TABLE 8

SIERRA LEONE: CENTRAL GOVERNMENT FINANCES, 1970/71-1975/76
(In millions of leones)

	1970/71	1971/72	1972/73	1973/74	1974/75[1]	1975/76[2]
Current Revenue	57.6	59.2	64.6	92.1	92.0	107.0
Current Expenditure	42.7	46.9	54.0	67.7	80.2	79.0
Debt Service	11.0	12.2	14.5	17.6	20.6	25.5
External	(8.0)	(9.4)	(10.2)	(13.3)	(15.3)	(20.2)
Domestic	(3.0)	(2.8)	(4.3)	(4.3)	(5.3)	(5.3)
Current Account Surplus (+) or Deficit (-)	+3.9	+0.1	-3.9	+6.8	-8.8	-2.0
Development Expenditure	9.5	8.4	13.1	8.4	24.2	63.6
Overall Deficit	5.6	8.3	17.0	1.6	33.0	65.6

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1 Revised estimate.

2 Budget estimate.

Source: Sierra Leone authorities and staff estimates.

4. Foreign Trade and Capital Flows

Foreign trade in Sierra Leone is dependent on world market prices. On the export side, the world diamond price has been of primary importance. On the import side, petroleum and rice prices have had critical effects in recent years.

A. Exports

The country's primary export earnings have come from minerals, principally diamonds. With world prices of diamonds stabilizing, and with increasing difficulty in mining, revenues from diamond exports will probably level off or decline in the next few years.

The closing of the iron ore mine will cost Le 3 or 4 million foreign exchange earnings in the last quarter of 1975. While there have yet not been exports of rutile (see Table 9), export prospects for this mineral are good; in addition, bauxite exports will probably increase in the next few years. Clearly, however, if Sierra Leone is to finance its planned development, an increase in agricultural exports is needed.

B. Imports

Table 10 gives recent data on imports. The sharp increase in foodstuffs imports in 1973 and 1974 was due to large purchases of rice that are not being repeated. However, greater economic activity in recent years has increased the demand for other imports.

TABLE 9

SIERRA LEONE: EXPORTS BY MAJOR COMMODITES, 1971-75[1]
(In millions of Leones)

	1971	1972	1973	1974	1975[2]	1976[3]
Minerals	65.2	70.2	79.2	91.1	92.6	88.6
Diamonds	50.0	56.7	64.6	74.6	76.1	83.6
Alluvial	26.1	22.2	30.3	42.5	43.4	20.3
Other	23.9	34.5	34.3	32.1	32.6	15.3
Iron Ore	11.5	10.2	11.1	12.4	12.4	-
Bauxite	2.5	3.3	3.5	4.1	4.1	5.0
Rutile	1.2	-	-	-	-	-
Agricultural Commodities	16.9	19.3	24.5	27.1	27.5	24.9
Palm Kernels	5.9	3.9	5.2	7.7	6.0	6.0
Coffee	3.5	8.7	9.9	2,8	5.4	4.0
Cocoa	2.7	3.3	5.1	7.3	6.0	5.0
Piassava	0.5	0.5	0.4	0.9	0.9	
Ginger	0.3	0.2	0.3	0.3	0.3	1.4
Kola Nuts	0.3	0.3	0.5	0.2	.	
Other	3.8	2.4	3.1	7.9	8.7	8.5
Total Domestic Exports	82.1	89.5	103.7	118.2	120.1	113.5
Re-Exports	1.3	2.1	2.3	3.9	3.9	7.9
Total Exports	83.4	91.6	106.0	122.1	124.0	121.0

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1 These data are based on customs sources and are not always consistent with figures in the balance of payments.

2 Estimated.

3 Projected.

Sources: Bank of Sierra Leone, Economic Review (quarterly); and data provided by the Sierra Leonean authorities.

In an attempt to curb growing imports, the government is developing a more restrictive import licensing system, which aims to hold imports below Le 180 million annually over the next two years.

SIERRA LEONE: IMPORTS BY MAJOR COMMODITY GROUPS, 1971-75
(In millions of leones)

	1971	1972	1973	1974
Foodstuffs	18.2	16.7	30.6	41.9
Beverages and Tobacco	3.6	3.2	4.5	4.7
Crude Materials	1.0	0.8	1.6	3.7
Mineral Fuels and Lubricants	6.9	7.3	7.5	21.6
Animal and Vegetable Oils	0.9	1.3	1.2	1.4
Chemicals	6.8	6.7	9.1	12.0
Manufactured Products	24.0	25.2	34.6	45.9
Machinery and Transport Equipment	22.7	23.3	25.0	38.6
Miscellaneous Manufactured Articles	8.7	9.3	11.4	16.0
Other	1.5	1.6	1.7	2.6
Total	94.3	95.4	127.2	188.4

Sources: Bank of Sierra Leone, Economic Review (quarterly); and data provided by the Sierra Leonean authorities.

C. Credit Flows

Table II gives a comprehensive picture of the country's balance of payments position. It should be noted that the net current account deficits increased from Le 23.5 million in 1973 to around Ie 50 million for the next two years. To the extent that deficits are covered by foreign assistance, this is acceptable. However, the uncovered gap requires a drawdown of the country's foreign assets, and this has led the country into the critical balance of payments situation its faces today.

TABLE II

SIERRA LEONE: BALANCE OF PAYMENTS 1971-76
(In millions of Leones)

	1971	1972	1973	1974	1975[1]	1976[2]
Exports (F.O.B.)	(79.5)	(90.7)	(105.3)	(113.1)	(124.0)	(121.0)
Imports (F.O.B.)	(83.2)	(84.2)	(112.5)	(136.9)	(160.0)	(176.0)
Trade Balance	-3.7	-6.5	-7.2	-24.8	-36.0	-55.0
Freight and Insurance	(-2.2)	(-2.9)	(-6.6)	(-8.7)	(-6.0)	(-7.0)
Investment Income	(-7.6)	(-5.7)	(-6.5)	(-8.3)	(-8.0)	(-8.0)
Government and Private Other Services	(-7.8)	(-7.8)	(-8.5)	(-12.4)	(-9.0)	(-9.0)
Services Balance	-17.6	-16.4	-21.6	-27.9	-23.0	-24.0
Deficit on Goods and Services	-21.3	-9.9	-28.8	-72.7	-59.6	-79.0
Net Transfer Payments	4.8	2.5	5.3	16.3	12.0	10.0
Net Current Account	-16.5	-67.4	-23.5	-53.2	-47.6	-69.0
Private Capital Net Inflow	8.1	12.5	7.4	17.7		
Government Capital Net Inflow	3.0	4.2	11.8	18.3	37.0	35.0
of which Supplier Credits	0.5	0.4	1.1	7.4		
Allocation SDR	2.3	2.3	-	-	-	-
Overall Gap	2.6	12.0	-3.2	-10.5	-10.6	-34.0

1 Estimated.

2 Projected.

II. Development Overview

A. Major Constraints on Development

There can be no single "correct" list of Sierra Leone's major development constraints. The four major constraints analyzed in this section are (1) low agricultural productivity, (2) demographic factors, (3) the inefficient educational system, and (4) a not yet very effective public administration. Other major constraints identified by recent analyses include (5) "resource mobilization"[1]; (6) inadequacy of economic data; and (7) problems of the mining industry, especially the decline of diamond mining.[2] The choice here to analyze the first four is to some extent arbitrary, reflecting for example that AID activities in Sierra Leone are not likely to deal directly with the mining industry and are not likely to be large enough for a significant macro-economic impact on resource mobilization. Furthermore, data problems overlap all sectors and can logically be treated as separate "subconstraints" within agriculture, health, education, and public administration.

It seems fruitless also to attempt any priority ranking among the major constraints, if for no other reason than that they are closely intertwined. For example, the level of public administration is a main "cause" of inefficient education and vice-versa. And both contribute significantly to health and agricultural problems.

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1. World Bank, Report No. [illegible] - SL, November 1974, p.i.
2. Numbers (6) and (7) are listed as major constraints in Tamba Alpha-Kpetewama, "The Economic Growth and Development of Sierra Leone," unpublished Ph.D dissertation, New York University, 1974.

Under these circumstances, abstract priority rankings are more confusing than enlightening--- although operational priorities certainly must be developed for AID later in terms of purely practical matters like the availability of personnel and the activities of other donors.

1. Low Agricultural Productivity

Since the majority of Sierra Leone's people are rural and derive their subsistance directly from agriculture, it is appropriate to discuss low agricultural productivity as the first major constraint upon development. The economics of agricultural development in low-income countries is a complicated and poorly understood matter, especially in a country like Sierra Leone that is lacking in reliable economic and technical data. Poor transportation, inefficient credit markets, the lack of sufficient agricultural research, sometimes inappropriate government policies, poor soils, inhospitable climate, poor health and nutrition, illiteracy, and social customs all have roles to play, as do other factors. However their inter-relationships and relative weights are not now and may never be precisely known. Given this state of uncertain knowledge, a strategy of attack is suggested in the agricultural summary discussion (Section III) below.

2. Demographic Factors

A second primary constraint upon Sierra Leone's economic development is concerned with high disease rates, high infant and child mortality rates, and high rates of human fertility. Controversies are rife among demographers, economists, and other experts as to whether such factors should be viewed primarily

as the symptoms of low income and underdevelopment or primarily as independent causes in countries like Sierra Leone. In all likelihood, they are both. For example, poor health causes worker's mental and physical energies to be low and thereby reduces incomes. But lower incomes lead back to poorer health care in a vicious cycle. High population growth rates also are best viewed as both a symptom of current poverty and as a main contributor to future poverty.

3. An Inefficient Educational System

Complaints about both the internal and the external inefficiencies of educational systems in low income countries are common, and Sierra Leone is no exception. If anything, Sierra Leone's educational problems seem intensified by even greater adherance to the British model than is found in many other African Commonwealth countries. A traditionally academic university system creates pressures upon the secondary schools for essentially preparatory education, and the secondary schools create in turn a derived demand for primary education that is largely irrelevant to the needs of the rural masses. This apparent irrelevance of the educational system encourages high dropout and wastage rates for the overwhelming majority of students that will never attend the university. The lack of appropriate skills like functional literacy and functional numeracy further intensifies the problem of agricultural productivity. And the lack of adequate middel-level and high-level technical and managerial training exacerbates the problem of poor public administration.

