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LESSONS FROM EXPERIENCE:  
STRUCTURAL ADJUSTMENT AND POVERTY  
IN GUYANA\*

BY

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Work-in-Progress

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Lessons From Experience: Structural Adjustment and Poverty in Guyana\*

Section 1: Introduction

One of the most important lessons of past experience in economic management in the region, is how easy it is to lose sight of the links between the operations of financial variables and the conditions under which people live. Nearly a decade ago, the Conference of Heads of Government of the Caribbean Community requested a study ~~from~~ the CDB of measures for ~~structural~~ adjustment in member states. Its report (CDB, 1981, P. 4) stated the dilemma starkly:

"To put it very bluntly, structural adjustment must by definition entail a fall in real consumption (that is, in the standard of living). If efforts are made to prevent this, the fall would be worse and of longer duration. Because of the fall in real consumption, means must be applied for an equitable sharing of the burdens of adjustment as between economic groups, particularly the unemployed, the underemployed and the poor"

At about the same time work coming out of a UNICEF study (UNICEF, 1987, P. 66) observed the same dilemma from another angle:

"While practically all analyses of adjustment focus on the effects on growth and relative income distribution ... most of them do not assess their effects in terms of overall poverty rates. Yet this is actually the crucial issue, far more important than assessing often insignificant changes in the relative income distribution". (emphasis in original)

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\*This Paper draws extensively on the first draft of a survey of poverty in Guyana which is being undertaken on behalf of ECLAC.

The importance of the UNICEF observation is realized in circumstances like those in Guyana, where output declines have been dramatic. This, combined with the familiar routes of adjustment (cuts in social expenditure, reduction of food subsidies, exchange rate falls and the increases in the domestic price of imports of food, fuel, raw materials and so on), can be expected to produce a sharp increase in the number of the poor, unless the design of the adjustment programmes take this into account and adequate compensatory mechanisms are put in place.

Over the last decade also poverty measurement has achieved a very high priority in development theory, policy and practice, reflecting the growing realisation that "the problem of poverty remains as critical in the region today as at almost any time in the past"<sup>1</sup> The present emphases in policy reform on liberalization, privatisation and marketisation do not seem adequate by themselves to ensure economic security for groups historically impoverished, and for the new vulnerables emerging out of the womb of policy reform. A priority role is now widely acknowledged for social intervention by the public authorities, while private non-governmental actions are also encouraged. To be effective, however, such intervention ought to be based on an accurate mapping of poverty and the development of appropriate social indicators and data bases. Unfortunately, this has not occurred and policy intervention, more often than not, takes place in the dark. Guyana is a very good example of this.

During the 1970s and up to the mid 1980s the Guyanese authorities publicly pursued policies of "cooperative socialism". As an ILO study described it, Guyana was at the time:

"one of the few countries in the world in which the Government is openly committed to what could be described as a 'basic needs' strategy of development. Indeed in 1971 the PNC Government of Premier Forbes Burnham proclaimed that 'we must feed, clothe and house ourselves by 1976'"

In pursuit of this the "commanding heights" of the economy, as well as many other sectors, were nationalized. The Government then boasted of its "80 per cent ownership and control of the economy". This "command economy" project, however, collapsed under the weight of economic mis-management and severe political difficulties. Since 1988 the thrust of public policy has been reversed, and now follows the standard IMF backed stabilization and structural adjustment package. The commitment to poverty eradication is still being publicly declared, but the circumstances now are no better than they were in the hey-day of "cooperative socialism", when the previously cited ILO study assessed the situation as follows:

"That year [1976] has come and gone and recent government pronouncements candidly admit that the laudable objectives have not been met; they could scarcely do otherwise"

It is more than curious, therefore, that despite such publicly stated objectives, in all this period no serious systematic effort has been made to measure and monitor the course of poverty in Guyana, by either the authorities, the international agencies, or independent scholars. After an absence of six years the World Bank

has very recently concluded an economic report on Guyana, and because of the policy timeliness of poverty issues it undertook a review of "poverty and the social sectors." The report states:

"There is no reliable way to estimate the extent of poverty in Guyana or assess the effects of the adjustment measures on the poor since recent data are not available on household income levels, employment and unemployment rates, or on other social conditions. The absence of even the most basic socio-economic data also makes it difficult to design social programs which effectively target the poor. Consequently, efforts to address poverty have focused on providing assistance to groups generally recognized as vulnerable, specifically women and young children and the unemployed. However, there remains a critical need for more adequate information."

A few studies have been done from time, to time, which, with great reservation, could yield very rough poverty estimates. The economic indicators available are also very suggestive. The purpose of this paper is to provide a broad inventory and review of the available information to see what light it may shed on poverty in Guyana during this critical period. The next Section very briefly reviews the main theoretical and practical issues of poverty measurement in an economy like Guyana. In Section 3 the economic indicators are analysed to see what hints they offer as to the state and direction of movement of poverty in Guyana. Section 4 reviews the various direct and indirect estimates of poverty in Guyana which have been made from time to time - usually undertaken by consultants in the form of the traditional "back-of-the-envelope



calculations". The final Section 5, concludes with recommendations.

## 2. Concept and Measurement

The reversal of earlier attitudes towards poverty related concerns (in word, if not in deed) in many national programmes of adjustment, growth and economic reconstruction is shown in the increasing number of poverty and poverty related studies and surveys which have been conducted in a wide variety of countries. For many governments an important seal of approval for this activity is given by the Living Standards Measurement Study being undertaken by the World Bank.<sup>5</sup> These studies face certain key problematics which are briefly reviewed in this Section.

