

Report No. 7635-SUR

Suriname

A Proposal for Economic Reform

August 31, 1989

Latin America and Caribbean Region

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CURRENCY EQUIVALENTS

Currency Unit: Suriname Guilder

Exchange Rate Prior to December 27, 1971

US\$1.000 = Sf 1.885

Sf 1.000 = US\$0.531

Exchange Rate From December 27, 1971 to Present

US\$1.000 = Sf 1.785

Sf 1.000 = US\$0.560

This report is based on the findings of a World Bank economic mission to Suriname in April 1988. The mission comprised: Hilarian Codippily (Chief of Mission); Alberto Herrou-Aragon (Macroeconomist); Jeno Malatinszky (Public Enterprise Specialist); Jean Loyer (Bauxite Consultant); Johan Moes (Agriculture Sector Consultant); Thorkil Bojlund (Transport Consultant); Miss Dorla Humes (Public Investment Specialist); Miss Barbara Ossowicka (Research Assistant) and Miss Saskia Roskam (Translator and Secretary). Messrs. R. Maharaj (UNDP), I. Dessalegne (UNDP) and R. Rodriguez (UNDP) also assisted the mission in compiling and reviewing the technical assistance needs of the country. The draft version of the report was sent to the Government in March 1989 and was updated and discussed with the Government in June 1989.

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ABSTRACT : The report reviews the performance of the Surinamese economy over the past five years--a period characterized by deteriorating economic performance owing to external and domestic factors. Real GDP has declined at an average rate of about 3.5% per year in 1982-87, and unemployment reached 34% in 1987 from 21% in 1982. Meanwhile, the overall fiscal deficit (before grants) climbed steadily from about 15% of GDP in 1982 to about 27% in 1987, causing heavy borrowing from the Central Bank. The Central Government current account deficit stood at 25% of GDP in 1987. The balance of payments position weakened severely during the past five years, causing cutbacks on imports and resulting in shortages of inputs, spare parts and machinery needed in the economy. The report highlights the importance of creating a macroeconomic policy framework conducive to sustained export-led economic growth through the use of a consistent and adequate set of exchange rate, fiscal, wage and monetary policies aimed at reducing external and internal imbalances. To become fully effective, these policies would need to be complemented by removing restrictions and impediments to trade. Sectoral issues and recommendations relate broadly to: the need to restore competitiveness in the bauxite sector; improve agricultural performance through a phasing-out of price controls; reduce state intervention and provide a major role to the private sector; and rehabilitate transport and other infrastructure. The report reviews the proposed public sector investment program amounting to about US\$207 million during 1988-90. The report also discusses the possibilities of recovery and longer term economic growth provided the key demand management and supply-side issues are addressed.

SURINAME

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SURINAME - COUNTRY DATA

<u>AREA</u>	<u>POPULATION</u>	<u>DENSITY</u>
163,820 km ²	0.405 million (mid-1987)	2.5 per km ²
	Rate of Growth: 1.1 (1977-87)	

<u>POPULATION CHARACTERISTICS (1987)</u>		<u>HEALTH (1978)</u>	
Crude Birth Rate (per 1,000)	32.0	Population per Physician	1,680
Crude Death Rate (per 1,000)	7.3	Population per Hospital Bed	160
<u>INCOME DISTRIBUTION (1985)</u>		<u>ACCESS TO ELECTRICITY (1985)</u>	
% of National Income, Highest quintile	42.0	% of Population	51
Lowest quintile	9.3		
<u>NUTRITION (1979)</u>		<u>EDUCATION (1978)</u>	
Calorie Intake as % of Requirements	119	Adult Literacy Rate	65
Per Capita Protein Intake (grams per day)	63	Primary School Enrollment (%)	103

GNP PER CAPITA IN 1988: US\$2,450 ^{a/}

<u>GROSS DOMESTIC PRODUCT IN 1987</u>			<u>ANNUAL RATE OF GROWTH (% , CONSTANT PRICES)</u>	
	<u>US\$ Million</u>	<u>(%)</u>	<u>1975-83</u>	<u>1983-87</u>
GNP at Market Prices	1,088	100.0	0.3	-3.3
Gross Domestic Investment	71	6.5	-9.8	-22.4
Gross Domestic Savings	56	5.2	.	.
Current Account Balance	-8.2	-0.8	.	.
Exports of Goods, NFS	369	33.9	-5.2	0.4
Imports of Goods, NFS	383	35.3	0.6	-15.5

OUTPUT LABOR FORCE AND PRODUCTIVITY IN 1987

	<u>Value Added</u>		<u>Labor Force (1987)</u>		<u>V. A. Per Worker</u>	
	<u>US\$ Million</u>	<u>(%)</u>	<u>'000</u>	<u>%</u>	<u>US\$</u>	<u>%</u>
Agriculture	69.4	9.9	14.9	16.7	4,657.7	59.6
Mining	4.7	5.0	3.6	4.0	9,638.9	123.3
Other Industry ^{b/}	128.0	18.3	12.1	13.5	10,578.5	135.3
Services	466.7	66.8	58.8	65.8	7,937.1	101.5
Total/Average	698.8	100.0	89.4	100.0	7,816.8	100.0

GOVERNMENT FINANCE

	<u>Central Government</u>					
	<u>Sf Millions</u>			<u>% of GDP</u>		
	<u>1984</u>	<u>1986</u>	<u>1987</u>	<u>1984</u>	<u>1986</u>	<u>1987</u>
Current Receipts	499.6	505.9	527.8	28.6	28.0	27.2
Current Expenditure	741.3	937.4	1010.9	42.5	51.8	52.1
Current Surplus	-241.7	-431.5	-483.1	-13.9	-23.8	-24.9
Capital Expenditures	83.3	39.0	36.7	4.8	2.2	1.9

^{a/} World Bank Atlas methodology.

.. = not available.

^{b/} Includes construction.

. = not applicable.

SURINAME - COUNTRY DATAMONEY, CREDIT AND PRICES

	1982	1983	1984	1985	1986	1987
	----- (SF Million; Outstanding On December 31) -----					
Money and Quasi Money	882.6	978.0	1,105.6	1,446.2	1,786.4	2,309.9
Bank Credit to Public Sector	167.5	477.3	804.0	1,150.7	1,607.9	2,095.3
Bank Credit to Private Sector	624.1	648.8	627.5	689.8	727.6	778.0
	----- Percentage or Index Numbers -----					
Money and Quasi Money as % of GDP	47.7	54.8	62.4	83.1	102.1	119.1
Consumer Price Index (4/68 - 3/89=100)	282.6	295.8	306.0	339.2	402.6	617.8
Annual Percentage Changes in:						
Consumer Price Index	7.2	4.3	3.7	10.9	18.7	53.4
Bank Credit to Public Sector	127.3	184.9	68.4	43.1	39.7	80.3
Bank Credit to Private Sector	14.2	3.2	-2.5	9.9	5.5	6.2

BALANCE OF PAYMENTS

	1985	1986	1987
	---- (US\$ million) ----		
Export of Goods, NFS	380.2	364.3	366.5
Import of Goods, NFS	422.1	385.6	393.1
Resource Gap (Deficit=-)	-41.9	-21.3	-14.6
Factor Payments (net)	-8.6	0.6	0.4
Current Transfers (net)	-4.0	-0.5	6.0
Balance on Current Account	-52.5	-21.2	-8.2
Public Capital	16.2	4.5	5.2
(M & T Disbursements)	16.1	2.7	3.0
(M & LT Amortizations)	4.0	1.7	2.1
(Grants)	4.1	3.5	4.3

Other Capital ^{a/}	17.8	-13.0	-12.4
Change in Reserves	-18.5	-29.7	-15.4
Gross Reserves (end-year)	70.0	72.2	69.0

RATE OF EXCHANGE

Since December 1971
 US\$1.00 = Sf 1.78E
 Sf \$1.00 = US\$0.560

MERCHANDISE EXPORTS (AVERAGE 1984-1987)

	US\$ Million	(%)
Bauxite	28.5	8.4
Alumina	187.3	55.2
Aluminum	28.0	8.3
Rice	37.1	11.0
Bananas	10.0	3.0
Shrimp	36.9	10.9
Processed Wood	2.6	0.8
Raw Lumber	0.7	0.2
Others	7.4	2.2
	338.5	100.0

EXTERNAL DEBT, DECEMBER 31, 1987

	US\$ Mil.
Public Debt, Incl. Guaranteed ^{b/}	73.3
Non-Guaranteed Private Debt	..
Total Outstanding & Disbursed	73.3

DEBT SERVICE RATIO FOR 1987^{b/} ^{c/}

Public Debt, Incl. Guaranteed	6.7
Non-Guaranteed Private Debt	..
Total Outstanding & Disbursed	6.7

a/ Includes financial capital, errors and omissions, and changes in arrears.

b/ Medium- and long-term debt. Does not include arrears.

c/ Ratio of Debt Service obligation to Exports of Goods and Non-Factor Services.

EXECUTIVE SUMMARY

1. This report reviews economic developments in Suriname since 1982, focusing on external shocks and domestic factors which have negatively affected economic performance. Real GDP dropped by about a fifth from 1982 to 1987; over one-third of the labor force is currently unemployed, and living standards have suffered accordingly. The fundamental macroeconomic malaise affecting the Surinamese economy has been the breakdown of the incentive system, the oversized and inefficient public sector, and a rise in real wages substantially beyond the economy's capacity to sustain it. Taking into account the currently depressed domestic economic situation, the report recommends the rapid implementation of an adjustment program to halt the economic deterioration and place the economy on a path of sustainable, longer-term growth.

2. The report's medium-term scenario envisages achievement and maintenance of viable financial balances and reasonable real economic growth starting with 2.0% in 1989 and averaging about 3.0% per year between 1989 and 1993. It also envisages improvement of living standards with consumption per capita rising by about 1% per year on average during this period. To attain this scenario, Suriname should create a macroeconomic policy framework conducive to sustainable economic growth through the use of a consistent and adequate mix of exchange rate, fiscal, monetary and wage policies and adopt adequate sectoral policies related to the bauxite, agriculture and transport sectors and to the public enterprises. These policies, summarized below, are elaborated in Chapters II, III and IV of the report.

3. The main macroeconomic measures suggested include:

a. Increase of the real exchange rate,¹ which together with the adoption of a flexible exchange rate policy, would contribute to the achievement of both internal and external balance.

b. Phasing-out price controls on basic consumer goods (i.e. sugar, cooking oil, rice, milk and beef), services (i.e. housing and electricity rates) and timber products; removing exchange controls and providing automatic access to foreign exchange once an adequate real exchange rate adjustment is undertaken, and phasing-out import and export licensing to strengthen the incentive framework and obtain a sustainable supply response from the productive sectors.

c. Implementation of the Investment Code for local and foreign investment; specification in the Investment Code of areas for foreign investors, incentives applicable and investment guarantees; development of export infrastructure and an institutional framework to support foreign investment; streamlining entry and exit requirements; intensive investment promotion activities abroad; and the elimination of external arrears.

d. Achievement of a surplus in the current account of the central government operations and reduction of the overall fiscal deficit to an

^{1/} The exchange rate is defined as units of domestic currency per unit of foreign currency.

amount not greater than net foreign financing, together with the elimination of access to Central Bank credit, are needed to achieve internal balance.

e. Increase of revenues and reduction of current expenditure through direct measures. The measures proposed below are designed to eliminate the current account deficit (25% of GDP in 1987) and achieve a small surplus. The Government has estimated that a sales tax of 5% (exempting food and medicines) would yield about 1% of GDP in revenues. Other measures include augmenting the effective rate of taxation by converting specific taxes into ad valorem ones (e.g. vehicle license tax, import duty on petroleum -- 0.3% of GDP); replacing quantitative restrictions with tariffs on imports once the real exchange rate has been adjusted (an exchange rate adjustment of 100% together with an import tariff of 40%, would yield additional revenues equivalent to 4.2% of GDP if applied to E.A. imports [based on foreign exchange acquired from the parallel market] and an additional 6.6% of GDP if applied to imports financed by Dutch Government aid [US\$90 million]); increasing taxes on fuels and beverages (0.3% of GDP); and strengthening revenue assessment and collection procedures (0.3% of GDP).

f. The 1989 budget proposals do indicate some positive steps on the revenue side along the lines mentioned above. Current revenue for 1989 is estimated at Sf780 million, which is achievable, up from Sf620 million in 1988. The revenue increase is predicated on sharp increases in income taxes, import duties, excise taxes on beer and tobacco and a new excise tax on soft drinks. Current expenditure, on the other hand, is optimistically estimated at Sf1050 million--lower than Sf1100 in 1988. If steps are taken to maintain these revenue and expenditure estimates, the resulting current account deficit would amount to Sf270 million or 14% of GDP, which is substantially lower than the 1987 deficit equivalent to 25% of GDP. Nevertheless, further steps in revenue raising combined with expenditure reduction measures mentioned above are needed in order to eliminate the current account deficits as rapidly as possible.

g. Wage restraint, combined with a freeze on hiring and the gradual reduction in the size of the civil service, would be the key to controlling current expenditures in the public sector and substantially reduce the current account deficit in the Government's operations (a 25% cut in the payroll and in goods and services would yield savings equivalent to 10% of GDP).

h. Introduction of cost recovery in the health and education sectors, the users of which currently receive subsidies equivalent to nearly one-half of central government transfers (equivalent to about 2.5% of GDP in 1989), and water charges for irrigation facilities.

i. Improvement of the operations and financial situation of the public enterprises by: raising real tariffs of public services; substantially reducing the burden of financing social services and consumer subsidies; (i.e. sugar, timber, rice); increasing both the accountability and the freedom of action of managers; and introducing an efficient monitoring performance system. Given its managerial and financial constraints, it is recommended that the Government leave the role of establishing new businesses to the private sector, and rapidly divest

selected public enterprises, improve the efficiency of other enterprises (e.g. electricity) and only invest in infrastructure to support private sector-led economic growth.

j. Elimination of legal restrictions on private sector employment decisions. The improved incentive framework would encourage increases in domestic production and exports, and the private sector's demand for labor.

4. For the main sectors of the economy, the following policies and investment priorities are proposed:

a. In bauxite: negotiations with the industry should be brought to an equitable and rapid conclusion (on which future costs and productivity gains should also be predicated) by addressing the sources of the loss in competitiveness. It is essential that alumina continue to be produced at the maximum present level of 1.5 million tons per year. Aluminum production should be increased to the maximum level compatible with the availability of hydropower -- 30,000 tons per year. The difference in cost of production in Suriname and that of its most efficient competitors needs to be narrowed further by US\$20 a ton. This will require the permanent replacement of the counterproductive levy system and bauxite tax by taxation based on earnings and treating the two companies in the sector equally in the long-term. Such reforms will reduce the Government's tax income and the net foreign exchange earnings from the sector in the short-term. However, in the absence of these reforms, the alternative is the continued involution of the sector and considerably more adverse effects on government revenues and the balance of payments within the next two years.

b. In agriculture, restructuring the sector will require addressing the issues of export competitiveness, price controls, import licensing, unavailability of the most essential inputs and spare parts, and the high cost of labor, together with those related to technological aspects such as crop varieties, mechanization and organization of production. In the area of divestment, those enterprises which have performed worst should be the prime candidates for privatization. In this connection, the issue of the debt position of the enterprises most immediately concerned should also be addressed. Divesting these enterprises would first require their net worth to become positive.

c. In transportation, there is a need to organize maintenance activities and also to develop an appropriate incentive mechanism to carry out this function with a smaller staff. Some of the immediate project actions include the reconstruction of the existing wharves at Nickerie and the rehabilitation of handling facilities at the Wageningen rice processing unit. It is also necessary to re-establish the functioning of the sluices of Awararra, Uitkijk, and Doorsteek, and especially to clean the Saramacca Canal in order to avoid damage to river vessels and loss of cargo. Consideration should be given to opening the rice transportation monopoly, where rice is transported abroad by Scheepvaart Maatschappij Suriname N.V. (SMS), to private sector competition. The Government should also consider fully privatizing public transportation, together with the maintenance garage and ferry services, in order to end losses on their operations.

The Public Sector Investment Program (PSIP)

5. With the re-establishment of Dutch Government aid during the second half of 1988, about US\$450 million in grants are expected to flow into the country in the medium-term. However, in the absence of a viable macroeconomic framework and a judicious utilization of these resources, the country still may find itself worse off over the medium-term than it is today. This makes it all the more important for the country to undertake the necessary adjustments of the economy.

6. The 1988-90 PSIP emphasizes rehabilitation and expansion of infrastructure for the productive sectors. Its composition is appropriate for the present. However, the PSIP would need to be expanded over the medium term to ensure economic recovery and sustained growth and would require increased external financing. The PSIP is projected to rise from 2% of GDP in 1987 to about 8% by 1990. The success of efforts to intensify project implementation during this period will depend on the availability of adequate supplies of equipment, spare parts and inputs. Among the projects proposed is the Multi-purpose Corantijn Project (MCP), including a distribution system to irrigate water to rice polders in the Nickerie District; a Banana Expansion Program to bring 1,500 hectares into production and an Oil Palm Project which would increase the cultivated area to 5,000 hectares from 3,500 hectares currently under cultivation but not harvested. The project also includes the construction of an oil refinery. Both the Banana Expansion Program and the Oil Palm Project should be undertaken by the private sector.

7. Special priority should be given to ranking projects on the basis of economic criteria and to securing the necessary technical assistance for their implementation. In the short-term, those projects which were suspended or delayed because of inadequate financing and have the potential to generate or save foreign exchange and which have an adequate rate of return should be given priority. This should be supported by technical assistance to complete them and strengthen institutional and managerial capability.

SUMMARY AND CONCLUSIONS

i. This report reviews economic developments in Suriname since 1982, focusing on external shocks and domestic factors which have negatively affected economic performance. Real GDP has dropped by about a fifth from 1982 to 1987; over one-third of the labor force is currently unemployed, and living standards have suffered accordingly. The fundamental macroeconomic malaise affecting the Surinamese economy has been the breakdown of the incentive system, the oversized and inefficient public sector, and a rise in real wages substantially beyond the economy's capacity to sustain it. Taking into account the currently depressed domestic economic situation, the report recommends the rapid implementation of an adjustment program to halt the economic deterioration and place the economy on a path of sustainable, longer-term growth.

ii. In January 1988 a new Government assumed office in Suriname. In its recent economic policy statements the Government has declared that its objectives are economic recovery and sustained growth, rising per capita consumption, and declining unemployment and inflation. The Government has indicated its intention to carry out a comprehensive program of economic reforms to attain these goals. The need for such a program is urgent given the severity of Suriname's economic situation.

iii. The country's rate of economic performance has deteriorated steadily since 1982. Initially, the economy was affected by lower world demand for bauxite and bauxite derivatives, which account for over 70% of Suriname's export earnings. In January 1983 Dutch Government aid, which accounted for 34% of government revenues, amounted to 33% of exports and equalled 10% of GDP, was suspended. Rather than adopting policies to offset the impact of these external shocks over the long term, the Government persistently pursued counter-cyclical fiscal and monetary policies and allowed the real exchange rate to appreciate substantially. Real GDP declined at an average of about 3.5% per year in 1982-87 and the rate of unemployment climbed to about 34% in 1987 from 21% in 1982. As revenues stagnated the Government increased current expenditure. Consequently, central government savings became increasingly negative, falling from -4% of GDP in 1982 to -25% of GDP in 1987. The overall fiscal deficit (before grants) climbed steadily from the equivalent of about 15% of GDP in 1982 to 27% in 1987. Virtually all of the deficit was financed through credit from the Central Bank. As a result inflation, as measured by changes in the consumer price index (CPI), rose to about 53% in 1987 from 7% in 1982.

iv. The enormous fiscal deficit and attendant money creation, together with a 95% appreciation of the official real exchange rate by 1987 compared to its 1980 level, exerted severe pressures on the balance of payments. Shrinking export volumes and falling prices of bauxite and its derivatives, together with declining volumes of rice, wood and lumber exports lowered the value of exports of goods and nonfactor services from 51% of GDP in 1982 to 34% in 1987. In response to the growing shortages of foreign exchange, the authorities introduced tight import licensing procedures and other foreign exchange controls. This led to a reduction in foreign exchange inflows to the Central Bank, in imports and a dearth of indispensable inputs, spare parts, and machinery needed for domestic

production. The persistent scarcity of foreign exchange caused the parallel market rate to vary from about three to five times the official rate. The balance of payments deficits were initially financed by the utilization of international reserves and, since 1984, by the accumulation of external payments arrears. The country's public and publicly guaranteed external debt climbed from 2.6% of GDP in 1983 to 15% in 1987. Likewise, debt service obligations (principal and interest) rose steadily, from under 3% of the value of exports of goods and nonfactor services in 1985 to about 7% in 1987, and amounted to about 8% of central government revenues in 1987. At the end of 1987, the stock of external payments arrears reached US\$87.5 million or approximately 8% of GDP.

Macroeconomic Issues

v. The foremost task the Government confronts is the creation of a macroeconomic policy framework conducive to sustainable economic growth through the use of a consistent and adequate mix of exchange rate, fiscal, monetary and wage policies. An increase of the real exchange rate, together with the adoption of a flexible exchange rate policy, would contribute to the achievement of both internal and external balance. It would help formalize a considerable amount of transactions currently taking place in the parallel market. Central government revenues would increase via trade taxes, provided a substantial depreciation of the currency is achieved in real terms. The allocative efficiency of imports would improve through a more realistic pricing of foreign exchange, and the administrative need for and burden of import and export licensing would be eliminated. In the bauxite sector, gains in competitiveness would require a major reduction in real wages, achievable only by a real depreciation of the currency. Non-bauxite exports would receive a major boost. In agriculture, incentives to expand production and exports would be dependent largely on a realistic exchange rate.

vi. The incentive framework needs to be strengthened substantially to enable the private sector to operate efficiently. This requires implementation of the Investment Code for local and foreign investment; phasing out price controls on basic consumer goods (i.e. sugar, cooking oil, rice, milk and beef), services (i.e. housing and electricity rates) and timber products; reforms of labor legislation which presently restrict private sector employment decisions; removing exchange controls and providing automatic access to foreign exchange once an adequate real exchange rate adjustment is undertaken; and phasing out import and export licensing. Unless these actions are undertaken rapidly, a sustainable supply response from the productive sectors is not likely to be realized.

vii. The fiscal imbalance reflects to some extent the declining trend in central government revenues, especially taxes on domestic and international trade, but more importantly, a steady increase in the Central Government's own current expenditure, and in transfers to public enterprises. The current account of the central government operations needs to turn into a surplus and the overall fiscal deficit needs to be reduced to an amount not greater than foreign financing; within this framework, access to Central Bank credit should be eliminated. Immediate steps need to be adopted to increase revenue and reduce current expenditure through direct measures, as well as through the exchange rate adjustment

that will expand government income. The measures proposed below are designed to eliminate the current account deficit (25% of GDP in 1987) and achieve a small surplus. The Government has estimated that a sales tax of 5% (exempting food and medicines) would yield about 1% of GDP in revenues. Other measures include augmenting the effective rate of taxation by converting specific taxes into ad valorem ones (e.g. vehicle license tax, and duty on petroleum imports--0.3% of GDP), replacing quantitative restrictions with tariffs on imports once the real exchange rate has been adjusted (an exchange rate adjustment of 100%, together with an import tariff of 40% would yield additional revenues equivalent to 4.2% of GDP if applied to "E.A. imports" [based on foreign exchange acquired from the parallel market] and an additional 6.6% of GDP if applied to imports financed with Dutch Government aid [US\$90 million]), and increasing taxes on fuels and beverages (0.3% of GDP). Revenue assessment and collection procedures need to be strengthened (0.3% of GDP). Together, these revenue measures would yield an equivalent of 12.7% of GDP. On the expenditure side, since the wage bill has grown rapidly and now comprises nearly one-half of central government current expenditure, wage restraint is the key to controlling current expenditure in the public sector. This should be combined with a freeze on hiring and the gradual reduction in the size of the civil service (a 25% cut in the payroll and in goods and services would yield savings equivalent to 10% of GDP). Another area which warrants early attention is the introduction of cost recovery in the health and education services, the users of which currently receive subsidies equivalent to nearly one-half of central government transfers (equivalent to about 2.5% of GDP in 1987), and water charges for the use of irrigation facilities. Thus, the total impact of the above-mentioned revenue measures and expenditure cuts would amount to over 25% of GDP--required to eliminate the current account deficit and produce a small surplus.

viii. The overall performance of public enterprises, has been poor. Several (i.e. petroleum, shrimp processing, telecommunications) are profitable and efficiently managed, but the majority sustain huge losses and cannot operate without enormous government subsidies (i.e. sugar, timber, rice production). The losses of public enterprises (at least Sf40 million per year) and consequent government subsidies (about Sf25-30 million per year) constitute a severe burden on the budget, equivalent to 5% of GDP in 1987. These losses arise primarily from inadequate pricing policies, lack of operational autonomy, poor management, high real wages and inadequate maintenance. The Government could improve their operation and finances by: increasing real tariffs of public services; substantially reducing the burden of financing social services and consumer subsidies (i.e. sugar, timber, rice); increasing both the accountability and the freedom of action of managers; and introducing an efficient performance monitoring system. Given its managerial and financial constraints, it is recommended that the Government leave the role of establishing new businesses to the private sector and rapidly divest selected public enterprises, improve the efficiency of other enterprises (e.g. electricity) and only invest in infrastructure to support private sector led economic growth.

Sectoral Issues

ix. In the bauxite sector, export value decreased from US\$425 million in 1980 to US\$206 million in 1987 as a result of the collapse in the volume

of exports from 1.7 million metric tons in 1980 to 0.3 million in 1987 and to a lesser extent owing to a price decline. In addition, this deterioration resulted in decreases of 50% in the sector's contribution to GDP, 42% in terms of balance of payments current account receipts impact, 85% of total current revenues and 52% in export revenues. The main factor responsible for the long-term deterioration of the industry has been its lack of competitiveness in world markets arising from increasing labor costs, a counterproductive tax system and the real appreciation of the currency. Government negotiations on the former issue with the two subsidiaries of foreign companies which operate in the sector began in 1985 and have not yet been fully concluded. Despite progress made in the suspension of the bauxite levy, capital investment by the producing companies in 85-87 dropped to less than one fifth of its 1980-82 level in real terms. Labor costs are extremely high for the region and for the country. No mine development work took place during 1983-88. The lack of investment has affected the sector's efficiency through higher mining costs, the postponement of significant cost reduction programs, higher consumption of caustic soda and higher production costs in the refinery-related operations because of the use of marginal ore. However, in 1988, the companies decided to propose investment flows mainly owing to very favorable prices for their alumina and aluminum exports as a result of a tight situation in the world market for these commodities. The industry will be facing a potential production crisis in 1990-92 if these investments are not continued, as the abovementioned effects will be felt more strongly and further worsen the country's competitive position.

x. While bauxite exports are not expected to resume in the foreseeable future for technical and economic reasons, it is essential that alumina continue to be produced at the maximum present level of 1.6 million tons per year. Aluminum production has to be resumed and rapidly brought to the maximum level compatible with the availability of cheap hydropower, (30,000 tons per year), without which it is uneconomical. Maximum alumina output cannot be secured unless the product is rendered competitive. Hence, negotiations with the industry should be brought to an equitable and rapid conclusion (on which future cost and productivity gains should also be predicated), by addressing the sources of the loss of competitiveness.

xi. The difference in the cost of production in Suriname and that of its most efficient competitors has narrowed considerably in the past two years, in part because of lower input costs owing to declining international petroleum prices. But the cost difference is still at least US\$20 per metric ton of alumina, or 18% of operating costs. Apart from a significant reduction in real wages (to be competitive internationally, the industry requires at least a 200% devaluation and wage restraint--see paragraphs 3.10 - 3.13), further reduction of the costs of production in Suriname will depend on the permanent replacement of the counterproductive levy system and bauxite tax by taxation based on earnings and treating the two companies in the sector equally in the long term. Such reforms will reduce the Government's tax income and the net foreign exchange earnings from the sector in the short term. In the absence of these reforms, the alternative is the continued involution of the sector and considerably more adverse effects on government revenues and the balance of payments within the next two years.

xii. The agriculture sector is in large part export oriented. Parastatals are the sole producers of sugar, bananas and palm oil, and play an important role throughout the sector. SML-Wageningen (rice) and Bruynzeel (timber) are among the largest enterprises in the country. The severe financial crisis following the political events of 1982 was reflected in the stagnation of rice production until 1986; in both 1987 and 1988 production declined. Timber production was influenced by the hostilities that started in 1986. The same is true of palm oil, whereas sugar production also has been severely curtailed because of the high production costs. Livestock, fisheries and other crops have stagnated.

xiii. The greatest constraint to agricultural growth is the lack of competitiveness resulting from high real wages. This, together with the price controls and cumbersome import licensing procedures, unavailability of the most essential inputs and spare parts, overshadow other problems in the parastatals. Most of these parastatals have never been profitable operations. When government transfers had to be curtailed in the train of the severe fiscal crisis, their equipment could not be maintained leading to highly inefficient operations. Agriculture also has begun to suffer from a marked infrastructure deterioration consequent upon the depression of public investment and maintenance expenditures.

xiv. Restructuring the sector will require addressing the above issues, together with those related to technological aspects such as crop varieties, mechanization and organization of production. To pursue the option of divestment, its exact modality should be determined depending on the specific circumstances of each enterprise. Obvious ones for early privatization in agriculture are SML Wageningen, Bruynzeel and Marienburg (sugar). The first two are regarded as potentially profitable after restructuring; in the case of the sugar estate, diversification into other export crops is needed. Successful diversification, however, would depend on securing and disseminating export marketing information to producers. For SML Wageningen a detailed study focusing on these areas has been prepared at the Government's initiative.

xv. Another issue that needs to be addressed is the debt position of the enterprises most immediately concerned. Should these debts remain on the books, no fresh start can be made on a sound basis while maintaining the parastatal form. Turning over these enterprises to the private sector would require their net worth to become positive.

xvi. The transport sector faces serious difficulties. Over the past five years the infrastructure has deteriorated to a state where reconstruction is urgently needed. All means of transport (road, air, river) suffer from lack of spare parts. Spare parts are often obtained from inoperative vehicles. Although some new vehicles are being imported for private transportation, their efficient operation is constrained by the lack of technical personnel to provide adequate maintenance services. Inadequate cost recovery in the sector and the consequent lack of maintenance on roads, wharves, sluices, canals and port facilities has reduced the efficiency of transport operators, leading to excessive transport and handling costs, and the loss of foreign exchange earnings from rice and other exports. Availability of public transportation also has been reduced because of the lack of operative equipment.

xvii. Most of the road, wharf and canal infrastructure are built with local materials (e.g. forestry products), and reconstruction work could be undertaken by local labor with existing equipment. Many of these problems would never have reached the serious and costly stage they have, had maintenance been carried out on a regular basis. Unclear responsibilities, insufficient budgets, poor decisions, shortage of foreign exchange and lack of priorities have played a major role in the deterioration of the infrastructure. In addition, poor management and lack of coordination of resources have emerged as major impediments to infrastructural development. The management and coordination of maintenance activities are very weak. The Government needs to carry out a rationalization process in the respective departments in order to organize maintenance activities. It also needs to develop an appropriate incentive mechanism to carry out this function with a smaller staff.

xviii. Some of the immediate actions which need to be undertaken include the reconstruction of the existing wharves at Nickerie and the rehabilitation of handling facilities at the Wageningen rice processing unit. Preliminary investigations indicate that dredging of the mouth of the Nickerie River is feasible and profitable and should be given serious consideration. At the same time, it is necessary to re-establish the functioning of the sluices at Arawarra, Uitkijk and Doorsteek and especially to clean the Saramacca Canal in order to avoid damage to river vessels and loss of cargo. Consideration should be given to opening the rice transportation monopoly, where rice is transported abroad by Scheepvaart Maatschappij Suriname N. V. (SMS), to private sector competition.

xix. Public transportation is at present carried out primarily by private license holders. Few public owned buses are operative and a limited number are rented. In order to end government losses on unprofitable public transportation, these services should be privatized. An early decision on this matter could avoid public investment in new buses, which currently is under consideration. The maintenance garage for government vehicles, buses, dumptrucks and heavy equipment suffers from inefficiency and inadequate organization. Ferry services are inefficiently run by SMS at unprofitable fares. Privatization of these services also should be considered by the Government.

The Public Sector Investment Program (PSIP)

xx. With the re-establishment of Dutch Government aid during the second half of 1988, about US\$450 million in grants over five years are expected to flow into the country. However, in the absence of a viable macroeconomic framework and a judicious utilization of these resources, the country still may find itself worse off over the medium-term than it is today. This makes it all the more important for the country to undertake the necessary adjustments of the economy.

xxi. The 1988-90 PSIP emphasizes rehabilitation and expansion of infrastructure for the productive sectors. Its composition is appropriate for the present. However, it would need to be expanded over the medium term to ensure economic recovery and sustained growth and would require increased external financing. The PSIP is projected to rise from 2% of GDP in 1987 to about 8% by 1990. The success of efforts to intensify project

implementation during this period will depend on the availability of adequate supplies of equipment, spare parts and inputs. Among the projects proposed is the Multi-purpose Corantijn Project (MCP), including a distribution system to irrigate water to rice polders in the Nickerie District; a Banana Expansion Program to bring 1,500 hectares into production and an Oil Palm Project which would increase the cultivated area to 5,000 hectares from 3,500 hectares currently under cultivation but not harvested. The project also includes the construction of an oil refinery. Both the Banana Expansion Program and the Oil Palm Project should be undertaken by the private sector.

xxii. Other proposed projects include continuation of programs to increase production and efficiency. For example, the construction of a 70-meter concrete pier (including storage facilities) at Nickerie to facilitate the loading and shipping of rice and bananas. A major project in the mining sector concerns the exploration of the Gros Rosebel Operations including the industrial recovery of gold. Some technical issues including the gold content of the ore have yet to be resolved before the feasibility of the project can be assessed. Another major proposal is the Tambaredjo Slow-Speed Diesel Generators (co-generation) Project which would increase energy generation by using crude oil.

xxiii. The major constraint to the successful undertaking of the PSIP will be the availability of foreign financing and relatedly, a sound portfolio of economically and financially viable projects. An average of Sf.88 million per year in external assistance is required mainly to cover foreign exchange costs, of which only 56% of the financing has been identified so far. Given the poor performance of the parastatals, the public sector will be unable to meet the local financing requirement averaging Sf35 million per year unless drastic measures are taken to increase its savings.

xxiv. Special priority should be given to ranking projects in the PSIP and to securing the necessary technical assistance for their implementation. The former will require the use of a relevant set of economic criteria for project evaluation and selection. In the short-term, the criteria should give priority to those projects which were suspended or delayed because of inadequate financing and have the potential to generate or save foreign exchange; nonviable projects on the other hand should be eliminated. This should be supported by a technical assistance package which provides the manpower resources required to complete these projects and strengthen the institutional and managerial capability to undertake the proposed investments.