4. Low Standards of Public Administration

There are certain minimum roles that government probably must play in order to accelerate economic development in Sierra Leone. These roles include in the agricultural sector, for example, the provision of information about technology through extension and research. Such roles are unlikely to be played effectively by the private sector in most low income countries, due to the lack of sufficient profit to motivate the entrepreneur. Obviously, inefficient public administration will vastly hamper government's ability to play such roles effectively. For other roles like marketing of agricultural commodities, which are handled adequately by market forces in many countries, Sierra Leone has chosen to have government agencies play a large role. Here too, the results of ineffective public administration would be serious. Among the primary characteristics of Sierra Leone's public administration problems are a shortage of high-level and middle-level trained manpower, lack of fiscal discipline in enforcing budgetary priorities, chronic deficits of public expenditures over receipts, inadequate governmental information and statistics needed for management and control of operating programs, and the problems are reinforced by regional and ethnic political rivalries.

B. DEVELOPMENT PRIORITIES OF THE GOSL

1. Introduction

With the assistance of a UNDP team, the Ministry of Development and Economic Planning wrote a five-year development plan for Sierra Leone. The Plan was launched in 1974 and will continue through 1979.

Agriculture is identified as the priority sector for development, with an estimated growth rate of 4.6 percent per annum in output.

Second priority is given to the expansion of manufacturing. The Plan also makes provisions for an increase in export earnings from mining and for growth or qualitative improvement in transport, communications, water supply, education, health, social welfare and other services sectors.

The Plan emphasizes self-help projects and an overall increase in the share of domestic financing for development. Total development expenditures for the Plan period are estimated at Le 623 million. Of this amount, approximately Le 206.5 million (33.15 percent) will come from foreign sources.

The document goes into considerable detail on the country's problems and what might be done to remedy them. Unfortunately, it is based upon unrealistic premises about what the country will be able to achieve. For example the Plan assumes the country will be able to attain an overall growth rate of 6.2 percent over the next few years. A growth rate of four percent would have been far more realistic.

Another major problem is that for the most part the Plan is not written in a form that lends itself easily to programming. It specifies targets and recommendations but does not come to grips with important programming questions that arise in attempting to meet the targets.

In recognition of such problems, the Ministry of Development and Economic Planning is now producing annual development plans that include the extent to which targets in the overall plan have been met. In addition, the MDEP is attempting to get representatives appointed to each of the operating ministries to increase the degree of liaison. It is hoped that these measures will help resolve some of the administrative problems that are a part of implementing the Plan.

2. Problems of Interpretation

As they are stated in the Five Year Plan for 1974/75 to 1978/79, Sierra Leone's development priorities and goals cannot be faulted. However the critical issue, as the Plan itself notes, is not priorities but whether the ambitious activities can actually be carried out: "It has become clear that the formulation of a plan is only the first step in a continuous planning process. Moreover there is now a widely accepted view that the major problem in planning is not plan formulation but plan implementation" (page ix). The prospects for fully implementing the plan on schedule are not promising at the present time. On the other hand, the amounts by which actual development expenditures (by sector and in toto) will eventually fall short of plan targets cannot be forecast. Nor can one say with any confidence whether relative shares of priority sectors are most likely to go up, go down, or stay about the same. And to make the interpretation of the stated priorities even more difficult, the financial data in the plan are restricted almost entirely to fixed capital formation. Thus, the salary outlays and other "current expenditures" of crucial development-oriented government bodies like the Ministry of Agriculture are only touched upon in the plan. Yet one can plausibly argue that the salaries of personnel like extension workers have as much to do with development as do the outlays on almost any class of structures or other fixed capital.

3. Stated Goals

The plan document (p. vii) describes the GOSL's "long-range development goals" as the following:

(i) to preserve political and economic stability as a major prerequisite for uninterrupted and continuous economic and social advancement;

(ii) to increase the welfare of the broad mass of population;

(iii) to achieve a more equitable distribution of wealth and income;

(iv) to achieve a rapid expansion of the productive capacity of the economy;

(v) to create the basis for an accelerated pace of economic and social progress;

(vi) to promote economic and social development through aided self-help methods; and

(vii) to continue and intensify economic co-operation with other African countries, particularly with neighboring countries.

4. Development Expenditures: Planned versus Actual

To achieve these goals, "top priority has been given to agriculture the growth rate of which is projected to increase from an estimated 1.6 percent during 1963/64 - 1970/71 to 4.6 percent" (p.vii). To achieve this growth rate, the Plan states that investment in agriculture over the five year period would be about one-fourth of the total (up from less than 6 percent in 1969/70) and that agriculture's share in the first year's budget would be 38 percent (p.ix). Actually, in the first year of the plan, agriculture appears to have received about one-third of the development budget as finally spent. But total development expenditures in the first year appear to have been about Le 24.4 million, about 32 percent less than the amount called for by the Plan. (As the plan describes

the pre-1974 period, "So far recurrent Government expenditure has risen too fast with the result that it was not possible to channel sufficient domestic resources to public investment." Page x. The situation does not appear to have changed significantly in the intervening year).

TABLE 12

SECTORAL RELATIVE SHARES IN THE FIVE-YEAR DEVELOPMENT PLAN
(Percentages of Total Public Investment)

Sector	Percentages
Agriculture	25.5
Mining	3.8
Manufacturing	7.2
Electricity	12.5
Water	1.7
Construction	0.4
Transport and Communications	21.3
Trade	0.7
Tourism	0.8
General Administration	3.0
Economic Services	3.2
Education	4.9
Health	5.4
Social Welfare	6.9
Housing and Country Planning	2.5
Total	100.0

Source: National Development Plan, August 1974, p. 56.

The stated emphasis on agriculture fits almost perfectly with AID's emphasis upon such goals as raising the incomes of poor people and helping small farmers. The foremost problem of income distribution in Sierra Leone is low agricultural productivity. The official statistics indicate that about 75% of the people are rural, almost all depending on some form of agriculture for a living. Actually, due to census underrenumeration, it would not be surprising to learn that as many as 80 or 85 percent of the popula-

tion is rural. These people are virtually all "small farmers" since there are no significant large holdings or plantation agriculture in Sierra Leone. Average farm size is about 4.5 acres, and there is no significant absentee ownership. Yet the 75 to 85 percent of the population in Sierra Leone that are in the "small farm" sector produce only about a third of the national income--creating by definition considerable inequality in income distribution.

As for AID's other main sectors of interest, the five-year plan targets for health and education are 5.4 and 4.9 percent of public investment respectively. It also should be noted that of the 21.3 percent of plan outlays targeted for "transportation and communications", more than half is budgeted for highways - many of which can be of great benefit to the farmers.

5. Sectoral Distribution of Current Expenditure

A somewhat different picture of GOSL priorities emerges when one examines the pattern of current (as opposed to "development") expenditures. See Table 13. Interpretation of these figures is extremely difficult in relation to economic development. For example, the budget for the President's Office includes the national outlays on courts and police. Undoubtedly, no significant economic development at all is likely to occur in a country without courts and police, but the contribution they make to development certainly cannot be estimated for Sierra Leone even in rough terms. Nor can the roles Defence and External Affairs play in Sierra Leone's economic development be either confirmed or summarily denied. But if we confine our look to AID's three major interest sectors, the priority rankings as measured by relative budget shares for current expenditures are

exactly reversed among agriculture, health and education as compared to "development" expenditures. In fact, education has current expenditures running at more than twice the rate of the second-ranking ministry. By contrast, the relatively small proportion of current expenses accounted for by agriculture reflects the shortage of extension workers and other field staff.

TABLE 13

SECTORAL RELATIVE SHARES
OF TOTAL CURRENT EXPENDITURES, 1974/75

(Revised Estimates)

Ministry or Office on Category	Percentage	Amount (be millions)
President's Office	8.3	8.7
Vice President's Office	0.2	0.2
Development	1.2	1.3
Interior	2.4	2.5
External Affairs	3.5	3.6
Defence	4.7	4.9
Finance	8.3	8.6
Transport and Communications	4.4	4.6
Education	17.0	17.7
Social Welfare	4.9	5.1
Tourism and Cultural Affairs	0.5	0.5
Health	6.4	6.7
Lands	0.6	0.6
Labour	0.2	0.2
Agriculture and Natural Resources	3.8	4.0
Trade and Industry	0.5	0.5
Works	2.1	2.2
Energy and Power	0.2	0.2
Housing and Country Planning	0.2	0.2
Information and Broadcasting	3.2	3.3
Mines	0.6	0.6
Pensions, etc.	2.1	2.2
Public Debt Service	24.6	25.6
Charged Emoluments	0.2	0.2
Total	100.0	104.2

Source: Estimates of Revenue and Expenditure, 1975-76

III. SUMMARY DISCUSSION OF THE AGRICULTURAL SECTOR

A. Sector Overview

Roughly thirty percent of Sierra Leone's gross domestic output is from the agricultural sector, which is composed almost entirely of small farmers. The sector provides a livelihood for seventy-five percent or more of the population, with about 290,000 farm households and cultivation over 1,305,000 acres. But only about forty percent of the sector is monetized, and it provides less than twenty percent of total exports.

Since the country became independent in 1961, little has been done to aid agricultural development. The result has been that production increases during the last decade appear to have averaged only about 1.6 percent per year. (The expansion of acreage under crop production seems to have accounted for nearly all of the increase in output.) The best current estimate of population growth rates is over 2.5 percent annually. These figures imply a substantial per capita decline in agricultural production since Independence.

Out of a total land area of 17.7 million acres, only 1.3 million acres or 7.4 percent was cropped as of 1970/71. Care must be exercised however in the selection of new lands for agricultural production. Due to the existence of poor soils and high rainfall in most parts of the country much of the cropped area must experience a fallow period of from four to twenty years in order to regain its natural fertility.