First, there is the issue of the poverty indicator. It has come to be generally accepted that the qualities of a good indicator are that it should be readily quantified, comprehensive in its coverage and comparable across sectors, regions and time periods. It should also be reduceable to a summary statistic. Examples of these are the "head count index" which shows the percentage of the population who are poor; the "poverty gap index" which measures the gaps between poor households' standard of living and the poverty line; and the "FGT index" which measures the depth and severity of poverty, meeting the additivity criterion requiring that aggregate poverty measures are equal to the population

weighted sum of the different levels of poverty found in the various sub-groups of the society surveyed.<sup>6</sup>

In practice a number of considerations have emerged. One is that the indicator may be presented as a single broad index expressing a general notion such as command over resources expressed in such ways as, total consumption, disposable income, permanent income, and expenditure. Or, it may be presented as a series of partial/multi-dimensional indicators based on such measures as consumption of food, clothing, shelter, or health. Another critical point is the crucial importance attached to the time period used for measurement, when, as in Guyana-type economies, income is irregular and seasonal and also varies markedly among regions, and when households too show marked variation, culturally and geographically, in their ability to dissave or borrow.

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The second problematic is the issue of determining the appropriate poverty line. To begin with there are the familiar concerns which stem from the distinction between a relative and absolute standard. The absolute standard seems to be the preferred measure in most studies, and is usually specified as a basket of subsistence commodities which ensures that basic consumption needs are met for the individual, family or household. This basket, in effect secures the bare essentials of life, as without this, in the long run life is not sustainable. It is usually denoted as a

vector of subsistence commodities,  $X^{\dagger}$ , available at prices,  $P$ , which after allowing for items not included in  $X^{\dagger}$  or wasteful inefficient use of resources,  $h$ , provides the subsistence requirement as:

$$(1 + h)P : X^{\dagger}$$

Frequently the vector is denoted by a food (nutrition) requirement, to ensure a recommended food energy intake. The size of the multipliers allowing for other goods has varied in studies, reflecting in part a cultural variation among countries. The basket of goods chosen in the equation is also adjustable through time.

The relative standard measures the relation of personal/family/household income to the average income of the population being studied. This is more frequently encountered in developed countries where the poverty line is usually set at about 50 per cent of the national mean. The implicit assumption behind this is that poverty lines increase with growth, but are more stable in developing countries, not varying significantly with overall living standards.<sup>1</sup>

Absolute measures have been criticized as being inherently arbitrary, there being invariably a cultural element in their determination. Relative concepts have also been criticized for

reducing the "sharpness" of the division between poor and non-poor, since they are premised on income distribution gradations from the lowest to highest incomes. In response two types of development have occurred. One is to suggest that different measures should be used for different purposes. If for example the domain of measurement is an international or regional comparison the measures used should be guided by this and will be different from comparisons within a country.<sup>8</sup> The other response has been to invoke subjective poverty lines derived from survey responses to questions such as, "what respondents consider the poverty line to be and their relation to it".

The third problematic is the unit of analysis to be used. Should it be based on commonality of residence (household), or spending (spending unit), or blood and marital relations (family), or on the "common-law", "live-in" and "visiting relations" which characterize large layers of Guyana and Caribbean society? This issue is complex for Guyana because of the cultural composition of the population. There are striking variations in the social structure of the Amerindian, Afro and Indo-Guyanese population, as well as sharp distinctions between "coastlanders" and those who live in the hinterland regions.<sup>9</sup>

The fourth problematic is the issue of equivalence scales. Problems arise whenever the individual is not the unit of analysis, as this will vary in "size". Indeed, individuals themselves are

not "homogenous" and when variations are marked, e.g., age, degree of handicap, etc. individual measures can also be misleading. Formally it is expressed as:

$$\text{equivalent income} = \text{total income}/n^s,$$

where  $n$  denotes the size of the unit and  $s$  the elasticity of need with respect to unit size.  $s$  varies from 0 where no adjustment for size is made to 1 where per capita income is used. In practice estimates of equivalence scales have been computed by statistical inference, subjective evaluation through anthropological observation and pragmatic policy choices based on administrative, political, and equity considerations. Atkinson (1991) states that the elasticities used tend to be lowest when based on subjective evaluation and at the highest when statistically estimated.

The above review suggests that the fundamental poverty measurement issues revolve around the quantification of a person's standard of living so as to relate it to a poverty line, as determined, in order to measure the degree of poverty in a manner that can be aggregated, so as to put a fix on the poor and the distribution of poverty among the population. Such a fix should observe the axioms identified in the literature, namely, poverty should show an increase when income or command over resources by the poor decreases (monotonicity axiom); the same should happen when income redistribution favours the non-poor and disfavours the poor (transfer axiom) and the fix should be additively decomposable into sub-groups of the population (poverty mapping).

In practice data availability is most likely to be the key determinant as to what measurement is or is not undertaken in economies like Guyana. Further, the study of poverty is really an aspect of the broader concern with income distribution. When exceptional economic occurrences have taken place, as we shall point out is the case in Guyana, this assumes even greater significance. The historical evolution of the Guyana economy throws up a distinction between the transient poor (year-to-year); the structural poor (related to the structural adjustment measures currently in train) and the systemic poor (reflecting the historical underdeveloped characteristics of the country).

In concluding this Section it should be stressed that poverty is rarely studied for its own sake and nowhere can such a luxury be less afforded than in Guyana. Poverty studies are, and should be, linked to anti-poverty programmes. In Guyana, these programmes exist - but operate in the dark.

### 3. What the Economic Indicators Show

Because of the paucity of data on poverty measurement in Guyana, we have to rely heavily on inferences drawn from economic indicators. As we shall see below these indicate a seriously worsening poverty situation, in no way yet significantly redressed by recent changes in economic direction. Since the mid 1970s, there have been two distinct phases in government policy. From the early 1970s to the mid 1980s, economic policy was dominated by

state control and ownership of the "commanding heights" of the economy (bauxite, sugar and rice), as well as important areas such as financial services, transport (road, air and sea), power and distribution. This approach was advanced in "basic needs" terms and was promoted as Guyana's unique brand of "cooperative socialism". The second phase started in the mid 1980s when the economic decline reached staggering proportions and the government sought support through the IMF for its Economic Recovery Programme (ERP). This programme lays emphasis on liberalization of the economy, divestment of state properties, the removal of "price distortions" in the commodities, foreign exchange and credit markets, restructuring of the state machinery, the elimination of fiscal deficits and the incorporation of the parallel economy which sprung up in the period of command economy into the formal economy.