Medium-Term Growth Prospects

xxv. The country's medium-term growth prospects will be influenced largely by the extent to and speed with which key macroeconomic and sectoral issues are addressed. These relate to: (a) the creation of a viable macroeconomic policy framework through a consistent set of exchange rate, fiscal, monetary, and wage policies; (b) removal of price controls, import and export licensing procedures and other quantitative trade restrictions; (b) agreement with the private bauxite companies to restore competitiveness; (c) rapid implementation of a divestment program; (d) improving public enterprise performance through greater autonomy and price

adjustments; (e) incentive schemes for agricultural and early completion of irrigation works; (f) rehabilitating transport and other infrastructure; and (g) execution of an adequate PSIP.

xxvi. Real GDP growth is projected under two alternative scenarios. The first scenario, of marginal real growth, assumes a growth of real GDP of 0.4% per year on average during 1989-93 in the absence of a coherent program of policy reform. The second scenario, of rising real growth, assumes a gradual increase in annual real GDP growth, starting with 2.0% in 1989 and averaging 3.0% per year during the same period.

xxvii. In the marginal real growth scenario, per capita consumption is projected to decline by 1.9% per year on average during the 1989-93 period. The balance of payments position could be sustained only through a cut-back on imports. The economic decline eventually would lead to lower levels of donor support and affect the import capacity necessary to permit growth in the economy. The balance of payments current account deficit is projected to be 1% of GDP at the end of the period while the debt service ratio is projected to reach 5.5% in 1993. Similarly, there would be a reduction in investment: the investment to GDP ratio is projected to average 6.3% per year compared with an estimated 10% in 1988.

xxviii. The rising real growth scenario reflects the adoption of policies to halt the decline in real GDP and create conditions for gradually rising real GDP growth, starting with 2% in 1989 and averaging 3% between 1989 and 1993. Achievement of this scenario is predicated on the rapid implementation of the recommendations in paragraph xxv above. Total investment is projected to increase from 10% of GDP in 1988 to about 13.5% in 1993. Living standards would be expected to improve with per capita consumption rising by about 1% per year on average during the projection period. The current account deficit of the balance of payments is projected to increase to about 2.3% of GDP in 1991 because of the projected increase in imports of raw materials and equipment urgently needed to increase capacity utilization. Beyond 1991, the current account deficit is projected to fall further as investments in previous years would be substantially completed and would yield higher output and exports. The current account deficit is projected to be financed largely from grants (US\$450 million) from the Netherlands and concessional loans during 1989-93. The debt service ratio is projected to decline to 2.9% in 1993.

xxix. A major problem related to the country's creditworthiness is the accumulation of external payment arrears. The rising real growth scenario assumes that these arrears would be gradually eliminated by 1993. The marginal real growth scenario, on the other hand, assumes the gradual elimination of arrears by 1995. In the absence of the actual implementation of an appropriate macroeconomic framework to address the issues highlighted in this report, Suriname cannot be considered creditworthy for Bank lending.

Chapter I

BACKGROUND

A. Overview

Country Background

1.1 Situated in the northern coastal belt of South America, Suriname covers an area of 163,820 sq. km. and is bordered by Brazil on the south, Guyana on the west and French Guyana on the east. The country has a population of 405,000, of which two-thirds live in the capital city of Paramaribo and its environs. The country is endowed with a good natural resource base - substantial bauxite reserves, vast hydroelectric power potential, large tracts of arable land and forest reserves. Agriculture accounts for 10% of GDP, industry including bauxite processing, for 23% and the other two-thirds by services. Suriname's GNP per capita stood at US\$2,450 in 1988.

The Political System

1.2 Suriname obtained its independence from The Netherlands in 1975. But during the two previous decades, the population exercised self-government in partnership with The Netherlands. It thus, had acquired considerable civic experience in government by 1975. A multi-party system of parliamentary democracy had governed the country during the pre- and immediate post-independence periods. The major political parties tended to be organized along ethnic lines. In contrast to other South American countries, the population is composed mainly of: Hindustanis, Creoles, Javanese, and Bushnegroes combined with a minority of Amerindians, Chinese and others. Superimposed on this ethnic composition is a strong Dutch influence, evident in culture, education, consumption habits and standards of public services, engineering and construction. Dutch is the country's official language although English is widely spoken along with local languages.

1.3 Suriname received substantial amounts of concessional assistance from The Netherlands both before and after independence. The flow of assistance in the form of grants expanded to an average of about US\$93 million during 1978-82. In 1982 it accounted for 34% of government revenues, was equivalent to 33% of the value of exports and equalled 10% of GDP. Soon after independence the country was governed by a coalition of several parties. However, increasing dissatisfaction with slow progress in resolving social inequities and domestic turmoil culminated in a military takeover in February 1980. Following the political events of December 1982, the Dutch Government suspended its concessional assistance. After nearly eight years of military rule, Suriname regained democracy in November 1987 through free elections. It is now governed by a national coalition of the three main political parties (the Front of Democracy and Development) which holds 40 of the 51 seats in the National Assembly.

Challenges Ahead

1.4 The new administration, which reflects the aspirations of the main ethnic groups as well as the interests of labor unions and the private sector, has expressed its commitment to a program of economic reconstruction, social justice and consolidation of the democratic system. However, the new Government has inherited an economy which has deteriorated steadily since 1982, a human resource base affected by a massive brain drain, and dislocations in the production structure caused by insurgent activity in Eastern Suriname. Whilst coping with these problems, the Government also is faced with the expectations of the Surinamese population, who have a strong desire for peace, stability and a steady improvement in their living standards. To meet these challenges, the Government has outlined a development strategy consisting of three phases: (i) an "Urgency Phase", to halt economic deterioration through external assistance to meet the country's urgent import needs; (ii) a "Recovery Phase" designed to generate significant economic growth as well as some reductions in macroeconomic imbalances; and (iii) a "Long-Term Growth Phase" designed to achieve sustainable economic growth, elimination of macroeconomic imbalances and a significant improvement of the country's production base. Rapid implementation of this strategy, especially the "Long-Term Growth Phase", is all the more necessary considering the serious economic crisis experienced since 1982, particularly because of the urgent need to eliminate macroeconomic imbalances and improve the incentive system.

B. Recent Economic Performance

Economic Growth

1.5 Suriname's economic performance has deteriorated steadily since 1982. Real GDP dropped at an average rate of 3.5% per year in 1982-87, partly owing to external shocks but largely because of internal factors. Rather than adopting policies to offset the impact of external shocks over the long-term, the Government persistently pursued counter-cyclical fiscal and monetary policies and allowed the real exchange rate to appreciate substantially. The bauxite sector's contribution to GDP fell by about 20% during 1982-86, mostly because of the loss of competitiveness arising from increasing labor costs and the appreciation of the currency. The increase in the production and export of alumina and bauxite since 1982 failed to offset the overall world price decline for these commodities. This was followed by a precipitous drop in output of nearly 30% in 1987 as a result of the insurgent activity that forced the closure of the Moengo bauxite mines for 10 months. The alumina refinery was closed for one month during 1987 after its power supply lines were blown up. Agricultural output fell in 1982-83 following a drop in rice production (which accounts for 60% of agricultural output) but recovered in 1984-85 as the planted area increased. In 1986, however, agricultural output declined as rice, sugar cane and palm oil production fell sharply. The main palm oil plantation in the eastern part of the country had to be abandoned since 1986 owing to insurgent activity. Other subsectors, banana, shrimp and meat production, did not experience major output fluctuations during 1982-87. In the services sector, value added in commerce, restaurants and the hotels

subsector experienced a steady decline, but was compensated for by increases in transport and communications and public services.

1.6 Investment declined steadily during 1982-87. Initially, the drop in investment was triggered by the suspension of Dutch Government aid in 1982. Although some of the projects continued to be financed from government resources for a few years, the deterioration of public finances precluded the possibility of maintaining an adequate public investment level. Private sector investment also declined as state intervention in the economy increased and the incentives to invest and produce were eroded. The resumption of Dutch Government aid during the second half of 1988 has, however, enhanced the possibility of restoring investment to levels commensurate with economic growth.

Table 1.1: GDP GROWTH AND INVESTMENT, 1982-87
(in percent)

	1982	1983	1984	1985	1986	1987
GDP Growth	-5.9	-4.1	-2.4	-0.9	-2.9	-7.8
Agriculture	-3.1	-8.8	3.8	1.5	-1.5	4.7
Bauxite Sector	-31.0	-22.1	11.7	10.3	11.3	-16.4
Services	-0.3	-9.4	-6.9	2.0	-0.1	-4.7
Investment (% of GDP)	27.4	15.4	11.6	7.9	5.2	6.5

Source: Statistical Appendix Tables 2.2 and 2.3, and General Bureau of Statistics, Suriname.

Public Sector Finances

1.7 Central government finances deteriorated rapidly during 1982-87. While current revenue stagnated at around 28% of GDP (see Table 1.2), current expenditure increased steadily from 31% of GDP in 1982 to 52% in 1987. This expansion mainly reflected rapid wage increases (government wages rose from 17% of GDP in 1982 to 25% in 1987), and also increases in current transfers to public enterprises. Consequently, the Central Government's current account deficit increased dramatically from -4% of GDP in 1982 to -25% in 1987, which precluded maintaining the level of development expenditures achieved prior to 1982 (see Statistical Appendix Table 5.1). Despite major cutbacks in development expenditures, the overall deficit (before grants) as a proportion of GDP almost doubled during 1982-87, increasing from 15% of GDP in 1982 to 27% in 1987. Virtually all of the deficit was financed by creation of Central Bank credit.

Table 1.2: CENTRAL GOVERNMENT FINANCES, 1982-87
(% of GDP at market prices)

	1982	1983	1984	1985	1986	1987
Current Revenues	27.6	28.7	28.6	27.5	28.0	27.2
Current Expenditure	31.4	40.9	42.5	46.2	51.8	52.1
Current Surplus	-3.8	-12.2	-13.9	-18.7	-23.8	-24.9
Overall Balance	-14.5	-18.0	-18.6	-21.8	-26.0	-26.8

Source: Statistical Appendix Table 5.1.

Money and Credit

1.8 During 1982-86, the money supply (money and quasi-money)¹ grew 16% per year on average, or far in excess of nominal GDP growth, which averaged 1% per year. As a percentage of GDP, it reached an all time high of 102% in 1986, compared to 48% in 1982. The extraordinary growth of the money supply was generated by the expansion of credit to the public sector. In 1983, the money supply increased by 11%, despite a 32% increase in credit to the public sector, because of the depletion of international reserves. With the exhaustion of Central Bank international reserves in 1984, monetary imbalances were eliminated through higher inflation and an increase in external arrears. Since 1985, the growth in the money supply has reflected the Central Bank's financing of the fiscal deficit.

Prices and Wages

1.9 Fueled by Central Bank borrowing to finance the fiscal deficit, inflation, as measured by movements in the consumer price index (CPI), rose to 53% in 1987 from 19% in 1986. Inflationary expectations, ignited by the persistent excess creation of credit to finance public sector operations, also contributed to the acceleration of inflation, as real cash balances fell by almost 16% during 1987 while the price of foreign exchange in the parallel market rose sharply. Central Bank accommodation of the enormous public sector deficit pushed up inflation both directly and indirectly, through the parallel foreign exchange market. The Government authorized imports of goods (E. A. imports) if the importer had available the foreign exchange to finance them or could acquire it in the parallel market. When the growth of the money supply and expectations pushed up the price of foreign exchange in the parallel market, the domestic price of such imports also rose.²

1/ The money supply, broadly defined, includes currency in circulation and demand, time and savings deposits at the end of the year.

2/ An econometric analysis shows that the fiscal deficit began affecting the domestic rate of inflation after 1984, following the Government's decision to allow E. A. imports. The analysis also shows that, before 1984, the domestic rate of inflation tended to reflect the US inflation rate (See Annex II).

1.10 After rising by about 34% during 1980-82, average gross labor cost increases have moderated reflecting job protection concerns by trade unions. Nevertheless, real wages have been increasing in mining and manufacturing. Although in 1987 economy-wide average real wages were only 61% of their 1980 level (when deflated by the consumer price index), the real average cost of labor in mining was 54% higher in 1987 than in 1980, and 30% higher in manufacturing.³

Balance of Payments

1.11 The enormous fiscal deficit and attendant money creation, together with a 95% real appreciation of the currency by 1987 compared to its 1980 level, exerted severe pressures on the balance of payments. Both the value of exports and of imports as a percentage of GDP declined sharply in 1982-87 (see Table 1.3 below). Exports of goods and nonfactor services declined from 51% of GDP in 1982 to 34% of GDP in 1987. This in part reflected the difficult world market conditions which prevailed for Suriname's main exports--bauxite, alumina and aluminum--which account for 70% of the country's export earnings. However, the large contractions in the volume of these exports far outstripped the decrease in world demand during that period. They resulted mostly from the competitive pressures which squeezed out high cost producers like Suriname. Rice exports recovered sharply in 1985, after being curtailed by excessive rainfall in 1984, but declined in 1986 and 1987 because of Suriname's inability to compete in world markets. Shrimp and banana exports performed well, but not enough to offset the declining volumes of wood and lumber exports (see Statistical Annex Table 3.3).

1.12 In response to the growing shortages of foreign exchange, the authorities tightened import licensing and other foreign exchange controls. These measures led to a further reduction of foreign exchange inflows to the Central Bank, and a dearth of indispensable inputs, spare parts and machinery needed for domestic production. The persistent scarcity of foreign exchange caused the parallel market rate to vary from about three to five times the official rate. The balance of payments deficits were initially financed by the utilization of international reserves and, since 1984, by the accumulation of external payment arrears.

1.13 The country's public and publicly guaranteed external debt climbed from 2.6% of GDP in 1983 to 15% in 1987. Likewise, debt service obligations (principal and interest) rose steadily, from under 1% of the values of exports of goods and nonfactor services in 1982 to about 7% in 1987, and amounted to about 8% of central government revenues in 1987. At the end of 1987, the stock of external payments arrears reached US\$87.5 million, or approximately 8% of GDP.

^{3/} The real average cost of labor in each economic sector was estimated by deflating the nominal average cost by the corresponding GDP deflator (for the rice subsector the average cost of labor in the service sector was used instead because of the lack of data).

Internal and External Balances

1.14 Table 1.3 below relates Suriname's external current account balance to its internal balances. In 1982-87, the falling deficit in the external current account balance reflected the sharp drop in private investment and the decline in public investment following the suspension of Dutch Government aid. Declining investment caused capital goods imports, particularly machinery, electrical goods, transport equipment, and industrial inputs to drop significantly. However, lower external imbalances were achieved at the cost of rising inflation produced by large public sector imbalances. In 1987, for example, the current account deficit was only about 1% of GDP while the fiscal deficit reached 27% of GDP.

TABLE 1.3: KEY MACROECONOMIC BALANCES, 1982-87
(% of GDP at current market prices)

	1982	1983	1984	1985	1986	1987
<u>Current Account Balance</u>	-14.8	-17.6	-8.5	-5.4	-2.1	-0.8
Exports of GNFS	51.3	45.0	43.8	39.0	35.9	33.9
Imports of GNFS	-66.6	-60.7	-51.3	-43.3	-38.0	-35.3
Net Factor Services	0.7	-1.1	-0.2	-0.7	0.1	0.0
Private Transfers	-0.3	-0.8	-0.8	-0.4	-0.1	0.6
<u>Equals:</u>						
<u>Central Government Balance</u>	-14.5	-18.0	-18.6	-21.8	-26.0	-26.8
Revenues	27.6	28.7	28.6	27.5	28.0	27.2
Current Expenditure	31.4	40.9	42.5	46.2	51.8	52.1
Capital Expenditure	10.7	5.8	4.8	3.1	2.2	1.9
<u>Plus:</u>						
<u>Private Sector Balance</u>	-0.3	0.4	10.1	16.4	23.9	26.0
Private Investment	17.4	8.7	6.8	4.7	3.0	4.9
Private Savings	17.1	9.1	16.9	21.1	26.9	30.9

Source: Statistical Appendix Tables 2.3 and 3.1.

1.15 Private investment was significantly discouraged by the Government's policies despite a significant increase in forced private savings. Had Suriname's exports remained competitive, the higher volume of exports would have generated an increased private sector investment demand. Higher private sector investment would have led not only to rising levels of output and employment, but also would have achieved permanent increases in the country's capital stock and in its rate of return. In the absence of such investments and of satisfactory real growth of the economy, a small external balance resulted at the cost of underutilization of the country's

productive potential. Attainment of satisfactory real growth of the economy while achieving sustainable internal and external balances is, however, a formidable task given the magnitude of the imbalances. It will depend on an adequate choice of policies needed to raise the level and productivity of investment and improve the country's ability to penetrate extra-regional markets.

CHAPTER II

MACROECONOMIC ADJUSTMENT AND RECOVERY PROGRAM

A. Government Objectives

2.1 The new Government which assumed office in January 1988 has, in its recent economic policy statements, declared that its objectives are economic recovery and sustained growth, rising per capita consumption, and declining unemployment and inflation. The private sector is to be assigned a major role in the economy. The Government has indicated its intention to carry out a comprehensive program of macroeconomic reforms to attain these goals. In particular, it has indicated its intention to reduce the fiscal and balance of payments deficits and public debt to sustainable levels, and to reduce state intervention in the economy. The need for such a program is urgent given the severity of Suriname's economic crisis. However, as outlined below, the Government's overall strategy needs to be translated into specific and timely policy actions.

B. Current Macroeconomic Issues and Priorities

The Incentive System

2.2 The fundamental macroeconomic malaise affecting the Surinamese economy has been the breakdown of the incentive system. Given the large overvaluation of the Surinamese guilder and a parallel exchange rate at over five times the official rate, the private sector has no incentive to earn and/or surrender foreign exchange to the Government. The overvaluation of the currency has encouraged underinvoicing of exports and holding of export proceeds abroad. It also has encouraged the misallocation of resources as the Government introduced severe import controls to bring the demand for foreign exchange to levels commensurate with the reduced capacity to generate foreign exchange. To deal with the increasing scarcity of imported goods the Government introduced a system of "E. A. imports". "E. A. imports" pressure on the parallel market rate as a result of an increased demand for foreign exchange was one of the factors responsible for the rise in inflation during 1987.

2.3 Price controls have discouraged domestic production and increased the demand for imports, augmented subsidies and the overall fiscal deficit, and encouraged the inefficient operation of services and the scarcity of foreign exchange. Since December 1984, the Ministry of Transportation, Trade and Industry has fixed prices or profit margins on a number of goods and services. Although the system of E.A. imports liberalized prices on imported items, price controls on a number of domestically produced goods have remained and have further dampened producer incentives. Producer prices in the directly productive sectors of the economy have declined since 1982 (see Table 2.1). The controls have their main impact on basic consumer goods (i.e. sugar, cooking oil, rice, milk, and beef) and services (i.e. housing and electricity rates). Commodity items not available at officially fixed prices are imported by the Government and distributed to consumers using coupons (consumer cards). Price controls have contributed

to increase the fiscal deficit: subsidies to sugar and milk amounted to about 1% of GDP in 1986; prices for timber products have not changed in seven years and add to the losses of the state timber company. Price controls also have created an excess import demand for basic consumer items and foreign exchange. In the housing area, the regulations state that prices can only be adjusted when landlords charge more than 7% of their property value as annual rent.

Table 2.1: KEY INDICATORS OF INCENTIVES, 1982-87

Indicators	1982	1983	1984	1985	1986	1987
Real Exchange Rate (1980=100) ^{a/}	117.1	123.6	131.9	145.9	144.3	195.4
Real Exchange Rate (% change)	-	6.5	8.3	14.0	-1.6	51.1
Average Labor Cost (% change)	14.5	5.3	4.9	4.4	1.5	-0.5
Consumer Price Index (% change)	7.2	4.3	3.7	10.9	18.7	53.4
Real Interest Rate (deposits)	-2.2	0.5	0.1	-11.0	-21.2	-32.9
Relative Prices (1980=100)						
Agriculture (rice) ^{b/}	92.3	88.5	92.1	80.3	73.9	n.a.
Mining ^{c/}	117.4	99.6	64.4	60.8	44.1	65.0
Manufacturing ^{d/}	82.4	77.0	75.2	67.7	72.5	77.9

a/ The real exchange rate is the nominal exchange rate (Sf per US\$) multiplied by the ratio of foreign to domestic price levels.

b/ Farm gate price deflated by the average labor cost in the services sector.

c/ GDP deflator for mining deflated by the average labor cost in the bauxite sector.

d/ GDP deflator for manufacturing deflated by the average labor cost in the manufacturing sector.

Source: IMF, Bank staff estimates.

2.4 Relative prices have been misaligned in the mining, agriculture and manufacturing sectors. In mining alone, the misalignment has been in the order of 50% in 1987 relative to 1978. In the bauxite sector, the misalignment has been the result of continuous wage increases granted since the late 1970s. This, in turn, occasioned wage increases in the other two sectors. When the relative price of mining began declining in 1983 (as measured by a fall in its GDP deflator), real wages were not adjusted accordingly and the misalignment in prices spilled over to the other sectors.

2.5 Incentives in the financial sector have been distorted by the prevalence of negative real interest rates since 1985. Notwithstanding the high level of deposits in the commercial banking system, the maintenance of interest rates below inflation has encouraged capital flight.

The Fiscal Deficit

2.6 The above distortions are related to macroeconomic imbalances, the major one being the fiscal deficit. Central Bank financing of the deficit has generated systematic monetary disequilibria. From 1982 to 1984, Central Bank financing of the deficit resulted in a reduction in Central Bank foreign exchange reserves. From 1985 on, Central Bank financing of the deficit has resulted in an inflation tax.⁴ The full impact of the deficit on inflation was initially avoided by restricting credit to the private sector. Once net international reserves became exhausted in 1984, the Government resorted to inflationary financing of the deficit, accumulated arrears on imports of goods and services, and delayed payments on the foreign debt (see Table 2.2). The inflation rate increased because of successive increases in the parallel market exchange rate. Both the fiscal deficit and inflationary expectations were responsible for changes in the parallel market rate. Moreover, increases in the parallel market rate raised the domestic price of imported goods under the E.A. regime. Following the general elections late in 1987, expectations changed favorably, bringing about a fall in the price of foreign exchange in the parallel market. This produced, in turn, a fall in the annual inflation rate in 1988.

Table 2.2: INDICATORS OF MONETARY DISEQUILIBRIA, 1982-87
(in percent)

Indicators	1982	1983	1984	1985	1986	1987
Change in Central Bank Claims to the Public Sector/M2	11.7	32.4	30.7	30.4	28.2	25.4
Change in International Reserves of the Banking System/M2	-8.1	-22.3	-17.4	-6.6	-4.9	-1.7
Change in Bank Credit to the Private Sector/M2	9.7	2.2	-1.6	5.6	2.6	2.5
Change in M2 (Money and Quasi-money)	11.0	10.8	13.0	30.8	23.5	29.3
Inflation	7.1	4.3	3.7	10.9	18.7	53.4

Source: Central Bank of Suriname.

^{4/} Inflation, like any other tax, is a transfer of resources from the private sector to the Government. It represents a tax on real money balances. Inflation depreciates real money balances at the rate at which prices rise. To avoid depreciation of their money balances, money holders need to increase them by increasing savings. These savings are then transferred to the Government in exchange for additional money balances when the Government finances its deficit by the creation of Central Bank credit

2.7 Although an overall fiscal deficit of the magnitude experienced in Suriname (27% of GDP in 1987) has led to hyperinflation in other countries,⁵ the fiscal deficit represented only 25% of the stock of broad money in 1987. The fiscal deficit generated an excess supply of money which in turn, generated a deficit in the overall balance of payments. In this respect, a 25% annual devaluation would have generated, through the inflation tax, the necessary demand for cash balances required to eliminate the balance of payments deficit created by the fiscal deficit.⁶

2.8 Central Government revenues have experienced a continuous declining trend, particularly taxes on domestic and international trade. Tax revenues have fallen particularly sharply in real terms. The fall in real tax revenues originated from a fall in bauxite tax receipts. Non-bauxite tax revenues in real terms responded negatively to increases in inflation because of lags between accruals and realizations and the policy of fixing the exchange rate.⁷

2.9 Rising real wages in excess of productivity increases and rising expenditures on goods and services increased government expenditure from 30% of GDP in 1977 to 52% in 1987. These were the major causes of the increase in the deficit. The public sector labor force grew by 1,500 in 1987 despite a hiring freeze. Between 1977 and 1987, it increased by over 4,000. A decrease in current expenditures would require a decline in real wages and/or a smaller labor force. This may not necessarily increase the unemployment rate, since shifts to the informal sector are common and changes in real wages may accommodate increases in the labor supply.

5/ Bolivia experienced a fiscal deficit of 30% of GDP in 1983 previous to its 1984-85 hyperinflationary episode. However, the fiscal deficit was 280% of the average stock of money in that year.

6/ A 25% annual inflation rate would generate an equivalent increase in the demand for nominal cash balances. The latter would offset the Central Bank's financing of the deficit. In this sense, the 25% ratio of the fiscal deficit to the broad stock of money was equivalent to the equilibrium inflation rate in the absence of real growth of the economy. Since the Central Bank also needs to increase its foreign exchange reserve holdings, an annual devaluation above 25% would be needed to achieve both objectives.

7/ An econometric analysis on the behavior of tax revenues (see Annex II) has shown that real non-bauxite tax revenues respond negatively to increases in inflation as measured by changes in the GDP deflator. The results also indicate that a 52% inflation rate would have resulted in a tax revenue loss of four percentage points of GDP. Although the analysis was not disaggregated for different taxes to identify which of them responded negatively to inflation, the negative relationship between tax revenues and inflation are likely a result of lags between accrual and realizations. Because of these lags, the tax base was eroded by inflation. In addition, the fixed exchange rate, given the ongoing inflation, precluded import prices from adjusting in terms of the domestic currency (E.A. import prices are not adjusted for fiscal purposes).

2.10 Another important cause of the fiscal deficit has been the poor performance of some public enterprises. Although several are profitable and efficiently managed (i.e. petroleum, shrimp processing, and telecommunications), the majority sustain huge losses and cannot operate without sizeable government subsidies (i.e. sugar, timber, rice production [SML - Wageningen]). The losses of public enterprises (at least Sf40 million per year) and consequent government subsidies (about Sf25-30 million per year) constitute a severe burden on the budget, equivalent to 5% of GDP in 1987. They arise primarily from inadequate pricing policies, lack of operational autonomy, poor management, high real wages and inadequate maintenance. These issues are discussed in Chapter IV.

Unemployment

2.11 The unemployment rate is estimated to have increased from 21% in 1982 to about 34% in 1987.⁸ Most of the unemployment is concentrated among the younger population with 82% of the unemployed in the 15 to 29 age group. Attempts to reduce unemployment through increases in aggregate demand would generate further inflationary pressures and a deterioration in the trade balance, given the high real wages and legal restrictions to retrenchment. The latter has made hiring expensive and reduced labor demand.

Table 2.3: AGE AND SEX DISTRIBUTION OF THE LABOR FORCE AND UNEMPLOYED, AND UNEMPLOYMENT RATE, 1986

Age	Labor Force	Unemployed	Unemployment Rate (%)
15-29	43,897	12,785	29.1
30-40	39,561	1,990	5.0
50-59	10,770	255	2.4
60-65	1,308	167	12.8
Unknown	<u>873</u>	<u>318</u>	<u>36.4</u>
Total	96,409	15,515	16.2
Males	62,755	8,420	13.4
Females	33,654	7,167	21.3

Source: Government of Suriname, Statistical Yearbook.

8/ The calculations originate from labor requirements estimates of the productive sectors made for national accounts purposes and from labor force estimates. They do not take into account estimates of employment in the informal sector.

C. Macroeconomic Policies

2.12 The key components of the macroeconomic policy framework which need to be reformed to arrest economic deterioration and move the economy to a path of sustainable growth over the longer-term are: incentive, fiscal, monetary, wage and employment policies. An essential feature of the recommended policy package is the interdependence of its elements, which highlights the critical need to carry out these policies simultaneously.

Incentive Policy

2.13 An increase of the real exchange rate, together with the adoption of a flexible exchange rate policy, would contribute to the achievement of both internal and external balance. It would help formalize a large volume of transactions already taking place in the parallel market. Central government revenues would increase via trade taxes, provided a substantial depreciation of the currency is achieved in real terms. The allocative efficiency of imports would improve through a more realistic pricing of foreign exchange, and the administrative need for and burden of import and export licensing would be eliminated. In the bauxite sector, gains in competitiveness would require a major reduction in labor costs, achievable only by a real depreciation of the currency (see Chapter III). Non-bauxite exports would receive a major boost. In agriculture, incentives to expand production and exports would be dependent largely on a realistic real exchange rate. Econometric analyses of rice exports for the 1974-86 period show that the short-run elasticity of rice exports with respect to their price is 0.95. A real devaluation would therefore increase rice exports (see Annex II). The increased exports generated by an adequate exchange rate would increase the foreign exchange flows required to increase imports.

2.14 The incentive framework needs to be strengthened substantially to enable the private sector to operate efficiently. This requires the implementation of the Investment Code for local and foreign investment; phasing-out price controls on basic consumer goods (i.e. sugar, cooking oil, rice, milk and beef), services (i.e. housing and electricity rates) and timber products; removing exchange controls and providing automatic access to foreign exchange once an adequate real exchange rate adjustment is undertaken, together with fiscal restraint; and phasing out import and export licensing. Unless these steps are taken, a sustainable supply response from the productive sectors is not likely to be realized.

2.15 The proposed macroeconomic adjustment and reform program would need to be supported by external financial flows to cover the balance of payments financing gaps. A major focus of the Government's effort should be directed to attracting foreign investment. Success in this task would require: the speedy implementation of the Investment Code specifying areas for foreign investors, applicable incentives and investment guarantees; development of export infrastructure; an institutional framework to support foreign investment; streamlined entry and exit regulations for foreigners; intensive investment promotion activities abroad; and the elimination of external arrears.

Fiscal Policy

2.16 The current account of the Central Government operations needs to turn into a surplus and the overall fiscal deficit needs to be reduced to an amount no greater than net foreign financing; within this framework, access to Central Bank credit should be eliminated. Immediate steps need to be taken to increase revenues and more importantly, to reduce current expenditure, through direct measures as well as through an exchange rate adjustment that will increase Government income. The measures proposed below are designed to eliminate the current account deficit (25% of GDP in 1987) and achieve a small surplus. The Government has estimated that a sales tax of 5% (exempting food and medicines) would yield about 1% of GDP in revenues. Other measures include augmenting the effective rate of taxation by converting specific taxes into ad valorem ones (e.g. vehicle license tax, import duty on petroleum 0.3%), replacing quantitative restrictions with tariffs on imports once the real exchange rate is adjusted (an exchange rate adjustment of 100%, together with an import tariff of 40%, would yield additional revenues equivalent to 4.2% of GDP if applied to E.A. imports and an additional 6.6% of GDP is applied to imports financed with Dutch Government aid [US\$90 million]), and increasing taxes on fuels and beverages (0.3% of GDP). Revenue assessment and collection procedures need to be strengthened (0.3% of GDP). Together, these revenue measures would yield an equivalent of 12.7% of GDP. On the expenditure side, since the wage bill has grown rapidly and now comprises nearly one-half of central government current expenditure, wage restraint is the key to controlling current expenditure in the public sector. This should be combined with a freeze on hiring and the gradual reduction in the size of the civil service (a 25% cut in the payroll and in goods and services would yield savings equivalent to 10% of GDP). Another area which warrants early attention is the introduction of cost recovery in the health and education sectors, the users of which currently receive subsidies equivalent to nearly one-half of central government transfers (equivalent to about 2.5% of GDP in 1987), and water charges for irrigation facilities. Thus, the total impact of the above-mentioned revenue measures and expenditure cuts would amount to over 25% of GDP--required to eliminate the current account deficit and produce small surplus.

2.17 The 1989 budget indicates some positive steps on the revenue side along the lines mentioned above. Current revenue for 1989 is estimated at Sf 780 million, which is achievable, up from Sf 620 million in 1986. The revenue increase is predicated on sharp increases in income taxes, import duties, excise taxes on beer and tobacco and a new excise tax on soft drinks. Current expenditure, on the other hand, is optimistically estimated at Sf 1050 million--lower than Sf 1100 in 1988. If steps are taken to maintain these revenue and expenditure estimates, the resulting current account deficit amounts to Sf 270 million or 14% of GDP, which is substantially lower than the 1987 deficit equivalent to 25% of GDP. Nevertheless, further steps in revenue raising combined with expenditure reduction measures mentioned above are needed in order to eliminate the current account deficits as rapidly as possible.

2.18 The Government could improve the operations and financial situation of the public enterprises by: raising real tariffs for public services; substantially reducing the burden of financing social services and consumer subsidies (i.e. sugar, timber, rice); increasing both the accountability

and the freedom of action of managers; and introducing an efficient monitoring performance system. Given its managerial and financial constraints it is recommended that the Government leave the role of establishing new businesses to the private sector and rapidly divest selected public enterprises, improve the efficiency of other enterprises (e.g. electricity) and only invest in infrastructure to support private sector-led economic growth.

Wage and Employment Policy

2.19 Wage policy should focus on increasing private sector employment. This would require wage restraint and the elimination of legal restrictions on private sector employment decisions. The improved incentive framework would encourage increases in domestic production and exports, and the private sector's demand for labor. Government retraining programs may be required for workers who would become redundant as the retrenchment program is implemented if their skills mix were not to match the private sector's demand.

CHAPTER III

SELECTED SECTORAL ISSUES AND POLICIES

3.1 This chapter focuses on selected issues in the bauxite and agricultural sectors--the main productive sectors in the economy -- and on transport which plays a dominant role in supporting their activities. The manufacturing sector in Suriname is relatively small, accounting for about 9% of GDP in 1987. It was discussed in the previous economic report (Report No. 6526-SUR of December 31, 1986).

A. The Bauxite Sector

3.2 The mining of bauxite and its processing into alumina and aluminum is the principal industrial activity in Suriname. The sector's three products dominate the country's exports, accounting for about 70% of its export earnings. They are produced and sold by two subsidiaries of foreign companies, Suralco (Alcoa) and Billiton M. S. (Billiton/Shell). These two formed two joint ventures in 1984, the mining joint venture (MJV) and the refining joint venture (RJV). Separately, Suralco also owns exclusively the Moengo mining center and the Paranam aluminum smelter.