Plantation agriculture does not exist on any significant scale, and traditional bush-follow farming is practiced by over seventy percent of farmers. Farm size varies through the country and outside

the Western area is usually based on the labor supply of the family. The average farm size for the country as a whole is about 4.5 acres. Outside the small western area the land tenure structure is based on user rights to communal lands belonging to each tribe and allocated to the farmers by the Chiefs. Presently a family is given rights to land for as long as they continue to use it, or receive a harvest from it (as in the case of tree crops). This system has proven adequate under present circumstances; but as the land and agriculture become more profitable under improved technology, more permanent tenure structures may have to be developed. In 1975 the GOSL announced its intention to revise the traditional land tenure system, but it has not tackled the specifics of this difficult task.

Rice is the principal food crop and is grown on over half of all cultivated land by about eighty percent of farmers. About three-fourths of the rice is grown on uplands during the wet season (May to November) with the remainder being grown on the swamplands. Through 1974, due to increasing demand and lagging production, Sierra Leone has imported large quantities of rice, which have contributed to the nation's current balance of payments crisis. Recently, the government has placed major emphasis on rice production and has developed a crash program to aid in these ends. Many observers now think rice self-sufficiency has been or soon can be achieved.

Major export crops are coffee, cocoa, and palm kernels. Production of the first two has doubled in the last 15 years. Other minor exports include piassava, kola nuts, and ginger. In recent years the government has realized that agricultural development should be

granted the highest priority. A consistent development strategy has not yet been developed, nor a sufficiently greater resource allocation has not been made, and this situation, coupled with the absence of sufficient trained personnel and adequate price incentives, has contributed to slow development in the sector.

Even so, the World Bank estimates the possibilities are favourable for accelerating the sector growth rate to about 3.5 percent annually.

B. Constraints: The Causes of Low Agricultural Productivity

The precise importance of each of the various factors that contribute to Sierra Leone's low agricultural productivity and the precise relationships among these factors cannot be specified with our present state of knowledge and probably can never be fully known. Sierra Leone does not differ substantially in these respects from other low income countries. It is safe to say that government policies, poor soils, poor climate, poor transportation, poor health, illiteracy, inefficient markets, lack of applied agricultural research, a limited number of extension agents, and non-economic social customs all contribute in some way to the problem. And the list could be expanded. It is inconceivable that the Government of Sierra Leone and any combination of foreign donors could mount an effective simultaneous attack on all of these underlying problems. The problem for analysis then becomes, through a combination of both logical reasoning and lessons from practical experience, to recommend a strategy for addressing the most critical factors in a logical sequence.

First of all, it is important to consider the incentives that

motivate Sierra Leonean farmers. The consensus among informed observers in Sierra Leone is that GOSL policies in past years to hold down agricultural prices, both through imports of rice and through government monopsony pricing of export crops, has seriously reduced farmers economic incentives, i.e., their rate of profit, and thereby caused them to reduce outputs. This consensus is fully in line with similar observations from other low income countries and with a growing number of careful statistical studies that document the peasant farmer's responsiveness to profitability. It is also in line with a belief by informed observers in Sierra Leone that a recent increase is the producer price of rice contributed substantially to an increase in rice production. In sum, the weight of professional opinion in the economics of agricultural development for low income countries is that the profit motive of farmers, even the most illiterate peasants, cannot be ignored and in many cases may be the most important "motivator" of all. The overwhelming constraint is low profitability. A corollary argument is that increasing the productivity and the profitability of peasant agriculture are merely two sides of the same coin.

C. Strategies to Increase Productivity and Profitability

In looking for ways that AID and other foreign donors may seek to help increase the productivity of agriculture in Sierra Leone, it is essential to keep in mind the GOSL shortages of skilled and reliable manpower. No manpower training program can bring the GOSL up to necessary standards except over a fairly long period of time. Therefore, the strategy recommended here is for donors to finance those agricultural development projects that contribute to the best

allocation of the GOSL's governmental management and technical skills. Specifically, donor strategy should recognize that in Sierra Leone, there are certain critical activities for agricultural development that can only be performed to the proper and necessary extent by government, for example activities like rural roads, agricultural extension, information disseminating activities like statistics and marketing news, and agricultural research. There is no hope that private firms or entrepreneurs can make significant profits in such activities. They must be done by government, or they will not be done at all. But donors should be wary of financing projects that draw the management and technical skills of GOSL personnel into areas where it is possible for the profit motive and the market to operate. The latter are areas where there is a significant probability that normal entrepreneurs operating under the profit motive are likely to provide speedier and efficient services than government corporations---and at a price more beneficial to farmers, if recent experience in Sierra Leone is a guide. The strategy of distinguishing clearly between activities that probably can and probably cannot be performed by market forces has the further advantage of being specifically in line with the congressional mandate that AID help encourage and develop private sector activities in host countries.

Among crucial "non-market" areas relevant to agricultural development in Sierra Leone, three stand out as particularly deficient. They are agricultural research, extension, and rural development planning and coordination. The strategy suggested in this DAP report for AID activities over the next few years in Sierra Leone's agricultural sector takes research, extension, and agricultural public administration as points of departure (although it recommends against

actuvities in extension as long as the British government is prepared here to play a major role). Possibilities for AID assistance in agriculture are further explored below in Section VI.

D. GOSL Priorities in Agriculture

In summary form, the five year plan gives the following measures as GOSL priorities:

1. Increasing the number and quality of extension workers, to a goal of one per 600 farm families.
2. Changing emphasis from investment in mechanical cultivation, previously the highest priority, to investment in integrated rural development projects.
3. Encouraging private sector takeover of mechanical cultivation.
4. Better logistics, management, and finance within the Ministry.
5. More research, data gathering, and land survey activities.
6. Better input (fertilizer, seed, etc.) supply systems for farmers, better credit and marketing facilities, and better price policy.
7. Adjustments in the land tenure system.
8. More government investment funds for agriculture.
9. Irrigation and land reclamation to increase acreages.

These policies are planned for execution over five years, for a total cost of about U. S. $64 million, of which "about one-third is allocated to projects which would directly contribute to rice production" (p.133). Other public investments are to be directed at oil palm, coconut, Urena Lobata, sugarcane, tobacco, groundnuts, onions, tomatoes, and pineapples.

E. Foreign Donor Activities

The five year plan contemplates that forty-five percent of the

$64 million for agriculture will come from foreign donors, including China (intensive rice and vegetable cultivation), IDA (four integrated rural development projects), West Germany (seed multiplication), the United Kingdom (training mechanical cultivation), World Food Programme (inland valley swamp development), UNDP, and the West African Rice Development Association. The EEC's European Development Fund (FED) indicated in late 1975 that it would program as much as $10 million for Sierra Leone agricultural projects over the next four or five years, although project details remain to be settled.

IV. SUMMARY DISCUSSION OF HEALTH, NUTRITION, AND POPULATION

A. Sector Overview

The health situation in Sierra Leone can only be described as bleak. Infant mortality has been reported in official sources as about 180 per thousand live births, although preliminary unpublished data from recent surveys suggest that rates between 200 and 300 may be common in some rural areas. Average life expectancy appears to be slightly more than forty years (but the possible underreporting of infant mortality suggests this statistic may eventually need to be scaled down). The spectrum of disease is typical of other low-income tropical countries. Almost everyone has malaria, and/or intestinal parasites. River Blindness, tetanus, measles, tuberculosis, leprosy, and schistosomiasis are also common. The dreaded lasa fever is endemic in certain areas. Human fertility is high, a typical symptom of proverty and poor health in tropical countries. The nation's nutritional status has never been properly measured, but it is widely estimated that a survey would demonstrate serious deficiencies in the average diet. Superimposed on this unfortunate

picture is a seriously inadequate medical system in which the staff of many health units are not trained properly to perform even the basic medical care tasks, most facilities lack drugs and diagnostic equipment, and from childbirth to death most people are attended by untrained midwives and other untrained local practitioners.

B. Constraints

Certain constraints are relatively fixed insofar as foreign assistance is concerned. Economic assistance cannot solve the socio-political problems, the religious and cultural attitudes, and the inhospitable weather and climate that lie behind so many of Sierra Leone's health problems. But among the more "mechanical" constraints, foreign assistance can probably make some significant contribution. In such areas one may include the shortages of physical equipment and supplies and skilled personnel, the run-down condition of health centres and clinics, the outdated management structure of the Health Ministry, and gaps in statistics and other information.

Sierra Leone's nutritional status has never been properly measured but there is reason to believe that poor nutrition contributes to at least half of the deaths in childhood. The needs for basic data on nutrition is urgent for planning in education, health and agriculture. The availability of basic and current data would give better guidance and direction to the implementation of PL-480 and World Food Program activities which are widespread in Sierra Leone.

C. GOSL Policies and Priorities

Health sector finances have risen in absolute monetary terms in recent years, although they appear not to have kept up in real terms

due to inflation. And as a percentage of total government expenditures, health sector finances have fallen recently. The recent five-year plans calls for about U. S. $17 million of investments in the health sector, aiming for achievement of the following goals: (1) decentralization of certain facilities from Freetown to the provinces; (2) reduction in maternal and child mortality by expanding the meagre resources of the MCH division, by supporting family planning and birth control as a means of child spacing, and by offering certain nutrition programs; (3) expansion of existing health care facilities and construction of new ones; (4) provision of qualified staff; and (5) an improved national laboratory facility. As in the other sectors, the precise meanings of these stated priorities are at best difficult to interpret, given the general GOSL lack of financial discipline in enforcing priorities and especially given the current financial crisis.

D. Foreign Donor Activities

Of the $17 million planned for health sector investment in the five-year plan, only about $4 million is targeted for foreign donors. Current donors active in the sector include: UNDP (health statistician), UNFPA (child mortality survey), WHO (four experts), UNICEF (TB control), USAID (Title II PL 480 and Title X through IPPF), UK (volunteer health personnel and study fellowships), USSR (five doctors), China (the staffing of one hospital), South Korea (two doctors), West Germany and Canada (Eastern Clinic, mobile clinics), and many foreign PVOs and religious groups. The EEC's European Development Fund has recently also indicated its readiness to make a large health sector commitment, probably for a paramedical training facility.