Despite the shift in policy, the official economic indicators reveal that the decade of the 1980s was a period of immiserizing growth. Sustained declines in real incomes per head were compounded with a virtual collapse of the economic and social infrastructure. The data show that the structural adjustment programme introduced in 1988 has not yet been able to reverse the real income loss over the period of its implementation, let alone reverse the loss of the period before that. These data are reviewed below.

### A. Growth, output and population

The data in Table 1 show that in the decade of the 1960s real GDP grew by 3.6 percent per annum and that by the 1970s this was down to 0.9 percent. In the 1980s there was negative growth, averaging, -3.3 percent per annum. In 1991 GDP grew by 6.1 percent. Per capita GDP followed the same downward trend, except that the population growth rate of 2.5 percent per annum in the

TABLE 1

SELECTED AVERAGE ANNUAL GROWTH RATES (CONSTANT PRICES) 1961 - 1991

	1961-1970	1971-1980	1981-1990	1991 <sup>1</sup>
1. Gross Domestic Product (GDP)	3.6	0.9	-3.3	6.1
2. GDP (Per Capita)	1.0	0.3	-3.3	6.2
3. Population (Total)	2.5	0.4	-0.1	-0.1
4. Population (Urban)	0.4	2.0	0.6	3.2
5. Total Consumption	3.6	1.2	-4.1	N.A
6. Gross Domestic Investment	0.6	-0.7	-1.9	10.9
7. Exports of goods and services	3.3	-2.9	-2.6	11.0
8. Value Added in Agriculture, Forestry and Fishing	0.7	0.9	-2.9	<del>N.A</del>
9. Value Added in Mining and Quarrying	6.8	-3.8	-8.3	N.A
10. Value Added in Manufacturing	2.1	5.1	-6.6	N.A
11. Value Added in Construction	1.5	0.9	-1.0	N.A
12. Growth of Consumer Prices	2.2	10.3	33.0	102.1

Note: 1 Provisional

Source: IADB Annual Report 1991, IMF, Bank of Guyana and Government Documents

1970s fell to 0.4 percent in the 1970s. This cushioned the decline in total GDP. The population declined even further in the 1980s reaching a negative growth of -0.1. This could not, however,



offset the staggering decline in total GDP. The result was that the per capita GDP in 1991 of \$US396 was about 23 percent below that of 1981.

The decline in exports was even more severe. From a rate of increase of 3.3 percent per annum in the 1960s, export growth fell to -2.9 and -2.6 percent respectively, for the decades of the 1970s and 1980s. Total consumption also declined from 3.6 percent per annum in the 1960s to 1.2 percent in the 1970s and -4.1 percent in the 1980s. As a primary producing export oriented economy, highly dependent on imports for a wide range of consumption, intermediate (including fuel) and capital goods, the pressure on the supply of commodities available in the domestic economy is revealed in the fact that import demand in the 1980s fell in absolute values, from over \$US400m in 1981 to about two-thirds of this value in 1990 - despite the rise in import prices (Table 2).

These difficulties are also revealed in the current account deficit of the balance of payments. This averaged \$US131m or about 60 per cent of export earnings for the period 1981 to 1991. To make the situation worse, by the end of 1991 outstanding external debt was \$US2.1 billion, or about \$US2,800 per capita. Debt service due, which was 146 per cent of merchandise export in 1989, was reduced to 75 per cent in 1991 (Table 2). This has been projected to range between 50-70 per cent up to 1993 by the Minister of Finance in his last National Budget presentation.<sup>10</sup>

The absolute decline in the population in the 1980s, referred to above, reflects the effects of persistent migration due to economic and political difficulties. The total population is small in relation to both the overall land area (9 persons per square mile) and agricultural area (120 persons per square mile). About

TABLE 2

## EXTERNAL SECTOR (\$ MILLION US)

	Current Account Balance	Exports Goods (F.O.B)	Imports Goods (F.O.B)	Service Balance	Unrequested Transfers	External Debt <sup>2</sup> Outstanding	Debt Service <sup>3</sup> as % of Merchandise Exports
1981	-184	346	400	-131	0.2	868	N.A
1982	-141	241	254	-121	-8	951	N.A
1983	-157	193	226	-124	-1	1201	N.A
1984	-94	217	202	-114	5	1265	N.A
1985	-97	214	209	-96	-5	1482	N.A
1986	-112	239	241	-126	16	1542	105
1987	-109	241	236	-135	21	1722	97
1988	-94	215	194	-134	20	1760	110
1989	-131	207	211	-148	21	1852	146
1990	-148	210	273	-113	35	1940	122
1991 <sup>1</sup>	<u>-177<sup>1</sup></u>	N.A	N.A	N.A	N.A	<u>2063</u>	75

- Notes:
1. Provisional
  2. Public Debt, including Bank of Guyana.
  3. Due on Public Debt, including Bank of Guyana. Includes principal obligations to foreign commercial banks that have been deferred from year to year.

Source: IADB, Annual Report 1991, IMF Statistics.