3.3 The sector went through a major deterioration during 1980-87,¹ with decreases of 50% in its contribution to GDP, 37% in balance of payments current account receipts impact, 85% in related government income and 52% in export revenues. Future prospects cannot realistically include a reversal of the trend, but only the maintenance of the present maximum production and export of about 1.6 million tons per year (MTPY) of alumina and the resumption of aluminum production and exports at the 30,000 TPY level.

3.4 The decline reflected in part the difficult world market conditions and price deterioration for all aluminum-related products. However, the large decreases in export volume were not commensurate with the relatively mild contraction of world demand during that period. In the case of bauxite exports, they resulted mostly from competitive pressures which squeeze out high cost producers under unfavorable conditions. The high production costs in Suriname, in turn, resulted mainly from high labor costs and a counterproductive tax system.

Competitiveness

3.5 The major problem facing the sector is its lack of competitiveness. Compared to the world's most efficient producers of alumina, namely the Australian plants which now dominate the world market,

1/ Data for 1987, although included in the calculations, should be interpreted with caution given the non-economic disturbances which occurred, including a 10 month production interruption at Moengo, one month interruption at the alumina refinery, and the shut-down of the aluminum smelter.

Suriname has a cost disadvantage of US\$20 per ton. The weighted average cost of alumina for the six Australian plants, which serve as a benchmark for international transactions, is US\$110 per metric ton, in mid 1988 prices. Against this benchmark, the weighted average cost of production for the two Surinamese companies is about US\$130 per ton.

3.6 The decline of competitiveness of Suriname's bauxite industry vis-a-vis Australian competitors can be traced back to the initial imposition of a bauxite levy on foreign companies. The inception of the bauxite levy system in 1974 more than doubled the cost for bauxite producers, which subsequently relocated some of their production to Australia, and to a lesser extent, Brazil. These structural changes, once implemented, became irreversible despite the relaxation of the bauxite levy in 1984-85; the levy was not negotiated since then. Australia, now has the most modern and efficient alumina plants in the world, and provides more than a third of the world's total supply. Moreover, the forced switch from Suriname to Australia also contributed to the shutdown of aluminum smelters in the Gulf area of the US, thereby cancelling or reversing the freight advantage that the Caribbean countries once had. The Australian suppliers cannot be dislodged from their present position in the foreseeable future. The issue for Suriname is whether or not it will survive the next round of market pressures--to be competitive when the present market upturn is over.

Investment

3.7 The industry will be facing a potential production crisis in 1990-92 as a result of the drastic reduction in capital investments in recent years. During 1983-88, no mine development work took place because of the length of the negotiations between the Government and the industry, as well as the 1986-87 disturbances. This led to: (i) the present lack in mining flexibility at Moengo and thus the pressure on mining marginal ores in Paranam which causes high caustic soda utilization and production costs at the refinery, (ii) the import of bauxite and (iii) the time pressure on the negotiations themselves. However, in 1988, the companies decided to propose investment plans mainly owing to very favorable prices for their alumina and aluminum exports as a result of a tight situation in the world market for these commodities.

Labor Costs

3.8 Labor costs in the sector are still the highest compared to the average for the economy, despite the wage freeze of 1985-87. The bauxite sector cost per employee in dollar terms in 1987 was significantly higher than that in Guyana and Jamaica, the two neighboring countries which have bauxite related activities. Regarding productivity, one study showed that productivity dropped 17% from 1980 to 1983. The creation of the two joint ventures and the resulting 1984 consolidation only barely restored the low 1980 productivity level in 1985. It is not until 1986 that the first significant productivity improvement over the 1980 level materialized, 60% of which was lost again in 1987 because of the Moengo mine and smelter shutdowns. In 1988, employment in the sector was further reduced, and output of bauxite, alumina and aluminum increased substantially. Total labor costs declined by 6%. Although productivity could still be improved, even further gains in this area would not be sufficient to provide the necessary impact.

Taxation

3.9 The taxation system, although improved through the absence of levies in 1986, still includes a counterproductive bauxite tax applicable to one of the companies, which no longer reflects current realities since bauxite exports have stopped. The major features of the tax system for the industry are as follows: (i) while the bauxite levy applied equally to both companies, the bauxite tax (Brokopondo tax) applies only to Suralco which in turn is taxed at only 35% on income compared to the 45% income tax rate for Billiton. Suralco is exempt from any import duties on most of the capital goods and spare parts it brings in for its operations under a provision of the Brokopondo agreement, a benefit which is also transferred to the RJV but does not apply to the MJV and the Moengo operation; (ii) the Brokopondo tax is an important element of the system but has been distorted by 28 years of escalation without exchange rate adjustments which makes the benchmark unrepresentative of actual prices; and (iii) the probable accumulation of very large tax loss carry forwards for both companies, which will probably prevent any income tax revenues for the Government.

Restructuring of the Sector

3.10 While there is no possibility of restoring the sector to its former status in the foreseeable future for economic reasons, it is possible to prevent its further degradation by the removal of major structural, fiscal and financial handicaps through appropriate economic adjustments and negotiations between the Government and the sector. To render the Suriname bauxite industry competitive, significant reductions of local costs are necessary, mostly in the areas of labor and taxation since other costs such as those of energy, material supplies and spare parts could not be realistically reduced to any significant extent.

Table 3.1: IMPACT OF A 100% DEVALUATION ON THE OPERATING COSTS IN CONSTANT TERMS
(costs in US\$ per ton of alumina)

	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992	
Alumina Price (US\$)	150.0	130.0	130.0	130.0	130.0	150.0	130.0	130.0	130.0	130.0	
Brokopondo Price (\$f)	73.2	67.3	67.3	67.3	67.3	73.2	67.3	67.3	67.3	67.3	
		<u>Brokopondo Tax Maintained</u>					<u>Brokopondo Tax Repealed</u>				
Efficiency Factor:	1.00	105.4	103.8	99.4	95.2	93.1	101.6	100.9	96.5	91.8	89.6
	0.75	106.9	109.0	108.3	106.2	106.0	103.2	105.6	106.2	103.7	103.6
	0.50	108.6	114.2	114.6	111.8	110.6	105.2	112.3	113.2	109.6	108.9
	0.25	111.6	119.4	118.4	113.9	111.9	108.3	118.0	117.3	112.1	110.1
	0.00	126.7	124.5	119.7	114.2	112.0	124.4	123.8	118.7	112.4	110.1

Source: Mission estimates.

3.11 Since alumina is sold on a US\$ basis, a real devaluation of the local currency would reduce local costs expressed in dollar terms provided that local inflation does not increase these costs again to the full initial value expressed in dollars. Different scenarios were constructed

to determine the potential of a devaluation on increasing competitiveness. A 100% nominal devaluation is sufficient from the industry standpoint to provide competitiveness (i.e. to bring the cost down to US\$110 per ton) if the real devaluation or efficiency² is of the order of 75% or better (see Table 3.1 above), which means that the inflation factor cannot exceed 1.25. This is extremely unlikely. A 200% nominal devaluation, on the other hand, appears to be viable. For the industry as a whole, such a devaluation yields an average price better than or equal to the Australian price if its efficiency or real devaluation is 50% or better, which means that the average inflation factor does not exceed 2.0 in 1989 and 1.25 in 1990. This would appear to be feasible with strong wage restraint. Finally, it should be noted that under both of these scenarios, Suralco and Billiton fare very differently; the 200% nominal devaluation may not be sufficient to insure competitiveness for Billiton, even if it is sufficient to help the industry as a whole.

3.12 Concomitant with the real devaluation should be a tax normalization. The devaluation effects explored above have a drastic effect on the Brokopondo tax, which is calculated in Suriname guilders. The 200% devaluation with a probable 50% efficiency would bring the tax down to practically nil. This is the reason why Suralco fares much better than Billiton in a devaluation. Accordingly, the opportunity arises to rationalize the tax system without losing any revenues since the Brokopondo tax revenues are already eliminated with the devaluation. The suggestion could then be made to Suralco for a removal of the Brokopondo tax in exchange for an increase in the income tax rate from 35-40% to the industry rate of 45%, a tradeoff which should be acceptable to Suralco. Such a normalization of taxation should be very desirable to the industry in general. The scenario of a 200% devaluation and 50% efficiency would mean a loss in tax revenues for the Government of about 35-40%, without taking into account the tax loss carryforwards which would erode government revenues even further. However, the choice is not between a devaluation or the maintenance of the status quo; it is between keeping a bauxite sector or losing it, in the longer term.

3.13 It is clear from the above that in order to achieve long-term competitiveness, a devaluation and a normalization of the tax system are necessary. Given the long lag time required for the actual implementation

2/ Efficiency is defined as $(d-i)/(d-1)$ where "d" is the devaluation factor and "i" is the inflation factor. Assuming that a 150% devaluation takes place and changes the exchange rate to US\$1=Sf4.425: in that case, a local cost of Sf4.425 was equivalent to US\$2.50 prior to the devaluation, but only US\$1 immediately after it. If there is domestic inflation exactly to the extent that it fully cancels the effect of the devaluation (in this case a 2.5 inflation factor), the efficiency is zero and the local cost expressed in dollars has been left unchanged by the devaluation. More generally, if the devaluation factor is d (2.5 in the example) and the inflation factor is i (1 and 2.5 successively in the example), the local costs expressed in dollars will change by the factor i/d . The importance of the inflation factor varies with the devaluation factor; what is critical is the efficiency ratio $(d-i)/(d-1)$.

Efficiency = 1 implies that real devaluation = nominal devaluation.
Efficiency = 0 implies that real devaluation = 0.

of either of these changes, the investment decisions for the development of the new mines must be triggered without any delay. It is therefore appropriate to negotiate a temporary agreement to bridge the time gap, with the focus on: (i) the normalization of the tax system as bauxite exports have stopped; and (ii) the issue of tax loss carryforwards. After that, broader issues could be brought in, including the increase in the production of aluminum and the question of the further consolidation of the industry. On the latter subject, Moengo, MJV and RJV should be combined into a single enterprise. Should this full restructuring not be achieved, cooperation should be carried out further by regrouping similar operations like hauling, laboratories, etc. Also, the interpenetration of the two managements would probably yield significant benefits. Finally, it should be kept in mind that the Australian benchmark, though in the analysis it has been considered stationary, would in fact move. What is imperative is therefore a framework which monitors competitiveness, for which the openness of the companies and the full cooperation between them and the government would be absolutely necessary.

B. The Agricultural Sector

Background

3.14 Agricultural activities are concentrated in the coastal plain with the exception of the oil palm estates and timber production. Rice is by far the most important crop, occupying in 1982 an estimated 42,600 hectares in the main season and 29,900 hectares in the dry season, whereas the total for all other (mainly permanent) crops was 13,830 hectares. In 1987 the agricultural sector was responsible for about 9% of GDP, 17% of total employment and 28% of total exports of goods.

3.15 The State has assumed a predominant role in agricultural production through the establishment of parastatal enterprises. Bananas, palm oil and sugar (with distilled products) are produced solely in parastatals; all milk and shrimp processing (as well as part of the catch) are also the exclusive preserve of parastatal enterprises. Bruynzeel, the country's largest company outside the bauxite sector, occupies a predominant place in forestry production whereas SML - Wageningen is by far the largest enterprise in rice production, responsible for some 25% of total output.

3.16 The employment picture in the sector is complicated owing to the employment of a significant number of foreigners, not all of whom are registered; part-time involvement of a large number of workers, many of whom also hold other jobs on small family farms; and successive waves of emigration to Holland causing a decline in the latter category, the size of which is not accurately known.

3.17 In reviewing the more recent economic performance of the sector, two periods may be distinguished. The first period, the early 1970s, (fully covered in the previous World Bank report), is one of steady growth and gradual structural change. This came to a halt in 1983 with the abrupt termination of the bulk of Dutch Government aid, the predominant factor in financing projects that made this expansion possible. The severe financial crisis that ensued initiated a period of stagnating production and exports because of the non-execution of expansion and rehabilitation projects.

Rice

3.18 Rice is by far the most important crop for domestic consumption and exports. Exports are primarily directed to the EEC under a preferential arrangement yielding a varying advantage over sales at world market prices. A smaller proportion of exports goes to the Caribbean, mainly the French Islands, which also provide the sole market for the parboiled rice produced by SML-Wageningen. The completion of the Multipurpose Corantijn Project (MCP), the implementation of which was disrupted at a fairly advanced stage by the curtailment of foreign assistance in 1983, would make an important contribution to augment exports. Conceived to supply irrigation water from the Corantijn river to the Nickerie rice-producing area, this would involve, in a first-phase, construction of the distribution works at the end of the MCP canal. As a result, it would become possible to raise the cropping intensity in the existing polders to 180%. A number of rehabilitation projects in other areas, including the Coronie polder as well as SML-Wageningen with the adjacent autonomously developed polders, are also envisaged. Shortage of water supply resulting from the development of rice production on concessions allocated to private farmers has affected the attainable cropping intensity in the entire Wageningen area and elsewhere. The result has been that new production has been offset by losses in the older areas. Thus, the net result has been an overall increase in the cost of production.

Table 3.2: AGRICULTURAL, LIVESTOCK AND FISHING OUTPUT GROWTH, 1977-86
(in percent)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Rice	17.6	10.3	5.3	9.2	8.9	7.3	-11.0	12.7	-0.9	0.3
Bananas	-25.4	8.4	-4.2	19.1	19.7	-7.3	-12.1	16.2	-3.9	3.8
Sugar	-7.8	-11.5	37.0	-10.8	-0.7	-14.3	2.7	1.4	-9.5	-6.1
Palm Oil ^{a/}	-22.0	169.3	73.6	-16.1	15.4	20.5	15.2	8.9	11.5	-24.3
Livestock	-3.8	26.6	-8.0	7.5	10.2	4.2	0.7	5.2	2.4	-14.6
Shrimp	0.3	-34.0	16.8	-2.1	22.0	-1.8	-11.3	-16.3	-12.4	36.3

a/ Fresh fruit bunches.

Source: Ministry of Agriculture, Animal Husbandry and Fishery.

3.19 There are other factors that can contribute to the efficiency of rice production and some of these require collective action. Water charges for irrigation need to be introduced. There is a need for the creation of water management units, which, with the participation of the farmers concerned, would guarantee fair and systematically conceived sowing schedules.

Fishing

3.20 During the past seven years a fluctuating number (between 138 and 165) of largely foreign-owned (85-90%) trawlers have been fishing for shrimp in Surinamese waters with an overall catch fluctuating between 2,400 and 3,400 tons. It is estimated that the industry's economic potential is

reached at around 3,000 tons. The locally owned vessels belong to the parastatal company SUGAM. SAIL and SUJAFI are the two shrimp processing and exporting companies. SAIL is a parastatal while SUJAFI is a private joint venture of Japanese and Surinamese investors. SUJAFI is, on average, just about covering its costs. However, in the absence of the means to exercise control of the industry's activity, shrimp fishing by unlicensed trawlers occurs at the expense of licensed ones.

3.21 There is some fish production from inland waters but far more important are the coastal fisheries. Most of the fin fish catch is brought in by at least some 1,500 small "artisanal" fishermen whose overall production in the early 1980s was in the order of 3,000 tons. But, under the impact of restrictions on fish imports such as salted cod and canned products, and because of the scarcity resulting in high prices of meat products, there has been a strong demand in the domestic market and fishing has become profitable.

Forestry

3.22 Timber production is based on forest reserves comprising an estimated 2.5 million hectares of exploitable forest, nearly all of which (2.2 million hectares) has been allocated in the form of concessions of widely varying size. On the whole these concessions are grossly underutilized and the Government's Forestry Management Program envisages an initial reduction of their total area to some 500,000 hectares, with the degree of actual exploitation the holder is deemed capable of as the principle criterion to be applied.

Sectoral Issues

3.23 Agricultural Pricing. Price controls have been imposed on a number of basic agricultural commodities with the objectives of checking inflation and protecting the consumer. These included rice, sugar, milk, and meat. For all these items and in the case of rice, for broken varieties for mass consumption, minimum farmgate prices and retail prices are set jointly by the Ministries of Trade and Agriculture. Such an environment appears to have dampened producer incentives, particularly to expand output. Unless price flexibility is introduced, neither adequate production levels nor the production targets set out by the Government for the subsectors discussed above are not likely to be realized.

3.24 Import Licensing. The import licensing process for obtaining agricultural inputs is a disincentive for production. Import licenses are issued by the Ministry of Trade based on the advice of the Ministry of Agriculture. At present, it takes at least two to four weeks to obtain a license. Thereafter, if no foreign exchange is required from official sources, the producer can obtain his imports relatively quickly through the E.A. imports. On the other hand, if foreign exchange is required from the Central Bank, it may take one to six months for the importers to obtain the required foreign exchange allocation. The elimination of import licensing (para. 2.14) would be required for the economy to operate efficiently and ensure speedy supplies of agricultural inputs.

3.25 Unemployment has been significantly affected by the lack of competitiveness resulting from high real wages (although lower than in

other sectors) which favor capital intensive production methods. The problem is compounded by the fact that in the parastatals and governmental services a sizable part of the labor force is redundant. In any exercise involving the rehabilitation and securing the future of parastatals, whether featuring divestment or not, addressing the labor issue will be of central importance.

C. The Transport Sector

3.26 The transport sector plays a dominant role in the production and export activities in Suriname--a country over four times the size of The Netherlands, but containing less than one-thirtieth of its population. Moreover, this low population is unevenly distributed. Paramaribo and its environs--an area of only 2.5% of national territory--contains 72% of Suriname's population. Whereas, the productive regions in Western and Eastern Suriname contain only 10% and 5% respectively of the total population. Consequently, haulage of raw materials to production centers and finished products to the main consuming or export centers tends to unduly inflate unit costs.

3.27 Several factors have adversely affected the efficiency of the transportation sector. First, Suriname is somewhat culturally and linguistically different from its neighboring countries--a factor that has not encouraged trade and transportation with its neighbors. Second, the physical geography of the country, which is roughly rectangular in shape is not readily amenable to land or water transportation. The northern border is formed by the Atlantic Ocean with the coastal waters being dominated by currents fed by the vast quantities of water flowing from the Amazon River into the Ocean. The northern coastal region of the country is thus characterized by swampy and muddy conditions. On the other hand, the southern border is dominated by almost impenetrable rain forests of the Amazon Basin and high mountain ranges. Both the western and eastern borders with Guyana and French Guyana are demarcated by two large rivers, the Corantijn to the west and the Marowijne to the east. The southern two-thirds of Suriname is largely unexplored and is heavily vegetated by thick rain forests and traversed by numerous rivers and tributaries which generally flow northwards from the highland southerly border with Brazil and eventually access in the Atlantic Ocean. In addition to these factors, extensive government involvement in the sector has also led to non-optimal patterns of transportation. The Government is involved in sea transport, ferry, river and coastal passenger boat services, as well as in public passenger transport. Moreover, the maintenance of transport facilities has suffered owing to inadequate cost recovery and user charges as discussed below.

Roads

3.28 Road Network. The total road network in Suriname has a length of 8925 kms. of which 26% is paved (asphalt, brick) and 74% is unpaved (crushed stone, shells, sand). The division between primary, secondary and tertiary roads is shown in Table 3.3 below. Many of the infrastructural difficulties in Suriname are physical while others are related to planning problems and providing cost effective transport services. Some of these difficulties have a large impact on the overall economy.

3.29 The responsibility for maintenance and improvement of primary roads and all roads in the Paramaribo district is with the Ministry of Public Works. The responsibility for secondary and tertiary roads in other districts is with the Ministry of Regional Development, while agricultural roads are maintained by the Ministry of Agriculture. However, little coordinated responsibility is exercised. Plans, cost figures or budgets for maintenance and improvement of the road network are unavailable. All maintenance work is carried out by private contractors. Major projects are put out for tender, but are contracted out based only on unit prices, rather than on fixed prices and terms. Maintenance and improvement of the road network is complicated by the lack of foreign exchange, inefficient organization and lack of responsibility within the ministries concerned. The prevailing contracting procedures often result in uncertain and costly maintenance, if any.

Table 3.3: - ROAD NETWORK CLASSIFICATION, 1986
(in kilometers)

<u>Road Classification</u>	<u>Asphalt/Paved</u>	<u>Unpaved</u>
Primary	542	1038
Secondary	1370	4110
Tertiary	<u>465</u>	<u>1400</u>
Total	2377	6548

Source: Ministry of Finance and Planning.

3.30 Agricultural roads, particularly, in the Nickerie area suffer from lack of maintenance and improvements. The condition of these roads has been aggravated because of the use of overloaded trucks. As the worn-out rural and secondary roads have an enormous impact on the deterioration of vehicles, aggravated by the shortage of spare parts, it is critical to, without delay, improve the road conditions in order not to affect the rice export activity. However, the maintenance and improvement of the road network call for more budgetary resources through a system of user charges and possibly contributions from some of the major enterprises served. At present, the only user charge generated from the system is the vehicle license fee which is totally inadequate. There is no contribution by way of a gasoline tax since this item is retailed below cost. The Government needs to institute a system of cost recovery to maintain, improve and develop further the assets of the subsector.

3.31 Public Transportation. Public transportation is at present carried out principally by private license holders under the umbrella of a directorate under the Ministry of Public Works. This directorate is responsible for public bus services, sewerage services, central garage for state owned vehicles and the servicing of heavy equipment. In the late sixties, public transportation was a state monopoly. Increased inefficiency and poor service is claimed to have set off unauthorized private bus operations, which, in the seventies, became legalized with the present bus licensing system. Even after the acquisition of 20 new state buses in 1982, this trend has continued. The efficient operation of the

central garage and services is complicated by: (i) the limited degree of freedom given by the Ministry of Public Works; and (ii) responsibility for services which the organization is not prepared to provide. Priority for the operation of the remaining bus services is often based on social rather than economic criteria. State bus services (about 5% of total) should be targeted for privatization. In addition, the operation of the central garage should be reviewed in order to remove services which, from an economic point of view, would improve if operated privately.

Water Transport

3.32 Suriname is enclosed between two major rivers, the Corantijn river as the western border with Guyana and the Marowijne river as the eastern border with French Guyana. In between, the Coppename and the Suriname rivers run north into the Atlantic Ocean. The rivers cross the coastal plain through the large and deep estuaries with shallow muddy bars across their mouths. These mud and shifting sand bars limit the access to the rivers for seagoing vessels. The total volumes shipped through the harbours in Suriname are shown in Table 3.4. Shipments through Paramaribo, Smalkalden and Moengo relate entirely to the bauxite industry.

Table 3.4: - TRADE VOLUMES HANDLED THROUGH SURINAMESE PORTS

	Year	G.R.T. (000) ^{1/}	Number of Ships	Imports (t/000)	Exports (t/000)
Paramaribo	1985	1595	634	554	86
	1986	1718	545	551	84
	1987	1459	507	475	90
Paramaribo Smalkalden Moengo	1985	2684	276	520	2388
	1986	3111	261	605	2248
	1987	2912	186	1194	1652
Nickerie	1985	226	189	28	114
	1986	282	167	17	86
	1987	225	160	13	86

^{1/} Gross registered tons.

Source: Harbour Office of Paramaribo, de "Loodsdienst Administratie".

3.33 Access to Nickerie and Wageningen from the sea is limited due to a mudbar across the mouth of Nickerie River. Seagoing vessels of 4000-6000 tdw are presently only able to enter and leave the river loaded with less than 50% of their capacity. Dredging of the river mouth and maintenance of the Nickerie River channel would allow fully loaded seagoing vessels to leave directly for export destination points, thus eliminating the costly transfer to Paramaribo. However, the economic and financial viability of a dredging program needs to be established.

Air Transport

3.34 Suriname is connected to the Caribbean, US and Europe by airline services provided by Suriname Airways (SLM), operating two DC-8 airplanes on international routes and two twin-otter airplanes on regional and domestic flights. In addition, KLM (Royal Dutch Airlines), ALM (Antillean Airways), and Cruzeiro Do Sol (Subsidiary of the Brazilian airline, Varig) serve Suriname. Domestic demand for air transport is partly covered by SLM. There are two private companies that serve the interior on a charter basis, Gum Air and Gonini Airways. Gum Air operates three small airplanes, whereas Gonini presently operates one; the other was hijacked during the period of internal conflict. The Missionary Aviation Fellowship, a church owned operation, serves the interior with medical services flights. Gum Air operates with the Government by flying civil servants to and from the interior. As an essential means of developing trade and tourism between Suriname and other countries, it is important to develop regular air traffic services. The clarification and planning of future development is a pressing need for SLM. The existing equipment is wearing down and immense investments are needed. A least cost and more efficient solution to these issues is to privatize the services.

CHAPTER IV

PUBLIC SECTOR ENTERPRISES

A. The Role of State Enterprises

Organization of the Sector

4.1 State enterprises play a dominant role in Suriname's economy. Non-financial state enterprises number about 30-35.¹¹ They produce about one-third of GDP and employ close to ten thousand people, equivalent to 10% of the jobs in the formal sector of the economy. The State owns the 12 largest firms outside the bauxite and financial sectors. The State is heavily involved in agricultural and food processing activities. It provides all sugar, edible oil, processed milk, a part of processed shrimp and commercial banana production and a large part of timber and rice production. The State also is the sole producer in crude oil, telecommunications, water and sewerage. It operates the largest airline and shipping company. Two state enterprises (SUREXCO and CIS) have an important role in foreign trade. State involvement in manufacturing, other than timber and food processing, is negligible.

4.2 There is a certain division of labor between the public and private sectors. The public sector provides the basic infrastructure, satisfies a significant part of the electricity and crude oil demand of the country and produces the majority of the non-bauxite (mostly agricultural) export commodities. Private entrepreneurs operate mainly in services (commerce, banking, transport), in the medium and small scale agriculture, and in manufacturing. In a number of areas (rice and timber production, transportation, foreign trade), both sectors operate.

4.3 The private sector in Suriname is moderately developed, much less concentrated than the state enterprise sector and less self-assertive than private sectors of other countries at similar levels of income. During the 1980's both the public and private sectors have been affected adversely by external shocks and internal domestic economic policies. In addition, the development of the private sector also was hindered by political uncertainties. One of the challenges of the Government is to define properly the relative roles of the two sectors, restructure the public sector and create conditions that foster private entrepreneurship in agriculture, transport and manufacturing industry.

4.4 State enterprises are controlled by sectoral ministries. The main overseeing ministries and the most important enterprises controlled by them are listed in Table 4.1 below. The ministries are responsible both for the elaboration and implementation of the Government's policies and for the

^{11/} There is some uncertainty about the exact total of state enterprises, partly because of lack of clear distinction between non-commercial "parastatal bodies" and enterprises, and partly because no government agency keeps track of the activities of all of state enterprises.

overall control of the state enterprises in their respective sectors. The sectoral minister appoints the general managers and the boards of the enterprises. The ministries exercise their authority partly through direct monitoring of the activities of the firms, and mostly through their boards. The Ministry of Finance and the Planning Bureau have overall responsibility in controlling the borrowing, subsidies and investments of state enterprises.

Table 4.1: REVENUES, EMPLOYEES AND NET PROFITS OF SELECTED STATE ENTERPRISES, 1987
(sales and profits in Sf million; employees in number)

Enterprise	Activity	Revenues	Employees	Net Profits (Loss)
Ministry of Natural Resources and Energy				
EBS	electricity	92.3	844	1.8
Staatsolie	petroleum	21.3	203	1.9
SWM	water-Sewerage	17.4	511	1.0
Bruynzeel	timber	20.0	1,057	(8.5)
Suriname Timber	timber	0.9	170	(2.9)
Grassalco	crushed stone	1.2	n.a.	(2.5)
Ministry of Agriculture, Animal Husbandry and Fishery				
SAIL	shrimp	75.1	n.a.	6.6
Wageningen State Farm	rice	27.9	760	(14.0)
Surland NV	banana	20.8	900	1.5
Marienburg State Farm	sugar	10.4	1,200	(7.7)
and Sugar Mill			(+300 temporaries)	
GPOV NV	oil palm	13.1	310	(6.5)
			(+400 temporaries)	
De Melkcentrale	milk	10.9	88	(6.3)
Tropica	canned fruits and vegetables	3.2	50	0.1
Ministry of Economic Affairs				
Suriname Airlines (SLM)		63.8	444	3.7
SMS	shipping	24.0	263	(5.1)
CIS	import	50.0	62	n.a.
NV Havenbeheer	port authority		n.a.	
Suréxco	rice marketing and export	4.0	93	0.6
Ministry of Public Works, Telecommunications and Construction				
Telesur	telecom- munications	55.4	1,180	9.3
Landbusdienst	bus service		n.a.	

n.a.: data not available.

Source: Ministry of Finance and Planning.

4.5 The present Government inherited deficient monitoring and control systems. Although the government agencies, especially the sectoral ministries, are rather well informed on the achievements and problems of the enterprises, none of them has full, concrete, quantitative information on the physical and financial performance of the sector as a whole nor of the individual enterprises. Currently the Government does not have a complete list of the state enterprises or consolidated profit/loss statements, cash flow, and equity data of the sector or of the flow of funds between the state budget and the state owned enterprises. Improving these information flows is thus an urgent task.

Financial Performance

4.6 It is difficult to determine the exact amount of losses and subsidies of the state enterprises because of inadequate monitoring, and because financial assistance is provided in a variety of forms (producers' and consumers' subsidies, non-repayable government loans and bank loans with government guarantees). It is estimated that the Sf15-20 million per year consolidated net profit of the profit-making enterprises reduces the net loss of the identified state firms to about Sf40 million per year, or 3-4% of GDP.

4.7 All the utility companies (water, electricity, telecom), the state airline, the petroleum, tropical fruit and shrimp producers are profitable while the rest of the agricultural, food, forestry and transport firms are loss-makers. Beyond the financial problems, unsatisfactory maintenance and unreliable operations are characteristic for the whole sector, including most of the well managed enterprises. In many enterprises production has stagnated or even declined considerably (sugar, timber, rice, and bus transportation).

4.8 There are several factors that have contributed to this situation. The facilities and equipment of many enterprises are in poor condition. In addition many facilities were destroyed by insurgent activities. The marked deterioration and/or breakdown of equipment led many firms to a severe drop in capacity and to the further deterioration of their financial situation. The shortage of foreign exchange and the resulting scarcity of imported inputs and spare parts was another factor leading to sharp decreases in capacity utilization.

4.9 For some enterprises (domestic passenger transport, milk), tariffs and prices are established below their operating costs with the resulting subsidy being financed out of the enterprises' cash flow. Because of the overvaluation of the Surinamese guilder, the export oriented enterprises suffer serious revenue losses. Some (e.g. Wageningen state farm and Marienburg sugar mill) are required to finance fully or partially various social services (health, education, housing, infrastructure) normally financed by the Government.

4.10 The extremely adverse financial situation of a number of enterprises has led to leniency from their supervisory ministries and to acceptance of weak financial discipline. In several cases (Marienburg, Wageningen, Bruynzeel Timber Company) the enterprises could not restructure their operations without Government financial assistance, and therefore, the supervisory ministries have had no other choice than to allow them to continue with inefficient and loss-making activities.

4.11 There are also serious problems in the management of the sector. The information flows to the Government are fragmented and erratic. Since the Government does not have reliable information on the sector's financial and economic performance nor of most of the individual enterprises, a performance assessment of managers is difficult. Yet, the managers freedom of action is limited. Many of the prices and tariffs are set by the Government; virtually all investment decisions are made or approved by government agencies; officials of the supervisory ministries have tended to interfere in the day-to-day decisions of the firms; the labor legislation makes retrenchment of redundant staff almost impossible and in many cases strong trade unions demand salaries beyond the enterprises' capabilities.

4.12 A number of enterprises perform well in spite of adverse external conditions. Some of them, with strong management and potential for earning foreign exchange, have special financing arrangements to import urgently needed inputs and spare parts. Others have made extraordinary efforts to keep their equipment functioning, and some have been capable of increasing their output while keeping their cost increases below inflation.

B. Reform Program for the Sector

4.13 The Government is aware of the need of a thorough reform of the sector. There is a consensus that the reform should lead to radical improvements in: (i) the efficiency, reliability and growth pattern of production and service activities undertaken by the enterprises; (ii) the financial performance of the enterprises and in their contribution to improve the finances of the Central Government and the country's balance of payments position; and (iii) in the use of manpower currently in the public sector.

4.14 There are, however, different views on the proper way of carrying out the reform program and on the desirable size and role of the sector. There appears to be a consensus that given the shortage of managerial cadre and scarcity of investment resources, the Government should not establish new businesses. Instead it should: (i) provide a larger scope and incentives to the private sector; (ii) concentrate on infrastructure development and in operating a few key state enterprises; and (iii) rehabilitate some of its badly deteriorated firms. The key issues are: (i) from which areas of economic activity should the Government withdraw; and (ii) how to improve the performance of the remaining public sector enterprises. These issues should be addressed on economic grounds.

4.15 There is no evidence to suggest that state enterprises can improve the welfare of the workforce in a given area. Although state ownership has prevented companies from going bankrupt and the salaries of the workers are paid entirely from Government transfers, this is a very costly, inefficient, and unsustainable way of alleviating income and employment problems. Although this provides temporary relief, it cannot be sustained indefinitely.

C. Issues on the Size and Scope of the Sector

4.16 The Government should promote private participation in state enterprises wherever feasible (e.g. domestic and regional flights, petroleum related complementary activities, fruit and vegetable production

and processing). It seems reasonable that the state retain ownership of the utility companies: EBS (electricity), SWM (water-sewerage) and Telesur (telecommunications). These perform reasonably well.

4.17 There are some small and medium size presently unprofitable enterprises (Grassalco, GPOV palm oil producer, Suriname Timber, etc.) that could probably perform better in private hands. Private owners would be able to pay more attention to their problems and the elimination of the continuing financial assistance of the Government would exercise a strong and healthy pressure on the new management. Therefore the Government should consider offering these companies to the private sector.

4.18 The situation in the transport sector is complex. Public bus transportation was developed originally by the State and had been for a long time a state monopoly. In the seventies and eighties strong private competition developed. Meanwhile, inefficiencies in the operation of the public bus company have led to its decline. Today its share in bus transportation (the main means of urban and interurban passenger transport) is less than 5%. There have been some efforts to purchase new buses and increase the State's share in the bus transport system. A better solution would be to sell the few remaining state owned buses and liquidate the company. Evidence shows that the relevant Government agencies do have the necessary tools to regulate effectively the mass passenger transport service and promote competition with participation of a large number of independent bus operators.