V. SUMMARY DISCUSSION OF THE EDUCATION SECTOR

A. Sector Overview

Education in Sierra Leone today reflects its British heritage in at least two important respects; first, a general modelling of the system on British precepts and second, a bifurcation between Creoles and indigenous peoples that was exacerbated by the colonial division of Sierra Leone into a colony and a separate protectorate. Historically in Britain and Sierra Leone, a main purpose of academic education has been to form a cultural, political, and administrative elite; the pursuit of other types of education--technical, vocational, agricultural--has in large measure constituted a bar to elite status. Today, despite GOSL attempts to emphasize some types of non-classical education, the newer forms generally seem still to be considered "second-class" in prestige terms. Structurally too, the education system is still virtually a carbon copy of the British. Seven years of elementary education leads to a "Five-Form" secondary education, followed by standardized "O" level examinations prepared and administered by the regional Commonwealth examination board. Standards and examinations for technical and vocational education are still prescribed by the City and Guilds Institute of London. Fourah Bay College, the liberal arts division of the University of Sierra Leone, had its degrees granted by the University of Durham until 1966.

Education flourished in the Colony around Freetown in the nineteenth Century, and Fourah Bay was the main center of higher education for all of British West Africa, but the penetration of Western education into the protectorate proceeded slowly through

the first half of the Twentieth Century. As late as 1950, school enrollment was thirteen times larger on a per capita basis in the Colony than in the Protectorate. Although access to education in the interior has improved markedly in the last two decades, the highly educated Creoles still predominate in the professions and in the Civil Service.

B. Recent Policies and Developments

In the third quarter of the twentieth century, educational policy in Sierra Leone has been characterized by a combination of attempts on the one hand to maintain tradition, and on the other hand to implement certain educational reforms. There has been no attempt at wholesale reform along the lines of, say, Guinea or Tanzania. Enrollments have soared, more schools have been built, and there has been some progress in equalizing educational opportunities, but overall the structure and main characteristics of the system do not seem to have changed a great deal. In summary, the educational system is largely irrelevant to the needs of most of Sierra Leone's people, principally those that live in rural settings and earn their subsistence from agriculture. The primary school system is designed mainly to feed graduates to the secondary school system, and the secondary schools in turn are designed primarily to feed graduates into a liberal arts university curriculum. Yet an extremely small percentage of the primary school pupils go all the way through the entire system; hundreds of pupils must start in order for one to get a university degree. Such high wastage and dropout rates would not necessarily be bad if the students received training in truly useful skills during their in-school years. But in fact, since each

level of the system is designed mainly to prepare students for the next higher level, effective training in basic skills that would be useful to farmers, craftsmen, small entrepreneurs, and mothers is inadequate.

C. Administration and Finance

Although operational control of some schools is delegated to subordinate authorities, the GOSL handles the finances of all "recognized" schools and is therefore in ultimate control of all education and training facilities. All planning is also done in Freetown ministries, and schools and training institutes are expected to abide by the policies that issue from the center. Although tight centralization has many advantages, there has recently been some recognition of its disadvantages as well in terms of time wasted in decision-making, the stifling of creativity and individual initiative, and strained community relations. The Sierra Leone Educational Review (SLER) of May 1974 (the major long-term GOSL educational planning document) proposed that regional education committees be formed and be armed with "some legal status." The SLER points out that such a devolution of responsibilities would "be one of the best means for getting rid of the vast regional inequalities...and for arresting the urban, white collar centripedal tendency of the educational system." As yet no government action has been taken on this recommendation, but the GOSL Annual Plan for 1975/76 lists as one of the tasks to be accomplished in the first half of 1976 the preparation and publication of a "Government Statement" on the SLER.

Revenues for education and training come from four sources: general government revenues, external donations, private fees and

contributions, and internal income generation. Government revenues cover the majority of expenditures. Private sources now cover only about thirteen percent of recurrent expenditures. Foreign contributions are earmarked for "development" expenditures. Internal income generation occurs principally from agricultural activities at Njala College. (Unfortunately, although the scope for such activities is probably much larger in other rural schools, at present their contribution to the overall MOE budget is negligible.)

Education currently takes about seventeen percent of total GOSL "recurrent expenditures", or about U. S. $18 million. This share makes education the largest claimant on the budget with more than double the share of the second-ranking Ministry. The other Ministries also have in-service training activities, but in monetary terms the MOE spends about twenty-five times as much on formal, mostly academic, instruction as is spent on training by all the other Ministries combined. Within the MOE the lion's share of expenditures goes for primary education, subsidies to higher education, and administration. Technical education and teacher training both get only about two percent each.

"Development" expenditures in education, on the other hand, are projected to be quite small--around four to five percent of the total development budget, or probably no more than about U. S. $4 million per year. Only about one-quarter of this amount is targeted for foreign donor sources, whereas the foreign donor share for the total GOSL development budget is over sixty percent.

D. Foreign Donor Activities

Major capital assistance in recent years has consisted of IDA projects, totalling about $10 million beginning in 1969 and scheduled to be completely disbursed by 1980. They have involved curriculum reform, technical and vocation education, teacher training, educational planning, establishment of an Institute of Public Administration and management, and construction of various facilities. Major donor activities also include German finance for the new Makeni Teachers College and a new girls' dormitory at Fourah Bay, UNDP/UNESCO assistance to a major rural primary teachers training program at Bunumbu, an ILO vocational training program financed partly by a UNDP grant, and numerous smaller activities including teachers and fellowships from such countries as the USA, UK, USSR, Germany, France, Canada, and Egypt.

VI. SUMMARY DISCUSSION OF PUBLIC SECTOR ECONOMIC PROBLEMS

The most immediate obstacle to development in Sierra Leone appears to be the uncertain ability of the government to implement plans. There is a critical need for institutional and organizational reform within the GOSL to facilitate the carryout of development programs. Notable among these are reforms to permit adequate control over fiscal and monetary policy and to create a more rational division and coordination of responsibility for development programs. AID should give appropriate help to the GOSL and support the efforts of the IMF, IBRD, UNDP, and other organizations working with the GOSL to bring about these reforms.

A. The Political and Social Environment

Beyond the financial crises that have plagued the country on a

recurrent basis, there are fundamental political and social problems that make design and implementation of a consistent development plan difficult. Some of these problems are typical of developing countries; others are unique to or more acute in Sierra Leone.

The problems Sierra Leone shares with other countries at a similar stage of development include low agricultural productivity, an outdated and unresponsive educational system, poor health, high population growth, and rural-to-urban migration.[1] Educational and employment problems are linked in the sense that unemployment and underemployment are particularly acute among certain categories of school leavers and can be attributed both to the irrelevance of present schooling patterns and to the anti-traditional, anti-rural biases which have become part of the socialization process in the school system. Rural-to-urban migration is due to population growth and low productivity in agricultural areas and due to the higher wages and wider variety of social services in the cities.

Sierra Leone's development is also constrained by certain political and social problems that are unique to the country or manifested in special ways. Salient among these is the Creole-tribal ethnic division of the country. The Creoles were brought to Sierra Leone in the nineteenth century, settled in the Freetown area, and were favored by the British colonial administration in matters of politics, education and commerce. Today, Creoles constitute the most urbanized and educated group in the country and as such are dominant in such areas as the Civil Service and the professions, even though the majority population in the provinces gained political control of the country at the time of independence.

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[1] In Sierra Leone, the direction of migration has been toward the diamond mining areas as well as the urban areas. Recently, however, people have been returning to the rural areas from the diamond fields.

The lack of social and economic progress in the tribal areas may also be at least in part due to political rivalries among politicians. The result is that development efforts may be concentrated in areas where political influence is greatest, rather than where projects would have the greatest chance of success. Also, tribal/political rivalries have at times created communication and coordination difficulties among various ministries and departments of government. A consequence of this lack of communication is that decisions are often made in isolation and without considering their impact on overall development strategy.

B. Recurring Financial Crises

Government Finances. Sierra Leone has a history of recurring government liquidity crises. In part, these crises have been due to external factors, such as the recent increase in the costs of petroleum and fertilizer products. But primary responsibility rests with the government, which has been unwilling or unable to implement strong fiscal controls. These controls will be absolutely necessary if a meaningful development effort is to be carried forward.

The absence of fiscal controls is easily documented. In GOSL budget documents, revenues and other sources of financing needed to cover budgeted current expenditures are set forth.[1] However, during the fiscal year, additional expenditure commitments are made. As Table 14 indicates, the additional commitments have increased to the point that for the 1973/74 fiscal year, actual current expenditures exceeded budgeted expenditures by twenty-four percent. Despite covenants with the World Bank and other international lending

[1]E. g., see Estimate of Revenues and Expenditures, 1975/76.

agencies, it appears that government officials continue to buy large amounts on credit without the legally required authorization from the Ministry of Finance.

TABLE 14

SIERRA LEONE: PERCENT INCREASE IN ACTUAL CURRENT GOVERNMENT EXPENDITURE OVER ORIGINAL BUDGET ESTIMATE 1970/71 - 1973/74.

Year	Percent Increase
1970/71	3
1971/72	18
1972/73	14
1973/74	24

In Table 15 the expenditure overruns for the various Ministries are presented. The Table also indicates the inability of the government to make realistic expenditure projections: to wit, the debt service requirements on long-term external debts were underestimated by fifty percent.

TABLE 15

SIERRA LEONE: PERCENT INCREASE IN ACTUAL CURRENT GOVERNMENT EXPENDITURE OVER ORIGINAL BUDGET ESTIMATE, BY FUNCTION, 1973/74

Function	Percent Increase	Actual (in millions of leones)
Agriculture	10	3.2
Education	14	15.4
External Affairs	50	3.3
Health	18	6.0
Local Government Grants	13	0.9
Pension and Gratuities	10	2.2
Public Works	26	5.9
Security Administration	27	8.5
Transport and Communication	8	4.1
Long-Term External Debt Service	50	15.1
Total	24	64.6

The continuing current expenditure overruns have serious implications concerning the ability of government to initiate a consistent and sustained development effort. As long as government liquidity remains a daily concern, priority will probably be placed on covering government wages and on the maintenance of essential services at the expense of development. For the 1974/75 fiscal year, it is estimated that development expenditure will be Le 24.4 million $24.6 million) or 32 percent less than the amount called for by the Plan.[1]

The Government expenditure overruns have also contributed substantially to a critical balance of payments situation. The accumulated and projected foreign trade deficits have virtually wiped out the country's foreign asset holdings. When added to growing external debt service charges, this situation makes it much more difficult to sustain a future development effort.