41 per cent of the population is in the age groups, 14 years and lower and over 65 (Table 3). The economically active population increased from 160, 098 in 1970 to 271,534 in 1986 - a 70 per cent increase. Female participation in the labour force grew from less

than 20 per cent in 1970 to 32 per cent in 1986. As the IADB observed:

"deteriorating economic conditions led additional household members, usually females, to go out looking for work...increasing hardship is, therefore the push factor for the increase in the female labour participation rather than the pull of attractive opportunities in the labour market".<sup>11</sup>

TABLE 3

POPULATION CHARACTERISTICS (1992)

Population		751,266
Urban Population (percent of total)		32
Population density per square mile		9
Population density per square mile of agricultural land		120
Population age Structure (percent)	0 - 14 Years	37
	15 - 64 years	59
	65 and above	4
Crude Birth Rate (per thousand)		24
Crude Death Rate (per thousand)		7
Total Fertility Rate		3
Life Expectancy at Birth (yrs)		65
Infant Mortality Rate (per thousand)		43

Source: Government of Guyana, 1992 Budget

During the period under review, particularly the decade of the 1980s, a significant underground economy emerged. This has been variously estimated by Thomas (1989) to have ranged in size between 33 and 99 per cent of the formal economy in 1986, as compared to 26

and 52 per cent in 1982. Under the structural adjustment programme, economic liberalization has been given high priority, resulting in a decline in the parallel economy, which is now reported to be about 19 per cent of the official economy.<sup>12</sup> Some of the recorded increase in GDP in 1991 noted in Table 1 may be due to improved recording of the official data caused by the shift from the parallel to the official economy.

#### B. Wages and prices

Sustained declines in output, and with it the suggestion of deepening poverty, was associated with very significant rates of price inflation brought on by rising import prices, a declining foreign exchange rate, inflationary financing of Government activity and the removal of subsidies, which, given the earlier state domination of the economy was very wide ranging. The consumer price index which grew at 2.2 per cent per annum in the 1960s entered the double digit range in the 1970s (10.3 per cent). By ~~the~~ 1980s it reached 33 per cent. In 1991, mainly because of the equalization of the black market and official rates for foreign currencies, consumer prices doubled (see Table 1). Statistics on the GDP deflator values support this trend (Table 4). Exchange rate data are also shown in (Table 4) with the official rate declining from \$G4.3 in 1986 to \$G121 for each US dollar in 1991. Since 1986 the real effective exchange rate, the commodity terms of trade, and the income terms of trade have also declined (Table 4).

Data on wages indicate severely declining real values. The present minimum wage in 1992 is just under one dollar US per day. In 1980 the minimum wage then was valued at \$US2.89, about three times the present value. The average real wage index for all Central Government employees also shows a marked decline of more than one-sixth between 1986 and 1991 (World Bank, 1992, p. 15). Expenditure on personal emoluments fell in nominal terms from 32

TABLE 4

PRICE INDICATORS

	1986	1987	1988	1989	1990 <sup>1</sup>	1991 <sup>2</sup>
1. Consumer Price Index (annual average % change)	7.9	23.5	40.1	59.3	61.9	102.1
2. Consumer Price Index (End of Period)	6.6	34.6	51.5	104.7	75.9	70.9
3. GDP deflator (annual % change)	14.7	45.8	24.5	92.7	52.6	123.1
4. Minimum Wage (Daily Rate G\$ End of Period)	16.80	23.75	24.94	35.92	64.56	106.74
5. Minimum Wage (Annual % Change)	5.0	41.4	5.0	44.0	79.7	65.3
6. Real Wage Index (Central Government employees)	100	112.8	102.0	74.7	84.3	82.5
7. Exchange Rate (Official G\$ per US\$) <sup>3</sup>	4.3	9.8	10.0	27.2	39.5	121.0
8. Commodity Terms of Trade (1977 = 100 Index)	84.6	85.2	80.2	75.2	75.2	73.9
9. Income Terms of Trade (1977 = 100 Index)	57.0	59.6	48.9	43.2	42.10	N.A
10. Real Effective Exchange Rate (1986 = 100 Index)	100	51.3	65.3	45.8	49.1	33.3

Notes: 1. Preliminary

2. Estimate

3. End of Year free market rate, 1991

Sources: Bank of Guyana, IMF, IADB, 1991 Annual Report, and Government Documents

per cent of Government's current expenditure in 1982 to 15 per cent in 1991. Labour force indicators from an IADB survey show that in 1989 about 13 per cent of the labour force was unemployed. Subsequently (Ganga 1991), gave an estimate of 35 per cent for 1989. Of the employed 87 per cent in the IDB survey, 54 per cent worked in the formal sector and 33 per cent in the informal (IADB, 1990, p. 80).

Monetary expansion and public sector deficits conform to the stagflationary characteristics highlighted here. The expansion of the money supply was extraordinary, growing by ten-fold between the end of 1984 and 1991. The overall public sector deficit also averaged about one-third of GDP over the same period.

### C. Sectoral Performance

These worsening macro-economic indicators are supported by sectoral performances in the economy.

#### i) Main Commodities

Data on the sectoral distribution of GDP are shown in Table 5. As can be seen the bulk of the GDP is generated by primary activity and government services. Indeed, three commodities, sugar, rice and bauxite provide the bulk of domestic value added, export earnings, and employment. Data on these

TABLE 5

## SECTORAL DISTRIBUTION OF GDP (%)

GDP	Average 1985 - 1990 (Constant 1988 Prices)
A Agriculture, Forestry and Fishing	26
B Mining and Quarrying	10
C Manufacturing	13
D Construction	7
E Government	18

Source: IADB, Annual Reports, IMF statistics

products along with timber and gold production, two important secondary activities, are shown in Table 6. There the general

TABLE 6

## OUTPUT OF MAJOR PRODUCTS

	-Bauxite '000 tonnes							Generation of Electricity ( '000 KWH)
	Sugar ( '000 tonnes)	Rice ( '000 tonnes)	Timber ( '000 tonnes)	Calcined ( '000 tonnes)	Dried ( '000 tonnes)	Alumina ( '000 tonnes)	Gold ( '000 ozs)	
1980	270	169	173	601	1027	246	11	241
1981	301	166	124	531	498	170	19	424
1982	292	182	247	392	784	73	7	359
1983	256	148	236	315	744	-	9	224
1984	246	180	155	517	754	-	11	236
1985	247	156	170	487	1050	-	10	236
1986	249	183	121	441	979	-	14	225
1987	224	147	189	426	853	-	21	215
1988	170	130	164	401	904	-	19	218
1989	167	142	147	298	919	-	17	180
1990	132	93	146	288	1107	-	39	-
1991 <sup>1</sup>	163	150	N.A	331	1015	-	59	219

Note: 1. Preliminary

Source: Government of Guyana

downward trend in physical output during the 1980s underscores the severity of the economic decline revealed in the macro-economic data. In the food sector, where the commodities are not for export and are largely consumed locally, the same pattern emerges, as can be seen in Table 7.