4.19 The shipping company, SMS, has sustained large losses as a result of its uneconomic service mix and size and the very low tariffs charged for its domestic services. The company operates in three completely different areas: deep sea shipping (one owned vessel), ferry services and river passenger transport. All three branches are too small to be run as a state company. Consideration should be given to the privatization of the three branches separately. Since the Government intends to keep the tariffs of the ferry transport in Paramaribo at a low level because of their social considerations, a tightly controlled subsidy system linked to the number of transported passengers might be elaborated and introduced for the private ferry operators.

Restructuring

4.20 The most urgent task in the restructuring of the sector is to resolve the problem of the largest loss-makers: Wageningen state farm (Sf14 million per year), Bruynzeel wood processing factory (Sf8.5 million), Marienburg sugar mill (Sf7.7 million), GPOV palm oil producer (Sf6.5 million) and Melkcentrale (Sf6.3 million). Their total losses are more than Sf40 million per year, which is roughly equal to the total consolidated loss of the whole sector.

4.21 Divestment would be the best solution for GPOV. GPOV's three estates could be sold separately. The deficit of the Melkcentrale could be eliminated by phasing-out the consumer and producer price subsidies. The elimination of the subsidies on fresh milk, accompanied by the increased availability of reconstituted milk produced from cheap imported powder milk, would not have a significant effect on low income milk consumers or on domestic milk producers.

4.22 The Wageningen state farm and rice mill is one of the largest enterprises in the country. Its annual loss is equal to about 50% of its sales. Part of its losses originate from financing of costly social services which are the Government's responsibility; however, most of its losses result from operational inefficiencies. The company has incurred these huge losses for several years without showing any sign of improvement. The sale of the company as one unit does not seem to be a viable option, since it would be difficult to find a buyer for such a large, loss-making estate. The sale of the rice fields in medium and small size plots could be feasible, but would pose two problems: (i) the farmers operating these plots would not need more than a small fraction of the present workforce; and (ii) the remaining rice mill would have to bear the burden of most of the overhead and, social costs of the present company. As an alternative, the Government might consider selling the company as a whole to its employees. This would force the company to survive without a government subsidy. Under these conditions, the company would find ways to operate profitably particularly since hundreds of private farms flourish profitably around Wageningen.

4.23 The performance of the Bruynzeel wood processing firm has been declining steadily for several years. To improve it the Government should strengthen management and elaborate a physical and financial restructuring plan, including a strict implementation schedule. Assistance of outside consultants would be required. As an alternative option, the Government should consider the privatization of the firm. Although the company is very large, it consists of many plants which could be sold separately to private investors.

4.24 The Marienburg sugar mill is in a desperate overall situation. Its buildings and equipments are run down, old (some of them 90 years old) and irreparable. Sugar production fell to 1,196 tons in 1987 from 8,117 tons in 1981. The cost of 1 kg sugar, estimated at Sf2.50 a few years ago, reached Sf10.00 in 1987 while the price of imported sugar was Sf0.67 CIF Paramaribo. The company has prepared a feasibility study for the rehabilitation of the plant, which shows that the only way of "rehabilitation" is to build a virtually new sugar mill. Such an investment would not be justified, because the production cost of the sugar after the rehabilitation would be Sf1.50/kg. Neither the location of the sugar mill nor the climate of the area are suitable for sugar cane production. In particular, the dry season is too short, which makes the sugar content of the cane too low (historically 4.5-6.7%, and in 1987, under 3%, compared to 12-15% in sugar exporting countries). It would be highly advisable to close this operation. At the same time the present cane fields should be diverted to the production of other crops (mainly coffee and tropical fruits). Implementation of the above recommendations would result in a leaner and more profitable state enterprise sector.

Management

4.25 The most important factor determining the success or failure of public enterprise management would be the improvement of the economic environment in which the state firms operate. Among the sector-specific actions the most urgent one seems to be the upgrading of the information system and the development of physical and financial performance indicators. Public enterprises need to be monitored continuously in terms of these indicators. The Government also needs a full inventory of its

enterprises' investment needs. The Government should consider establishing a monitoring department in either the Ministry of Finance or Planning Bureau for this purpose, whose responsibility would be to determine together with other sectoral ministries, the scope of information required. The regular (monthly or quarterly) reports would be sent from the enterprises to the central unit through the relevant sectoral ministry. The central unit would check, consolidate and process these data and distribute their information to all interested government agencies. The Government also needs precise information on the flow of funds between its enterprises and the central budget and also on the size and character of financial obligations of the enterprises. All the above information should be used: (i) to assess the performance of enterprises and their managers; and (ii) as basis for central government decisions on macroeconomic issues and on strategic issues of individual enterprises.

4.26 The operations of the state enterprises will not be successful in the absence of freedom of their managers to make decisions on all aspects of their day-to-day operations (production program, personnel, pricing, salaries and wages, and maintenance expenditures). The Government should intervene (through its representatives on their Boards) only on strategic issues such as medium and long term plans, expansion, and opening of new lines of business.

4.27 The Government should consider increasing the accountability of managers and introduce a regular system to assess their performance, particularly the financial situation and the trend of the profitability of the enterprises. The differences in performance of individual enterprises suggest the need for strengthening their management by removing inefficient managers. At the same time, a bonus system could be attached to the performance evaluation in order to reward competent managers.

4.28 Price setting is inevitable for enterprises operating under monopolistic conditions (electricity, water, telecommunication, ferry). In these cases, it is important to establish prices and tariffs at a level that covers the long-run marginal cost of production. If the Government decides that certain goods or services need to be sold at prices below that level, the difference should be financed from the budget through transparent and explicit consumer subsidies; but price controls should be phased-out.

CHAPTER V

THE PUBLIC SECTOR INVESTMENT PROGRAM

A. Background

Overview

5.1 The suspension of Dutch Government aid in 1982 had an adverse effect on Suriname's public sector investment program. Project execution was either halted or severely curtailed. Hardest hit were projects with a large foreign exchange component since aid from the Netherlands accounted for about 90% of capital inflows between 1976 and 1982. The shortage of foreign exchange led to a forced cutback in imports and precipitated a shortage of key inputs, machinery and equipment needed to sustain productive sector activity.

Development Strategy

5.2 The Government's development strategy focuses, in the short-term, on the restoration of domestic production to pre-1982 levels by rehabilitating infrastructure for the major productive sectors. Over the medium-term, the authorities seek to achieve sustained growth through the diversification of the economy.

5.3 The new Government has not yet designed a comprehensive package of projects to support these broad objectives. It has solicited technical assistance from the IDB to undertake the preparation of the portfolio of projects for possible external financing as part of an effort to develop a realistic public sector investment program (PSIP). The Bank mission identified an extensive list of projects at varying stages of preparation during discussions with Government officials. The PSIP therefore, is a listing of some of the major ongoing and proposed capital projects for the 1988-1991 period. Its composition is appropriate for the present. The PSIP discussed below is thus a limited one and is likely to be expanded in the medium term to fully reflect emerging government priorities. Final decisions regarding the continuation or commencement of some projects are expected to be made during the investment programming exercise.¹ The projects included in the Government's catalogue concentrate on the rehabilitation of existing assets and promotion of activities which can earn or conserve foreign exchange. A sound development strategy will

^{1/} Since the time of the mission, the Government has been preparing a comprehensive PSIP within the framework of a multi-annual development plan (MADP). Ongoing and new projects during the first year of the MADP are estimated to cost Sf277 million in comparison to an estimate of Sf161 million for 1990 for the limited PSIP examined by the mission (see Table 5.1). The largest shares of the Government's PSIP are assigned to agriculture (15%), energy (23%) and industry (11%).

require that the Government undertake only infrastructure investment in support of private sector-led economic growth.

5.4 With the reestablishment of Dutch Government aid during the second half of 1988, about US\$450 million in grants are expected to flow into the country in the medium-term. However, in the absence of a viable macroeconomic framework and a judicious utilization of these resources, the country still may find itself worse off over the medium-term than it is today.

B. Composition of the PSIP

5.5 Between 1988 and 1990, the Government proposes to spend an estimated Sf370 million on public investment. Given the program's emphasis on rehabilitation, considerable attention is being paid to the agricultural sector. In addition to developing new rice polders in the Nickerie District, Phase II of the Multi-purpose Corantijn Project (MCP) will focus on installing a distribution network and increasing the capacity of the pumping station from 30 meters to 50 meters per second in order to fully irrigate old and new rice polders.

5.6 Insurgency activities together with spearrot disease retarded the development of the oil palm industry. Because of the unrest the expansion of the estate at Patamacca was halted and 3,500 hectares of oil palm trees are not being harvested. The immediate concern of the Oil Palm Project at Patamacca is to renew operations and expand production capacity to 5,000 hectares. There is also a proposal to construct a refinery to process the oil produced on this estate. Consideration should be given for the private sector to undertake the project.

5.7 Under two Banana Expansion Programs 1,500 hectares are to be cultivated. The current high prices for banana exports, together with the fact that production is currently below the amount Suriname can export to the United Kingdom under contract with Fyffes Group Ltd., is primarily responsible for plans to increase production. This decision should, however, be carefully re-evaluated against the background of the uncertainties surrounding the continuation of this preferential access beyond 1991. Consideration should be given to the private sector undertaking this project.

5.8 The Aquaculture (Brackish water fish) Project is being funded by the IDB and involves the establishment, over 2 years, of a 30 hectare pilot farm. In addition, funding also is being sought to improve the artisanal fishing fleet and fishing techniques through the Artisanal Fisheries/Boat-building Project, which is estimated to cost Sf17.8 million.

5.9 Insurgency activities in the interior resulted in a considerable loss of output capacity in the forestry sector. The Government proposes to rehabilitate Suriname Wood Processing Industry (Bruynzeel) at a cost of Sf26.3 million by rebuilding the sawmill destroyed by fire in 1983. The Suriname Timber Company Project would improve the company's logging and saw milling activities. However, the company has been experiencing considerable losses and the Government is in the process of deciding whether to liquidate the company or to consolidate activities in the forestry sector. Consideration should be given to the private sector undertaking this project in the context of privatization of the enterprise.

5.10 Projects in the energy sector offer considerable potential for import substitution and foreign exchange savings. The IDB is financing a feasibility study of the Tambaredjo Energy Project, which would increase energy generation by combining heavy crude oil with imported diesel oil for use as boiler fuels. Assistance is also being sought to examine alternative energy sources, including solar energy and the burning of rice husk. The State-Oil Company Project which is estimated to cost Sf74.5 million, would augment oil production from 3,000 to 5,000 barrels of crude oil per day. However, it would be critical to examine the economic and financial viability of the project through further studies, given its relatively small size, existing refinery capacity in the Caribbean Region, and the lack of local technical expertise. Financing also is being sought to construct a transmission line from Paranam to Paramaribo at a cost of Sf40 million.

5.11 In the transportation sector, the emphasis of the PSIP is on improvement of the efficiency of agricultural production. Priority is being given to securing financing for the construction of an Export Loading Wharf. Plans are to replace two wooden piers which are in an advanced stage of deterioration with a 70-meters concrete pier (including storage facilities) at New Nickerie to facilitate the loading and shipping of rice and bananas.

5.12 The Gros Rosebel Gold Exploration Project includes the industrial recovery of gold at a cost of Sf39 million. While the project offers an opportunity to generate foreign exchange earnings, the gold content of the ore should first be determined before it can be established that the project is justified.

C. Financing

5.13 With the proposed intensification of project activity, public sector capital expenditures are projected to increase substantially. Expenditure will rise from an estimated Sf70 million in 1988 to Sf161 million in 1990. About 48% of the proposed expenditures would be on ongoing activities as the public sector increases efforts to restart a number of projects. Financing for all the new projects except the IDB-financed Aquaculture project is still undetermined.

5.14 Many of the projects with a large foreign exchange component, in particular those with a long gestation period, will have to be fully financed through external assistance. An estimated Sf88.4 million per annum will be required in external assistance. A number of non-traditional donors are being approached for financing.

5.15 The proposed level of local financing will require the pursuit of an aggressive fiscal program to ensure that local counterpart funds are available. Such a program should: (i) aim to improve the performance of the non-financial public enterprises, particularly in view of the Government's policy to restrict transfers to these institutions; and (ii) give priority to short gestation projects with a high rate of return.

Table 5.1: FINANCING OF THE PUBLIC SECTOR INVESTMENT PROGRAM, 1988-90
(Sf'000)

	1988	1989	1990
<u>TOTAL PSIP</u>	<u>63,899</u>	<u>145,222</u>	<u>160,841</u>
<u>Central Government</u>	<u>13,364</u>	<u>38,683</u>	<u>11,140</u>
External	9,829	37,513	10,261
Grants	5,282	9,087	4,050
Loans	4,547	28,426	6,211
Local	3,535	1,220	979
<u>Rest of Public Sector</u>	<u>50,535</u>	<u>106,539</u>	<u>149,701</u>
External	38,427	73,832	98,260
Grants	119	962	0
Loans	38,308	72,870	96,460
Local	12,108	29,407	47,741

Source: Ministry of Finance and Planning; Bank staff estimates and projections.

D. Implementation

5.16 The PSIP may be constrained by the limited availability of human resources to prepare and manage the projects. It also contains a number of projects, for example, the Restructuring of the Sugar Cane Industry and Suriname Timber Company Improvement, the viability of which are highly questionable.

5.17 The major challenges facing the Suriname Government over the planning period is to ensure that the projects in the PSIP are consistent with overall development objectives, that the resources mobilized to finance the program are used efficiently and that the institutional framework for investment programming is in place. Accepting these challenges requires two major sets of decisions. First, projects included in the PSIP must increasingly be based on a rigorous set of selection criteria, including rates of return. In the short-term, the criteria also should give priority to economically and financially sound ongoing projects which were suspended or delayed because of inadequate financing and have a relatively high potential to generate or save foreign exchange. The identification of projects on the basis of such criteria also will serve to focus energies on those projects which are of highest priority and form the core of the PSIP.

5.18 Second, attention should be paid to the institutional framework for investment programming. Responsibility for formulating and monitoring the PSIP and identifying macroeconomic policies which can enhance program performance must be clearly established. The Planbureau can assume responsibility for economic policy formulation and planning; however, this will require a broadening of the responsibilities of the Unit which was originally set up to monitor the performance of the Dutch Government-funded development aid.

5.19 The shortage of inputs, spare parts and equipment which affected implementation of many of the ongoing projects in the PSIP can be traced to the acute scarcity of foreign exchange. Equally responsible are the generally poor maintenance practices which have contributed to a marked deterioration in infrastructure over the last five years. This problem may be attributed either to inadequate allocation of resources to cover maintenance costs or, where several ministries are involved in the project execution, a lack of clear lines of responsibility for maintenance activities. If capacity utilization and consequently the returns on investments are to increase during this phase of the PSIP, adequate provisions for maintenance should be made either in the recurrent budget during the annual budgeting exercise or in estimated project costs.

E. Technical Assistance

5.20 Technical assistance programs, both ongoing and proposed are focused largely on the productive sectors. Accordingly, considerable emphasis has been placed on the assessment of mineral resources, provision of electricity, exploration of alternative forms of energy and training in industrial management and project preparation. Some programs also have been prepared for the social sectors, including the development of a vocational and technical training institution and studies on the provision of potable water. The ongoing and proposed technical assistance programs are listed in Annex IV.

CHAPTER VI

MEDIUM-TERM GROWTH AND BALANCE OF PAYMENTS PROSPECTS

A. Overview

6.1 This chapter discusses the medium-term prospects of the Surinamese economy. Two alternative illustrative policy scenarios are presented. The scenarios do not represent forecasts per se, but rather quantitative indications of the range within which key economic variables could probably lie, depending on the extent to and speed with which the recommended economic reforms are carried out. These scenarios also provide a better understanding of the factors affecting growth and their inter-relationships. The projections utilize the World Bank's commodity price forecasts. A summary of the projections is shown on Table 6.1.

6.2 Suriname's medium-term growth prospects will be influenced largely by the extent to and speed with which key macroeconomic and sectoral issues are addressed. These relate to: (i) the creation of a macroeconomic policy framework conducive to sustainable economic growth through the use of a consistent and adequate mix of exchange rate, fiscal monetary, and wage policies; (ii) removal of price controls, import and export licensing procedures and other quantitative trade restrictions; (iii) agreement with private bauxite sector companies to restore the industry's competitiveness; (iv) rapid implementation of a divestment program; (v) improve incentives in agriculture and complete irrigation works; (vi) rehabilitation of transport and other infrastructure; (vii) price adjustments and greater autonomy in the public enterprises; and (viii) execution of an adequate PSIP.

B. The Marginal Real Growth Scenario

6.3 The marginal real growth scenario assumes an insufficient domestic policy response. Performance of the economy is projected to be only marginally better than in the preceding five years. Such performance would be related to the ongoing recovery in the bauxite sector originating from favorable world market prices and ongoing agreements with companies in the sector. Agricultural output is projected to increase because of the completion of irrigation works, while the services sector is projected to achieve marginal value added increases. Such a performance, however, would not be sufficient to eliminate the stagnation in per capita income and consumption over the medium to longer term. The country would eventually be overwhelmed by the inherent weaknesses of the economy. The bauxite sector would stagnate after an initial recovery and then decline. Inadequate incentives would deter expansion in the other exports, while growth in the agricultural sector would barely exceed population growth.

6.4 Real GDP is projected to grow by 0.5% per year on average during 1989-93, while real per capita consumption is projected to decline by 2.1% per year on average. The balance of payments position would be only sustained through a cut-back on imports, since the economic decline would eventually lead to lower levels of donor support. This would affect the import capacity necessary to sustain growth in the economy. The balance of payments current account deficit is projected to be 2.3% of GDP in 1993 while the debt service ratio is projected to reach 5.5% in the same year.

Similarly, there would be a reduction in investment: the investment to GDP ratio is projected to average 7.3% per year compared with an estimated 10% in 1988. Lower levels of investment would also imply lower absorption of grant assistance from the Netherlands amounting to about US\$214 million as against a possible maximum of about US\$450 million during 1989-95.

Table 6.1: KEY MACROECONOMIC INDICATORS, 1987-93
(annual average growth rate and percent of GDP and GDY; US\$ million)

	1987	1988	1989-1993	
	Actual	Estimated	Rising Growth	Marginal Growth
<u>Domestic Balance</u>				
Real Gross Domestic Product	-7.8	-0.6	3.2	0.5
Real Consumption	-4.8	4.3	3.1	0.2
Per Capita Consumption	-6.8	1.5	0.9	-2.1
Real Gross Domestic Savings (% of GDY)	5.2	8.4	9.1	3.3
Real Investment (% of GDP)	6.5	10.0	11.7	7.3
<u>External Balance</u>				
Exports (GNFS)	1.2	36.0	7.3	1.0
Imports (GNFS)	-0.6	29.2	6.6	2.5
Current Account Balance				
US\$ million	-8.2	-2.5	-15.4	-45.1
% of GDP	-0.8	-0.2	-1.1	-2.9
Debt Service Ratio	2.0	4.4	6.6	7.0
Population (thousands)	0.41	0.42	0.44	0.44

Source: Annex I.

C. The Rising Real Growth Scenario

6.5 The rising real growth scenario reflects the halting of the decline in real GDP and creation of conditions for real GDP to gradually increase starting with 2.0% in 1989 and averaging 3.2% per year between 1989 and 1993. This scenario assumes the implementation of policy recommendations included in this report. Total investment is projected to increase from 10% of GDP in 1988 to 13.5% in 1993 as a result of the execution of the PSIP and an upsurge of private investment. Total investment is projected to increase in 1989 because of the accelerated implementation of ongoing projects and large increases in capital goods imports. This would allow agricultural production to achieve its 1986 level in 1989 and increase at an annual average rate of about 4% during the projection period. Increases in rice production and exports would depend on adequate levels of input supplies and spare parts. Shrimp production and exports would be governed by biological limits to fishing in coastal waters, but has potential for growth through aquaculture. Increased production and export of wood and lumber would depend on the supply of

spare parts and logging machines in the short term. Over the medium term it would depend on the reorganization and privatization of the sector.

6.6 Living standards are projected to improve with per capita consumption rising by about 0.9% per year on average during the period. In 1991, however, the growth of consumption per capita is projected to become negative because of a projected deterioration in the terms of trade. The current account deficit of the balance of payments is projected to increase to about 2.3% of GDP by 1991 mainly because of an increase in imports needed for reconstruction of the economy and to increase capacity utilization. Beyond 1991, the current account deficit is projected to fall, as investments in previous years would be substantially completed and would yield higher output and exports. The deficit is projected to be financed largely from grants (US\$450 million) from the Netherlands and from concessional loans during 1989-95. The debt service ratio is projected to decline to 3% in 1993 as exports respond to the improved incentive framework.

Table 6.2: PROJECTIONS OF EXTERNAL FINANCING REQUIREMENTS, 1989-93
(US\$ million)

	Rising Growth Scenario	Marginal Growth Scenario
Resource Balance (cumulative) (Average as % of GDP)	-45.30 (-1.7)	-198.3 (-3.9)
Current Account Balance (cumulative) (Average as % of GDP)	-77.1 (-1.1)	-225.7 (-2.9)
Public Capital Requirements	503.7	147.6

Source: Bank staff projections.

6.7 Assuming rapid agreement is reached with the companies, the bauxite sector is projected to recover in 1989 and alumina production is projected to rise gradually from 1.4 million metric tons to 1.6 million metric tons over the medium term. Aluminum production is projected to reach its maximum capacity of 30,000 tons in 1991. The service sector would also expand in line with the expansion of other sectors and grow from 1.0% in 1989 to 3.5% in 1993.

6.8 A major problem related to the country's creditworthiness is the accumulation of external payment arrears. The rising real growth scenario assumes that these arrears would be gradually eliminated by 1993. The marginal growth scenario, on the other hand, assumes the gradual elimination of arrears for 1995. In the absence of the actual implementation of an appropriate macroeconomic framework to address the issues highlighted in this report, Suriname cannot be considered creditworthy for Bank lending.

**TABLE 1: SURINAME - ACTUAL AND PROJECTED NATIONAL ACCOUNTS, 1987-1993
MARGINAL GROWTH SCENARIO**

(in constant 1987 \$ million)

	ACTUAL		PROJECTED				
	1987	1988	1989	1990	1991	1992	1993
Gross Dom. Product	1940.00	1928.95	1941.04	1951.07	1959.76	1966.85	1972.22
Terms of Trade Adj.	0.00	164.61	42.40	24.81	14.45	23.70	33.18
Gross Dom. Income	1940.00	2093.56	1983.44	1975.89	1974.20	1990.55	2005.40
Imports GNFS	683.80	843.55	773.01	779.65	783.11	787.23	784.25
Exports GNFS TTADJ	-657.80	-825.94	-712.65	-698.14	-690.73	-703.22	-717.11
Resource Gap	26.00	17.61	60.36	81.51	92.38	84.01	67.14
Total Resources	1966.00	2111.17	2043.80	2057.39	2066.59	2074.57	2072.54
Consumption	1840.00	1918.28	1907.93	1918.87	1925.48	1929.02	1922.65
Investment	126.00	192.89	135.87	138.53	141.10	145.55	149.89
Public	37.00	63.90	63.26	62.63	62.00	62.00	62.00
Private	89.00	128.99	72.61	75.90	79.10	83.54	87.89
Gross Dom. Savings	100.00	175.29	75.51	57.02	48.72	61.53	82.75
Net Factor Payments	0.71	-24.32	-23.78	-21.56	-18.37	-16.11	-13.80
Transfers	10.71	10.19	10.07	10.41	10.55	10.70	10.84
Gross Nat. Savings	111.43	161.16	61.80	45.87	40.91	56.12	79.79
Gross Nat. Product	1940.71	1914.89	1927.33	1939.92	1951.95	1961.44	1969.26
Gross Nat. Income	1940.71	2079.42	1969.73	1964.73	1966.39	1985.14	2002.44

GROWTH RATES IN CONSTANT PRICES

GDP	-0.57	0.63	0.52	0.45	0.36	0.27
Total Resources	7.38	-3.19	0.67	0.45	0.39	-0.10
Investment	53.09	-29.56	1.95	1.86	3.15	2.98
Consumption	4.25	-0.54	0.57	0.34	0.18	-0.33
Bauxite	8.01	-1.00	-2.00	-3.00	-4.00	-4.50
Agriculture	-13.94	6.60	3.50	2.60	2.60	2.58
Industry	1.00	1.30	-1.00	-0.50	-0.50	-0.55
Services	0.10	0.73	0.70	0.60	0.51	0.40
Consumption per capita	1.81	-2.87	-1.78	-1.62	-1.78	-2.28

PERCENTAGES OF GDP AND GDY

Based in constant \$f

I/GDP	6.49	10.00	7.00	7.10	7.20	7.40	7.60
GDS/GDY	5.15	8.37	3.81	2.89	2.47	3.09	4.13
GNS/GDY	5.74	7.70	3.12	2.32	2.07	2.82	3.98
C/GDY	94.85	91.63	96.19	97.11	97.53	96.91	95.87

SOURCE: Mission Estimates.

**TABLE 2: SURINAME - ACTUAL AND PROJECTED BALANCE OF PAYMENTS, 1987-93
MARGINAL GROWTH SCENARIO**

(US\$ million)

	ACTUAL		PROJECTED				
	1987	1988	1989	1990	1991	1992	1993
Exports, GNFS	368.37	500.92	459.44	456.83	468.21	493.79	521.62
Imports, GNFS	382.93	494.69	482.54	497.25	518.69	541.53	558.19
Resource Balance	-14.56	6.23	-23.11	-40.41	-50.48	-47.74	-36.57
Net Transfers	6.00	6.18	6.49	6.81	7.15	7.51	7.89
Net FSY	0.40	-14.71	-15.33	-14.11	-12.45	-11.31	-10.04
Interest	-5.30	-13.63	-14.25	-13.02	-11.35	-10.20	-8.91
Current Balance	-8.16	-2.35	-31.95	-47.71	-55.77	-51.54	-38.72
Private Capital	-27.40	-10.00	-7.00	-4.90	4.00	6.50	9.00
Grants	4.30	41.00	35.00	38.50	42.35	46.59	51.24
Disbursements MLT	3.00	17.00	15.50	9.45	5.67	3.40	2.04
Amortization MLT	2.10	7.12	24.62	24.62	17.12	17.12	18.62
Net MLT	0.90	9.88	-9.12	-15.17	-11.45	-13.72	-16.58
Errors and Omissions	15.00	-46.53	0.00	0.00	0.00	0.00	0.00
Changes in Reserves	15.40	8.00	13.06	29.28	20.87	12.18	-4.95
Gross Reserve Level	69.00	61.00	47.94	18.66	-2.21	-14.39	-9.45
RESLEV AS							
MONTHS OF M	2.16	1.31	1.19	0.45	-0.05	-0.32	-0.20
DS/XGNFS	2.01	4.38	8.72	8.50	6.34	5.77	5.51
CB/GDP	-0.75	-0.18	-2.31	-3.27	-3.63	-3.18	-2.27
DOD/GDP %	15.98	14.04	12.63	10.93	9.61	8.28	6.89

SOURCE: Mission Estimates.

TABLE 3: SURINAME - ACTUAL AND PROJECTED MACROECONOMIC INDICATORS, 1987-93
RISING GROWTH SCENARIO

(in constant 1987 Sf Millions)

	ACTUAL		PROJECTED				
	1987	1988	1989	1990	1991	1992	1993
Gross Dom. Product	1940.00	1928.94	1968.05	2032.71	2101.42	2173.77	2253.65
Terms of Trade Adj.	0.00	164.61	182.78	232.49	122.95	214.05	309.10
Gross Dom. Income	1940.00	2093.55	2150.84	2264.80	2224.37	2387.82	2562.74
Imports GNFS	683.80	843.84	848.76	888.36	941.39	953.57	951.03
Exports GNFS TTADJ	-657.80	-825.94	-793.32	-833.84	-874.86	-932.36	-978.15
Resource Gap	26.00	17.90	55.43	54.52	66.53	21.22	-27.11
Total Resources	1966.00	2111.45	2206.27	2319.32	2290.90	2409.04	2535.63
Consumption	1840.00	1918.55	1989.78	2075.44	2080.75	2148.19	2231.39
Investment	126.00	192.89	216.49	243.88	210.14	260.85	304.24
Public	37.00	63.90	100.00	110.00	120.00	130.00	145.00
Private	89.00	128.99	116.49	133.88	90.14	130.85	159.24
Gross Dom. Savings	100.00	175.00	161.05	189.35	143.61	239.63	331.36
Net Factor Payments	0.71	-24.32	-23.94	-21.72	-19.42	-17.92	-17.35
Transfers	10.71	10.19	9.97	10.31	10.55	10.90	11.36
Gross Nat. Savings	111.43	160.87	147.08	177.94	134.74	232.61	325.37
Gross Nat. Product	1940.71	1914.81	1954.08	2020.90	2092.54	2166.75	2247.66
Gross Nat. Income	1940.71	2079.42	2136.86	2253.38	2215.50	2380.80	2556.76

GROWTH RATES in Constant Prices

GDP	-0.57	2.03	3.27	3.40	3.44	3.67
Total Resources	7.40	4.49	5.12	-1.23	5.16	5.25
Investment	53.09	12.23	12.65	-13.83	24.13	16.63
Consumption	4.27	3.71	4.30	0.26	3.24	3.87
Bauxite	8.00	6.00	5.80	4.00	3.50	2.50
Agriculture	-13.94	5.00	4.90	3.90	3.50	3.50
Industry	1.00	3.50	4.60	5.00	4.80	4.50
Services	0.10	1.00	2.50	2.80	3.00	3.50
Consumption per capita	1.83	1.28	1.86	-1.71	1.22	1.84

PERCENTAGES OF GDP and GDY

Based in constant Sf							
I/GDP	6.49	10.00	11.00	12.00	10.00	12.00	13.50
GDS/GDY	5.15	8.36	7.49	8.36	6.46	10.04	12.93
GNS/GDY	5.74	7.68	6.84	7.86	6.06	9.74	12.70
C/GDY	94.85	91.64	92.51	91.64	93.54	89.96	87.07

SOURCE: Mission estimates.

TABLE 4: SURINAME - ACTUAL AND PROJECTED BALANCE OF PAYMENTS, 1987-93
RISING GROWTH SCENARIO

(In US\$ Million)

	ACTUAL		PROJECTED				
	1987	1988	1989	1990	1991	1992	1993
Exports, GNFS	368.37	500.92	511.45	545.63	593.03	654.69	711.50
Imports, GNFS	382.93	494.83	531.12	567.81	625.12	657.25	680.28
Resource Balance	-14.56	6.09	-19.67	-22.18	-32.10	-2.57	31.22
Net Transfers	6.00	6.18	6.43	6.75	7.15	7.65	8.27
Net FSY	0.40	-14.75	-15.43	-14.22	-13.17	-12.58	-12.62
of which Interest	-5.30	-13.63	-14.25	-12.94	-11.79	-11.09	-10.98
Current Balance	-8.16	-2.48	-28.68	-29.65	-38.11	-7.49	26.87
Private Capital	-27.40	-10.00	5.00	5.50	6.05	6.66	7.32
Grants	4.30	41.00	85.00	88.00	90.00	92.00	95.00
Disbursements MLT	3.00	17.00	21.50	25.35	32.96	42.84	55.69
Amortization MLT	2.10	7.12	28.99	28.99	28.99	28.99	8.62
Net MLT	0.90	9.88	-7.49	-3.64	3.97	13.86	47.07
Errors and Omissions	15.00	-46.40	0.00	0.00	0.00	0.00	0.00
Changes in Reserves	15.40	8.00	-53.84	-60.21	-61.91	-105.02	-176.26
Gross Reserve Level	69.00	61.00	114.84	175.05	236.96	341.97	518.24
RESLEV AS							
MONTHS OF M	2.16	1.48	2.59	3.70	4.35	6.24	9.14
DS/XGNFS	2.01	4.38	8.69	7.90	7.08	6.30	2.92
CB/GDP	-0.75	-0.19	-2.05	-1.95	-2.31	-0.42	1.38
DDD/GDP %	15.98	14.04	12.57	11.36	10.70	10.63	12.18

SOURCE: Mission estimates.

ANALYTICAL NOTES

A. INFLATION IN SURINAME, 1970-87

1. Introduction

The purpose of this note is to analyze the main determinants of inflation in Suriname during 1970-87, and in particular, to examine how inflation was affected by fiscal imbalances after the change in the import regime in 1984. In 1984 the Government authorized importers to import goods if they could provide their own foreign exchange or acquire it in the parallel market. The source of most private holdings of foreign exchange is the parallel market. A devaluation of the parallel market exchange rate would increase the price level through an increase in the domestic price of imported goods. Hence, an increase in Central Bank financing of the fiscal deficit would increase the rate of inflation through the devaluation mechanism in the parallel market, as the recipients of the additional money supply increase their purchases of foreign exchange in the parallel market. In addition, an increase in inflationary expectations, in so far as they are reflected in a devaluation of the parallel market exchange rate, would also increase inflation.

The results of the econometric analysis indicate that the substantial deviations of domestic inflation from US inflation after the change in the import regime can be satisfactorily explained by the behavior of the fiscal deficit. The results also indicate that domestic inflation followed US inflation very closely up to 1984.

2. Econometric Methodology

Suriname inflation is regressed on a constant term, US inflation, the fiscal deficit and a dummy variable taking the value of one in 1987 and zero elsewhere. The dummy variable is intended to capture the effects of a huge increase in the price of foreign exchange in the black market on inflation in 1987. The inflation equation is estimated by ordinary least squares (OLS) and by instrumental variables (I.V.). The estimation of the equation by instrumental variables is performed to cope with the effects of the possible simultaneous determination of inflation and the fiscal deficit.¹ To test the hypothesis that the change in the import regime in 1984 made inflation sensitive to the fiscal deficit, an additional dummy variable was included in the inflation equation to capture any shift in the coefficient of the fiscal deficit. The second dummy variable took a value equal to the fiscal deficit during 1985-87 and zero elsewhere. The coefficient of this dummy variable indicates if there was a significant structural change in the response of inflation to the fiscal deficit following the change in the import regime. The second specification of the inflation equation is also estimated by ordinary least squares and by instrumental variables.

^{1/} The presence of simultaneity between inflation and the fiscal deficit produces inconsistency in the estimator of the coefficient of the fiscal deficit. The instrumental variable estimation solves this problem if the instruments are predetermined.

3. Empirical Results

The variables are defined as follows:

- (i) Domestic inflation: the rate of change in the Consumer Price Index;
- (ii) US inflation: the rate of change in US Wholesale Price Index;
- (iii) Fiscal Deficit: the ratio of the change in Central Government bonds held by the Central Bank to the stock of money broadly defined at the beginning of the period.