A second factor contributing to the recurring financial squeeze is the country's tax structure. Revenues do not increase proportionately with income; consequently, receipts are continually lagging behind government expenditures since in Sierra Leone; as in other developing countries, government expenditures are increasing at a more rapid rate than national income.

Comparative studies carried out by the International Monetary Fund indicate that relative to other developing nations Sierra Leone's tax effort is low and that the taxation of agricultural exports is excessive.[2]

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[1] A serious deficiency in the Plan is that it does not present development expenditure targets that are consistent with government accounting practices.

[2] E. g., while government revenues collected from coffee and cocoa exports amount to 30-40 percent of market value, diamond exports are taxed at a 7.5 percent rate and diamond traders are exempt from the income tax.

A recent Internal Revenue Service study indicates that considerable revenue could be realized from improved tax administration. Clearly, if the country is to make a meaningful development effort in the future, additional steps to mobilize domestic resources will be needed

The Current Crisis. Data on government finances are imprecise and thus an accurate portrait of the current (Winter 1975-76) situation is not possible. Despite continuing efforts by the International Monetary Fund and the World Bank to obtain the needed data, the best reading on the current situation comes from discussions with government officials. These indicate that:

> Government finances are being dealt with on a day-to-day basis (i.e., the tax department reports collection from the previous day, and the Ministry of Finance then decides which payments are most pressing for that day.
>
> The Bank of Sierra Leone is lending the government as much as it can under statutory regulations in the form of Ways and Means advances and Treasury Bills--from December 1974 through September 1975, this amounted to Le 10.06 million.[1]

Table 16 gives the best available estimate of the current situation and the projected future situation. Key importance is attached to the overall deficit. Indications are that 1974/75 current expenditures are running at a greater rate than the stated Le 100.8

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[1] The Bank is allowed to issue Ways and Means advances of up to ten percent of budgeted current expenditures; the Bank is not allowed to lend more than 20 percent of its current liabilities to the government in Treasury Bills or 20 percent of budgeted government current revenues--whichever amount is less.

million ($101.8 million). It is clear that next year's deficit is not tenable.

The implications for foreign assistance donors are straightforward. There is a danger that the government will have to cut back on planned development efforts for several years to come, with a possible failure to meet matching requirements called for by foreign assistance. To the extent that a foreign donor is insistent on the matching expenditure, the GOSL will have to decide whether the foreign aid of the demanding donor is important enough to cancel some other activity. The donor's matching requirement is a two-edged sword, whose effects must be assessed on a case-by-case basis. The matching requirement may tempt the GOSL to increase recurrent budgetary items or the GOSL may feel it needs the donor's aid badly enough and, if the donor exercises leverage use by the matching requirement, the GOSL may be induced to reallocate expenditures from low priority to high priority uses.

TABLE 16

SIERRA LEONE: CENTRAL GOVERNMENT FINANCES, 1970/71-1975/76

	1970/71	1971/72	1972/73	1973/74	1974/75[1]	1975/76[2]
Current Revenues	57.6	59.2	64.6	92.1	92.0	107.0
Current Expenditures	53.7	64.1	68.5	85.3	100.8	104.5
of which: Debt Service	(11.0)	(17.2)	(14.5)	(17.6)	(20.6)	(25.5)
Development Expenditures	9.5	8.4	13.1	8.4	24.2	63.6
Overall Deficit	-5.6	-13.3	-17.0	1.6	-33.0	-61.1

[1] Revised estimate

[2] Budget estimate

Source: Sierra Leone Authorities

Balance of Payments. Over the last few years, Sierra Leone's balance of payments situation has deteriorated to the point where today the country has virtually no untied foreign assets and some rather extreme steps must be taken if the situation is not to deteriorate further.

There are a number of reasons for these developments. On the import side, higher petroleum prices, coupled with what in restrospect appears to have been an unnecessarily large purchase of foreign rice (40,000 tons worth Le 15.6 million) in 1974 have contributed significantly to the downward slide. Government expenditures have also contributed significantly to the rise in imports, and the apparent lack of effective expenditure control over travel by high-level government officials has exacerbated the problem. Greater GOSL recognition of the seriousness of its B. O. P. situation has led to the imposition of some measures in recent months. But the effectiveness of these actions cannot yet be determined.

Many of the unauthorized expenditures have been financed by suppliers' credits which add to the country's debt service burden. While a current picture of the country's debt picture is not available, it is estimated that external debt service obligations will increase from Le 15.3 million for the current year to Le 20.2 million next year, an amount that is equivalent to seventeen percent of projected 1976 total export earnings.

While exports increased substantially in 1974, further increases are not anticipated due to a leveling out of world prices and to the precipitate closing down of the country's major iron ore producer last fall.

Details on the past, current and projected balance of payments situation are given in Table 17. As regards the current situation, the key question is how this year's gap of Le 10.2 million and next year's projected gap of Le 34.0 million will be covered. As of December 10, 1975, the country's foreign assets were Le 25.5 million, an amount equal to about two months of imports. However, Le 17 million of that amount is blocked (i.e., already legally obligated by specific agreements), and this leaves only Le 8.5 million to cover the projected gaps.

TABLE 17

SIERRA LEONE: BALANCE OF PAYMENTS, 1971-76
(In millions of leones)

	1971	1972	1973	1974	1975[1]	1976[2]
Export (f.o.b.)	(79.5)	(90.7)	(105.3)	(122.1)	(124.0)	(121.0)
Imports "	(83.2)	(90.2)	(112.5)	(166.9)	(160.0)	(176.0)
Trade Balance	-3.7	6.5	-7.2	-44.8	-36.0	-55.0
Services Balance	-17.6	-16.4	-21.6	-27.9	-23.6	-24.0
Deficit on Goods & Services	-21.3	-9.9	-28.8	-72.7	-59.6	-79.0
Net Transfer Payments	4.8	2.5	5.3	18.8	12.0	10.0
Private Capital (net)	8.1	12.5	7.4	17.7	26.0	15.0
Govern. Capital (net) of which: suppliers' Credits	3.0 (0.5)	4.2 (0.4)	11.8 (1.1)	18.3 (7.4)	11.4 (NA)	20.0 (NA)
Allocation of SDRs	(2.3)	(2.3)	(-)	(-)	(NA)	(NA)
Surplus on Capital Accounts	15.9	19.2	24.5	54.8	49.4	45.0
Overall Surplus (+) or Capital (-)	5.4	9.3	-4.3	-17.9	-10.2	-34.0

[1] Estimated

[2] Projected

(NA) - Not Available

Source: Bank of Sierra Leone authorities.

Sierra Leone's B. O. P. situation was temporarily eased when the IMF made 12.3 million in SDR available in early 1976 under the 1975 facility and the compensatory financing arrangements.

Implications of Recurring Financial Problems. In summary, the financial crises described above make it exceedingly difficult for the country to pursue a consistent development effort over the short run. Instead, the government may be forced to accept whatever will permit it to deal with financial crises as they occur.

C. Shortages of Qualified Personnel

The most recent census in Sierra Leone was conducted in 1974 and the last manpower survey in 1964. Since the results of the census have not yet been published there are no recent data on employment and manpower needs. If the situation in Sierra Leone resembles that in similar West African countries, and if the subjective judgments of employers in the public and private sectors are accurate, there are shortages of qualified personnel in many sectors of the economy.

These shortages are especially acute, it is reported, at middle levels of manpower and in rural areas and smaller towns. There are middle level shortages of nurses, technicians of all sorts, medical assistants, telephone operators and agricultural extension workers.

A principal reason for the shortage in high level personnel is that qualified Sierra Leoneans tend to seek employment abroad. The World Bank has estimated that over 3,000 Sierra Leoneans with masters degrees or higher are living and working outside the country.

D. Administrative Coordination

Administrative arrangements in Sierra Leone also impede implementation of meaningful development plan. The Ministry of Development and Economic Planning has ultimate responsibility for the country's development planning. The country's development plan was written under its direction. However, actual control of development activities is not centralized; the Ministry of Finance must legally sign off on any expenditure, but its views on expenditure priorities do not always coincide with those of the Ministry of Development and Economic Planning.

An example of the absence of central control over development planning is the way decisions are made concerning the prices paid farmers for agricultural commodities. These decisions have traditionally been made by Boards effectively dominated by the Ministry of Trade and Industries (MOTI), whose primary objective apparently has been to obtain a profit for the Rice Corporation and the Produce Marketing Board. In making its decisions in this way MOTI apparently has given little thought to establishing prices that would provide the farmers with profit incentives necessary to increase agricultural production.

This lack of communication in decision making has also led to a lack of follow-through on the implementation of decisions. The problem arises because many decisions taken unilaterally must be implemented through a combined effort of several ministries. To address this problem, consideration is being given to strengthening the role of the Ministry of Development and Economic Planning and the Ministry of

Finance be strengthened, so that decisions can be coordinated and implemented in a timely manner. The establishment by the MDEP of an assessment unit responsible for monitoring the progress of development activities is another action which could be helpful in this regard.

E. Problems in Expatriate Technical Assistance

Expatriate advisors to government have had at best a mixed record of success. It is fair to say that these advisors have not been well utilized. They have written many reports, some of which are quite good, but too little of what they have recommended has been implemented.

Problems with technical assistance fall into at least three categories. One is the inability of many of the foreign technicians to work well with their Sierra Leonean counterparts. Another is the high degree of politicization of development issues in Sierra Leone, which has made it difficult to implement worthwhile substantive suggestions. The third involves a lack of coordination and communication among the various groups of expatriates themselves.

Notwithstanding these problems, expatriate technical assistance will be needed in Sierra Leone for some time to come. In order to promote greater cooperation and to facilitate working relationships, support might be given to activities like the proposed Project Evaluation and Services Unit to be established in the Ministry of Agriculture and Natural Resources, which would coordinate GOSL planning activities with donor activities. Such units should work especially closely with the office of the Resident Representative of

the United Nations Development Programme.