TABLE 7

PRODUCTION OF SELECTED NON-TRADITIONAL PRODUCTS 1981-91  
(<sup>'000</sup> ton)

	1981-83	1984	1985	1986	1987	1988	1989	1990	1991 <sup>a</sup>
Coconuts	47.0	50.0	51.0	51.0	45.4	45.3	49.6	48.7	-
Citrus	10.7	10.7	11.4	13.2	11.0	7.3	5.3	6.3	-
Ground Provisions	21.1	29.0	38.0	44.5	50.3	39.0	37.2	32.0	-
Plantains	13.2	17.9	20.5	24.2	20.8	22.4	21.9	12.8	-
Bananas	4.9	11.2	16.2	17.4	9.5	14.2	15.8	12.7	-
Pineapples	2.0	3.6	3.7	5.3	7.9	9.8	11.0	7.4	-
Grain Legumes	0.9	1.0	1.2	1.5	1.0	0.9	1.0	1.0	-
Tomatoes	2.9	3.0	3.0	3.7	2.4	2.3	2.3	1.3	-
Cabbages	1.0	1.3	1.6	2.1	0.3	0.8	1.6	1.5	-
Milk (Million gallons)	3.2	3.8	4.9	6.2	6.9	7.6	7.8	7.5	8.0
Beef	2.1	1.6	1.6	1.7	1.8	2.0	2.4	2.2	3.0
Pork	1.1	1.0	1.0	1.1	1.1	1.1	1.0	0.9	0.4
Eggs (million units)	45.2	49.0	49.3	49.9	35.0	14.0	30.4	13.5	5.3
Poultry	7.0	4.1	2.8	3.0	3.6	3.9	2.2	2.1	1.7
Fish	20.8	27.7	38.1	38.5	40.3	40.6	31.7	32.5	36.0
Prawns	3.0	2.1	1.9	2.3	2.4	1.8	1.8	1.5	1.9

Source: Ministry Of Agriculture and Bank of Guyana Bulletin for asterisked item

The trend in energy generation further emphasizes the decline. Electricity generation in 1991 was little more than half that



attained ten years earlier in 1981.

ii) Public Sector

Table 8 shows the precarious state of public finances

TABLE 8

CONSOLIDATED PUBLIC SECTOR FINANCES (% OF GDP)

	1985	1986	1987	1988	1989	1990	Prel. 1991
Central Government <sup>1</sup>	-5.8	4.8	-3.2	-4.0	-2.3	2.1	7.6
Revenue <sup>2</sup>	33.5	42.1	30.5	30.0	18.7	21.6	21.0
Expenditure	-39.3	-37.3	-33.7	-34.1	-21.1	-19.5	-13.4
Rest of Public Sector <sup>3</sup>	10.7	11.3	31.2	13.7	15.5	10.4	11.6
<u>Primary Current Balance</u>	4.9	19.1	28.0	15.7	13.2	12.6	19.3
<u>Interest obligations</u>	-29.0	-32.7	-36.5	-31.6	-32.0	-34.1	-35.0
Domestic	-16.0	-17.9	-12.6	-11.7	-8.9	-9.0	-6.1
External <sup>4</sup>	-13.0	-14.8	-24.2	-19.9	-23.1	-25.0	-28.9
<u>Current Balance</u>	-24.1	-13.6	-9.8	-15.9	-18.8	-21.5	-15.7
<u>Capital Revenue</u>	0.2	0.1	0.0	0.0	0.4	1.9	5.7
<u>Grants</u>	1.5	1.2	3.1	1.7	2.1	3.6	2.8
<u>Capital Expenditure</u>	-24.7	-24.8	-29.4	-18.1	-16.9	-27.5	-16.5
<u>Overall Balance</u>	-47.1	-37.2	-35.1	-32.6	-35.2	-43.5	-23.8
<u>Financing</u>	47.1	37.2	35.1	32.6	35.2	43.5	23.8
External (Net)	29.6	26.5	37.1	17.5	26.2	30.8	6.9
Domestic	17.5	10.6	-2.0	15.1	9.0	12.7	16.9

1. Excludes transactions with the Public Enterprises and the NIS.
2. Excludes the sugar levy and all other taxes from Public Enterprises.
3. Excludes transactions with the Central Government.
4. Starting from October 1990, interest obligations on rescheduled debt were estimated at 2% of the stock of such debt. These obligations subsequently rescheduled by the Paris Club.

Sources: Government of Guyana, IMF and Bank staff estimates. Cited in World Bank (1992).

since the mid 1980s. This has put enormous pressures on the Government's capacity to deliver social services, upkeep the country's infrastructure, and to maintain employment in the public sector. This situation reflects four major forces at work,

namely, the decline in real activity, the poor performance of the large public enterprises sector, the emergence of a large parallel economy, and the high payments due on the local and external debt.

As a result of public sector reform under the present structural adjustment programme, (ERP) there has been a relatively drastic cut-back in the number of government ministries and employment. Between 1986 and 1991 employment in the public sector fell by just under 40 per cent, from 28,650 to 17,800 in the respective years.