The results of the least squares estimation indicate (see Table 1 below) that the coefficient of US inflation is statistically significant at the usual significance levels. In addition, the coefficient of the dummy variable for 1987 is positive and statistically different from zero, and it reflects the inflationary effects of the huge devaluation of the exchange rate in the black market. However, the fiscal deficit appears as only marginally significant. The Durbin-Watson test (D-W) indicates no autocorrelation of residuals.

Table 1: SURINAME - DETERMINANTS OF INFLATION, 1970/1987

	OLS $\pi(t)$	I.V. $\pi(t)$
Constant	2.4286 (.8813)	-.6956 (-.1607)
$\pi^{US}(t)$	.6710 (2.4701)	.9348 (2.3647)
$\frac{d}{M}(t)$	.2233 (1.8838)	.3951 (1.8333)
D1	43.4948 (8.6381)	41.5441 (7.2248)
R ²	.8420	.8182
D-W	1.4887	1.6438

Note: t-statistics in parenthesis.

$\pi(t)$: rate of change in Suriname C.P.I.

$\pi^{US}(t)$: rate of change in US W.P.I.

$\frac{d}{M}(t)$: change in Government bonds held by the Central Bank as a proportion of the money supply at the beginning of the period.

D1 : dummy variable with value of one in 1987 and zero elsewhere.

The instrumental variable for $\frac{d}{M}(t)$ is its lagged value.

The results of the instrumental variable estimation (see Table 1) indicate that the coefficient of US inflation is statistically significant and that the hypothesis that the coefficient is equal to one cannot be rejected.² This indicates that US inflation is fully transmitted to domestic inflation. The Durbin-Watson test also indicates that the hypothesis of residual autocorrelation can be rejected.

The results of testing for structural change in the coefficient of the fiscal deficit (see Table 2 below) indicate that this coefficient is highly significant during 1985-87 in both the least squares and the instrumental variable estimations. This contrasts with the absence of statistical significance of the coefficient of the fiscal deficit for the whole period. Thus, the hypothesis that a structural change occurred after 1984 cannot be rejected on the basis of these results.

Table 2: SURINAME - DETERMINANTS OF INFLATION, 1970/1987

	OLS	I.V.	I.V.
	$\pi(t)$	$\pi(t)$	$\pi(t)$
Constant	.8166 (.4372)	1.8434 (.5593)	.8831 (.5318)
$\pi^{US}(t)$	.8577 (4.6232)	.7946 (2.6806)	.8729 (4.8284)
$\frac{d}{M}(t)$	.0936 (1.1115)	-.0652 (-.3222)	-
$\frac{d^1}{M}(t)$	.4433 (4.3280)	.6512 (3.8270)	.6260 (5.0564)
D1 (87:1)	36.6374 (9.8997)	34.5346 (7.4637)	34.2679 (8.1661)
R ²	.9303	.8999	.9181
D-W	1.8959	1.6567	1.7690

Note: Instruments for $\frac{d}{M}(t)$ and $\frac{d^1}{M}(t)$ are their lagged value and the lagged rate of inflation ($\pi(t-1)$), respectively

$\frac{d^1}{M}(t)$ is a variable equal to zero for 1970-84 and to $\frac{d}{M}(t)$ for 1985-87.

^{2/} The value of the t-statistics is (.1649) and its marginal significance is 1 v 1 (a (971'))

DATA: INFLATION EQUATION
(%)

Year	Π	d/M	Π^{US}
1969	1.00	-0.50	3.90
1970	1.75	-2.00	3.66
1971	-0.59	-0.60	3.26
1972	2.44	-0.30	4.48
1973	12.09	7.00	13.10
1974	15.96	3.50	18.86
1975	7.49	-1.40	9.24
1976	9.31	2.30	4.62
1977	8.83	15.80	6.12
1978	7.99	-5.50	7.77
1979	13.95	-2.40	12.56
1980	13.21	-3.00	14.01
1981	8.71	7.30	9.09
1982	7.29	11.60	2.15
1983	4.39	32.40	1.28
1984	3.69	27.10	2.24
1985	10.89	28.90	-0.43
1986	18.69	28.40	-2.69
1987	53.40	25.40	2.69

Source: Central Bank of Suriname and IMF: International Finance Statistics.

B. RICE SUPPLY RESPONSE TO RELATIVE PRICES, 1974-86

1. Introduction

The purpose of this note is to estimate the price elasticity of rice supply in Suriname during 1974-86. The period was chosen on the basis of data availability. This study will help to address the question of what will the response of rice production be if a devaluation of the real exchange rate is achieved. In addition, the price elasticity of rice exports is also estimated.

The results indicate a short-run price elasticity of rice supply of about (.60) and a short-run price elasticity of rice exports of about (.95). Data availability has precluded this study from a proper evaluation of the long-run elasticities.

2. Specification of the Supply Function

Let the production function be:

$$(1) Y = F(X, Z)$$

where X is a vector of variables inputs; and
where Z is a vector of fixed inputs.

By definition, the firm can choose the amounts of variable inputs according to their relative prices. Let the demand for variable inputs take the following form:

$$(2) X_i = h_i \left(\frac{P_{x_i}}{P}; \frac{P}{P}; \frac{P_{x_j}}{P}; Z_i; Z_j; \dots \right)$$

Where P_{x_i} is the price of input x_i
Where P_{x_j} is the price of substitute
and complement inputs to x_i
 P is the price of final output Y

p is the numeraire (i.e.: the general price level).

By definition, the amounts used of fixed factors change only through time. The dynamics of the adjustment of the fixed factors to their desired long-run levels can be specified as:

$$(3) Z_i(t) = \theta Z_i(t-1) + g_i \left(\frac{P_{z_i}}{P}(t); \frac{P}{P}(t); \frac{P_{z_j}}{P}(t) \dots \right)$$

where θ is the coefficient of adjustment of the stock of input Z_i to its long-run value.

Inserting (2) and (3) in (1) we get:

$$(4) Y(t) = F\left(\frac{P_{x_i}}{P}(t); \frac{P}{P}(t); \frac{P_{x_j}}{P}(t); Z_i(t-1)\right)$$

The short-run supply price response is evaluated as:

$$\frac{\partial Y(t)}{\partial(P/p)(t)} = \sum_{i=1}^n \frac{\partial F}{\partial X_i(t)} \cdot \frac{\partial X_i(t)}{\partial(P/p)(t)} + \sum_{i=1}^n \sum_{j=i}^m \frac{\partial F}{\partial X_j(t)} \cdot \frac{\partial X_j(t)}{\partial(P/p)(t)}$$

$$\frac{\partial Z_j}{\partial(P/p)(t)} + \sum_{i=1}^m \frac{\partial F}{\partial Z_i} \cdot \frac{\partial Z_i}{\partial(P/p)(t)}$$

The long-run response is derived once the full effect of a change in the relative price on the demand for Z factor is taken into account:

$$\sum_{i=1}^n \frac{\partial F}{\partial X_i(t)} \cdot \frac{\partial X_i(t)}{\partial(P/p)(t)} + \sum_{i=1}^n \sum_{j=i}^m \frac{\partial F}{\partial X_j(t)} \cdot \frac{\partial X_j(t)}{\partial(P/p)(t)} \cdot \frac{1}{(1-\theta L)} \frac{\partial g_i}{\partial(P/p)(t)} +$$

$$\frac{1}{(1-\theta L)} \sum_{j=1}^m \frac{\partial g_j}{\partial(P/p)(t)}$$

where L is the lag operator ($L^j x(t) = X(t-j)$).

3. Empirical Results

A log-linear version of equation (4) is estimated for 1974-86. Only the planted area was included in the estimation of equation (4) as fixed input because of data availability. In addition, data on the formation of price expectations. A dummy variable was also included to capture the effect of unfavorable weather conditions in 1983. The results of the least squares estimation (see table 1) indicate that the short-run price elasticity of supply of rice is (.60) and it is statistically significant. In addition, the coefficient of one period lag of the planted area is also highly significant. The lack of data with respect to other fixed inputs has not allowed us to make any inference on the long-run price elasticities. The values of the Box-Ljung statistic to test the hypothesis of serial correlation of the residuals at several lags indicate that it can be rejected.

The response of rice exports to price incentives was also estimated. The specification is based on some ad hoc reasoning. It includes lagged rice production among the explanatory variables. This variable attempts to capture the effect of rice stocks policy on rice exports. The results (see Table 1 below) indicate that the response of exports to a contemporaneous change in the relative price of rice is almost one (.9540) and highly significant. This result indicates that, as rice supply responds only to a one-period lag of its relative price, most of the response of rice exports to changes in its price is a result of changes in the domestic consumption of rice and stock accumulation.

Table 1: RICE SUPPLY AND EXPORTS FUNCTIONS, 1974-86

	ln Qr(t)	ln Xr (t)
Constant	-2.1225 (-1.5160)	-13.5485 (-2.7786)
ln $\frac{P_r}{CPI}$ (t-1)	.6044 (2.2672)	
ln $\frac{P_r}{CPI}$ (t)	-	.9540 (2.0700)
ln H _r (t-1)	1.8321 (5.5720)	-
D1	-.1634	-
ln Qr (t-1)	-	2.5584 (4.7270)
R ²	.9357	.8871
Q (2)	.8276 (.6611) ^a	.6818 (.7111) ^a
Q (3)	2.9568 (.3983) ^a	.6818 (.8775) ^a
Q (6)	6.1573 (.4058) ^a	3.0014 (.8087) ^a

Notes:

- Qr(t) = volume of rice production
- $\frac{P_r}{CPI}$ (t) = real price of rice
- H_r (t) = area devoted to rice production
- X_p (t) = exports of rice
- D1 = dummy variable taking a value of one in 1983 and zero elsewhere
- Q(x) = Box-Ljung statistics to test residual autocorrelation up to x lags
- a = marginal significance levels of the calculated Q(x) statistics

DATA: RICE SUPPLY FUNCTION

<u>Year</u>	<u>Pr</u> (\$/ton)	<u>Qr</u> ('000 tons)	<u>Hr</u> ('000)	<u>Xr</u> ('000 tons)
1973	160.0	164.1	45.0	
1974	190.0	162.4	44.9	
1975	210.0	174.8	47.5	
1976	221.0	172.5	48.4	
1977	259.0	202.9	49.7	54.7
1978	204.0	223.9	55.2	74.7
1979	247.0	235.8	58.9	103.0
1980	243.0	257.6	65.0	101.1
1981	233.0	280.7	70.8	112.9
1982	244.0	301.1	72.6	130.8
1983	245.0	268.0	73.3	127.4
1984	248.0	302.0	74.8	94.7
1985	250.0	299.2	74.9	127.5
1986	250.0	300.0	75.1	108.1

Source: Tables 3.2 and 7.1, Statistical Appendix.

C. SOME DETERMINANTS OF TAX REVENUES IN SURINAME, 1975-87

1. Introduction

The purpose of this note is to analyze the sensitivity of non-bauxite real tax revenues to inflation. If the tax base is not adjusted for inflation, inflation erodes the tax base because of lags between accruals and realizations of tax revenues. In addition, if there are specific taxes fixed in nominal terms, inflation diminishes their revenues in real terms. The erosion of real tax revenues caused by inflation produces a feedback between inflation and money creation. Once inflation rises as a result of previous increases in money creation, so does the fiscal deficit as tax revenues decline in real terms. In the absence of corrective measures (i.e.: measures reducing government expenditure in real terms), higher fiscal deficits imply, in turn, higher rates of money creation to finance the gap.

The main finding here is that non-bauxite tax revenues are, in real terms, quite sensitive to inflation. It is estimated that an annual inflation rate of 50% would cost about four percentage points of GDP in terms of tax revenue losses.

2. Empirical Results

Non-bauxite real tax revenues (deflated by GDP at current prices) are regressed on a constant, the rate of inflation, a trend variable and a dummy variable. The inclusion of a trend variable is intended to capture the impact of trend components (i.e.: economic growth) on tax revenues in real terms; the dummy variable is included to deal with an apparently anomalous observation in 1980. The non-bauxite tax revenue equation is jointly estimated with an equation for bauxite tax revenues by the seemingly unrelated regression (SUR) technique. The reason for using this technique is that common shocks to both equations are possible. These shocks make the residuals of both equations contemporaneously correlated, and, this being the case, ordinary least squares estimators are no longer efficient. Efficiency gains can be achieved through the SUR technique. Bauxite revenues as a percentage of GDP at current prices are regressed on a constant, a trend variable and two dummy variables. The estimation covers the period 1975-87 because of data availability. One of the dummy variables is defined as before for 1980, and the other one takes values equal to one in 1975 and zero elsewhere.³

3/ The reason for including the dummy variable for 1975 is, again, the existence of an anomalous observation. The dummy for 1980 is included to have the same number of regressors in each equation in order to perform the correction for degrees of freedom of the estimate of the covariance matrix of the residuals of the two equations. The estimation of that matrix is needed to estimate the two equations jointly and the correction for degrees of freedom is needed because of the size of the sample. The inclusion of an irrelevant variable in the bauxite tax revenue equation, makes the power of the tests of hypothesis lower than otherwise.

The results are as follows:

$$\begin{aligned} \text{TNB} &= 17.9165 - .0853 \pi + .1367t + 1.9474 d1 \\ \text{GDP} &(24.2200) (2.3516) (1.9749) (2.0502) \end{aligned}$$

$$\begin{aligned} R^2 &= .3969 \\ D-W &= 1.3940 \\ Q(6) &= 5.6097 (.4683) \end{aligned}$$

$$\begin{aligned} \text{TB} &= 9.5899 - .6579t + .8156 D1 + 4.5400 D2 \\ \text{GDP} &(14.2998) (9.1037) (.8827) (4.9407) \end{aligned}$$

$$\begin{aligned} R^2 &= .9317 \\ D-W &= 1.9454 \\ Q(6) &= 3.3179 (.7680) \end{aligned}$$

Covariance/Correlation Matrix of Residuals

	<u>TNB</u>	<u>TB</u>
	<u>GDP</u>	<u>GDP</u>
<u>TNB</u>	.5954	-.7344
<u>GDP</u>		
<u>TB</u>	-.4336	.5854
<u>GDP</u>		

The number above the diagonal of the Covariance Correlation Matrix of Residuals is the correlation between residuals.

Where:

- TNB: Non-bauxite tax revenues
- TB : Bauxite revenues
- GDP: Gross domestic product at current prices
- π : Rate of change in GDP deflator
- t : Trend variable
- D1 : Dummy for 1980
- D2 : Dummy for 1975
- Q(6): Box-Ljung statistic to test for serial correlation of residuals up to six lags (the numbers in parenthesis are the marginal significance levels)
- D-W: Durbin-Watson statistic to test for serial correlation of residual of degree one

The results indicate that inflation has a negative impact on tax revenues and that this effect is statistically significant. The magnitude of the coefficient indicates that an annual rate of inflation of 50% would reduce non-bauxite tax revenues in real terms by four percentage points of GDP. This suggests that a reduction in money creation through a reduction in the fiscal deficit will be achieved as a lower rate of inflation will reduce, in turn, the fiscal deficit. In addition, the significant coefficient of the trend variable in the bauxite tax revenue equation is not surprising since it reflects the decline in bauxite exports and the elimination of the tax levy in 1987.

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DATA: TAX REVENUES EQUATION
(Sf million and percentages)

Years	GDP	TNB	T_B	II
1975	937.0	144.8	126.2	12.9
1976	1030.0	183.9	71.5	6.5
1977	1282.7	235.0	64.8	6.3
1978	1471.0	271.5	103.6	6.4
1979	1565.3	334.1	88.3	15.1
1980	1602.3	385.7	92.6	9.6
1981	1798.3	395.2	96.4	5.1
1982	1848.8	441.1	68.7	9.3
1983	1786.9	438.4	74.5	0.8
1984	1744.8	440.2	59.4	0.0
1985	1741.3	515.9	51.7	0.7
1986	1810.3	578.3	20.2	7.1
1987	1939.7	624.2	0.0	16.2

Source: Tables 2.1, 2.2 and 5.1, Statistical Appendix.

SURINAME

PUBLIC SECTOR INVESTMENT PROGRAM LISTS

This annex contains lists of ongoing investment projects and proposed investment projects. Each list contains the name of the projects; the total cost, amount, source and conditions of external financing, if any; and the duration and status of the projects. Estimated costs are to be regarded as indicative.

Data for these projects, which will be presented for consideration at the ninth meeting of the Caribbean Group for Cooperation in Economic Development, were prepared by the Government of Suriname with the assistance of the Bank mission.

SURINAME - SECTORAL DISTRIBUTION OF PSIP
(in thousands of Sf)

	1988		1989		1990	
	Total SF'000	%	Total SF'000	%	Total SF'000	%
TOTAL PSIP	63,899	100.0	145,222	100.0	160,841	100.0
ECONOMIC SERVICES	58,348	91.3	132,272	91.1	155,041	97.0
Agriculture, Forestry & Fisheries	13,526	21.2	29,160	20.1	40,150	25.0
Manufacturing	400	0.6	24,410	16.8	25,491	15.8
Mining	0	0.0	13,700	9.4	20,100	12.5
Power	23,670	37.0	41,050	28.3	45,200	28.1
Transportation	1,800	2.8	11,642	8.0	6,200	3.9
Water	952	1.5	1,510	1.0	18,900	11.8
Telecommunications	18,000	28.2	10,800	7.4	0	0.0
SOCIAL SERVICES	5,551	8.7	12,950	8.9	4,800	3.0
Education	2,375	3.7	1,250	0.9	1,700	1.1
Health	3,176	5.0	11,700	8.1	3,100	1.9

SURINAME - PSIP BY SOURCE OF FINANCING
(Sf' 000)

	1988	1989	1990
TOTAL PSIP	63,899	145,222	160,841
Central Government	13,364	38,683	11,140
External	9,829	36,598	10,161
Grants	5,282	9,087	4,050
Loans	4,547	27,511	6,111
Local	3,535	2,085	979
Rest of Public Sector	50,535	106,539	149,701
External	38,427	73,832	96,460
Grants	119	962	0
Loans	38,308	72,870	96,460
Local	12,108	32,707	53,241

SURINAME - FINANCING GAP
(Sf' 000)

	1988	1989	1990
Total requirements	63,899	145,222	160,841
External commitments	47,886	66,149	33,840
Local contributions	15,643	34,792	54,220
• Financing gap	370	44,281	72,781

SURINAME - PUBLIC SECTOR INVESTMENT PROGRAM, 1988-90
(\$m thousands of \$f)

Total Project Cost	Local Cost	External Financing Terms & Conditions			1988			1989			1990				
		Amount	Source	Int. Rate %	Grace Period (Yrs)	Depr. Period (Yrs)	Total	Exter.	Local	Total	Exter.	Local			
TOTAL PSIP							63,000	40,236	15,643	145,222	110,430	34,792	166,041	106,621	54,220
ONGOING							62,030	47,500	15,422	75,052	65,852	9,200	42,230	33,840	8,390
ECONOMIC SERVICES							57,370	43,503	13,706	62,102	52,802	9,200	37,430	28,640	8,300
Agriculture, Forestry & Fisheries							12,927	8,301	4,626	21,260	19,045	2,215	7,230	5,000	2,230
Freshwater shrimp project	3,850	2,100	1,750	Dep. China	-	-	1,100	550	630	2,040	1,200	840	0	0	0
Fish. centre - Bickerie	3,432	554	2,878	EDF	-	-	1,300	800	410	1,893	1,840	45	79	0	79
Banana expans. prog. (1000 ha)	39,500	10,600	11,900	EDF	-	-	0	0	0	0	0	0	1,251	520	731
Fisheries (inputs & equip.)	11,338	7,871	3,405	Venezuela	-	-	0	0	0	11,036	11,036	0	0	0	0
Feasib. - rice prodnc (Bickerie)	1,977	140	1,237	IBD	-	-	1,517	1,377	140	0	0	0	0	0	0
Feasibility study - bananas	77	0	77	EDF	-	-	35	35	0	0	0	0	0	0	0
Research on farm mechanisation	357	0	357	Netherlands	-	-	53	0	53	27	27	0	0	0	0
Feasibility study - MCP	2,400	900	1,500	IBD	-	-	1,700	1,500	200	695	625	70	0	0	0
Slice polders (Coronle)	10,060	0	10,060	EDF	-	-	119	119	0	0	0	0	0	0	0
Agric. dev plan (Comwonijne)	4,195	4,195	-	Netherlands	-	-	923	0	923	0	0	0	0	0	0
Artificial insemination (cattle)	1,000	500	500	EDF	-	-	1,000	1,000	0	300	360	0	400	400	0
Fruit & vegetable proj. (Ponona)	1,600	1,600	0	Netherlands	-	-	285	0	285	262	262	0	0	0	0
Banana expansion prog. (500 ha)	9,000	0	3,600	Fyffes	-	-	3,282	1,313	1,069	2,067	827	1,240	2,325	930	1,395
Oil palm project (Patanacca)	72,745	-	-	Netherlands	-	-	16	0	16	20	0	20	25	0	25
Line of credit (Agric Dev Bank)	8,400	0	8,400	EDF	1	10	30	1,500	1,500	0	2,000	2,000	0	3,000	3,000
Field trials (rice)	1,460	-	-	Netherlands	-	-	0	0	0	120	120	0	150	150	0
Manufacturing							400	400	0	1,000	1,000	0	2,000	2,000	0
Global industrial loan	10,000	-	-	IBD	-	-	400	400	0	1,000	1,000	0	2,000	2,000	0
Power							23,300	18,362	4,938	19,700	15,340	4,360	24,000	18,640	5,360
Expansion of State Oil Co.	74,500	32,500	42,000	ABD	-	-	21,000	10,062	4,938	19,000	14,640	4,360	24,000	16,640	5,360
Feasib- Tanaredjo energy proj	2,200	200	2,000	IBD	-	-	1,500	1,500	0	700	700	0	0	0	0
Transportation							1,800	800	1,000	9,342	8,217	1,125	4,200	3,400	800
Road (Burnside/Wageningen)	26,800	10,000	16,800	EDF	-	-	1,500	500	1,000	4,500	3,375	1,125	2,000	1,200	800
Ferry contract(Guyana/Suriname)	24,250	0	24,250	EDF	-	-	300	300	0	4,842	4,842	0	2,200	2,200	0

SURINAME - PUBLIC SECTOR INVESTMENT PROGRAM, 1988-90
(In thousands of \$)

Total Project Cost	Local Cost	External Financing Terms & Conditions					1988			1989			1990		
		Amount	Source	Int. Rate %	Grace Period (Yrs)	Repay. Period (Yrs)	Total	Exter.	Local	Total	Exter.	Local	Total	Exter.	Local
Water						952	220	732	0	0	0	0	0	0	
Water supply (Comenijne)	-	-	Netherlands	-	-	412	0	412	0	0	0	0	0	0	
Feasib. study (water sector)	2,700	1,600	1,100	IDB	-	546	220	320	0	0	0	0	0	0	
Telecommunications						10,000	15,500	2,500	10,000	9,300	1,500	0	0	0	
Telecommunications expansion	36,000	5,000	31,000	Brazil	0	3	0	10,000	15,500	2,500	10,000	9,300	1,500	0	0
SOCIAL SERVICES						5,551	3,925	1,626	12,950	12,950	0	4,000	4,000	0	
Education						2,375	1,925	450	1,250	1,250	0	1,700	1,700	0	
Technical school (Nickerie)	-	ERR	-	EDF	-	1,575	1,575	0	0	0	0	0	0	0	
Bureau for curriculum develop.	3,000	0	3,000	Netherlands	-	300	0	300	500	500	0	500	500	0	
Adult education	-	ERR	-	Netherlands	-	150	0	150	150	150	0	200	200	0	
Curriculum development	31,000	0	31,000	IDB	-	350	350	0	600	600	0	1,000	1,000	0	
Health						3,176	2,000	1,176	11,700	11,700	0	3,100	3,100	0	
Hospital extension/improvements	7,200	0	7,200	Netherlands	-	750	0	750	600	600	0	600	600	0	
Regional hospital (Nickerie)	14,000	0	14,000	IDB	-	2,000	2,000	0	10,400	10,400	0	2,500	2,500	0	
Improve. psychiatric hospital	8,936	0	8,936	Netherlands	-	426	0	426	700	700	0	0	0	0	

SURINAME - PUBLIC SECTOR INVESTMENT PROGRAM, 1988-90
(in thousands of \$f)

Project	Total Cost	Local Cost	External Financing Terms & Conditions				1988			1989*			1990		
			Amount	Source	Int. Rate %	Grace Period (Yrs)	Repay. Period (Yrs)	Total	Ext.	Local	Total	Ext.	Local		
NEW PROJECTS															
Agriculture, Forestry & Fisheries															
							969	748	221	70,170	44,578	25,592	118,611	72,781	45,830
							599	378	221	7,900	2,047	5,853	32,920	14,530	18,390
MCP Phase II	79,300	30,300	49,000	Unknown	-	-	0	0	0	2,700	1,400	1,300	25,500	13,000	12,500
Aquacul- Brackish water fish	1,110	435	675	108	-	-	599	378	221	496	297	199	0	0	0
Artisanal fisheries/Boat bldg	17,826	12,826	5,000	Unknown	-	-	0	0	0	4,704	350	4,354	5,420	1,530	3,890
Restructuring sugarcane indus.	24,890	9,920	14,880	Unknown	-	-	0	0	0	0	0	0	2,000	0	2,000
Manufacturing															
							0	0	0	23,410	13,825	9,585	23,491	14,211	9,280
Expans - milk processing plant	10,000	4,000	6,000	Unknown	-	-	0	0	0	7,500	4,000	3,500	4,500	2,000	2,500
Improv. Suriname Timber Co.	7,068	3,060	4,008	Unknown	-	-	0	0	0	2,200	1,400	800	4,500	2,900	1,600
Rehab./extens. of Tropica NV	4,420	1,870	2,550	Unknown	-	-	0	0	0	1,035	875	160	1,350	900	450
Indus. infrastruc. (Saramacca)	300	60	240	Unknown	-	-	0	0	0	300	240	60	0	0	0
Feasib. study - baelin produc.	4,691	1,412	3,279	Unknown	-	-	0	0	0	1,865	1,000	865	1,311	1,311	0
Rehab.-Sur. Wood Process. Indus	26,285	10,514	15,771	Unknown	-	-	0	0	0	10,510	6,310	4,200	11,830	7,100	4,730
Power															
							370	370	0	21,350	18,600	2,750	21,200	18,400	2,800
Feas. - energy from rice husk	270	0	270	Unknown	-	-	270	270	0	0	0	0	0	0	0
Prefeas. - solar collectors	225	25	200	Unknown	-	-	0	0	0	250	200	50	0	0	0
Use of "non-conventional" energy	1,000	250	750	Unknown	-	-	100	100	0	100	100	0	200	100	100
Street lighting	2,000	600	1,400	Unknown	-	-	0	0	0	1,000	700	300	1,000	700	300
Transmission line	60,000	7,000	53,000	Unknown	-	-	0	0	0	20,000	17,600	2,400	20,000	17,600	2,400
Transportation															
							0	0	0	2,300	300	2,000	2,000	1,200	800
Construct. of wharf-New Nickerie	7,000	2,800	4,200	Unknown	-	-	0	0	0	2,300	300	2,000	2,000	1,200	800
Water															
							0	0	0	1,510	906	604	18,900	11,340	7,560
Water supply expansion- Ph I	37,240	14,820	22,420	Unknown	-	-	0	0	0	1,510	906	604	18,900	11,340	7,560
Mining															
							0	0	0	13,700	8,900	4,800	20,100	13,100	7,000
Gold exploration - Gros Rosebel	39,800	13,600	25,200	Unknown	-	-	0	0	0	13,700	8,900	4,800	20,100	13,100	7,000

SURINAME - PROJECTS IN IDEA STAGE
(in thousands of Sf)

	Total Project Cost	External Financing Amount	%
Idea			
Agriculture, Forestry & Fisheries			
Improvement of forestry industry	90,000	50,000	56
Forestry training programme	300	120	40
Oil palm proj. (mill & refinery) - Patamacca	21,000	12,600	60
Manufacturing			
Infrastructure for industrial estate	3,000	3,000	100
Pover			
Oil Refinery	50,000	34,000	68
Pover project - small diesel plants	1,400	1,100	79
Pover project - small diesel plants (EBS)	8,000	6,000	75
Diversion of Jaikreek to Brokopondo Lake	60,000	22,000	37
Electricity supply to the interior	1,200	800	67
Solar collectors	250	200	80
Tambaredjo Project	65,000	55,000	85
Processing of rice husk (Nickerie)	2,200	1,800	82
Kabalebo hydro project	325,000	225,000	69
Water			
Five-year dev. plan for rural water supply	20,837	5,854	29
Mining			
Prospecting (Greenstone Belt)- minerals	7,640	5,472	72

TECHNICAL COOPERATION PROGRAMS, 1987-90

(US\$'000)

The data provided in Annex IV was compiled by a UNDP mission working in close collaboration with the World Bank team, the Planbureau of Suriname and various technical Ministries and Departments. It is intended that this technical assistance identification process will be an ongoing activity which will provide updated information from time to time. In the course of the development of an economic plan for Suriname during the coming months, it is anticipated that Government will seek to establish priorities among the various technical assistance projects listed.

Pages 1 to 11 of Annex IV reflect the ONGOING Technical Cooperation Programs between the Government of Suriname and various donors, with an estimated total cost of US\$38.3 million. Pages 12 to 22 reflect the PROPOSED Technical Cooperation Program totalling US\$23.8 million. It should be noted, however, that several proposals are only ideas at this stage for which cost data is not yet available.

**SURINAME TECHNICAL COOPERATION PROGRAMME
LIST OF ONGOING/COMMITTED TECHNICAL COOPERATION PROGRAMMES 1987-90**

(in US\$'000)

Key:

- (1) Date of proposed disbursement
- (2) Date of terminal disbursement
- (3) Project Related (PR)/Institutional Support(IS) Training(T)/Hard Pipeline(HP)/Soft Pipeline(SP)/Advisory Service(AS)
- (4) Donor Approved (DAPV)/To be Approached (TBA)/Donor Approached (DAPCH)/Source Unknown(SU)/Project Design Stage (PDS)
- .. Not determined, unknown
- None
- XX Estimated \$ values
- Amount Unknown(0)

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION (3)	STATUS	COMMENTS
		AMT	SOURCE	LOAN GRANT (L/0)	AMT	EXECUTING AGENCY	START (1)	COMP. (2)				DURA TION (mths)
ECONOMIC SERVICES											
Agriculture (AGR)											
Pre-feasibility study Dairy Production Project.	20	13	IICA	0	7 MOA, AH, F	87	85	17	AS	DAPV	Preparation of a feasibility study to increase milk production of 2,700 Small Dairy Farms.
Emergency Assistance Programme "Spear Rot" Disease of Oil Palm	13	13	IICA	0	0 MOA, AH, F	87	87	0	AS	DAPV	Evaluation of the oil palm and coconut pest and disease research in Suriname.
Strengthening the Animal Production division of the Min. of Agriculture & Fisheries	85	85	IICA	0	0 MOA, AH, F	86	89		AS	DAPV	Mainly assisting the GOV to meet the needs of improving Dairy Production by training and demonstration.
Support to Agriculture & Rural Development Planning	233	233	IICA	0	0 MOA, AH, F	84	89	48	AS	DAPV	Assistance to GOV to develop and operate an effective sector Policy Analysis Process.
Support Programme for the control of Pests & Diseases of Coconut & Oil Palm trees	137	137	IICA	0	0 MOA, AH, F	88	89	24	AS	DAPV	To increase the production & productivity of oil palm & coconut cultivation in Suriname through pest and disease control.
Training in packaging of Agricultural products	6	6	INDIA	0	0 MOA, AH, F	88	87	4	T	DAPV	

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIFICATION	STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START (1)	COMP. (2)				DURA TION (3)
Baramacca Canal Rehab. Programme	700	700	OAS	0	0	RIC	85	86	60	PR	DAPV	Pre-feasibility study of the rehabilitation of the Baramacca Canal financed under 3 biennium programmes 84/85, 86/87, 88/89. Project forms part of Suriname River Basin Project.
Agriculture Sector Study	50	50	IDB	0	0	MOA, AN, F	87	87	5	PR	DAPV	Analysis/evaluation of agricultural sector
Expansion of acreage under Bananas	40	40	EDF	0	0	MOA, AN, F		88		PR	DAPV	Project seeks to increase acreage by 1.500 hectares.
Ass. in Forestry	0	0	OAS	0	0	MOA, AN, F	83	89		AS	DAPV	Project modified to deal with refugee resettlement programme in the interior.
Artificial Insemination programme - Dairy cattle	0	0	EDF	0	0	MOA, AN, F	87	89		PR	DAPV	To improve dairy cattle quality for increased milk production. Includes equipment, experts. Part of a US\$720 capital project.
Establishment of a Fisheries Data Collection & Info System	128	128	UNDP/IPF G GCS (FAO)	0	0	MOA, AN, F	87	89	20	AS, T	DAPV	Establishment of a shore based fishery data collection system, research survey programme, offshore observer prog. computerization of fishery data mgmt., analysis and reporting, fishery mgmt. plan, short term consultants 8-5 m/w training, equip.
Project Manager/Coordinator Boskamp village Fisheries Project	0	0	Belgium/ G BHAS	0	0	MOA, AN, F	83	90	108	AS, T		Aimed at improving artisanal fishing industry in Boskamp.
Agricultural cooperative Development	358	358	UNDP/IPF G GCS (FAO)	260	0	MOA, AN, F	88	90	42	AS, T	DAPV	Originally financed under FAU/TCP Programme.
Leucaena (R)	44	44	OAS	0	0	MONRE	87	89	24	AS	DAPV	Research on leucaena plant for energy prod. (firewood, charcoal) and fodder. Biennium 86/87, 88/89.
EBUTROP (R)	60	60	OAS	0	0	MOA, AN, F	87	89	24	AS	DAPV	Research on tropical plants for medicinal purposes. Project coordinator departed proj. 8/87. No new coordinator assigned.