VII. MAIN AREAS OF ASSISTANCE FOR AID CONSIDERATION

A. Agriculture

The GOSL's list of priority areas in the five-year plan does not constitute a true "strategy" in the sense that AID uses the term, for the list gives no real priority ordering among the items nor does it give a logical time-sequence of attack. In the absence of GOSL-established logical criteria to sift through project ideas, the approach taken in this DAP report is to suggest that AID's donor strategy should be to encourage the most effective use by the GOSL of its most competent and scarce managerial and technical personnel. The suggestion here is that AID should encourage the GOSL to have these personnel engaged whenever possible in activities where the profit motive and market forces cannot operate. Otherwise, there is the danger that these skilled personnel will be spread too thin and spend much of their time in activities that could be performed adequately by market forces.

There are three areas that appear to need particular attention in the agriculture sector, and for which there is no possibility that market forces or other non-government entities can make a significant impact. These areas are agricultural research; training, hiring, and equipping technical and extension staffs of the MANR; and improving the overall management and planning abilities of the Ministry and other loci of rural development planning and formulation. Of these areas, the British Government has been discussing and designing a large training program for agricultural personnel, and an AID role here at the moment would probably be needless duplication.

Njala University, with its virtual "founding" by AID and its "land grant" tradition is an important resource that should be considered in the planning of further U. S. assistance in both the training and research spheres. Currently Njala is in an ambiguous position vis-a-vis the Ministry of Education, which controls it, and the Ministry of Agriculture and Natural Resources, which should be (but is not) the main "customer" for hiring Njala's agricultural graduates, there are however recent signs to indicate that further cooperation may improve.

Except for activities running less than one-half million dollars per year at the newly re-activated Rokupr Rice Research Station, and some small projects by faculty and students at Njala, there is a dearth of agricultural research in Sierra Leone. If the economic development community has learned anything at all about peasant agriculture in the last ten or fifteen years, it has learned that significant and sustained yield increases will not occur in tropical agriculture without a great deal more systematic and scientific attention to basic problems of tropical biology and tropical soils. And there must be a strong continuum from basic research (which must be performed largely at the international research centers) to applied research and field trails (which must be country-specific and region-specific). All the extension work conceivable is not likely to make a big dent in Sierra Leone's agricultural problems if the extension workers do not have "something to extend". The consensus of the best informed technical and professional experts knowledgable on Sierra Leone appears to be that except for some modest progress in improving the technology of low-

land or "swamp" rice cultivation, there is as yet no reliable technical information on how to raise the yields of Sierra Leone's other main crops (especially upland crops), no adaptive research to transfer the technology of tree crops from successful neighbors like Ivory Coast to the local environments and soils of Sierra Leone, and no really significant work on livestock production and management. Agricultural research is a high priority item for donor assistance. AID should especially investigate this area generally as well as in light of the new Title XII legislation.

In the realm of agricultural policy analysis and planning assistance is recommended: to strengthen the planning, economic analysis, and evaluation capabilities of the GOSL. A project to strengthen the GOSL's planning capability in rural development is a candidate for AID consideration. Like agricultural research, this activity will possibly mesh well with Title XII. The strength of the American agricultural economics profession is an added plus.

Serious thought should also be given to the design of an "umbrella" project for small-scale grants in agriculture following the example of the highly-regarded self-help grants program now administered by the Embassy in Freetown. An activity of this type would be a good candidate for PVO implementation, best of all with pooled funds from other donors and with active Sierra Leonean participation in the evaluation and selection of proposals for funding.

Longer run AID involvement in Sierra Leone's agricultural sector will no doubt eventually involve consideration of activities similar to, or as part of, the integrated rural development projects now being developed by the GOSL and donors, principally IDA-World

Bank and the EEC. However, it will be more timely to recommend an appropriate American role (specialized participation in research, education, health, or credit aspects, for example, versus generalized participation) -- only after the current IDA Eastern project has run long enough to allow adequate impact evaluation and after AID staff achieve greater familiarity with technical and managerial problems that design of such projects will entail.

B. Education

Direct AID involvement on a significant scale with the formal education system in Sierra Leone does not appear to be option for FY 1977, partly because of the many activities of other donors (British involvement looms large), and partly because the system's current orientation does not mesh easily with AID's Congressional Mandate and other policies. However, the present limited USAID assistance to Mathematics curriculum development and teacher training will continue at least through FY-1977. For the longer run (FY 78 and beyond) AID consideration can usefully be directed at the following areas, largely outside the current formal system:

1. Training in functional literacy and functional numeracy, especially for adults.
2. In conjunction with functional literacy programs, the development of curricular and instructional materials in vernacular languages, with emphasis on topics like agricultural techniques and bookkeeping, health, nutrition, and family planning.
3. Technical assistance to the Institute for Public Administration.

4. Specialized education for women to increase their effectiveness both as economic agents and as homemakers.
5. Upgrading the skills of village artisans, working probably through a PVO or an organisation specializing in small-scale appropriate technology.
6. Njala University which was founded in the early 1960's Training school dropouts in specific technical skills needed within the economy.

with large AID support, has reservoir of professional talent (which should play a strong supporting role) in activities like agricultural training and research. Njala is beset with budgetary difficulties and appears unlikely that it will be able to attract significant foreign donor support until the GOSL decides its own priority roles for Njala and provides adequate budget support.

C. Health-Population-Nutrition

It seems premature at the time of this writing (early 1976) to attempt articulating a comprehensive and coherent health strategy sector for AID in Sierra Leone, for several reasons. In the first place, the GOSL's five year plan for health is largely a list of desirable investments with little ordering or sequencing among them. In the second place, given the absence until recently of long-term AID personnel in Sierra Leone and given the limited amount of time the DAP team spent in the country, it is not realistic to expect AID personnel to develop either the professional judgments necessary to justify project ideas fully nor the personal relationships with host country personnel necessary in the formulation of sound programs. In the third place, there were in the health sector no

donor studies comparable to the World Bank and FAO sector papers in agriculture and the World Bank education paper (which eased greatly the requirements upon the DAP team for original analysis and data-gathering).

Nonetheless, some elements of a health sector strategy clearly are present for AID in Sierra Leone, and these elements should be drawn upon in examining ideas for medium to large projects. Furthermore, there is no shortage of potential small AID projects (many of them candidates for central funding in FY 76 and FY 77) in the Sierra Leone health sector, which could be quite valuable not only in helping the country but also in allowing AID to establish the relationships and entree necessary for a more significant role in future years.

Foremost among the discernible elements of a health sector strategy is the GOSL's stated policy in favor of family planning, so long as family planning is part of the general approach to better maternal and child health. The political commitment to the "integrated" health-FP approach seems strong in Sierra Leone just as in most other African countries, and it appears to rest on sound socio-economic and medical grounds. If the U. S. fails to appreciate fully the logic of the integrated approach, it runs the serious risk of seeing the persuasion in favor of population control go to waste. As explained in the sector analysis, high infant and child mortality is a probable determinant of high birth rates in Sierra Leone, so that dollars spent on child health are probably also dollars spent on reducing the birth rate. The African peasant in the typical case is probably not an irrational

parent who has a large family merely because he and his wife lack the knowledge about (or acess to) contraception. On the contrary he probably has rational and good reasons for wanting a large family, reasons that AID health sector policy in Sierra Leone should respect.

Among other discernible elements of a health sector strategy, it seems clear that the lack of data on disease incidence, on health status and nutrition status, and on the growth rate and distribution of the population is a primary constraint that foreign donors can usefully help attack. Furthermore it seems equally clear that the shortage of managerial and technical manpower plagues the health sector just as it does most other sectors in Sierra Leone. Therefore, modest AID activities in health and demographic statistics and in training of health staff no doubt could proceed safely even in the absence of a comprehensive and tightly reasoned health strategy. Activities in the general orbit of health planning also seem logical candidates for early AID consideration, insofar as they address a prior constraint, viz. the lack of a good health strategy with well-designed projects. Finally, it would be premature and unwise to dismiss altogether the possibility that AID strategy for the health sector in Sierra Leone should look favorably from time to time on moderate-to-large "targets of opportunity" that have highly favorable cost-effectiveness ratios. For example, if it should appear that a large-scale national disease campaign (say based upon one round of mass vaccinations) would be an extremely economical way to reduce or eliminate a major health problem, such

a project should not be excluded from serious AID consideration merely because it is perhaps not the strict logical outcome of a pre-determined strategy.

D. Public Administration

When one considers the institutional strengths and weaknesses relevant to economic development in AID's main sectors of interest in Sierra Leone, it is difficult to be optimistic. There are many hardworking and competent individuals but when they leave their posts, there is often no one of comparable ability to replace them. (Among local private organizations, there appear to be none suitable for direct involvement with AID on a significant scale, (although many local private organizations can no doubt continue to work fruitfully with AID-financed PVO's, and can perhaps expand their collaborative activities.) Weakness in the staffing of GOSL ministries and offices argues strongly for assistance to generalized public administration projects. For example, AID might do more to insure the successful implementation of agricultural, education, and health projects by providing technical assistance directly to the Ministry of Finance by training economists than by providing an equal dollar amount of assistance to the technical ministries.

Ministry of Finance

Due to the key role of the Ministry of Finance and its organizational weaknesses, consideration may be given to finding a way to assist the Ministry to become more effective in instituting fiscal control over the various ministries. Any AID assistance would be coordinated with that of other donors such as the IMF and the World Bank. Assistance both in economic analysis and in tax administration for the Ministry of Finance are appropriate project areas for

AID's consideration. A comprehensive modernization program to increase revenues through tax collection is urgently needed. Improvements in the organizational structure of Sierra Leone's tax administration should be complemented by the introduction of training and upgrading programs for personnel and the development of tax payer education campaigns. Broader public administration activities, such as assistance to the Institute of Public Administration and Management (IPAM) equally warrant consideration.

VIII. SUGGESTED CRITERIA FOR PROJECT IDENTIFICATION AND SELECTION

The following suggestions are based upon AID's general policies and upon what appear to be desirable attributes for an expanded AID program in Sierra Leone. However, these criteria should be applied flexibly as dictated by practical requirements and common sense, and they should be reviewed for possible modification after AID has gained more experience with bilateral programming in any new Sierra Leone arrangements.

A. Projects should evolve logically from the DAP and address themselves to principal constraints identified in the sector assessment.

A corollary to this criterion is that when well-conceived projects in AID's priority sectors are strongly supported by the GOSL and proposed to AID for financing, but do not appear to evolve logically from the DAP, it is perhaps time to reexamine the DAP and/or the sector assessments for up-dating or for logical revisions.

revisions.