Social expenditure has also taken a severe beating. Expenditure on health and education as a percentage of total current expenditure and of GDP declined between 1984 and 1991. (see Table 9). For the years 1990 - 1991, the average expenditure on health was only 8.5 per cent of total current expenditure and 2.3 per cent of GDP. For education the relevant figures are 7.9 per cent and 2.1 per cent respectively. Meanwhile the tax structure has become more regressive. Direct taxes in 1991 only accounted for 31 per cent of current revenue, down from over 50 per cent in the mid 1970s. The consumption tax alone accounted for 30 per cent of current revenue in 1991.

### iii) Agriculture as a special case

Special attention is drawn to the agricultural sector, because like all poor countries, it is, along with rudimentary

service occupations, perhaps the most important location of the

TABLE 9

GOVERNMENT HEALTH AND EDUCATION EXPENDITURE AS A SHARE OF TOTAL EXPENDITURE AND GDP, (G\$000'S)\*

	1984	1986	1988	1989	1990	1991**
Total Current Expenditure	569999	747183	1306205	2555135	3433084	7123729
Total Current Health Expenditure	64551	84961	197158	288736	335431	524750
Health as a % of TCE	11.3	12.9	15.1	11.3	9.7	7.3
Health as a % of GDP	3.8	3.1	3.8	3.3	2.6	1.9
Total Current Education Expenditures	100487	111389	333480	308253	231340	645802
Education as a % of TCE	17.6	14.9	12.1	12.1	6.7	9.1
Education as a % of GDP	6.0	4.1	6.4	3.5	1.8	2.4

## Note:

\* Total recurrent expenditures (TCE) include total statutory expenses (minus public debt) plus total appropriations voted.

\*\* 1991 figures are estimates, not actual expenditures.

Source: Estimates of the Public Sector Current and Capital Revenue and Expenditure. Government of Guyana, 1986 to 1991.

poor: small farmers, landless farmers, rural wage workers and indigenous peoples living primarily in the hinterland regions. The general contribution of agriculture to GDP referred to earlier in Table 5 masks the asymmetrical distribution between large and small farmers, and between individual crops. Large farms contribution to GDP ranged between 56 and 81 per cent during the 1980s, while for small farmers the corresponding figure is 19 to 41 per cent. Sugar and sugar processing account for 13-15 per cent of total GDP and rice and rice processing to 5-7 per cent. Other crops contribute about 3-5 per cent of GDP. Data on the composition of agricultural GDP are shown in Table 10.

TABLE 10

COMPOSITION OF AGRICULTURAL GDP, 1983-90 (IN PERCENTAGE)

	1983	1985	1987	1989	1990
Sugarcane	45	41	39	34	33
Rice	18	18	18	20	17
Other Crops	20	22	23	26	30
Livestock	8	7	8	8	8
Fishing	6	8	9	8	9
Forestry	4	4	4	3	3
Total	100	100	100	100	100

Source: Bank of Guyana, cited in World Bank (1992)

Information on land use patterns is shown in Table 11. Most of the agricultural activities remain confined to the coastal region, as it has been historically. Under 3 per cent of the land area is in arable and permanent crops. Six per cent is under permanent pasture and 83 per cent under forest and woodland.

A study by IICA stresses the importance of the dualistic rural structure.<sup>13</sup> Data from the last rural farm survey (1978) suggest

TABLE 11

## GUYANA LAND USE ('000 HA) 1961-88)

ITEM	1961-65	1977	1988*
Total Area	21,497	21,497	21,497
Land Area	19,671	19,685	19,685
Arable and Permanent Crops	360	379	495
Arable Land	350	364	480
Permanent Crops	10	15	15
Permanent Pasture	999	999	1,230
Forest and Woodland	18,190	18,190	16,360
Other Land	122	122	159

Source: IICA (1991)

\* ESTIMATES

the following based on the assumptions indicated in Table 12.

About three quarters of the farms were less than 15 acres and this accounted for about one-quarter of total acreage. Whereas farms 15 acres and up accounted for one-quarter of the total number, and three quarters of the land area.

The IICA study provides three major reasons for the state of development of the small farm sector. These are:

- i) "the colonial state policy which restricted the size and number of plots owned by former slaves and indentured workers;

- ii) the granting of very short-term leases; and  
 iii) the absence of any significant land reforms."<sup>14</sup>

TABLE 12

## ESTIMATED ACREAGE OF FARMS BY SIZE CLASSES: 1978

SIZE CLASS (acres)	MID POINT OF SIZE CLASS (acres)	NUMBER OF FARMS	ESTIMATED ACREAGE (1)	ESTIMATED ACREAGE (2)
(1)	(2)	(3)	(4)	(5)
Less than 2.5	1.25	6,252	7,815.0	15,630
2.5 to 4.9	3.75	3,732	13,995.0	18,660
5.0 to 9.9	7.5	4,906	36,795.0	49,060
10.0 to 14.9	12.5	3,415	42,687.5	51,225
15.0 to 24.9	20.0	3,605	72,100.0	90,125
25.0 to 49.9	37.5	1,609	60,337.5	80,450
50.0 to 99.9	75.0	704	52,800.0	70,400
100.0 to 199.9	150.0	298	44,700.0	59,600
200.0 & above	250.0	182	45,500.0	45,500
TOTALS		24,703	376,703.0	480,650

ACREAGE (1) = COLUMN (2) X COLUMN (3)

ACREAGE (2) = UPPER LIMIT OF CLASS INTERVAL (ROUNDED) X COLUMN (3)

Source: Ministry of Agriculture, Govt. of Guyana, cited in World Bank (1992).

There are six general forms of land tenure: private owner operated lands with title deeds to the properties; leases or rentals of state lands for periods of 21 years, and over; leases and rentals for under 21 years; leases or rentals sub-leased or rented to others; state lands used by state corporations (e.g.) the nationalized sugar industry; unused state lands; and a residual "other" category. The 1978 Farm Survey referred to earlier provides information on the distribution for rentals or leases of

state lands, private ownership and the "other" category which is shown in Table 13. There it can be seen that the most frequent type of tenure in small farms is rental or leases over 21 years.