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- TION ICATION (3)	STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START (1)	COMP. (2)				DURA TION mths
Aquaculture	95	95	OAS	0	0	Swiland	87	89	24	AS	DAPV	Establishment of a shrimp and cascadura hatchery. 12 ponds established and 4 stocked to date. After 89 will be self-supporting project.
Veterinary Public Health Programme	21	21	PAHO	0	0	MOA, AH, F	ON-GO ING			AS	DAPV	Strengthening of the public Health and animal health programme to reduce human mortality & morbidity arising from Zoonosis. Director General of PAHO donated an additional US\$17.5 to programme for control of Bovine rabies.
Prawn Propagation Techniques	20	20	JAPAN (IICA)	0	0	MOA, AH, F	86	87	9	T	DAPV	Training in Prawn techniques.
Aquaculture	15	15	JAPAN	0	0	MOA, AH, F	87	87		T	DAPV	
AGRI. SUB-TOTAL	2323	2056										
Industry (IND)												
Export Promotion	500	500	EEC	0	0	MOTCI		88	9	T	DAPV	To be completed in 88.
Strengthening of National Development Bank	78	78	IDB	0	0	P.B.	88	89	12	IS	DAPV	Awaiting Execution.
Industrial Credit	80	80	IDB	0	0	NOB	87	88	12	IS	DAPV	
Industrial Adviser	134	134	TF UNIDO UNDP/IPF GCS	0	0	FB, MOTCI	88	89	15	PR	DAPV	Dutch Trust Fund.
INDUSTRY SUB-TOTAL:	792	792										
Tourism (TOU)												
Assistance in Tourism	400	400	OAS	0	0	MOTCI	85	89	48	IS	DAPV	Consultants institutional
TOURISM SUB-TOTAL:	400	400										
Mining, Quarrying (MO)												
Geological Study-Mineral Resource assessment Study	3600	3600	Belgium	0	0	NONRE	82/88	83	24	IS	DAPV	2 geologists - ongoing and completed; 2 geologists proposed to undertake training and exploration; 2 chemical
MINING SUB-TOTAL:	3600	3600										

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START	COMP.			DURA TION (mths)	CLASSIF- ICATION (3)
Transport (TPR)											
Feasibility & final Design Study - Burnside/Wagoningen	22	22	EDF	0	0 MOPW,T	87	87	3	PR	DAPV	Phase I of road project completed by GOV. Phase II to start in 88 with EDF funds (7.6M ecu's).
Feasibility and Final Design Study - Ferry Service between Guyana & Suriname	0	0	EDF	0	0 MOPW,T	87	88	3	PR	DAPV	EEC Regional project - Part of a 12.1M Ecu project.
Training in shipping Administration	5	5	JAPAN	0	0 NOTCI	87	87	2	T	DAPV	
TRANSPORT SUB-TOTAL:	27	27									
Communications (COM)											
Telecommunications Development	287	287	UNDP/IPP GCS (ITU)	0	0 TELESUR	86	88	48	AS,T	DAPV	(i) establishment & implementation of a Management Info system, project admin. & control system;(ii) planning & org. of a national telecom. programme includes 2 m/m's of consultancy services equipment & fellowships
Postal Training	9	9	INDIA	0	0 MOPWT	88	87	9	T	DAPV	
COM. SUB-TOTAL:	296	296									
Energy (ENY)											
Training and Construction Biogasifiers	70	50	OLADE	0	20 MONRE	87	88	38	IS	DAPV	Technicians training.
Feasibility Study Tamberedjo Diesel Project	1150	1008	IDB	0	142 Electricity Utility Co. (MONRE)	88	89	12	PR	DAPV	Feasibility Study 25-40m slow speed diesel plant to generate electricity of Saramacca and 161KV transmission line from Saramacca/Paramaribo.
Training in heavy fuel production, storage and equipment	3	3	OLADE	0	0 MONRE	88	88	1	IS	DAPV	Technicians training (Petrobras Brazil).
Training Course in solar Energy	13	10	OLADE	0	3 MONRE	88	88	1	IS	DAPV	Training course in solar Energy and installation of Solar collectors for hot Watersupply.
Training in energy audits	3	3	OLADE	0	0 MONRE	88	88	1	IS	DAPV	Technicians training in the execution of energy audits.
ENERGY SUB-TOTAL:	1239	1079									

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION	STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/O)	AMT	EXECUTING AGENCY	START (1)	COMP. (2)				DURA- TION (mths)
Water Supply (WAS)												
Feasibility study Improvement Water supply system in Greater Paramaribo	000	000	IDB	L	0	Burinasco Water Company	88		PR	DAPV	Loan to be arranged for implementation.	
Ground Water/Hydrology	80	80	OAS	G	0	MOHA MONS Suriname	87	89	24	PR	DAPV	8 m/m consultants financed from 2 years allocation 1988/89 of 700.000.
WATER SVC. SUB-TOTAL:	980	980										
Trade, Banking (TB)												
Trade Promotion	500	500	ERC	G	0	NOT.I.C	87	88	9	IS	DAPV	
Industrial Loan to MOB	6000	6000	IDB	L	0	MOB	88	90	48	PR	DAPV	To promote industrial activities.
TRADE SVC. SUB-TOTAL:	6500	6500										
Miscellaneous (MISC)												
Fera District Dev.	220	220	OAS	G	0	PB	87	89	24	PR	DAPV	Consultants (22 m/m) financed from 2 years allocation 1988/89 of 700.000.
Urban Planning Greater Paramaribo	30	30	OAS	G	0	PB	88	88	3	PR	DAPV	3 m/m consultants to be financed from 1988/89 allocation of 700.000.
Assistance to National Meteorological Service	285	285	UNDP IPF/GCS (WHO)		0		87	88	3.5	PR	DAPP	
Preparation of Atlas	0	0	OAS		0	PB	81	88		PR	DAPP	Consultant financed from 1988/89 Prog. of US\$700.000.
Rehabilitation of Van Woeke Canal Area (Rice Land)	0	0	OAS	G	0		88	89	2			Co-financing of feasibility study.
Comewijne District Regional Development	30	30	OAS	G	0	PB	88	89	0.5	PR	DAPV	To be financed from 1988/89 allocation of 700.000.
MISC. SUB-TOTAL:	565	565										
ECON. SERVICES TOTAL:	16702	16270										

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- TICION ICATION (3)	STATUS	COMMENTS		
		ANT SOURCE	LOAN GRANT (L/G)	ANT AGENCY	EXECUTING	START	COMP.	DURA TION (mths)					
SOCIAL SERVICES													
Education & Training (EDT)													
Fellowships and Short term Training (Belgium Training Programme)	0	0	Belgium	0	0	MOE	79			T	DAPV	Since '79, 80 fellowships awarded. Currently 20 persons in training.	
Provision of Technician (teacher)	1858	350	VVOB (Belgium)	0	1808	NATIN (Techn. School)	88	88			T	DAPV	1 year extension likely.
Provision of Lecturer (Geology)	3429	820	VVOB (Belgium)	0	2609	Univ. of Suriname	85	88	38		T	DAPV	1 year extension likely.
Fellowship and Short term training	0	0	Belgium	0	0	MOE	79				T	DAPV	Since '79, 80 fellowships awarded. Presently 20 persons in training.
Provision of Technician (teacher)	60	30	VVOB (Belgium)	0	30	NATIN (Tech. School)	88	88	24		T	DAPV	1 year extension likely.
Provision of Geologist	90	45	VVOB	0	45	Univ. of Suriname	85	88	38		T	DAPV	1 year extension likely.
Provision of Agricultural engineer (Lecturer)	90	45	VVOB (Belgium)	0	45	Univ. of Suriname	85	88	38		T	DAPV	1 year extension likely.
Computer Programming course for Managers and Teachers of Technical and Vocational Schools	14	14	OAS	0	0	MOE	88	88	24		T	DAPV	Consultants/equipment.
Upgrading the Faculty of Home Economics	8	8	OAS	0	0	MOE	88	88	24	18		DAPV	Consultants/equipment.
Audio Visual Training	17	17	OAS	0	0	MOE	87	88	24		T	DAPV	Fellowship/consultant.
Manpower Training in fisheries, Agriculture and Forestry	44	44	OAS	0	0	MOE	88	89	12		T	DAPV	Consultants/Seminars.
Improvement and Development of Teaching Materials	12	12	OAS	0	0	MOE	88	89	12	18		DAPV	Consultants/equipment/fellowsh ip.
Guidance and counselling training programs	4	4	OAS	0	0	MOE	87	87			T	DAPV	Training and equipment.
Training in development of assessment materials	8	8	OAS	0	0	MOE	87	88			T	DAPV	

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- TATION ICATION (3)	STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START (1)	COMP. (2)				DURA- TION mths
Upgrading Curriculum Development Personnel	5	5	OAS	0	0	MOE	87	88		T	DAPV	
Training and Up-grading of Personnel in Special education	10	10	OAS	0	0	MOE	88	89	12	18	DAPV	Consultant and Training.
Development of Assessment Testing Material	7	7	OAS	0	0	MOE	88	89	24	16	DAPV	Training and Equipment.
Training and Up-grading of counselling and guidance officers	5	5	OAS	0	0	MOE	88	89	12	18	DAPV	Training.
Education Programmes for Women	7	7	OAS	0	0	MOE				15	DAPV	Training.
Computer Centre of University of Suriname	14	14	OAS	0	0	MOE				15	DAPV	Consultant and Equipment.
Mass Media and Adult Education	6	6	OAS	0	0	MOE	88	88	2	18	DAPV	Training and Equipment.
Development of children's Literature and Songs	27	27	OAS	0	0	MOE	88	88	12	18	DAPV	Consultant, training and equipment.
Provision of Agr.	80	45	VVOB	0	45	Univ. Suriname	85	88	36	T	DAPV	1 year extension granted.
Provision of Chemist (Lecturer)	725	725	Belgium	0	0	NATIN (Techn. College)	81	89	08	T	DAPV	2 years extension granted.
Provision of Agricultural Engineer (Lecturer)	90	45	VVOB (Belgium)	0	45	Univer- sity of Suriname	86	89	36	T	DAPV	1 year extension granted.
Development of a new curriculum for Primary Education in Suriname	8000	8000	IDB	L	0	MOE	88	89	36	18		
Strengthening of audio-visual div.	383	154	UNESCO	0	239	MOE	87	88	24	18	DAPV	Phase I: 1987 US\$67,500; Phase II: 1988 US\$68,500; Training Advisor and equipment.
Cultural Heritage	10	10	UNESCO	0	0	UNESCO Nat. Comm.	87			18	DAPV	Preservation of the traditional head-dress of the Surinamese Creole, the "anjisa".
Literature of Suriname	31	31	UNESCO	0	0	MOE	88	87	24		DAPV	Preparation of literature of Suriname from 1970-85.

TITLE/SUBJECT	TOTAL T/A CDBT	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION (3)	STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START	COMP.				DURA- TION (mths)
Establishment of a National Info system	41	41	UNESCO	G	0	UNESCO Nat. Comm.	86	87	24	18	DAPV	Strengthening secretariat of Nat. Comm.
EDUCATION (108-TOTAL)	16191	16191										
Population, Health, Nutrition (PHN)												
Doctor N.D.	45	0	VVOB/GOS	G	45	MOH/PHS	85	88	36	18	DAPV	1 year extension & 1 further year extension.
PARO Country Programme	0	0	PAHO	G	0							
Epidemiology surveillance & trend assessment	66	66	PAHO	G	0	MOH	ONGOING			AS.T	DAPV	PAHO assistance for 87/88 consultancy service (short term) disease control training examined of blood samples LATUC.
Development of Health Services	123	123	PAHO	G	0	MOH	ONGOING			AS.T	DAPV	Aimed at strengthening health care delivery programme using the primary health care approach.
Control of Communicable Diseases	37	37	PAHO	G	0	MOH	ONGOING			AS.T	DAPV	Programme aimed at the control of diseases such as B.I.D. diarrhoeal diseases, acute respiratory diseases short-term consultants, equipment, training.
Maternal & Child Health	39	39	PAHO	G	0	MOH	ONGOING			AS.T	DAPV	Programme aimed at the delivery of a comprehensive range of promotion, preventive and curative services for mothers and children through health education and medical supplies.
Environmental Health	56	56	PAHO	G	0	MOH	ONGOING			AS.T	DAPV	Programme aimed at strengthening, organizing and developing all environmental health services through MOH. Post of environmental health engineer to be filled shortly.
Feasibility & final Design study, Nickerie Hospital	0	0	IDB	L/G	0	MOH						
Chief Pharmacist	0	0	Belgium	G	0	Nickerie Hospital	80	89	108	18	DAPV	24 mths. extension likely. No local replacement available. No training programme in place.

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION (3)	STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START (1)	COMP. (2)				DURA TION mths
Chief Pharmacist	0	0	Belgium	0	0	's Londs Hospital	80	89	108	18	DAPV	Further 24 mths. extension likely. No local replacement available. No training prog. in place.
Pharmacist	0	0	Belgium	0	0	MOH	87	89	24	18	DAPV	24 mths. extension to be requested.
Health Economist	0	0	Belgium	0	0	MOH	83	89	72	18	DAPV	24 mths. extension granted at 3/87.
General Surgeon	73	0	VVOB/GOS	0	0	Academic Hospital	85	88	38	18	DAPV	No local replacement available. 1 year extension likely.
X-ray Technician	45	0	VVOB/GOS	0	45	Academic Hospital	85	88	38	18	DAPV	1 year extension granted & 1 year further extension likely.
Development of Human Resources	120	120	PAHO	0	0	MOH	87	88		T	DAPV	Aimed at monitoring the National Public Health manpower situation in the planning and development of human resources in relation to the needs of programmes and services. Fellowships/consultancy services. Compliments PAHO's control of communicable disease project consultancy services equipment, medical supplies.
Control of Leprosy diseases	45	45	EMMAUS (PAHO)	0	0	MOH	1/88	12/88	12	AS	DAPV	
POPULATION SUB-TOTAL:	854	854										
Housing and Community Services (HCS)												
Assistance in Housing	40	40	UNDP/IPF (HABITAT)		0	MOSAR	88	88	0.8	PR	DAPP	
Social Security	104	104	UNDP IPF/GCS (ILO)		0	MOSAR	89			PR	DAPP	Duration to be determined.
Production Unit for preserved fruits and by-products	158	83	UNIFEM	0	95	National Women's Movement	88	90	38	PR	DAPV	
ROUBINCO SUB TOTAL:	302	207										
Miscellaneous (MISC)												
National School of Dance	13	13	OAS	0	0	MOZ	87	88	8	18	DAPV	Training and equipment.

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION (3)	STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START (1)	COMP. (2)				DURA- TION (mths)
Introduction to the Music of Suriname	2	2	OAS	0	0	MOE	87	88	6	18	DAPV	Research and equipment.
Caribbean Arts and Crafts	12	12	OAS	0	0	MOE	87	88	12	18	DAPV	Training and equipment.
Training and Up-grading in visual Acuity and Visual functioning	5	5	OAS	0	0	MOE	87	88	7		DAPV	Training and equipment.
MISC. SUB-TOTAL:	32	32										
SOCIAL SERVICES TOTAL:	17179	11999										
GENERAL PUBLIC SERVICE												
Administration & Planning (ADM)												
National Accounts Development SUR/82/006	435	285	UNDP/IPF G GCS	150	MOP		85	89	48	18	DAPV	Advisory Services completed in 1986. Fellowship component being implemented.
Institutional Strengthening of Planbureau	0	0	OAS	0	PB		85	89	48	18	DAPV	Consultant financed under 1988/89 biennium allocation of US\$700,000.
Non-projects related Experts	3000	3000	Belgium G Ed. Prog	0	PB					18	DAPV	10 experts - Institutional Streng. of Public Service.
Adviser Project Eval. and Programming	0	0	Belgium G Inst. Str. Prog.	0	PB		81	88	84	18	DAPV	Ext. granted from 6/86 to 6/88.
Sociologist	0	0	Belgium G Inst. Supp. Prog.	0	MOL		85	89	48	18	DAPV	Org. appr. 2 yrs. Add. 2 yrs. granted Sociologist attached division of MOL.
Improvement of Information systems	47	47	OAS	0	PB		87	89	26	7	DAPV	
Graduate Inst. support Programme	360	360	MOB	0	MOE, MOL		81			18	DAPV	Vlaamse Vereniging voor Opleidings programma's in het Buitenland provides activities, installation cost etc. est. US\$15,000 per person.
Training in Parliamentary Procedures	16	16	INDIA	0	Univ of Suriname PM's office		84	88	4	18	DAPV	Training for 4 mths. for 2 persons in India.
Training in Manpower	6	6	India	0	Planbu- reau		87	87	3	15	DAPV	Training for 3 mths for 1 person in India.

TITLE/SUBJECT	TOTAL Y/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION (3)	STATUS	COMMENTS
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START (1)	COMP. (2)				DURA- TION (mths)
Data Processing for Statistics and Planning - SUR/88/003	180	180	UNDP/IPF GCS (UNDTCD)	0	30 PB	88	89	24	18	DAPV	Short term consultants. Fellowships and equipment.
Economic Development Planning - SUR/88/004	150	150	UNDP/IPF GCS (IBRD)	0	0 PB	88	88	4	18	DAPV	Short-term consultants.
Umbrella project to promote TCDC activities SUR/88/001	118	118	UNDP IPF/GCS UNDP (OPS)	0	0 PB	88	90	36	18	TBA	Short-term consultants, fellowships under TCDC arrangements.
Formulation of public sector investment pipeline.	138	138	IDB	0	0 PB	88	88	12	18	DAPV	Development of public sector investment pipeline.
ADMIN. SUB-TOTAL:	4460	4280									
SER. PUBLIC SERVICES:	4460	4280									
TOTAL ON-GOING PROGRAMS			30293	32549							

**SURINAME TECHNICAL COOPERATION PROGRAMME
LIST OF PROPOSED TECHNICAL COOPERATION PROGRAMMES 1985-90**

(in US\$'000)

Key:
 (1) Date of proposed disbursement
 (2) Date of terminal disbursement
 (3) Project Related (PR)/Institutional Support(IS)/
 Training(T)/Pipeline(HF)/Soft
 Pipeline(SP)/Advisory Service(AS)
 (4) Donor Approved (DAPV)/To be Approached (TBA)/
 Donor Approached (DAPCH)/Source Unknown(SU)/
 Project Design Stage (PDS)
 .. Not determined, unknown
 - None
 XI Estimated \$ values
 Amount Unknown (0)

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION (3)	STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START	COMP.				DURA TION (mths)
ECONOMIC SERVICES												
Agriculture (AGR)												
Rice Marketing Study	40	40	EDF	0	0	MOA, AH, F	88/89	90/91	24	AS, PR	DAPCH	Related to fellowship on rice production.
Milk production pre-investment study	0	0	IDB	0	0	MOA, AH, F				PR	DAPCH	Follow-up to IICA pre-feasibility.
Assistance in development of Prawn culture	290	290	UNKNOWN	0	0	MOA, AH, F	88/89	90/91	24	PR	SU	
Co-op. Assistance - Rice Handling drying storage Marketing.	810	810	UNKNOWN	0	0	MOA, AH, F	88/89	90/91	24	AS	SU	Assistance to small Farmers Co-op. in rice handling drying storage and marketing.
Study price stabilisation programme for agricultural produce	0	0	UNKNOWN	0	0	MOA, AH, F	88/89	89/90	3	AS	SU	
Forestry Sector Plan	120	100	IDB	0	0	MONRE	88	89	12	AS	TBA	Preparation of forestry sector plan & the identification of projects.
Establishment of a Rice Research Centre	0	0	EDF	0	0	MOA, AH, F	88/89	89/90	12	PR, AS	DAPV	EEC Regional Pipeline.
Fisheries Development Research Programme	2400	2400	EDF	0	0	MOA, AH, F	88/89	90/91	24	AS	DAPCH	EEC Regional Pipeline.
Hydrological & Environmental Study - Van Wauw	407	387	IDB	G/L	40	MOA, AH, F	88	89	6	PR, AS	DAPV	Executed by Multi-purpose Corantijn Authority. To develop a comprehensive understanding of hydrological

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION (3)	STATUS	COMMENTS
		AMT	SOURCE	LOAN GRANT (L/O)	AMT	EXECUTING AGENCY	START	COMP.				DURA TION (mths)
Rehabilitation of Rice lands in Van Nieuw - F/S	760	680	IDB/ (OAS)	0	80 MIPA	88	89	12	PR	DAPP	water quality and environmental consequences of rice prod. - related to F/S of rice rehab. - Van Nieuw.
Evaluation study of the Performance of the Extension services	0	0	UNKNOWN	0	0 MOA, AH, F	88/89	89/89	6	AS, T	SU	Evaluation of the performance of the Extension Services and recommendation for upgrading the extension programme.
Oriental Fruit Fly Survey and Detection	150	150	FAO	0	0 MOA, AH, F	88/89	89/89	2	AS	DAPCH	To determine the distribution of the oriental fruit fly on Suriname and assess the feasibility of eradicating this fruit fly.
Production and storage of certified coverseed (peanut, soy bean) in Suriname	0	0	IICA/FAO	0	0 MOA, AH, F	89/90	90/91	24	AS, T	TBA	To produce high quality coverseed for farmers - Training.
Updating of MOA Library	0	0	UNKNOWN	0	0 MOA, AH, F	88/89	89/89	N/A		SU	Literature to update knowledge of researchers and enable them to keep track of new developments.
Tropical Fruit Juice processing	0	0	UNKNOWN	0	0 TROPICAL FRUIT INDUSTRIES NV	88	88	1	AS, PR	SU	Increase the quality of the fruit juices to international standards.
Production Cocoa Butter Derivation	0	0	UNKNOWN	0	0 GPOV	88/89	88/89	3	AS, PR	SU	Expert Consultancy Services for undertaking a feasibility study for the production of cocoa butter derivation out of oil palm product.
Production of Castor Bean Oil F/S	0	0	FAO	0	0 GPOV	89/90	89/90	6	PR, AS	TBA	Feasibility study to determine viability of cultivation and oil processing of the Castor Bean.
Production of Rice Bran Oil F/S	0	0	FAO	0	0 GPOV	89/90	89/90	6	PR, AS	TBA	Feasibility study to determine feasibility for the production of rice bran oil.
Cultivation of Processing of Ginger F/S	0	0	FAO	0	0 GPOV	89/90	89/90	6	PR, AS	TBA	Consultancy services for feasibility study for the cultivation and processing of ginger.

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION (3)	STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START	COMP.				DURA TION (mths)
Production of shoe polish F/S	0	0	FAO	0	0	GPOV	89/90	89/90	8	PR, AS	TBA	Consultancy Services for feasibility study for production of shoe polish out of oil palm products.
Soy Bean cultivation and Processing F/S	0	0	FAO	0	0	GPOV	89/90	89/90	8	PR, AS	TBA	Feasibility study to determine the cultivation of processing of soy-bean.
Essential Oils, F/S	0	0	FAO	0	0	GPOV	89/90	89/90	8	PR, AS	TBA	Feasibility study for cultivation and production of essential oils.
Development of mechanical crop cultivation	0	0	UNKNOWN	0	0	MOA, AH, F	10/88	1/89	3	AS	SU	Research work on mechanized cultivation of soy bean, sugar-cane and citrus crops.
Milk processing study	0	0	UNKNOWN	0	0	MOA, AH, F	88	88	2	AS	SU	Evaluation of quality of efficiency of milk processing and proposed measures for improvement.
Construction of New Sugar Factory/Rehabilitation Project	0	0	UNKNOWN	L/G	0	SFH	90/91	01/92	8	PR	SU	F/S to determine whether existing sugar factory should be rehabilitated or equipment replaced.
Feasibility Study of Agriculture school	0	0	OAS	0	0	MOA, AH, F	88	88	12	IS	TBA	FEASIBILITY STUDY AGRICULTURE SCHOOL.
Training in Bee Culture	12	12	OAS	0	0	MOA, AH, F	88	88	8	IS	TBA	Bee culture.
Laboratory	100	100	FAO/IICA	0	0	MOA, AH, F	88	88	12	IS	TBA	Establishment of a communication laboratory.
Farm Machinery	100	100	FAO	0	0	MOA, AH, F	88	88	12	IS	TBA	Assessment of the needs of farm machinery and equipment.
Interdisciplinary	100	100	FAO	0	0	MOA, AH, F	88	88	12	IS	TBA	Expertise in economist, land and water.
Farming System Research	100	100	FAO/IICA	0	0	MOA, AH, F	88	88	12	IS	TBA	Farm System Specialist, Rural Economist and Rural Sociologist.
Establishment of a Rural Development Institute	200	200	FAO	0	0	MOA, AH, F	88	90	24	IS	TBA	Institute directed to agricultural needs of interior of Suriname.
Rehabilitation of rice lands in MCP area	230	230	IDB	G/L	0	MOA, AH, F	88			PR	I, V	MCP.

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION	STATUS	COMMENTS	
		AMT	SOURCE	LOAN GRANT (L/O)	AMT	EXECUTING AGENCY	START	COMP.				DURA TION (mths)
Rehabilitation of rice lands Phase II MCP Area Phase II	0	0	IDB	0/L	0	MOA, AH, F				PR	TBA	Follow-up to phase I IDB pipeline.
Assistance to NGO's	800	800	IDB	0	0	MOA, AH, F	88/90			PR, AS, T	TBA	T/A & Capital Assistance for NGO projects - Fisheries Development Agr. (Non-Rice), Livestock sector.
Forestry Research & Nature Conservation	20	20	UNKNOWN	0	2857	MOA, AH, F	88/89	92/93	60	PR, AS, T	SU	36 m/m of experts, equipment, training/fellowships. To maintain existence of natural economic systems in suriname through conservation.
Improvement of forestry industry P/S	40	40	UNIDO/OT NER	0/L	0	MONRE	88/89	92/93	60	PR, AS, T	TBA	Feasibility studies, sawmill equipment, logging equipment, 35 m/m of sawmilling experts.
Training Programme - Boskamp Village Fisheries Project	0	0	Belgium	0	0	MOA, AH, F	88			T	TBA	6 fellowships/short-term training; (2x) Electrical/Mechanical equipment repair; (3x) Book Building; (1x) boat Design.
Biological composition of the Estuarine Area	100	100	OAS	0	0	MONRE	88	89		AS	TBA	Change in scope of project likely.
Training/Education Awareness/Extension Services - Forestry Conservation	150	150	UNKNOWN	0	0	MONRE	89/90	91/92	24	AS	SU	Expertise 12 m/m. Improvement of the Forestry equipment US\$20K, training facilities and the development of curricula & extension programmes for rural communities-fellowships.
Forest Management/Institution building	180	180	UNDP(FAO)	0	0	MONRE	7/89	12/90	18	AS, T	TBA	(1x) forest management expert (3x2 mths); (1x) forest management assoc. expert for 18 mths. Equipment.
Wood technology	0	0	UNIDO/AB CS/FAO/B teral	0	0	MONRE/US			12		TBA	To determine suitable types of under-utilized hardwood for most suitable area of use.
AGRI. SUB-TOTAL:	6603	6465										
Industry (IND)												
Pre-investment Studies	0	0	IDB	0	0	PR				PR	DAPP	Pre-investment Fund.
Institutional Support - National	680	680	IDB	0	0	PR				IS	DAPCH	

TITLE/SUBJECT	EXTERNAL FINANCE			LOCAL FINANCE		DURATION			CLASSIFICATION	STATUS	COMMENTS	
	TOTAL T/A COST	AMT	SOURCE	LOAN GRANT (L/O)	AMT	EXECUTING AGENCY	START (1)	COMP. (2)				DURATION (mths) (3)
Industrial Parks	1800	1800	EEC						IS	DAPCH	Details to be developed.	
Umbrella project for pre-investment studies	0	0	IDB	0	0	89	90	24	PR	TBA	Preinvestment studies.	
Development of small and Medium Size Enterprises	0	0	Govt. of Brazil		0				PR	DAPCH		
Survey Wood Processing Industry	10	10			0				PR	SU	Approx. 1 m/m consultancy.	
Survey of Agro-Industry	10	10			0				PR	SU	Approx. 1 m/m consultancy.	
Seminar on Technology Acquisition	15	15			0			.1	PR	SU	Consultants.	
Establishment of Management Training Centre	0	0			0				IS	SU		
INDUSTRY SUB-TOTAL:	2515	2515									support, Marketing Study.	
Tourism (TOU)												
Participation in Trade Fair	12	12	EEC	0	0	MOT, C, I	88	88	1	RP	DAPCH	Participation of officials in London trade Fair.
TOURISM SUB-TOTAL:	12	12										
Mining & Quarrying (MQ)												
Kaolin Feasibility Study	3515	2680	UNKNOWN	0	835	MONRE	89	90	24	AS, T	SU	Kaolin for export.
Evaluation of phosphate Resources	1871	300	UNKNOWN	0	1371	MONRE	89	91	36	AS, T	SU	Development of phosphate for export and agro-industrial application.
Strengthening of Geological and mining laboratory	911	500	UNKNOWN	0	1371	MONRE	89	91	36	AS, T	SU	Upgrading of laboratory.
Dimension Stone Development	578	350	UNKNOWN	0	228	MONRE	89	90	24	AS, T	SU	Promotion of dimension stone industry.
MINING SUB-TOTAL:	6875	3830										

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION (3)	STATUS	COMMENTS
		AMT SOURCE	LOAN GRANT (L/O)	AMT AGENCY	EXECUTING	START (1)	COMP. (2)	DURA TION (mths)			
Transportation (TRP)											
Study - Improvement of Ferry Service Sur./French Guyana (R)	0	0 EDF	0	0	NOPW.T	88/89			PR	DAPCH	Part of 0.3m ecu's project Ferry plus facilities on both sides. EDF Regional Project.
Study on dredging and construction of deepsea harbour Suriname/French Guyana	0	0 EDF	0	0	NOPW.T	88/89			PR	DAPCH	Part of 0.6m ecu project.
Strengthening of Civil aviation Services & facilities	0	0 UNKNOWN	0	0	NOPW.T	89/90			AS.T	BU	
Feasibility & Final Design Study and Project Management. -New Nickerie Deep Water Harbour	0	0 EDF	0	0	NOPW.T	88/89			PR	DAPCH	
TRANSPORT. SUB-TOTAL:	0	0									
Communication (COM)											
Feasibility study for Telecommunication and Data Comm. facilities for the Caribbean (R)	1350	1350 EDF	0	0	TELESUR	88/89	90/91	3	PR	DAPCH	EDF regional pipeline.
F/S - Improvement of Telecommunications between Guyana and Suriname (R)	0	0 EDF	0	0	TELESUR	88/89	90/91	3	PR	DAPCH	EDF regional pipeline part of 2.1 m Ecu capital project.
COMMUNI. SUB-TOTAL:	1350	1350									
Energy (ENT)											
Wind Energy Project	0	0	0	0	MONRE				SP	BU	Electricity Generation for Indian village consultant.
Water Pumping systems	130	114	0	16	MONRE	89	90	24	SP	BU	Substitution of diesel pumps for irrigation by solar energy pumps.
Solar Energy Project	275	275	0	0	MONRE				SP	BU	Consultancy and installation of Photovoltaic solar energy in remote village.
Hot Water Production with Solar collectors	565	460	0	125	MONRE	89	90	24	SP	BU	Hot water for industries and hospitals by use of solar collectors. Consultants. training and equipment.

TITLE/SUBJECT	EXTERNAL FINANCE			LOCAL FINANCE		DURATION			CLASSIFICATION	STATUS	COMMENTS
	TOTAL T/A COST	AMT SOURCE	LOAN GRANT (L/O)	AMT EXECUTING AGENCY	MONRE	START (1)	COMP. (2)	DURATION (3)			
training in reparation of Plan or energy Sector	0	0	0	0	MONRE				SP	BU	
feasibility Study electricity Supply of state owned Rice state (S.N.L.)	45	45	EEC	0	MONRE	89			SP	DAPCH	Study to assess alternatives for medium term electricity supply to S.N.L.
feasibility study energy supply of MCP rice polders	40	40		0	MONRE				SP	BU	Study to assess alternatives for energy supply to multi-purpose Corantijn Project (MCP).
energy Planning	45	45	OLADE	0	MONRE	88	89	5	SP	TBA	Training in elaboration of computerised energy model.
Study on National Use of energy in transport, industrial and commercial sectors	85	85	EEC	0	MONRE	88	89	12	HP	DAPCH	Improvement of energy consumption.
Feasibility study use of agr. waste for energy purposes	150	150	EEC	0	MONRE	88	89	12	HP	DAPCH	In-depth analysis of small power system fueled by rice husk.
Energy Pricing system	0	0		0	MONRE				SP	BU	
Wood Gasification	0	0		0	MONRE				SP	BU	
Small Energy Systems for rural communities	0	0		0	MONRE				SP	BU	
ENERGY SUB-TOTAL:	1365	1214									
Miscellaneous (MISC)											
Marine Resource Assessment, Suriname and Guyana	1000	1000	EEC	0					PR	DAPCH	Proposal for financing under EEC regional Programme covering Guyana and Suriname.
MISC. SUB-TOTAL:	1000	1000									
ECO. SERVICES TOTAL:	19504	16378									
SOCIAL SERVICES											
Education & Training (EDT)											
Special Education Prog. for women	13	8	UNESCO	0	MOE	88	88	1	T	TBA	Training for 2 officials.
Mass Media and Adult Education	9	8	UNESCO	0	MOE	88	88	1	T	TBA	Training for 2 officials.

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION		CLASSIF- TION ICATION (3)	STATUS	COMMENTS		
		AMT	SOURCE	LOAN GRANT (L/G)	AMT	EXECUTING AGENCY	START				COMP. (2)	DURA TION (1) mths
Cultural Heritage	8	8	UNESCO	0	0	MOE	88	89	12	T	TBA	Training and equipment.
Cultural Development	15	15	UNESCO	0	0	MOE	88	89	24	T	TBA	Training and equipment.
Training in Ceramics	10	10	UNESCO	0	0	MOE	88	88	4	T	TBA	Training course or restoration for ceramics.
Strengthening of the activities of UNESCO Commission	5	5	UNESCO	0	0	UNESCO Commission	88	89	24	IS	TBA	Training and equipment.
Assistance to physically handicapped children	9	9	UNESCO	0	0		88	89	24	T	TBA	Assistance to Kennedy Foundation equipment, training, etc.
Archeology	8	8	UNESCO	0	0		88	89	24	IS	TBA	Conservation and restoration of Archeological Laboratory.
Local production of Television Programme	20	20	UNESCO	0	0	STVS	88	89	24	IS	TBA	Assistance to the Surinamese Televisie Stichting (STVS) equipment, AS.
Assistance to Foundation of Arts and Services	25	25	UNESCO	0	0	BNI	88	89	24	IS		Equipment T and AS.
Exchange programme	8	8	UNESCO	0	0		88	88	1	IS	TBA	Exchange of personnel, curricula research and teaching material in the field of communications.
Exhibition of production material	20	20	UNESCO	0	0	MOE	88	89	24	IS	TBA	equipment and training.
EDUCATION SUB-TOTAL:	143	135										
Population, Health, Nutrition (PHN)												
Emergency response to malaria activities in the interior	75	75	UNKNOWN	0	0	MOH	88/89	90/91	24		SU	Provision of medical supplies for blood testing, consultancy services, outboard motors and canoes.
Food protection Review Study	0	0		0	0	MOH	88/89	90/91	24	AS	SU	It is presumed that many food items are prepared under less than hygienic conditions. consultants expected to examine food production packaging conditions prevailing in Suriname.