B. Projects should clearly reflect GOSL interests and priorities.

These priorities might be established by statements in the five year plan, by official GOSL proposals to the U. S. or other donors, or by the existence of similar on-going activities. Needless to say, such priorities must always be judged with common sense and in light of reality. Experience demonstrates for example that priorities stated clearly and elegantly in the plan may not be fully honored in practice.

C. Projects should be designed to require as little AID field representation in Freetown as possible.

Current PVO activities under U. S. finance in Sierra Leone and the Embassy's self-help program are model examples of very effective programs with very little AID involvement and minimal backstopping.

D. Projects should be fully compatible with, and to the extent feasible, coordinated with other donors' activities.

This strategy will help, of course, to avoid unnecessary duplication among donors. Equally or even more important for Sierra Leone today is that coordination will help donors to speak with one voice on critical financial matters like the current budget and balance of payments crises.

E. Projects should to the extent possible avoid imposing large additional budgetary requirements on the GOSL, and local cost elements of projects should help induce the GOSL to shift budgetary resources from loss productive to more productive activities.

The GOSL has a history of chronic budgetary problems. At

present, about one-fourth of its recurrent expenditure goes for debt service. AID and other donors should not put their money into projects requiring substantial follow-up by the GOSL after the donors withdraw, unless evidence exists that the GOSL is strongly committed to the activity and is likely to continue to be. Special care must be taken in designing projects to minimize the dangers (e.g., through specially blocked accounts at the Central Bank) that GOSL counterpart contributions will fail to occur on time. It seems likely that lack of GOSL fiscal controls and related local-cost project questions will constitute the greatest short-run problem for AID in designing and initiating a new program of bilateral projects in Sierra Leone. This problem heightens the need for multi-donor consultation and cooperation and for consultations between the donors and the IMF.

SECTION IX Strategy and Goals for AID Assistance to Sierra Leone

In FY 1977, the first program year of renewed bilateral assistance to Sierra Leone, AID's long range strategy will be reviewed and goals set for the years ahead. Major constraints to Sierra Leone's development will be addressed and programs designed to help in their solution will be proposed. For this first year, however, an interim strategy is being adopted which will permit start up of a limited number of programs in Agriculture, Nutrition, Manpower Development, Women in Development, and Population. Some of these programs will be of a pre-project, basic data-gathering type. Two of them: 1) Rural Development Planning and Coordination and 2) Crop and Soils Research and Training Station may represent first phases of major programs. Since the GOSL Five Year Plan identifies Agriculture as its priority sector for develop-

ment, it is appropriate that AID undertake its initial projects in this sector.

In the agricultural sector AID programs will ultimately be directed toward assisting the Government of Sierra Leone increase food production with desired consequences being an increase in productivity and a more equitable distribution of wealth and income among the broad mass of the poorest part of the population. Emphasis will be placed on helping small farmers who constitute the overwhelming majority of farmers.

Consideration will be given to the use of alternative strategies in future years that would enable AID assistance to be brought more directly to the rural and urban poor including working with private voluntary organizations and encouraging the involvement of local organizations in carrying out programs. The Mano River Union offers opportunity for implementation of regional programs in both Sierra Leone and Liberia. A consortium approach to integrated rural development in a region of the country may also be considered.

APPENDIX A
MINING, MANUFACTURING AND ENERGY

Mining

The mining sector contributes substantially to the wealth of Sierra Leone and is particularly important in the external accounts. In 1970-1971, mining provided 16 percent of Gross Domestic Product and 79 percent of total domestic exports. Employment in the sector was estimated at 39,000, about 3.8 percent of the total labor force. Through royalties, land rentals, government participation in the National Diamond Mining Co. (DIMINCO) and direct taxation of corporate profits, the industry provides about 17 percent of current government revenues.

Except for government's 51 percent interest in DIMINCO, which produces about half of the total diamond output in the country and production by Sierra Leone under the Alluvial Diamond Mining Scheme (ADMS), the mining industry is largely foreign-owned and foreign operated. The bauxite, rutile and iron ore companies are large-scale, capital-intensive subsidiaries of American, British or European corporations. Although the government announced its intention in 1969 of obtaining majority ownership in all the mining companies, government participation is at present limited to DIMINCO. In addition to the deep mining of DIMINCO, about 1,300 small-scale producers are licensed under ADMS.

DIAMONDS. Diamonds have been and remain the most important mineral mined in Sierra Leone, contributing more than 60 percent to the total value of domestic exports. Over the past decade, alluvial diamonds have provided a bit more than half this wealth, with the key contribution coming from the independent producers. In 1975, production under ADMS is expected to remain rather steady whereas production from DIMINCO is expected to decline (see Table A-1).

Table A-1

VALUE OF MINERAL EXPORTS -- Millions of Leones[1]
(Percent of total domestic exports)

	Diamonds	Iron Ore	Bauxite	Rutile	Total Mineral Exports	Total Domestic Exports
1963	32.3 (64)	9.8 (19)	.1 (0)	-	42.2 (83)	50.9 (100)
1967	29.7 (65)	9.0 (20)	1.1 (2)	.9 (2)	40.7 (89)	45.5 (100)
1971	50.0 (61)	11.5 (14)	2.5 (3)	1.2 (1)	65.2 (79)	82.1 (100)
1972	56.7 (62)	10.2 (11)	3.3 (4)	-	70.2 (78)	89.5 (100)
1973	64.6 (62)	11.1 (11)	3.5 (3)	-	79.2 (76)	103.7 (100)
1974	74.6 (63)	12.4 (11)	4.1 (3)	-	91.1 (77)	118.2 (100)
First Half 1975	32.7 (56)	7.0 (12)	1.6 (3)	-	41.3 (71)	58.0 (100)
Projections 1975/76	57.8 (43)	11.5 (9)	4.2 (3)	11.3 (8)	84.8 (63)	135.0 (100)
1978/79	62.8 (36)	10.0 (6)	13.2 (8)	23.3 (13)	109.7[2] (63)	175.1 (100)

[1] For this and following tables, figures are in current prices.

[2] Includes 480,000 leones ilmenite. Production of ilmenite will begin in 1976/77.

Sources: For 1963, 1967 and for projections, National Development Plan 1974/75-1978/79; for 1971-1975, Bank of Sierra Leone, Economic Review and data provided by Sierra Leonean authorities.

ADMS was established in February 1956 in an attempt to control an estimated 40,000 illicit diamond diggers. Under the scheme a producer pays Le 80[1] for a license and is permitted to employ up to 20 diggers on a specified plot of land measuring not more than 1,600 square feet. Participation in ADMS was highest in 1969 when 1.2 million carats of alluvial diamonds valued at Le 35 million were exported and 35,000 diggers were employed. By 1972, however, exports of alluvial diamonds had fallen to 870,000 carats and employment in ADMS to 16,000. This decline can be attributed to exhaustion of deposits and a significant recurrence in illicit diamond mining (IDM).

IDM and concomitant smuggling of diamonds out of the country are the principal obstacles to further development of the diamond mining industry. IDM has caused DIMINCO to cease its prospecting activities since any indication of a new deposit would only increase IDM. Smuggling has caused the loss of both foreign exchange and government revenues. DIMINCO estimates that between 1968 and 1973, about Le 125 million worth of diamonds was mined illegally within the company's leased areas. This total was roughly equivalent to what the company itself produced during that time period.

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[1] On December 1, 1975, the exchange rate between the leone and the dollar was Le 1 = US$1.01.

IRON ORE. Iron ore has been mined since 1933 at one site, Marampa in Northern Province, by the Sierra Leone Development Company (DELCO), a subsidiary of the British firm, William Baird of Glasgow. Production in 1974 was estimated at two million tons, down from 2.2 million tons in 1973. Production in 1975 will decline further, due to the fact that DELCO ceased operations altogether in October 1975.

DELCO failed for several reasons. Iron ore grade, which was originally about 63 percent iron, has recently fallen to about 40 percent. Exhaustion of the rich powder near the surface necessitated the more expensive mining of lower-lying rock deposits. Although the total value of iron ore exports has remained steady at roughly Le 10 million since 1963 (see Table 1) the unit value of iron ore exports has declined from a high of 5.28 per ton in 1964 to Le 4.02 per ton in 1972. The high cost of oil, abnormal water shortages, frequent equipment failures and the increased cost of beneficiating the lower grade ore are additional factors which contributed to the company's loss of profits in recent years.

Reserves at Marampa are estimated at 67 million tons. DELCO discovered and prospected another major deposit or iron ore in the Sula Mountains in Tonkolili District in Northern Province, but did not find it economical to exploit. Another deposit has been discovered at Bagla near the Liberian border and is currently being investigated by Bethlehem Steel Corporation

of the United States. Bethlehem Steel has also been exploring the possibility of taking over the operations of DELCO.

BAUXITE. Bauxite has been mined since 1963 by the Sierra Leone Ore and Metal Company (SIEROMCO), a subsidiary of the Swiss aluminum company, Alusuisse. SIEROMCO works a deposit located in the Mokanji Hills, Moyamba District, Southern Province. The deposit has an average alumina content of 55-56 percent and a silica content of four to five percent.

Production of bauxite increased steadily over the first ten years, rising from 127,000 tons in 1964 to 693,000 tons in 1973. Production in 1974 slipped slightly to 682,000 tons and production in the first half of 1975 was 335,000, compared to 346,000 tons for the first half of 1974[1]. The total value of bauxite exports increased from Le 407,000 in 1964 to Le 3.3 million in 1972. Unit value also rose from Le 3.20 per ton in 1964 to Le 5.32 per ton in 1972.

SIEREMCO has located a large bauxite deposit in the Port Loko area which, because of its proximity to the sea, is a more favourable location than the Mokanji Hills site. Prospecting and evaluation of the Port Loko site have indicated that it could produce about one million tons per year. If bauxite reserves in Sierra Leone are proven to be at least 100 million

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[1] National Development Plan and IMF statistics.

tons, it may be possible to open an aluminum plant in the country by 1980. SIEROMCO has recently been engaged in negotiations with the government over the terms of an agreement for equity participation.