TABLE 13

FARMS DISTRIBUTION ACCORDING TO TENURE, 1978

	Private Ownership	State Ownership		
		Rental or Lease <del>21</del> years or more	Rental or Lease less than 21 years	Other
Number of farms	51.8%	27.3%	10.8%	10.2%
Acreage	49.1%	35.0%	8.1%	7.8%
Acreage farm size (ha)	5.1	7.0	4.1	4.2

Source: Guyana Rural Household Survey (1978).

Over the period in question these agricultural arrangements have proven to be severe impediments to the small farmers. Lack of clear title to their lands has discouraged investment, undermined the collateral value farmers can use to secure credit, perpetuated fragmentation, and prevented consolidation of farm units into an economic size. In addition, abnormally long legal and administrative delays in establishing legal rights to their land further complicates the situation.

#### D. Evaluation

The overall indications of the economic data support an interpretation of increasing poverty in Guyana, by no means halted by the recorded growth of 6.1 per cent of real GDP in 1991. The peculiar combination of a sustained decline in real income per person; de-population (due to migration); de-capitalisation (as the social and economic infrastructure has collapsed); persistent balance of payments problems in the face of absolute declines in exports and imports; an exceptionally high per capita external debt; and the threats of de-monetisation of the national currency (due to the rapid fall in its external value) is also unlikely to yield an easy or rapid restoration of the economy. The emphasis of the present ERP on subsidies removal, exchange rate liberalization and wage restraint has led in the short run to further adverse consequences for the vulnerable poor. This has been recognized and is responsible for the Government's support for a poverty alleviation programme (SIMAP).<sup>15</sup> Unfortunately, funding for this has not been as readily forthcoming as was initially anticipated. It is estimated that only \$US5m has been so far firmly committed to the programme, with promises of a further \$US10m programme to come on stream later this year. Donor countries (e.g. Canada and the Futures Fund, the USA and PL480 Funds) have also used some of the funds generated from the sale of relief commodities locally, for poverty alleviation among vulnerable groups.



#### 4. Poverty Related Studies in Guyana

In this Section we survey poverty related studies done in Guyana, both those which aim at a general estimation of its size and distribution, and those which are of a clearly partial type.

##### A. Income distribution

There has been no income distribution measurement in Guyana. A few years ago an IDP author provided "heroic" assumptions provided the only speculative effort I know of in print.<sup>16</sup> His procedure was to fit the 1988 GDP at current prices to the closed economy national income identity. Private sector expenditures were disaggregated into household and corporate expenditure on the basis of an estimate by Thomas (1989) that the private sector accounted for approximately 20 per cent of the output recorded in the official GDP. The corporate sector was assumed to appropriate 25 per cent of total government expenditure. He further assumed that household income was understated by 50 per cent in the official statistics also using Thomas' estimate of the size of the informal economy. He then proceeded to assume that the relative income shares which obtained in Sri Lanka for the period 1969-70 would be a useful proxy for the Guyana economy! On this basis income distribution was arrived at as shown in Table 14.

The Sri-Lankan proxy produced a situation in which the highest quintile received 43.4 per cent of income and the lowest about one-sixth of this, 7.5 per cent. He urged the "reasonableness" of the

estimate because at the time salaries earned by the highest grade public officers approximated those in the middle range of the top quintile.

TABLE 14

## ESTIMATED INCOME DISTRIBUTION: GUYANA 1988

	Share %	Total Income Per Quintile (G\$ million)	Average Income Per Household (G\$ per annum)	Household Average Income (G\$ per week)
Lowest 20%	7.5	216.8	7.805	150.10
Second Quintile	11.7	338.2	12.176	234.15
Third Quintile	15.7	435.9	16.341	314.25
Fourth Quintile	21.7	627.3	22.583	434.29
Highest 20%	43.4	1254.6	45.167	868.60

NOTE: Number of household =  $\frac{\text{Population}}{\text{Household size}} = \frac{750,000}{5.4} = 138,889$

Source: Boyd (1989)

B. PAHO Survey

Apart from a survey of household income and expenditure presently being conducted over the 1992-93 period and to a lesser extent the national population census data also presently being processed, a PAHO National Food and Nutrition Survey conducted in collaboration with FAO, the Caribbean Food and Nutrition Institute and the Government of Guyana is the only one I came across which provides information which could yield rough poverty measures. This, however, is over two decades old; the field work was undertaken during April-June 1971 and the study was published in 1976.<sup>17</sup>

The data show an average size of household then of 6.14 persons, with the variation between ethnic groups and regions ranging from 5.3 (urban, other than African or East Indian) to 6.6 persons (rural, East Indian). The rural African was 5.5 persons and the rural other than Africans or East Indians, 5.7 persons. The urban East Indian and the rural African had the same size households, 5.5 persons. Data on average household income and expenses are shown in Table 15. The variation between urban and rural is striking. Average urban cash income was more than twice that of the rural household, while non-cash income in urban households were less than 2 per cent of total income and for rural households it was just over 8 per cent. The study reported that when average per capita household income was divided into four strata which approximated the 10th, 50th, and 90th percentiles, the poorest stratum earned \$G114 or less, the lower middle stratum

TABLE 15

AVERAGE HOUSEHOLD INCOME AND EXPENSES (PER CAPITA PER ANNUM)

	URBAN	RURAL	OVERALL
Cash income	\$773	\$382	\$515
Noncash income	\$ 11	\$ 36	\$ 27
Overall income	\$784	\$418	\$542
Expenses	\$683	\$471	\$544

Source: PAHO (1976)

earned \$G115 - \$G300; the upper middle \$G301 - \$G997, and the richest \$G998+. On this basis a relative measure of poverty is that at least 50 per cent of the population earned less than 55 per cent of the mean income. The median income was reported at \$302 per capita per annum.