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			CLASSIF- ICATION (3)	STATUS	COMMENTS	
		AMT SOURCE	LOAN GRANT (L/G)	AMT EXECUTING AGENCY	MOH	START (1)	COMP. (2)	DURA TION (mths)				
National AIDS Programme	1063	1063	UNKNOWN	0	0	MOH	88/89	90/91	24	AS	SU	Aimed at educating general public of terminal effects and preventative behaviour. Lab equipment and chemicals, survey among high risk group training.
Health educator - AIDS Programme	0	0	EDF	0	0	MOH	4/88	10/88	6	AS	DAPV	Education of general public of terminal effects of AIDS and preventative practices and train personnel MOH.
Evaluation of Refugee pattern in Eastern Suriname	0	0	OAS	0	0	MOH/RC-PM	8/88	8/88	2	AS	DAPV	Determination of pattern of village settlement of Bush Negro Creole in Eastern Suriname and proposals for resettlement.
T/A in Repatriation of Refugee presently in Cayenne	0	0	UNKNOWN	0	0	MOHA, RC-PM	88/89	89/89	3	AS	DAPCH	Identification of "holding areas" for refugees infrastructure medical/food requirements.
Population Census	0	0	UNKNOWN	0	0	MOHA, RC-PM	88/89	89/89	3	AS	SU	UNFPA regional adviser assisting in drawing up TOR for assistance.
Manpower Planning - Ministry of Health	0	0	UNKNOWN	0	0	MOH	88/89	89/89	6	AS	SU	Manpower needs assessment study for the health sector and analysis of the organisational and management structure of MOH.
Health Information System	0	0	UNKNOWN	0	0	MOH	88/89	89/89	6	AS	SU	To establish a full-fledge health information system and health care unit.
Health Education Programme	0	0	UNKNOWN	0	0	MOH	88/89	90/91				Includes provision of health education advisers and training - FARD assisting in identifying sources of finance.
Development of Rehabilitation facilities for addicts (Drug & Alcohol)	1307	1307	UNKNOWN	0	0	MOH	88/89	90/91	24	PR, AS	SU	
Medical equipment Maintenance Programme	0	0	UNKNOWN	0	0	MOH	89	89	8	PR, AS	SU	Medical equipment in state of disrepair shortage of technical maintenance personnel. Require a review study to determine whether R&M facilities should be centralized and R&M specialist

TITLE/SUBJECT	TOTAL T/A COST	EXTERNAL FINANCE		LOCAL FINANCE		DURATION			STATUS	COMMENTS		
		AMT	SOURCE	LOAN GRANT (L/G)	AMT; EXECUTING AGENCY	START (1)	COMP. (2)	DURA: TION: ICATION (3)				
										to train.		
Review study - establishment of health care system in the interior	0	0	UNKNOWN	0	MOB	ANAP	88/88	8	AS	80	Required as soon as possible. Health care system in interior has collapsed. Need to determine the state and condition of the existing primary/secondary health, infrastructure and recommend operations of the health care system in the interior.	
Health Management Systems	0	0	UNKNOWN	0	MOB		88/89	88/89	12	AS	80	Consultancy services required to review and analyze the role, function & organizational structure of the health institutions in particular: (i) Academic Hospital; (ii) Regional Health Service.
POPULATION SUB-TOTAL: 3045 3045												
Housing & Community Services (HCS)												
Food Preservation of Food processing	0	0	UNIFEM	0	0	NATIONAL WOMEN'S MOVEMENT	88	88	5	18	DAFY	Consultant in techniques of food processing.
Evaluation and feasibility study of projects and organization building and training in the field of Women in development	0	0	UNIFEM YWCA	0	0	MA, AH, P	88	88	24	18	TBA	Expert in the field of women in Development, training and equipment.
Evaluation and feasibility study of projects and organization building and training in the field of Agr. Youth Work (4 H)	0	0	FAO/YWCA	0	0	MA, AH, P	88	88	24	18	TBA	Expert in the field of Agr. Youth Work.
Women Development in Rural Areas	0	0	UNIFEM	0	0	MOHA	88			2	18	Short-term advisory assistance.
BOOZIES SUB-TOTAL: 0 0												
SOCIAL SERV. TOTAL: 3188 3175												

TITLE/SUBJECT	EXTERNAL FINANCE			LOCAL FINANCE		DURATION			CLASSIFICATION	STATUS	COMMENTS
	TOTAL T/A: COST	AMT SOURCE	LOAN GRANT (L/O)	AMT EXECUTING AGENCY	START	COMP.	DURA (mths)	(1)				(2)	(3)
GENERAL PUBLIC SERVICES											
Administration and Planning (ADM)											
Employment Promotion	0	0	Brasil	0	0	NOL	89		18,8P	TBA	Consultants and training.
Vocational Training	0	0	Brasil	0	0	NOL	89		18,8P	TBA	Consultants and training
Labour Inspection	0	0	Brasil	0	0	NOL	89		18,8P	TBA	Training.
Minimum Wage	0	0	Brasil	0	0	NOL	89		18,8P	TBA	Training in minimum wage policy.
Labour Relations	0	0	Brasil	0	0	NOL	89		18,8P	TBA	Training.
Management Training	0	0	Brasil	0	0	PD			18,7,8P	DAPCH	Project to be developed in cooperation with CARICAD (Barbados).
Youth Employment	307	0	UNDP/IFP GCS ILO	0	0	NOL, NOR, M OARR			18,7,8P	DAPCH	
Vocational Training Programs	600	600		0	0	NOL			8P	8U	
Soil Science Laboratory	0	0		0	0	MONRE			8P	8U	
Automation of Land Registration System	0	0		0	0	MONRE			8P	8U	
Mapping of Urban Areas	0	0		0	0	MONRE			8P	8U	
Training of Land Surveyors	0	0		0	0	MONRE			8P	8U	
Automation of Energy Department	0	0		0	0	MONRE			8P	8U	
Improvement of Public Administration	0	0	0	0	0	NORA	89		18	8U	
Assistance to Bureau for Registration	0	0	0	0	0	NORA	89		18	8U	
Archives	0	0	0	0	0	NORA	89		18	8U	
Legal Draftsman	200	200	0	0	0	NORA	88	89	24	18	8U
ADMIN. SUB-TOTAL:	1107	1107									
GEN PUBLIC SERV TOTAL:	1107	1107									
TOTAL PROPOSED PROGRAMS	-	23,789	20,880								
TOTAL ONGOING PROGRAMS	-	36,289	32,649								

SURINAME

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Table 1.1: SURINAME - POPULATION TRENDS, 1977-87

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	a/ 1987
Total Population (beg. of year)	358480	365707	368943	361040	351990	358549	367523	374115	382650	392609	401060
Total births	11099	10673	10586	9848	10094	11205	11823	11503	11704	10176	9660
Total deaths	2516	2730	2699	2192	2441	2506	2811	2873	2674	2791	2467
Natural population increase	8583	7943	7887	7656	7653	8699	9012	8630	9030	7385	7193
Net migration	-1358	-4707	-15790	-16708	-1094	275	-2420	-95	929	1063	611
Net population increase	7227	3236	-7903	-9050	6559	8974	6592	8535	9959	8451	7604
Crude birth rate (per 1000)	30.7	29.1	29.0	27.6	28.4	30.9	31.9	30.4	30.2	25.7	23.9
Crude death rate (per 1000)	6.9	7.4	7.4	6.1	6.9	6.9	7.6	7.6	6.9	7.0	6.1
Rate of natural increase (%)	0.0	-7.5	-0.7	-2.9	0.0	13.7	3.6	-4.2	4.6	-18.2	-2.6
Rate of population growth (%)	2.2	1.4	-0.6	-2.3	-0.3	2.2	2.1	2.0	2.4	2.4	2.1
Memo Item:											
Mid-year Population	362094	367325	364992	356515	355270	363086	370819	378383	387630	396835	404962

a/ Preliminary figures.

Sources: Bureau of Civil Registration of Suriname.

Table 1.2: SURINAME - NUMBER OF AVAILABLE POSITIONS BY SECTOR, 1977-87 a/

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
	(Average number of jobs)										
Total	98400	102300	102100	98300	98300	98400	96900	96200	95000	91800	89400
Agriculture, Livestock and Fisheries	14500	14200	13900	13900	14000	14000	13900	13800	16300	15800	14900
Forestry	1800	2500	3200	3200	3100	3200	3200	2900	-	-	-
Mining & Bauxite Processing	6700	8200	6000	6000	6000	5400	5100	4800	4400	3900	3600
Manufacturing	10100	10500	10400	11200	11000	11100	11200	11000	10800	10100	9500
Construction	5200	4200	3500	3500	3800	3800	3100	2800	3000	2800	2600
Gas, Water & Electricity	1100	1100	1100	1300	1300	1400	1400	1400	1400	1400	1400
Trade and Tourism	15000	15300	14900	14500	14400	14800	14000	12800	11700	10200	8700
Transportation & Communication	2800	3600	3600	3700	3700	3800	3700	3800	3800	3800	3800
Financial Institutions	1900	2000	2200	2000	2100	2200	2200	2200	2300	2000	2000
Government	35900	39000	39600	35200	35400	35300	35400	37100	37900	38300	39500
Other Services	3400	3700	3700	3800	3500	3600	3700	3800	3600	3500	3400
	(Share by sector)										
Agriculture, Livestock and Fisheries	14.7	13.9	13.6	14.1	14.2	14.2	14.3	14.3	17.2	17.0	16.7
Forestry	1.8	2.4	3.1	3.3	3.2	3.3	3.3	3.0	-	-	-
Mining & Bauxite Processing	6.8	6.1	5.9	6.1	6.1	5.5	5.3	4.8	4.6	4.3	4.0
Manufacturing	10.3	10.3	10.2	11.4	11.2	11.3	11.6	11.4	11.2	11.0	10.6
Construction	5.3	4.1	3.4	3.5	3.9	3.7	3.2	2.9	3.2	3.1	2.9
Gas, Water & Electricity	1.1	1.1	1.1	1.3	1.3	1.4	1.4	1.5	1.5	1.5	1.6
Trade and Tourism	15.2	15.0	14.6	14.8	14.6	15.0	14.4	13.3	12.3	11.1	9.7
Transportation & Communication	2.8	3.5	3.5	3.8	3.8	3.9	3.8	4.0	4.0	4.1	4.3
Financial Institutions	1.9	2.0	2.2	2.0	2.1	2.2	2.3	2.3	2.4	2.2	2.2
Government	36.5	38.1	38.8	35.8	36.0	35.9	36.5	38.6	39.9	41.8	44.2
Other Services	3.5	3.6	3.6	3.9	3.6	3.7	3.6	4.0	3.6	2.8	3.8

a/ Classification in this table does not correspond to that used in GDP by sector tables.

Source: Planning Bureau, Suriname.

Table 2.1: SURINAME - SECTORAL ORIGIN OF GROSS DOMESTIC PRODUCT AT CURRENT FACTOR COST, 1977-87

(Sf million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Agriculture, Animal Husbandry, Forestry and Fishing	92.1	91.7	116.0	122.7	140.1	144.3	126.9	134.5	142.7	164.2	206.1
Mining and Quarrying	103.2	113.3	125.0	96.8	123.6	132.8	95.7	92.7	94.6	78.0	58.7
Manufacturing	202.9	225.3	239.6	249.1	271.2	225.8	195.3	197.4	206.6	226.6	210.6
Construction	127.2	104.2	102.6	88.6	106.8	110.2	99.7	106.5	97.2	104.9	115.6
Gas, Water & Electricity	34.2	46.7	62.1	87.1	73.4	69.7	92.9	88.0	66.4	50.4	65.8
Trade, Restaurants & Hotels	200.9	213.8	270.9	273.3	296.7	314.5	310.6	271.2	267.8	278.0	267.1
Transportation & Communications	61.4	82.5	77.8	84.1	98.6	100.2	106.2	111.4	127.7	138.9	153.8
Financial Institutions	57.2	75.5	89.9	102.7	142.8	140.8	118.6	117.7	147.4	170.3	203.5
Housing, Other Real Estate and Business Services	54.6	62.9	70.4	73.8	76.9	82.1	83.9	86.7	92.3	102.3	134.1
Public Admin. & Defence	182.3	210.9	221.6	225.9	276.1	346.3	373.9	374.1	383.8	408.7	463.8
Personal, Social & Other Community Services	14.6	17.4	19.1	21.9	26.4	29.5	32.1	25.2	21.0	32.7	33.8
Imputed Bank Service Charge (-)	26.4	41.2	56.0	71.3	93.9	92.5	75.3	74.7	69.3	103.6	112.6
GDP (Factor Cost)	1102.1	1235.9	1339.0	1354.7	1526.6	1603.7	1560.5	1530.7	1556.3	1643.0	1783.9
Net Indirect Taxes	180.6	235.1	226.3	247.6	269.6	245.1	226.4	214.1	183.0	167.3	155.6
GDP (Market Prices)	1282.7	1471.0	1565.3	1602.3	1796.2	1848.8	1786.9	1744.8	1741.3	1810.3	1939.7

Source: General Bureau of Statistics and IMF.

Table 2.2: SURINAME - SECTORAL ORIGIN OF GROSS DOMESTIC PRODUCT AT CONSTANT PRICES, 1977-87

(1980 Sf million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Agriculture, Animal Husbandry, Forestry and Fishing	115.4	110.2	121.8	122.7	138.9	134.7	122.9	127.8	129.4	127.4	133.4
Mining and Quarrying	145.3	151.1	134.4	96.8	102.6	80.6	80.4	77.3	87.3	104.0	85.6
Manufacturing	277.3	295.0	278.4	249.1	256.1	214.0	193.6	187.5	199.6	206.9	168.3
Construction	153.6	116.3	105.0	88.6	106.3	104.5	94.4	98.1	87.0	91.7	76.7
Gas, Water & Electricity	70.7	77.3	86.0	87.1	78.0	62.3	64.0	63.9	59.0	53.7	46.5
Trade, Restaurants & Hotels	279.8	318.5	306.8	273.3	263.8	269.7	255.2	214.9	191.3	166.1	104.3
Transportation & Communications	88.9	95.6	83.6	84.1	82.4	84.1	90.6	93.0	105.0	105.4	99.0
Financial Institutions	76.9	95.0	95.3	102.7	139.9	119.3	95.8	89.7	110.0	114.5	134.0
Housing, Other Real Estate and Business Services	88.6	71.5	73.0	73.8	76.3	77.9	79.3	80.5	84.5	87.5	84.2
Administration & Defence	224.2	259.5	221.6	225.9	276.1	298.5	257.8	251.1	249.2	247.7	252.4
Personal, Social & Other Community Services	20.3	22.3	21.7	21.9	24.3	25.4	26.3	20.0	15.0	19.7	18.9
Imputed Bank Service Charges (-)	40.0	52.5	59.7	71.3	90.1	75.6	56.2	52.6	62.4	75.8	85.1
GDP (Factor Cost)	1479.0	1559.8	1467.9	1354.7	1454.6	1396.4	1284.1	1250.9	1254.9	1246.9	1118.2
Net Indirect Taxes	242.4	296.3	248.1	247.6	256.6	213.4	186.3	175.0	147.4	127.2	97.7
GDP (Market Prices)	1721.4	1856.1	1716.0	1602.3	1711.2	1609.8	1544.2	1507.3	1493.5	1450.4	1337.1

Source: General Bureau of Statistics and IMF.

Table 2.3: SURINAME - EXPENDITURE ON GDP AT CURRENT PRICES, 1977-87

(Sf million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Consumption	891	1028	1213	1268	1491	1624	1792	1872	1879	1754	1840
Public a/	282	335	343	339	431	520	613	583	624	753	799
Private b/c/	609	693	870	929	1060	1104	1179	1089	1055	1001	1041
Investment d/	479	477	358	420	555	507	275	203	137	94	126
Public	138	139	136	128	176	185	119	85	56	39	37
Private	341	338	222	292	379	322	156	118	81	55	89
Resource Balance	-88	-34	-5	-86	-248	-282	-281	-131	-75	-38	-26
Exports	707	814	917	1094	1044	949	803	784	679	650	658
Imports	795	848	922	1180	1292	1231	1084	895	754	688	684
GDP at Current Market Prices	1282	1471	1566	1602	1798	1849	1786	1744	1741	1810	1940
Net Factor Payments Abroad	-61	-55	-74	-30	23	13	-20	-4	-12	1	1
GNP at Current Market Prices	1221	1416	1492	1572	1821	1862	1766	1740	1729	1811	1940
Indirect Taxes less Subsidies	181	235	226	249	270	245	226	214	183	167	156
GNP at Current Factor Cost	1040	1181	1266	1323	1551	1617	1540	1526	1546	1644	1785
Gross Domestic Savings	391	443	353	334	307	225	-6	?	62	56	100
Gross National Savings e/	334	395	291	316	337	233	-40	55	43	56	111

a/ Government wage bill and purchases of goods and services.

b/ Includes public sector other than Central Government.

c/ Private consumption is residual.

d/ Includes changes in stocks.

e/ Equals GNP less Consumption plus/minus Net Unrequited Transfers (see Table 3.1).

Sources: General Bureau of Statistics, Central Bank and IMF.

Table 3.1: SURINAME - BALANCE OF PAYMENTS, 1977 - 87

(US\$ million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 ^{a/}
Exports of Goods and NFS	398.2	455.8	513.6	613.0	584.8	531.5	450.0	427.9	380.2	384.3	388.5
Merchandise Exports	346.2	393.5	444.1	514.4	492.9	450.6	382.3	372.6	336.1	328.8	316.2
Non Factor Services	50.0	62.3	69.5	98.6	91.9	80.9	67.7	55.2	44.1	35.5	52.3
Imports of Goods and NFS	445.1	474.8	516.3	660.8	722.9	696.4	607.1	501.1	422.1	385.6	383.1
Merchandise Imports	380.1	391.7	410.9	504.4	587.0	588.1	478.8	394.7	335.6	304.3	311.1
Non Factor Services	65.0	83.1	105.4	156.4	135.9	151.3	128.3	116.4	86.5	81.3	66.1
Resource Balance	-48.9	-19.0	-2.7	-47.8	-139.1	-157.9	-157.1	-73.3	-41.9	-21.3	-14.6
Factor Services and Transfers	-32.2	-27.0	-34.8	-10.5	16.6	4.6	-19.1	-9.5	-10.6	0.1	6.4
Net Factor Service Payments	-34.3	-30.9	-41.3	-17.0	12.9	7.2	-11.1	-2.1	-6.6	0.6	0.4
Net Unrequited Transfers	2.1	3.9	7.0	6.5	3.7	-2.6	-8.0	-7.4	-4.0	-0.5	6.0
Current Account Balance	-81.1	-46.0	-37.0	-58.3	-122.5	-153.4	-176.2	-82.8	-52.5	-21.2	-8.2
Private Capital	-11.8	-4.6	-17.1	18.5	40.0	18.9	35.1	-14.3	3.9	-46.4	-27.4
Medium & Long-term (net)	-11.9	-6.2	1.1	3.1	45.0	22.7	10.1	27.5	-7.8	-0.7	0.8
Short-term b/	0.1	1.6	-18.2	15.4	-5.0	-3.9	25.0	-41.8	11.7	-45.7	-28.2
Public Capital	75.0	76.2	80.8	71.4	93.8	96.6	26.7	26.0	21.9	34.8	12.8
Grants	77.5	55.5	80.7	73.7	94.7	96.9	3.9	5.0	4.1	3.5	4.8
Medium & Long-term Disb.	0.0	22.4	0.0	0.0	0.0	0.0	11.6	4.7	16.1	2.7	3.0
Medium & Long-term Amort.	1.3	1.1	1.6	1.6	2.5	1.2	1.0	2.8	4.0	1.7	2.1
Other Capital (net)	0.0	-0.2	0.0	0.0	-1.0	-0.6	-0.5	0.0	0.0	12.7	6.1
Short-term (net)	-1.2	-0.4	1.2	-0.7	2.6	1.5	12.7	19.1	5.7	17.6	1.0
Capital Account Balance	63.2	71.6	63.2	69.9	133.8	115.4	61.8	11.7	25.8	-11.6	-15.1
SDR Allocation	0.0	0.0	3.4	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Gold Revaluation c/	0.0	0.0	0.0	0.0	0.0	0.0	17.4	-4.7	1.0	2.9	5.0
Errors, Omissions & Unclassified	0.6	14.0	-0.5	0.8	0.4	1.7	-1.4	1.0	7.2	0.2	2.9
Change in Reserves (- increase)	17.4	-39.6	-29.1	-35.7	-15.0	36.2	98.4	74.8	10.5	29.7	15.4

a/ Preliminary figures.

b/ Including changes in working balances between the Surinamese bauxite companies and their parent companies.

c/ Gold was revalued from US\$42 per troy ounce to US\$397 per troy ounce in August 1983, since then has been adjusted in line with the market price.

Table 3.2: SURINAME - EXPORTS BY VALUE, VOLUME AND PRICE, 1977-87

(value-US\$ million; volume-tons'000; price-US\$/ton)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Bauxite											
Value	65.8	72.1	65.8	73.8	63.0	29.4	24.9	40.7	35.9	26.9	10.4
Volume	2172.0	2241.0	1737.0	1775.0	1268.0	497.0	449.0	957.3	992.5	839.8	322.6
Unit Price	30.2	32.2	37.8	41.5	49.7	58.7	55.6	41.2	34.6	30.8	76.8
Alumina											
Value	152.0	176.0	200.8	279.4	265.5	231.0	215.9	201.5	175.6	177.4	194.8
Volume	1059.4	1124.6	1134.4	1323.7	1165.6	1043.7	1143.3	1096.5	1265.2	1342.6	1342.1
Unit Price	143.5	156.5	169.5	210.3	227.8	221.3	189.8	183.8	138.8	132.1	145.1
Aluminum											
Value	59.4	60.8	74.8	62.0	49.0	69.5	34.6	42.8	30.9	34.9	3.5
Volume	57.7	55.0	63.5	43.8	31.8	60.3	28.7	29.4	28.1	29.5	3.2
Unit Price	1029.1	1105.5	1178.4	1413.6	1549.5	1152.0	1208.8	1455.8	1098.5	1183.1	1102.9
Rice											
Value	17.1	23.4	38.0	42.2	36.8	39.4	37.0	31.8	43.3	35.7	37.6
Volume	54.7	74.7	103.0	101.1	112.9	130.8	127.4	94.7	127.5	108.1	112.6
Unit Price	313.3	313.3	368.9	417.4	324.5	301.5	290.7	336.0	339.6	330.6	334.3
Bananas											
Value	3.3	3.9	4.1	5.9	6.8	7.4	7.4	8.9	10.3	11.1	9.5
Volume	27.3	29.0	27.3	34.0	36.5	37.5	32.2	34.9	37.3	36.0	32.4
Unit Price	121.1	135.2	151.9	173.0	187.3	197.2	229.7	255.2	274.9	309.7	292.2
Shrimp											
Value	28.9	29.8	26.8	31.3	40.9	42.0	36.1	36.0	31.4	38.4	41.6
Volume	3.8	3.7	3.3	3.1	3.7	3.3	3.1	3.3	2.8	2.7	3.1
Unit Price(US\$/kg)	7.6	8.1	8.1	10.1	11.1	12.7	11.6	10.9	11.2	14.2	13.4
Processed Wood											
Value	5.2	6.2	9.8	9.6	8.7	10.1	5.3	4.1	2.5	2.1	1.8
Volume(cu.meter '000)	22.5	24.2	36.5	33.6	27.1	31.8	19.2	14.3	9.6	7.3	4.9
Unit Price(US\$/cu.meter)	231.7	254.7	268.9	286.8	322.5	318.9	274.3	286.0	262.6	283.9	377.3
Raw Lumber											
Value	1.0	0.7	1.1	2.1	1.7	1.3	1.2	0.8	1.1	0.6	0.3
Volume(cu.meter '000)	15.1	9.1	14.5	25.6	24.9	15.4	13.2	8.9	7.3	6.4	3.7
Unit Price(US\$/cu.meter)	63.1	80.1	73.4	83.1	67.5	87.3	89.1	88.1	145.8	96.3	90.8

Sources: Central Bank of Suriname, Ministry of Agriculture, General Bureau of Statistics, Bauxite Institute of Suriname.

Table 3.8: SURINAME - MERCHANDISE IMPORTS BY ECONOMIC USE, 1983-87 a/

(Sf million)

	1983	1984	1985	1986	1987 b/
TOTAL	793.3	699.0	592.3	571.3	525.4
Hydrocarbons (f.o.b.)	201.9	195.3	176.4	111.4	113.1
Raw materials	291.4	277.5	229.7	231.8	219.6
of which for:					
Agriculture and fisheries	20.5	18.5	21.5	25.7	18.3
Food processing, beverage, and tobacco industry	35.3	37.9	26.3	22.7	18.3
Construction	39.6	41.8	29.5	30.0	29.5
Textiles	26.0	21.2	11.3	11.9	5.0
Other industries	170.0	158.1	141.1	141.5	148.5
Consumer goods	209.0	148.1	108.4	126.6	110.5
Food products	51.0	40.0	34.2	32.2	37.3
Beverages	8.4	3.8	4.2	2.7	4.8
Cigarettes	2.4	1.9	0.7	0.8	0.8
Home appliances	34.6	26.4	16.0	22.6	18.5
Clothes	11.4	8.6	2.8	3.0	2.0
Footwear	5.8	2.5	3.8	4.1	4.4
Cleaning products	6.2	4.5	2.4	2.5	3.2
Pharmaceuticals and cosmetics	34.4	23.4	14.3	18.2	12.4
Recreational items	17.5	14.4	10.4	9.7	7.2
Bicycles and mopeds	5.1	4.9	0.7	1.1	1.2
Passenger cars and motorcycles	14.0	6.6	10.2	18.0	9.0
Weapons and ammunition	2.8	0.3	0.2	1.1	0.1
Other	15.4	10.8	7.5	10.8	9.6
Investment goods	91.0	78.1	77.8	101.5	82.2
Transport equipment	32.1	19.0	22.5	33.4	21.2
Machinery and parts for bauxite sector	2.5	6.5	7.0	20.8	5.5
Other	56.4	52.6	48.3	47.3	55.5

a/ Net of re-exports.

b/ Preliminary.

Source: General Bureau of Statistics and IMF.

Table 3.4: SURINAME - IMPORTS OF OIL PRODUCTS, 1978-87
(volume='000 barrels; value=US\$ million) a/

	1978		1979		1980		1981		1982		1983		1984		1985		1986		1987	
	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.
Gasoline	374	7.4	394	11.3	355	14.5	378	15.5	409	17.1	418	15.4	430	15.4	449	16.2	453	11.7	457	12.0
Aviation Gasoline	27	0.8	27	1.2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Premium Gasoline	243	4.8	261	7.3	259	11.0	283	11.7	313	13.2	325	12.2	337	12.2	354	13.0	365	9.5	..	..
Regular Gasoline	104	1.8	106	2.8	96	3.5	95	3.8	96	3.9	93	3.2	93	3.2	95	3.2	88	2.2	..	..
Kerosene	132	2.5	146	4.3	156	7.1	137	5.4	143	6.3	128	5.6	110	5.2	140	5.9	137	4.1	143	4.0
Kerosene	26	0.5	22	0.7	19	0.8	18	0.7	16	0.7	16	0.7	18	0.8	17	0.6	17	0.5	..	..
Aviation Kerosene	106	2.0	124	3.6	137	6.3	119	4.7	127	5.7	112	4.9	92	4.4	123	5.3	120	3.6	..	..
Diesel	1255	25.8	1134	28.9	1061	37.8	1126	46.6	1079	44.2	1063	38.4	1185	43.9	1121	41.9	1158	29.6	1119	29.4
Heavy fuel	3396	44.9	3209	55.9	3433	90.0	2707	73.8	2242	57.5	1948	45.3	2107	55.2	1842	50.8	1578	26.4	1466	29.0
Fuel Oil	3384	44.3	3190	54.9	3417	89.5	2687	73.2	2232	57.1	1938	44.9	2092	54.6	1825	50.1	1570	26.2	..	..
Asphalt	12	0.6	19	1.0	16	0.5	20	0.7	10	0.3	10	0.3	15	0.6	17	0.7	8	0.2	..	..
Lubrication Oils	42	5.3	42	5.8	41	5.6	44	6.8	44	6.5	40	6.8	37	6.4	38	6.6	38	6.4	39.0	5.5
Liquified gas	143	2.4	182	3.2	106	3.6	109	4.3	113	4.5	132	6.1	132	5.0	131	5.0	149	6.4	136.0	4.6
Total	5342	88.3	5107	109.4	5152	158.6	4501	152.4	4030	136.1	3729	117.5	4001	131.0	3721	126.3	3513	84.7	3360	84.6

a/ On c.i.f. basis.

Source: Oil Company of Suriname, Central Bank of Suriname and IMF.

Table 4.1: SURINAME - EXTERNAL DEBT OUTSTANDING, 1983-87

(US\$ million)

	End of Period				
	1983	1984	1985	1986	1987
Total External Debt	25.7	74.4	108.6	139.6	161.1
Medium and long-term debt	25.7	38.4	52.4	66.0	73.0
Public debt	25.7	38.4	52.4	66.0	73.0
Official sources	1.5	15.6	23.1	34.2	44.4
International institutions	0.0	1.8	2.7	3.7	6.6
EDF/EIB	0.0	1.8	2.7	3.7	6.6
IDB	0.0	0.0	0.0	0.0	0.8
Governments	1.5	13.8	20.4	30.5	37.8
USAID	0.2	0.1	0.0	0.0	0.0
Brazil a/	1.3	13.7	14.9	14.1	21.1
China	0.0	0.0	5.8	6.9	7.2
Taiwan, Province of China a/	0.0	0.0	0.2	9.5	9.5
Private sources	24.2	22.8	29.8	31.8	28.6
Financial institutions	21.8	20.8	22.8	24.3	23.5
ABN, Netherlands	21.8	20.8	19.8	18.4	18.6
ABN, United States	0.0	0.0	2.7	5.6	6.9
ABN, Curacao	0.0	0.0	0.3	0.8	0.0
Other	2.4	2.0	6.5	7.5	5.1
Alcoa	2.4	2.0	1.7	1.3	1.0
Fiat a/	0.0	0.0	4.0	5.4	4.1
Other	0.0	0.0	0.8	0.8	0.0
Short-term debt	0.0	0.0	0.0	1.1	0.6
Official creditors	0.0	0.0	0.0	1.1	0.6
Venezuela a/	0.0	0.0	0.0	1.1	0.6
External payments arrears	0.0	36.0	54.2	72.5	87.5

a/ Excludes arrears.

Source: Ministry of Finance, Central Bank and IMF.

Table 5.1: SURINAME - CENTRAL GOVERNMENT OPERATIONS, 1979- 87

(Sf million)

	1979	1980	1981	1982	1983	1984	1985	1986	1987
Current Revenues	422.4	476.3	491.6	509.8	512.9	499.6	479.3	505.9	527.8
Tax revenue	367.6	413.2	429.0	401.6	405.6	410.4	385.3	393.4	384.1
of which: bauxite levy (net)	88.3	92.6	96.4	68.7	74.5	59.4	51.7	20.2	0.0
Non-tax revenue	54.8	65.1	62.6	108.2	107.2	89.2	94.0	112.5	143.7
Current Expenditures	427.0	479.3	531.5	560.6	731.2	741.3	804.3	937.4	1010.9
Wages and salaries	245.0	259.0	266.2	319.8	360.4	383.8	414.4	443.6	480.8
Subsidies and transfers	60.0	107.8	89.3	94.6	103.0	133.7	139.3	124.0	127.5
Interest	4.5	5.6	5.1	6.6	15.2	24.3	41.4	60.3	84.0
Other	117.5	107.9	170.9	159.6	252.6	199.5	209.2	309.5	318.6
Curr.acct. surplus/deficit (-)	-4.6	-1.0	-39.9	-70.8	-218.3	-241.7	-325.0	-431.5	-483.1
Development Expenditures a/	132.8	118.3	185.3	198.2	102.8	83.3	54.5	39.0	36.7
Overall surplus/deficit (-)	-137.4	-119.3	-225.2	-269.0	-321.1	-325.0	-379.5	-470.5	-519.8
Foreign Financing (net)	148.2	127.5	174.1	172.3	8.7	31.3	18.8	12.2	32.6
Grants	144.1	131.6	172.0	174.2	4.8	6.4	5.5	6.1	7.7
M< loan disbursement (net)	-0.9	-4.1	2.1	-1.9	3.9	24.9	13.3	4.5	14.8
Arrears	--	--	--	--	--	--	--	1.6	10.1
Domestic Financing (net)	-5.8	-8.2	51.1	96.7	312.4	293.7	360.7	458.3	487.2
Banking system	-21.5	-21.7	53.9	94.0	312.1	293.6	360.6	458.3	487.1
Private sector (net)	15.7	13.5	-2.8	2.7	0.3	0.1	0.1	0.0	0.1

a/ Include capital transfers and lending.

Source: Ministry of Finance, Central Bank of Suriname and IMF.

Table 5.2: SURINAME - CENTRAL GOVERNMENT SUBSIDIES, TRANSFERS AND LENDING, 1981-87

(Sf million)

	1981	1982	1983	1984	1985	1986	1987
Total subsidies and transfers	89.3	94.6	103.0	133.6	139.4	123.6	127.5
Hospitals	16.6	20.5	21.9	20.7	22.6	21.2	21.2
Education	10.1	13.5	14.7	15.2	18.3	19.8	29.2
o.w.: University	-	9.2	9.4	10.2	10.9	10.3	14.4
Social security	31.5	27.6	31.4	45.8	44.9	29.8	22.1
Old age fund	17.9	17.8	22.2	33.2	31.7	14.8	14.3
Child allowance fund	8.6	5.4	4.4	7.0	8.7	3.7	4.3
Social assistance fund	5.0	4.4	4.8	5.6	4.5	5.3	3.5
Welfare	2.4	2.4	2.4	2.4	2.6	2.5	6.0
Productive sectors	28.7	30.6	32.6	49.5	51.1	58.5	49.0
Electricity company	7.1	9.5	-	8.7	4.9	5.4	6.0
shipping company	3.4	2.2	3.7	4.1	3.6	3.7	2.0
Sugar factory	9.4	12.2	12.7	11.5	8.8	11.5	9.8
Dairy factory	3.7	2.3	4.6	4.5	1.6	-	1.3
Others	5.1	4.4	11.6	20.7	32.2	35.9	29.9
Total lending	5.8	4.7	7.7	18.0	19.5	18.8	15.4
S.M.L. Wageningen	-	-	0.1	0.5	9.7	13.9	9.0
Grassalco	2.9	4.7	1.9	8.6	6.5	4.1	3.5
Bruynzeel	-	-	1.6	0.7	7.1	5.7	4.9
Pharmaceutical enterprise	-	-	-	2.9	4.0	-	-
Landbouwbank	-	-	-	1.0	-	7.2	-
Other	2.9	0.0	4.1	4.3	-7.8	-12.1	-2.0

Source: Ministry of Finance and IMF.