RUTILE.[1] Reserves of rutile in Sierra Leone, found in gravels along river bottoms in Southern Province, are the second largest in the world, following Australia. Unlike the rutile found in the beach sands of Australia, however, the Sierra Leone variety suffers from large admixtures of laterite and other materials which makes it more difficult to mine. The first effort to mine rutile began in 1967, but after several years of economic difficulties, the operation, run by Sherbro Minerals Ltd. (a local subsidiary of a British and an American Company), shut down in 1971.

From 1967 to 1971, Sherbro Minerals mined a total of 85,000 tons valued at Le 5.4 million. Although the tonnage mined was actually less in 1971 than in 1967 (16,000 tons to 19,000 tons, respectively), the annual value rose from Le 882,000 in 1967 to Le 1.2 million in 1971. This increase stemmed from a rise in the unit price from Le 46.42 per ton in the first year to Le 76.63 per ton in the last year of operation. The peak year was 1970 when 29,000 tons were mined, at an export value of Le 1.9 million.

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[1] Rutile is a mineral consisting mainly of titanium dioxide, TiO_2, which is used especially as a pigment, and also, because of its property of scattering and reflecting ultraviolet and visible light, in sunburn preventatives and lip balms.

In 1972, a new exclusive prospecting license was granted to Sierra Rutile Ltd. which is a new subsidiary of Bethlehem Steel and Nord Resources. The company, having negotiated an agreement with government, expects to begin production in 1978, utilizing a dredging technique and a treatment plant with a capacity output of 125,000 tons of rutile. The company's prospecting and evaluation endeavors have estimated reserves at 170 million long tons. Another company, Bayer-Preussag of West Germany, has found promising deposits of rutile and ilmenite near Motifunk in Southern Province and has constructed a pilot plant which it plans to begin operating in the near future.

SECTOR DEVELOPMENT PROBLEMS. IDM and smuggling remain the biggest short-term problems for the mining industry. There are two principal causes of the smuggling. (The first is that) (1) the price paid for diamonds in foreign markets is usually much higher than that offered by the Government Diamond Office or other licensed Sierra Leone diamond buyers, and (2) (The second is that) diamonds can usually be exported from other countries like Liberia at a cheaper export duty than that which obtains in Sierra Leone.[1] The government has recognized that it is virtually impossible to halt or even slow down significantly the physical process of smuggling and that the way to attack the problem is to remove the incentives. To this end, the government recently ended the monopoly purchasing

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[1] The export duty on diamonds in Sierra Leone is 7.5 percent and is levied only on diamonds produced under the ADMS. The legal export rate in Liberia is 15 percent, but it is reported that the actual rate can be as low as three percent.

had a negative growth rate (1.8 percent) from 1963/64 to 1970/71.

authority of the Government Diamond Office and has allowed a number of international purchasers to bid competitively for Sierra Leone diamonds.

Notable among several other constraints to the development of the mining industry is the lack of mineral processing. To ready this, the GOSL has considered developing a diamond cutting industry and an aluminum plant for bauxite processing. Another problem is that the government, in deciding how to increase its equity in the mining industry, must proceed in a way that will not frighten off new private investment (which may already be discouraged by declining production). The government must also decide how to allocate resources between mining and other sectors, notably agriculture, recognizing that an increase in the allocations for one sector often means a decrease in another sector. Still another constraint lies in the fact that only a small part of the country's territory has been adequately surveyed, so that the range of mineral wealth remains largely unknown.

Manufacturing

As in many developing countries, manufacturing in Sierra Leone is among the least significant economically of all sectors. According to the National Accounts of 1970/71, manufacturing, including handicrafts, contributed only six percent to GDP and provided employment for only five percent of the labor force. From 1963/64 to 1970/71, the average annual growth rate of the sector was 3.0 percent, lower than both the overall industrial growth rate (7.6 percent per annum) or the growth rate of GDP (4.3 percent per annum) for the same time period.

Much of the chronic deficit in the balance of trade can be attributed to the dearth of import-substituting manufacturing industries. In 1973/74, when the balance of trade deficit reached Le 43.4 million, total exports of the manufacturing sector stood at Le 7.5 million. In the period 1961 to 1970, total exports of goods other than from mining and agriculture were only Le 9 million, comprising but 1.5 percent of gross domestic exports for the decade.[1]

The breakdown of manufacturing industries in Sierra Leone into "large-scale" or "modern factory-type," "medium-scale," and "small-scale" or "artisan/handicraft" categories is the subject of some confusion, resulting mainly from the fact that there has never been an accurate survey of the number of small artisan-type shops or of medium-scale industries.[1] There is a general agreement, on the other hand, that the majority of manufacturing activity is of the "small-scale" variety. According to the National Development Plan, 88 percent of all "industrial" workers are artisans and craftsmen, and in 1970/71, their output was estimated at Le 11 million, equivalent to 57 percent of total industrial output. According to the Central Statistics Office, the output of these small-scale industries had a negative growth rate (1.8 percent) from 1963/64 to 1970/71. It is probable that most of the workers listed in this category are tailors. Others would include woodworkers, gara printers and repairmen in electronic, automotive and related trades.

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[1] Some of the agriculture sector experts, however, such as palm kernel oil and cake, were processed or semi-processed goods which would be counted under manufactured exports.

Of the large-scale manufacturing industries, the most important are the food industries, the beverage industries, the tobacco manufacturers, and the manufacturers and refiners of chemical products (see Table A-2). The food manufacturers include one flour mill, palm kernel mills, bakeries and biscuit factories and accounted for 30.3 percent of total value added of the modern industrial subsector in 1973/74. The beverage industries produce beer, soft drinks and liquor and accounted for 19.6 percent of value added. Tobacco manufacturing accounted for 30.6 percent of value added. The chemical industry included petroleum refining, paints, oxygen, acetylene, carbon dioxide, soap and matches and accounted for 8.1 percent of value added in 1973/74. According to the Central Statistics Office, employment in both large & medium-scale (more than five workers) enterprises increased from 5,100 in 1964 to 6,800 in 1967, but then began a consistent decline to only 5,000 in 1971.

The declining output of artisanal industries and the drop in employment in the larger industries suggest the existence of certain fundamental problems in the manufacturing sector. Some of these may be short-term and related to the effects of deteriorating

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1 The Central Statistics Office uses the three-way breakdown of large, medium and small with "small" being less than five workers. The National Development Plan, 1974/75-1978/79 uses a two-way break: an establishment is classified as "small" unless it meets at least two of the following criteria: (1) capitalized at least Le 50,000; (2) having an annual output of at least Le 100,000; (3) employing at least 11 people. Using these criteria, the Plan classified 53 establishments as "modern factory-type industries"

A survey team from Michigan State University is currently working on a survey of artisan industries in Sierra Leone. Their data and classifications should clear up some of the confusion and provide help in planning for all types of manufacturing industries in Sierra Leone.

TABLE A-2

MANUFACTURING INDUSTRIES: VALUE ADDED BY BRANCH
(Projections in thousands of leones, 1973/74 prices)

	1973/74		1975/76		1978/79	
	Value	Percent	Value	Percent	Value	Percent
Food Manufacturing	7,812	30.3	11,407	33.2	19,017	36.2
Beverage Industries	5,048	19.6	5,942	17.3	7,293	13.9
Tobacco Manufacturing	7,892	30.6	9,171	26.7	10,923	20.8
Manufacture of Chemicals	2,097	8.1	2,637	7.7	3,290	6.3
Manufacture of Fabricated Metal Products	675	2.6	2,244	6.5	4,580	8.7
Other	2,289	8.8	2,960	8.6	7,380	14.1
Total	25,813	100.0	34,361	100.0	52,483	100.1

Source: National Development Plan 1974/75-1978/79.

terms of trade or government fiscal and pricing policies. Others are more deep-seated, including a relatively small domestic market, a social and educational system which does not value entrepreneurial skills, the absence of a well-developed institutional credit market, the centralization of manufacturing in the Freetown area and the lack of appropriate infrastructure, such as power facilities, particularly in the rural areas.

Over the past ten years, government policy has concentrated on encouraging import-substituting manufacturers. The National Development Plan, however, has recognized that "import substitution by itself is a limited and insufficient strategy for industrial development."[1] The new policy will attempt to supplement import substitution with priority assistance to industries, particularly those based on agricultural and other natural resources, which will export a significant share of their product. Measures contemplated

[1] NDP, P. 174.

to promote these ends include preferential interest rates on bank loans to agro-based industries, forest industries and fishing industries; tax reductions; and other export incentives for industrial crop and other exporters. Priority will also be given to labor-intensive manufacturers, including artisanal industries. A new Directorate of Small Industries and Handicrafts will be established within the Ministry of Trade and Industry[1] and three new training centers for artisans and craftsmen have been proposed for three provincial headquarters. To implement the entire industrial program of the Plan, the government has suggested the establishment of a National Industrial Development Corporation.

ENERGY

With the exception of firewood, Sierra Leone has no currently usuable source of fuel. The country is dependent on oil imports for all its fuel needs, and this dependence has increased in recent years with the shutting down of the railways and the consequent increase in road transportation. While oil consumption has risen at about a five percent annual rate, the sharp increase in oil prices in 1974 caused oil imports to treble in value from roughly six percent of total imports to 11 percent.

Nearly all oil imports come from Nigeria and are refined in Freetown. The refinery works at about 60 percent of capacity and exports refined products equivalent to about one-half of its crude imports to shipping companies and airlines. The refinery is currently using low sulphur Nigerian crude which fetches premium

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[1] The Small Industries Division of the Ministry of Trade and Industry has current staff of four.

prices from countries sensitive to pollution.

The energy crisis has made the development of Sierra Leone's hydroelectric potential economically viable. A feasibility study of a large hydroelectric project at Bumbuna Falls has been carried out, but it will be some years yet before this project can cut significantly into the need for petroleum imports.

Nearly 55 percent of the electricity supply is generated by four mining companies, with virtually all of the balance generated by the Sierra Leone Electricity Corporation (SLEC). The Financial condition of SLEC has deteriorated in recent years, because fuel prices have increased nearly five-fold while rates remained constant from 1964 to 1975. The company ran a deficit of more than one million leones in 1974. In 1975, rates were increased substantially, and the projected deficit for 1975 is Le 250,000.