Table 6.1: SURINAME - SUMMARY ACCOUNTS OF THE MONETARY AUTHORITIES, 1975-87

(Sf Million)

	December 31												
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Net International Reserves	172.7	205.9	177.3	223.7	294.3	338.8	370.4	315.0	139.3	5.7	-27.5	-80.6	-108.2
Assets	172.8	208.1	177.4	237.3	304.3	339.2	370.8	315.4	139.7	70.6	70.0	72.2	69.0
Liabilities	0.1	0.2	0.1	7.6	10.0	0.4	0.4	0.4	0.4	64.9	97.5	152.8	177.2
Net domestic Assets	-28.9	-28.4	36.9	9.7	-5.4	-43.1	-15.7	69.3	368.3	699.2	1067.1	1485.7	2026.7
Net Claims on the Public Sector	0.6	7.2	70.2	48.9	30.6	8.3	57.3	149.8	435.7	700.8	1040.0	1480.0	1983.0
Net Central Gov't (budget)	0.6	7.2	70.2	54.9	41.6	19.6	70.0	167.6	452.3	716.7	1055.6	1493.7	1991.6
Assets a/	53.0	124.1	186.5	62.5	55.3	36.9	81.4	181.7	460.6	718.9	1062.1	1494.1	1997.5
Liabilities	52.4	116.9	116.3	7.6	13.7	17.3	11.4	14.1	8.3	0.2	6.5	0.4	5.9
Net-Other Central Government	0.0	0.0	0.0	-11.0	-11.1	-11.3	-12.7	-17.8	-16.6	-15.9	-15.6	-13.7	-8.6
Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liabilities	0.0	0.0	0.0	11.0	11.1	11.3	12.7	17.8	16.6	15.9	15.6	13.7	8.6
Official Capital and Surplus	-14.5	-22.0	-22.0	-22.0	-22.0	-27.0	-32.0	-34.5	-34.5	-34.5	-34.5	-34.5	-34.5
Credit to the private Sector	0.8	0.7	0.6	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.0	0.0	0.0
Net Unclassified Assets	-15.8	-14.3	-11.9	-12.8	-14.4	-24.8	-41.3	-46.2	-33.1	32.8	61.6	40.2	78.2
Assets	1.0	2.1	1.6	1.9	3.2	3.5	5.0	4.5	4.6	66.2	102.2	142.4	182.8
Liabilities	16.8	16.4	13.5	14.7	17.6	28.3	46.3	50.7	37.7	33.4	40.6	102.2	104.6
Asset = liabilities	143.8	177.5	214.2	239.4	288.9	295.7	354.7	384.3	507.6	704.9	1039.6	1405.1	1918.5
Counterpart Unrequited Foreign Exchange	19.7	19.2	17.5	40.9	47.7	53.9	57.0	57.2	85.2	78.1	83.3	92.3	108.1
Allocation of SDRS	0.0	0.0	0.0	0.0	6.1	11.9	16.1	15.3	14.5	13.6	15.2	16.9	19.6
Valuation Adjustment-Fund Accounts	0.0	0.0	0.0	0.0	0.2	-0.3	-1.0	-0.6	0.1	0.8	-1.3	-2.0	-0.2
Valuation Adjustment-Gold & foreign Exchange	19.7	18.2	17.5	40.9	41.4	42.3	41.9	42.5	70.6	63.7	69.4	77.4	88.7
Liabilities to Commercial Banks	33.1	48.4	69.4	51.9	79.6	53.1	78.9	53.7	152.4	316.1	543.2	808.5	909.9
Currency	8.3	11.9	14.0	14.6	17.0	16.6	20.7	25.1	27.7	26.4	29.4	46.8	49.3
Demand Deposits	25.1	36.8	55.6	37.6	62.9	36.7	59.4	28.8	124.9	289.9	514.3	761.1	863.1
Other liabilities	-0.3	-0.3	-0.2	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.5	-19.4	-2.5
Liabilities to Private Sector (monetary liabilities)	91.0	110.8	127.4	146.6	161.5	188.6	218.6	273.4	270.2	310.7	413.1	504.4	900.5
Currency in circulation a/	68.6	109.6	125.3	145.1	156.3	177.8	197.0	266.1	265.0	305.2	405.4	451.3	638.0
Demand Deposits	2.4	1.2	2.1	1.5	5.2	10.8	21.8	5.3	5.2	5.5	7.7	23.4	14.0
Time Deposits	-	-	-	-	-	-	-	-	-	-	-	29.7	248.5
Reserve Money	124.4	159.6	196.9	198.8	241.5	242.0	297.9	327.3	422.6	627.0	956.8	1302.5	1564.4

a/ Includes government issue of currency.

Source: Central Bank of Suriname.

Table 6.2: SURINAME - SUMMARY ACCOUNTS OF THE COMMERCIAL BANKS, 1975-87

(\$ million)

	December 31												
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Net International Reserves	32.5	36.4	33.9	52.2	39.6	58.8	54.1	44.7	23.3	-13.1	-29.0	-72.0	-74.6
Assets	39.4	51.0	51.6	74.4	66.7	92.7	98.3	87.7	55.4	30.0	20.6	9.3	20.7
Liabilities	6.9	14.6	17.7	22.2	27.1	33.9	39.2	43.0	32.1	43.1	49.6	81.3	95.3
Monetary Reserves & Monetary Holdings	33.4	49.1	70.0	52.2	79.9	53.3	79.1	53.9	152.4	316.1	543.2	927.9	912.4
Net Domestic Assets	175.8	252.5	305.7	387.4	445.7	485.8	583.4	683.8	694.1	731.6	802.5	883.4	920.5
Net Claims on the Public Sector	13.5	11.2	11.4	16.8	9.8	11.3	16.4	17.6	41.8	103.2	110.7	127.8	112.2
Net Central gov't (budget)	8.1	0.4	0.1	2.8	-5.3	-4.8	0.2	1.6	28.0	48.0	65.7	82.0	63.6
Assets	9.8	13.0	7.2	4.0	3.4	1.3	5.6	5.0	35.4	54.9	78.8	96.6	74.5
Liabilities	1.7	12.6	7.1	1.2	8.7	6.1	5.4	3.4	7.4	6.9	13.1	14.6	10.9
Net-Other Decentr. Agencies	5.4	10.8	11.3	13.8	15.1	16.1	16.2	16.0	13.6	55.2	45.0	45.8	48.6
Assets	5.4	10.8	11.3	13.8	15.1	16.1	16.2	16.0	13.6	55.2	45.0	45.8	48.6
Credit to the Private Sector	156.6	229.6	283.9	360.4	420.6	460.5	546.3	623.9	643.6	627.4	689.8	727.6	773.0
Net Unclassified Assets	5.7	10.3	10.2	10.4	15.3	14.0	20.7	21.5	8.9	1.0	2.0	28.0	35.3
Assets	13.6	18.0	22.5	27.2	33.1	36.2	47.8	57.2	54.7	60.2	56.8	94.1	329.9
Liabilities	7.0	7.7	12.3	16.8	17.8	22.2	27.1	35.7	45.8	59.2	54.8	66.1	294.7
Net Interbank Float	0.0	1.4	0.2	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Assets = Liabilities	241.7	338.0	409.6	491.8	565.2	597.9	716.6	762.4	869.8	1034.6	1316.7	1639.3	1758.3
M< Foreign liabilities	7.4	8.9	6.3	6.5	6.6	6.8	6.6	7.0	7.0	7.0	7.0	7.0	7.0
Liabilities to Monetary Auth.	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.5	19.4	2.5
Liabilities to private Sector	234.1	328.5	402.7	485.1	558.3	591.0	709.8	755.2	362.8	1027.6	1309.4	1612.9	1748.9
Monetary Liabilities (demand deposits)	77.7	87.9	92.3	99.5	111.9	105.6	139.4	147.8	184.9	202.3	370.3	624.6	753.8
Other Liabilities	156.4	240.6	310.4	385.6	446.4	485.4	570.4	607.4	177.9	825.3	939.1	988.3	995.1
Time, Savings & F/C Deposits	124.5	201.2	254.8	308.8	345.5	372.2	437.3	461.4	523.2	598.1	670.5	680.8	669.6
Other Liabilities	8.4	9.9	11.7	21.0	34.5	38.2	48.9	49.7	51.5	119.0	144.0	173.7	189.0
Private Capital and Surplus	23.5	29.5	44.1	55.8	66.4	75.0	84.2	96.3	103.2	108.2	124.6	133.8	136.5

Source: Central Bank of Suriname and IMF.

Table 6.3: SURINAME - SUMMARY ACCOUNTS OF THE BANKING SYSTEM, 1976-87

(\$ million)

	December 31												
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Net International Reserves	205.2	242.3	211.2	281.9	333.9	397.6	424.5	359.7	182.6	-7.4	-58.5	-152.5	-182.8
Assets	212.2	257.1	229.0	311.7	371.0	431.9	464.1	403.1	195.1	100.6	90.8	81.6	89.7
Liabilities	7.0	14.8	17.8	29.8	37.1	34.3	39.6	43.4	32.5	108.0	147.1	234.1	272.5
Net Domestic Assets	148.9	224.1	342.6	397.1	440.3	442.7	587.7	733.2	1062.4	1430.8	1869.6	2369.2	2747.1
Net Claims on the Public Sector	14.1	18.4	81.8	80.5	40.3	19.6	73.7	167.5	477.3	804.0	1150.7	1607.9	2095.3
Net Central gov't (Budget)	8.7	7.8	70.3	57.7	36.3	14.8	70.2	169.2	480.3	784.7	1121.3	1575.8	2055.3
Assets	62.8	137.1	193.7	86.5	58.7	38.2	87.0	186.7	496.0	771.8	1140.9	1590.7	2072.1
Liabilities	54.1	129.5	123.4	8.8	22.4	23.4	16.8	17.5	15.7	7.1	10.6	14.9	16.8
Net-Other Central government	0.0	0.0	0.0	-11.0	-11.1	-11.3	-12.7	-17.7	-16.8	-15.9	-15.6	-13.7	-8.6
Assets													
Liabilities	0.0	0.0	0.0	11.0	11.1	11.3	12.7	17.7	16.8	15.9	15.6	13.7	8.6
Net-Other Decentr. Agencies	5.4	10.8	11.3	18.8	15.1	18.1	16.2	16.0	13.8	55.2	45.0	45.8	48.6
Assets	5.4	10.8	11.3	18.8	15.1	16.1	16.2	16.0	13.8	55.2	45.0	45.8	48.6
Liabilities													
Official Capital and Surplus	-14.5	-22.0	-22.0	-22.0	-22.0	-27.0	-32.0	-34.5	-34.5	-34.5	-34.5	-34.5	-34.5
Credit to the Private Sector	157.4	230.3	284.5	381.0	421.1	480.9	546.8	624.1	643.8	627.5	689.8	727.6	773.0
Net Unclassified Assets	-10.1	-4.0	-1.7	-2.4	0.9	-10.8	-20.6	-24.7	-24.2	33.8	63.6	68.2	113.3
Assets	14.6	20.1	24.1	29.1	38.3	39.7	52.8	61.7	59.3	126.4	159.0	236.5	512.6
Liabilities	24.7	24.1	25.8	31.5	35.4	50.5	73.4	86.4	83.5	92.6	95.4	168.3	399.3
Net Interbank Float	0.0	1.4	0.2	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Assets = Liabilities	352.1	466.4	553.8	679.0	774.2	840.3	992.2	1092.9	1225.0	1423.4	1813.1	2216.7	2764.3
Counterpart Unrequited Foreign Exchange	19.7	18.2	17.5	40.9	47.7	53.9	57.0	57.2	85.2	78.1	83.3	92.3	108.1
Allocation of SDRS	0.0	0.0	0.0	0.0	6.1	11.9	16.1	15.3	14.5	13.6	15.2	16.9	19.6
Valuation Adjustment-Net-Fund Accounts	0.0	0.0	0.0	0.0	0.2	-0.3	-1.0	-0.6	0.1	0.8	-1.3	-2.0	-0.2
Valuation Adjustment-Gold & foreign Exchange	19.7	18.2	17.5	40.9	41.4	42.3	41.9	42.5	70.6	63.7	69.4	77.4	88.7
M< Foreign liabilities	7.4	8.9	6.3	6.5	6.6	6.8	6.6	7.0	7.0	7.0	7.0	7.0	7.0
Liabilities to private Sector	325.1	439.3	530.1	631.7	719.8	779.6	928.4	1028.6	1133.0	1338.3	1722.6	2117.3	2649.4
Money (1)	168.7	198.7	219.7	246.1	273.4	294.2	358.0	421.2	449.9	507.5	775.7	1075.9	1391.8
Currency in Circulation	88.6	109.6	125.3	145.1	158.3	177.8	197.0	268.1	285.0	305.2	405.4	451.3	638.0
Demand Deposits	80.1	89.1	94.4	101.0	117.1	116.4	161.0	153.1	184.9	202.3	370.3	624.6	753.8
Other Liabilities	132.8	211.1	266.3	329.8	380.0	410.4	488.2	511.1	579.9	722.6	822.3	907.6	1121.1
Quasi-money	124.5	201.2	254.8	308.8	345.5	372.2	437.3	461.4	523.2	598.1	670.5	710.5	918.1
Other Liabilities	8.4	9.9	11.7	21.0	34.5	38.2	48.9	49.7	56.7	124.5	151.8	197.1	208.0
Private Capital and Surplus	23.5	29.5	44.1	55.8	66.4	75.0	84.2	96.3	103.2	108.2	124.6	133.6	176.5

Source: Central Bank of Suriname and IMF.

Table 6.4: SURINAME - COMMERCIAL BANK CREDIT BY SECTORS, 1977-87

	1977	1979	1980	1981	1982	1983	1984	1985	1986	1987
(Sf million)										
Total	302.1	488.7	477.6	567.5	645.0	692.0	736.5	812.6	869.1	895.4
Agriculture	30.3	54.1	68.3	88.5	99.9	119.9	142.6	157.6	171.0	178.8
Fisheries	1.5	0.5	0.6	0.6	0.6	0.9	3.5	5.6	5.9	3.6
Forestry	0.7	1.6	1.6	0.8	0.7	0.6	0.5	0.8	2.1	3.5
Mining	28.3	27.6	24.2	37.0	41.4	35.8	46.4	37.4	40.0	46.6
Manufacturing	30.5	44.3	49.9	51.1	50.8	52.6	58.3	70.3	69.7	89.1
Construction	11.0	21.3	22.7	17.8	20.7	20.2	22.5	20.2	22.6	22.9
Electricity, gas & water	13.4	19.2	24.7	26.2	24.3	23.6	25.1	20.0	12.6	8.5
Commerce	94.7	138.0	150.3	177.6	197.5	189.7	156.1	154.7	157.1	179.0
Transport & communications	7.5	12.6	9.3	8.4	10.5	12.0	14.4	16.2	15.0	18.7
Services	10.0	16.5	16.4	21.0	24.8	28.6	32.5	38.2	43.2	48.3
Other (including housing)	74.2	105.0	109.6	138.5	173.8	208.1	234.6	291.6	329.9	296.4
(as percent of total)										
Agriculture	10.0	12.3	14.3	15.6	15.5	17.3	19.4	19.4	19.7	20.0
Fisheries	0.5	0.1	0.1	0.1	0.1	0.1	0.5	0.7	0.7	0.4
Forestry	0.2	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.4
Mining	9.4	6.3	5.1	6.5	6.4	5.2	6.3	4.6	4.6	5.2
Manufacturing	10.1	10.1	10.4	9.0	7.9	7.6	7.9	8.7	8.0	10.0
Construction	3.6	4.9	4.8	3.1	3.2	2.9	3.1	2.5	2.6	2.6
Electricity, gas & water	4.4	4.4	5.2	4.6	3.8	3.4	3.4	2.5	1.4	0.9
Commerce	31.3	31.0	31.5	31.3	30.6	27.4	21.2	19.0	18.1	20.0
Transport & communications	2.5	2.9	1.9	1.5	1.6	1.7	2.0	2.0	1.7	2.1
Services	3.3	3.8	3.4	3.7	3.8	4.1	4.4	4.7	5.0	5.4
Other (including housing)	24.6	23.9	22.9	24.4	26.9	30.1	31.9	35.9	38.0	33.1

Note: From 1977 to 1983 data includes the Postal Savings Bank.

Source: Central Bank of Suriname.

Table 6.5: SURINAME - COMMERCIAL BANK INTEREST RATES, 1977-87

Rate in Percent per Annum	Loans and Deposits Outstanding									
	December 31									
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
	(\$f '000)									
Lending Rate	375729	438134	476774	566725	643314	690178	785026	810816	907393	893538
Up to 6	12299	14054	23048	19676	18712	53745	73288	93338	113446	94019
6-7	34466	25785	26891	29629	45080	32380	19850	22095	17778	18483
7-8	69341	68331	73191	84565	57992	70760	40216	46164	66847	82879
8-9	148097	198979	201701	220320	239704	230699	256191	282947	266327	228959
9-10	94347	112988	119831	165817	220579	226910	260276	293138	337827	356249
Over 10	17179	31997	32112	46718	61267	75684	85206	93134	105168	112949
Deposit Rate	445158	516248	545214	661928	690900	792116	969735	1269988	1534366	1655569
Up to 3	115411	133587	124869	166507	180623	227974	318473	563306	825336	968848
3-4	180387	196564	203967	238075	214570	224575	275554	326763	344773	359302
4-5	21622	36185	45873	58381	42563	55870	56556	36863	33553	31380
5-6	23839	23106	26910	23112	39292	44892	37302	45367	59301	72056
6-7	43055	48651	49575	47029	45640	41511	57847	78092	80082	68850
7-8	58287	75583	69641	127327	148314	163037	180171	175322	147538	125661
Over 8	2557	2572	2579	3497	19898	34757	44082	44275	43783	39672
	(as percent of total)									
Lending Rate										
Up to 6	3.3	3.2	3.3	3.5	2.9	7.8	10.0	11.5	12.5	10.5
6-7	9.2	5.9	3.9	5.2	7.0	4.7	2.7	2.7	2.0	1.8
7-8	18.5	15.1	10.6	14.9	9.0	10.8	5.5	5.7	7.4	9.3
8-9	39.4	42.7	29.2	38.9	37.3	33.4	34.9	32.4	29.4	25.6
9-10	25.1	25.8	17.4	29.3	34.3	32.9	35.4	36.2	37.2	40.1
Over 10	4.6	7.3	4.7	6.2	9.5	11.0	11.6	11.5	11.6	12.6
Deposit Rate										
Up to 3	25.9	25.9	22.9	25.2	26.1	28.8	32.8	44.4	53.8	56.5
3-4	40.5	38.1	37.4	35.7	31.1	28.4	28.4	25.7	22.5	21.7
4-5	4.9	7.0	8.4	8.8	6.2	7.1	5.8	2.9	2.2	1.9
5-6	5.4	4.5	5.3	3.5	5.7	5.6	3.8	3.8	3.9	4.4
6-7	9.7	9.4	9.1	7.1	6.6	5.2	6.0	6.1	5.2	3.6
7-8	13.1	14.6	16.4	19.2	21.5	20.6	18.6	13.8	9.6	7.6
Over 8	0.6	0.5	0.5	0.5	2.9	4.4	4.5	3.5	2.9	2.4

Source: Central Bank of Suriname.

Table 7.1: SURINAME - AGRICULTURAL PRODUCTION, 1977-86

		1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Rice											

Physical area	ha 1000	29.9	32.5	32.9	35.4	39.9	42.6	43.0	43.7	49.4	49.4
Planted area	ha 1000	49.7	55.2	58.9	65.0	70.8	72.8	73.3	74.8	74.9	75.1
Cropping intensity		1.66	1.70	1.79	1.84	1.77	1.70	1.70	1.71	1.52	1.52
Yield	Kg/ha	4002	4057	4008	3986	3994	4149	3853	4039	3995	3992
Volume: dry paddy production a/	Tons	202.9	223.9	235.8	257.6	280.7	301.1	288.0	302.0	299.2	300.0
Price	Sf/ton	239	204	247	247	233	244	245	248	250	250
Value of paddy production	Sf mln.	52.6	45.7	58.2	63.6	65.4	73.5	65.7	74.9	74.8	75.0
Volume of milled rice	Tons '000	117.4	128.9	135.8	148.4	161.7	173.4	154.3	173.9	172.3	172.8
Bananas b/											

Planted area	ha	1909	1910	1955	1909	2539	2009	1955	2161	2041	1890
Volume of production	Tons '000	33.2	36.0	34.5	41.1	49.2	45.8	40.1	46.6	44.8	46.5
Price	Sf/ton	211.0	234	271	304	343	350	376	406	431	490
Value of production	Sf '000	7007.0	8409	9344	12509	17101	15942	15081	18905	19310	22770
Oil Palm											

Planted area	ha	1800	2025	2372	2614	2948	4199	4954	5747	6187	6128
Productive area	ha	1296	1650	1650	1800	1944	2552	2741	3281	3660	4212
Yield	Tons/ha	7.2	9.0	15.0	11.7	12.7	11.0	11.4	10.3	10.4	7.2
Volume of palm fruit	Tons '000	10.11	14.84	24.76	21.03	24.65	28.19	31.24	33.89	38.21	30.30
Volume of raw palm oil	Tons	1042	2806	4874	4091	4722	5691	6558	7140	7958	6024
Price	Sf/ton	930	970	970	1000	1300	1300	1800	205	...	280
Value of production	Sf '000	1713	2722	4728	4091	6139	7398	8525	1464	0	1687
Volume of palm kernels	Tons	421	734	994	844	880	1133	1180	1530	1987	1809
Sugar											

Planted area	ha	2100	2303	2429	2392	2422	2489	2500	2491	2423	2523
Yield	Tons/ha	72	89	80	82	88	64	69	66	62	64
Volume of production	Tons '000	135.3	119.8	164.1	146.4	148.3	125.4	126.8	130.6	118.2	111.0
Volume of raw sugar production	Tons	6370	6751	9967	8997	8118	7049	8051	6533	8739	6011
Price	Sf/ton	425	425	425	580	600	600	600	600	650	750
Value of production	Sf '000	2707	2889	4238	4058	4871	4229	3831	3920	4380	4508
Volume of alcohol production c/lt	'000	1371	1697	1695	1250	949	1047	2328	1253	1608	1562
Volume of molasses production	Tons	4524	4192	5008	4594	3580	1891	1791	2082	2900	2715
Citrus d/											

Planted area	ha	2000	1890	1899	1934	2154	1774	1755	1981	2151	2185
Productive area	ha	1200	1250	1300	1537	1600	1400	1400	1600	1670	1700
Volume of production	Tons	20.1	8.7	9.6	11.1	11.4	9.4	11.1	11.3	12.0	11.6
Value of production	Sf '000	7335	3909	4508	5385	5559	4979	5763	5085	6632	7506

Table 7.1(contd): SURINAME - AGRICULTURAL PRODUCTION, 1977-86

		1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Vegetables											
Planted area	ha	485	538	586	719	1730	747	743	869	864	920
Volume of production	Tons	3165	3379	3886	4650	10581	5264	4580	5094	4989	4233
Value of production	Sf '000	2950	3268	4117	6872	13642	6589	5916	5246	7829	6407
Peanuts											
Planted area	ha	282	245	285	208	339	344	328	485	497	627
Volume of production	Tons	330	250	286	210	339	344	257	485	449	467
Value of production	Sf '000	800	880	1007	687	1287	1204	1028	1528	1616	1845
Coconut											
Planted area	ha	1110	1000	973	1097	1339	1236	1104	1206	1208	1342
Volume of production	'000 unit	5500	5844	5846	5479	6528	7177	6753	6772	6955	8518
Value of production	Sf '000	800	734	846	822	979	1077	1013	880	904	1533
Other Food Crops a/											
Planted area	ha	651	939	1084	1126	1840	987	1121	1419	1155	1157
Volume of production	Tons '000		5342	5737	6106	11850	6761	5855	7321	6597	3920
Value of production	Sf mln.		3547	4019	4793	9511	6612	5619	6571	5687	4100
Other Cash Crops a/											
Planted area	ha	750	417	413	402	664	440	475	487	461	487
Volume of production	Tons '000	151	72	142	110	128	74	82	80	86	79
Value of production	Sf '000	480	371	654	656	672	364	397	364	442	414
Total											
Planted area	ha '000	61	66.5	70.9	77.7	87.6	87.4	88.8	92.2	92.5	92.9
Value of production	Sf mln.	79	74.6	92.5	105.1	125.1	120.7	112.7	126.2	129.8	132.6

a/ 14% wet paddy

b/ Includes plantains.

c/ 50% alcohol volume.

d/ Oranges represent about three quarters of citrus production.

e/ Increase in 1978 largely reflects inclusion of crops not covered previously.

Note: Prices represent farmgate prices. Production value equals volume times farmgate price.

Source: Ministry of Agriculture.

Table 7.2: SURINAME - LIVESTOCK AND FISHERIES, 1977-86

	Unit	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Meat and Dairy Products											
Beef/Milk											
Number of Livestock	number	24000	34485	42239	45430	47957	51640	52554	52739	70376	88850
(of which: milk cows)	number	4990	6178	5743	5922	6350	6180	7020	6950	6280	6800
Volume of meat production	tons	943	1194	1098	1180	1300	1355	1365	1436	1470	1255
Price	Sf/kg	4.10	5.50	5.50	5.50	5.32	5.50	5.50	5.90	6.00	10.00
Value of meat production	Sf'000	3888	6567	6039	6490	6916	7453	7508	8470	8820	12550
Volume of milk production	lt.'000	7830	7790	6892	7108	7200	8300	8700	9524	10220	12000
Price	Sf/lt	0.33	0.45	0.45	0.45	0.70	0.70	0.70	0.70	0.70	0.80
Value of milk production	Sf'000	2584	3506	3101	3198	5040	5810	6090	6667	7154	9800
Pork											
Number of pigs	number	18259	18000	20179	20000	17720	18590	21400	21840	20970	19190
Volume of Production	tons	811	948	1069	1135	1100	995	1155	1380	1565	1355
Price	Sf/kg	4.71	3.40	3.00	3.20	3.50	3.50	3.50	4.50	4.50	5.00
Value of production	Sf'000	3820	3223	3207	3632	3850	3483	4043	6210	7043	6775
Chicken/Eggs											
Number of chickens	'000	4400	4500	4500	4500	4600	4700	4700	4800	5800	5000
Volume of meat production	tons	6400	7800	8380	8400	8400	8800	8800	8900	10400	9750
Price	Sf/kg	2.40	2.70	3.00	3.00	3.00	3.25	3.25	3.50	3.80	5.00
Value of meat production	Sf'000	15360	21060	25080	25200	25200	27950	27950	30800	37440	48750
Volume of egg production	'000	62.0	45.0	52.5	52.8	53.0	53.0	53.0	50.0	61.8	44.4
Price	Sf/'000	135	130	130	129	130	130	130	150	160	250
Value of egg production	Sf/'000	8370	5850	6825	6828	6890	6890	6890	7500	9888	11100
Seafood and Fish											
Shrimp											
Trawlers	number	190	175	181	133	185	160	167	163	...	...
Production per trawler	tons	21.6	21.7	20.7	23.3	22.9	23.2	19.7	18.9	...	...
Volume of production	tons	4105	2708	3164	3098	3777	3710	3289	2754	2413	3289
Price	Sf/kg	10.55	13.24	17.56	17.01	20.35	24.62	26.28	27.71	33.84	47.04
Value of production	Sf mln.	43	36	56	55	74	84	85	64	50	82
Crab											
Volume of production	tons	26	23	30	31	27	43	22	40	40	22
Value of production	Sf'000	39	32	50	54	56	80	54	69	72	48
Other Fish											
Volume of production	tons	2400	2885	2618	2127	2285	2151	2395	2788	2249	2379
Value of production	Sf'000	3364	3894	3142	2901	3258	3094	3431	3784	3612	6518

Source: Ministry of Agriculture.

Table 7.3: SURINAME - BAUXITE, ALUMINA, AND ALUMINUM PRODUCTION, 1977-87

(thousand metric tons)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Bauxite	5000.9	5220.1	4837.1	4569.1	3868.7	2868.0	2598.8	3261.2	3738.3	3730.6	2510.8
Calcined Abrasive Bauxite	153.1	155.8	156.6	135.2	158.4	153.7	142.9	0.0	0.0	0.0	0.0
Calcined Refractory Bauxite	25.4	27.9	41.8	41.0	35.4	13.9	0.0	0.0	0.0	0.0	0.0
Alumina	1214.6	1287.1	1306.5	1445.3	1248.7	1135.2	1171.7	1237.2	1241.7	1471.0	1362.5
Aluminum	50.3	58.0	53.9	54.9	40.5	42.5	33.6	23.0	28.8	28.7	1.9

(million metric tons)

Bauxite production	5.0	5.2	4.8	4.6	3.8	2.8	2.7	3.2	3.7	3.7	2.7
For Export a/	2.0	2.0	1.5	1.5	1.0	0.8	0.3	0.9	1.0	0.8	0.8
For Processing	3.0	3.2	3.3	3.1	2.8	2.5	2.4	2.3	2.7	2.9	2.4

Index of Output (1977=100)

Bauxite	100	104	97	91	77	57	52	65	75	75	50
Calcined Abrasive Bauxite	100	102	102	86	103	100	93	0	0	0	0
Calcined Refractory Bauxite	100	110	165	161	139	55	0	0	0	0	0
Alumina	100	106	108	119	103	93	96	102	102	121	112
Aluminum	100	115	107	109	81	84	67	46	57	57	4

a/ Excluding calcined bauxite.

Source: SURALCO and Billiton; mission estimates.

Table 8.1: SURINAME - REVISED CONSUMER PRICE INDEX FOR PARAMARIBO AND SURROUNDING AREA, 1977-88

	WEIGHTS	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
(annual average, April 1968 - March 1969 = 100)													
Food and Beverages	40.0	183.9	191.4	214.3	238.6	258.1	266.5	278.5	282.5	310.3	389.7	699.0	731.1
Housing and Furnishings	23.6	160.0	185.6	207.2	238.8	236.3	261.9	276.2	283.2	334.8	387.7	573.2	580.5
Clothing and Footwear	11.0	182.8	208.2	256.9	279.0	345.4	372.2	396.2	432.0	460.2	527.5	693.6	836.9
Other	25.4	166.3	175.4	201.1	235.5	263.6	288.8	295.0	309.5	336.3	382.7	497.8	556.3
Total	100.0	173.7	187.8	214.0	242.3	264.0	282.7	292.1	306.0	339.2	402.6	617.6	662.7
(percent change)													
Food and Beverages			4.1	12.0	11.3	8.2	3.3	4.5	1.4	9.8	25.6	79.4	4.6
Housing and Furnishings			16.0	11.6	15.3	-1.0	10.8	5.5	2.5	18.2	15.8	47.8	1.3
Clothing and Footwear			13.9	23.4	8.6	23.8	7.8	6.4	9.0	6.5	14.6	31.5	20.7
Other			5.5	14.7	17.1	11.9	9.6	2.1	4.9	8.7	13.8	30.1	11.8
Total			8.1	13.9	13.2	8.9	7.1	4.3	3.7	10.9	18.7	53.4	7.3

Source: General Bureau of Statistics.

Table 8.2: SURINAME - INDEX OF AVERAGE GROSS LABOR COST PER EMPLOYEE, 1978-87

(annual percentage change)

	1978	1979	1980	1981	1982	1983	1984	1985	1986a/1987b/1987 c/		
Total Index	9.7	7.8	14.4	16.0	14.7	6.8	7.0	3.3	6.4	-2.4	14633
Mining	7.1	18.9	7.3	14.0	23.7	12.8	17.0	-4.3	3.9	-	43318
Manufacturing	1.0	15.6	19.8	15.0	11.3	2.3	6.9	9.3	-2.6	3.4	15531
Utilities	16.6	2.5	20.3	2.0	14.7	7.7	7.9	7.4	7.5	7.0	28893
Commerce	24.6	7.0	13.2	16.0	6.9	9.7	5.1	11.9	3.1	-2.4	15070
Banking	8.4	10.2	13.2	4.0	17.3	9.0	6.8	0.0	4.2	1.4	28870
Other Services	7.8	9.7	16.6	0.0	7.0	4.7	-2.7	15.6	8.7	2.2	6986
Government	4.1	2.6	7.0	22.1	15.6	2.8	2.8	3.4	7.8	6.6	11586
Consumer Price Index	8.0	14.0	13.2	9.0	7.3	4.3	3.3	10.9	18.7	53.4	-

a/ Excluding Construction.

b/ Excluding Construction and Transportation.

c/ Average gross labor cost per employee in Surinamese guilders per year.

Source: General Bureau of Statistics and IMF.

Table 8.3: SURINAME - AVERAGE INCREASE OF WAGES COVERED BY COLLECTIVE BARGAINING AGREEMENTS, 1979-87 a/

(change in percent)

	1979	1980	b/ 1982	1983	1984	1985	1986	1987	Number of Employees Covered in 1986-1987
Total c/	12.7	13.5	12.8	12.7	12.2	5.0	3.8	2.8	16434
Agriculture & forestry	13.2	15.0	10.8	13.3	...	3.2	6.4	3.0	1779
Mining	15.0	14.7	12.4	11.8	13.0	-	-	-	2994
Manufacturing	13.0	13.3	14.0	13.0	10.7	7.1	3.4	2.2	3370
Public utilities	12.5	14.0	15.5	17.9	14.7	10.7	11.0	10.8	1274
Construction	11.1	13.1	13.5	11.2	...	4.0	3.6	-	121
Commerce, hotels, and restaurants	12.2	13.8	13.0	12.6	12.3	3.2	1.5	-	2666
Transportation	8.6	11.3	10.6	10.0	...	6.8	5.2	5.2	1699
Banking	12.2	12.1	13.4	13.4	13.9	6.6	4.8	6.4	1282
Other Services	9.3	9.2	14.6	13.8	10.0	5.7	5.2	2.4	1249

a/ Sectoral averages are unweighted.

b/ No figures available for 1981.

c/ Weighted average.

Source: Ministry of Labor and IMF.