The data also showed that while overall 69 per cent of cash income was spent on food, households earning less than \$G300 per capita, spent as much as 87 per cent of their cash income on food, whereas those over \$G300 spent only 44 per cent on food. Expenses also exceeded cash income in the rural areas.

### C. Head-Count Estimates

There are several head-count estimates reported in various documents, but none, (apart possibly from [Boyd 1989]) indicate the basis for the estimate. Boyd defined the poverty line from data on a food basket provided by a trade union grouping for the year 1984, adjusted for possible overestimation, inflation, and for an average household size presently estimated at 5.4 persons as compared with 6.14 in the PAHO study.<sup>18</sup> He assumed the population on average spent 70 per cent of their income on food so that the following obtained:

$$\text{Poverty line} = \text{Food Cost} + 10/7$$

Food cost was measured at 60 per cent of the value of the items in the trade union basket, while the estimate of 70 per cent of income

spent on food is comparable to that of 69 per cent obtained in the much earlier PAHO survey.

The calculation produced an estimate of 65 per cent of the population in 1988 had incomes below the poverty line of a weekly income of \$G336.74. Calculating for 1989 to take in the effects of the rapidly worsening inflation of that year, he put the head-count index at 75 per cent of the population in 1989.

Boyd's estimate of a poverty line of \$G336.74 in 1988 adjusted for inflation up to the end of 1991 would yield a weekly household income of \$G2112 or \$G20,332 per capita per annum. As a rough indication, working backwards to the 1971 PAHO survey this yields an income of \$G258.96 per capita per annum in 1971. This would give an absolute head-count index of about 38 per cent of the population in 1971 based on the PAHO survey. The absolute poverty line measure equals 42 per cent of the mean income in that year.

The World Bank, in the 1992 study referred to earlier reported that "official" estimates are that 67 per cent of the population exists below the poverty line. It then goes on to state that the gap is widening because "the large increases in basic food prices occurring in 1990 have widened to gap between the earnings of the poor and the cost of a minimum food basket and very probably increased the number in poverty".<sup>19</sup>

SIMAP, in its Manual defines the vulnerable groups as: unemployed persons, especially young adults and including school leavers; unskilled and semi-skilled workers; persons with low fixed income (retirees, pensioners etc); children of school age and under; the urban and rural poor; small farmers and artisans; female heads of households lacking in skills or living in conditions which inhibit income earning; and residents of certain remote and depressed rural/hinterland communities. Many of these categories clearly overlap, but they are mentioned here because the agency reported the IDB (Boyd) study and further stated that the estimate would be 86 per cent if official views of minimum nutrition requirement were the underlying criteria.<sup>20</sup> Recently, in April 1992, the head of the agency reported that an estimate of 75 per cent was being used.<sup>21</sup>

- These various guesses and crude approximations have only one thing in common, an underlying recognition of worsening poverty. This comes out just as strongly in the review of the partial indicators below.

#### D. Partial Indicators

A number of partial indicators reinforce the inferences drawn from the data already reviewed. These indicators are briefly reviewed below.

### Nutrition

The data in Table 16 show a uniformly high incidence of infant malnutrition for the years 1982-88. Around 40 per cent of clinic attenders under 5 years suffered from mild to severe malnutrition. The incidence could have been worse, as difficulties in attending

TABLE 16

CLINIC ATTENDERS UNDER 5 YEARS WITH MALNUTRITION (%)

	1982	1983	1984	1985	1986	1988
<u>Nutritional Status</u>						
Normal	60.0	56.1	55.5	57.0	59.5	60.4
Mild	31.4	33.6	33.0	32.5	30.1	30.1
Moderate	7.9	9.2	10.2	9.1	9.1	8.4
Severe	0.6	1.1	1.3	1.4	1.3	1.1

Source: Ministry of Health and R.Vio, Guyana's Nutritional Status, 1991.

clinics e.g., cost of transportation, resulted in only about 55 per cent of the population cohort attending in 1986. Data for more recent years could not be obtained, but information based on Georgetown Hospital records show that the number of malnutrition cases increased four-fold between 1989 and 1990. (World Bank, 1992).

The PAHO survey referred to earlier reported that 43 per cent of infants surveyed in 1971 had mild malnutrition, 16 per cent moderate, and 1.7 per cent severe. The distribution of pre-school

age malnutrition at the time is shown in Table 17, with a range from 7 per cent with mild to moderate malnutrition in the urban areas to 40 per cent in some rural areas being observed. Six per

TABLE 17

DISTRIBUTION OF PRESCHOOL-AGE MALNUTRITION IN THE PCM PREVALENCE AREAS

PCM prevalence categories	Infants and children under 5 years old	
	No. examined	% with Gomez Grade II or III malnutrition
A: Rural high	135	40
B: Rural medium	425	26
C: Rural low	142	10
D: Urban	262	7
<u>All areas together</u>	<u>964</u>	<u>18</u>

Source: PAHO, Survey (1976)

cent of Africans suffered some form of malnutrition, while 25 per cent of the East Indians did so. The percentage of households consuming less than the recommended intakes of energy and nutrients at that time is also shown in Table 18. Analysis of the data reveals a strong association between decreasing income, large household size and a poor diet. The economic indicators looked at



in this study would seem to support the persistence of poverty from the 1970s.

Recent health clinics data show that over 76 per cent of pregnant women attending clinics suffered from mild to moderate anemia. The figures for 1985 and 1987 are 57 per cent and 71 per

TABLE 18

PERCENTAGE OF HOUSEHOLDS CONSUMING LESS THAN RECOMMENDED INTAKES OF ENERGY AND NUTRIENTS

	Less than recommended intakes		Less than 80% of recommended intakes	
	Rural (%)	Urban (%)	Rural (%)	Urban (%)
Energy	77.1	71.2	54.3	48.5
Protein	65.1	61.4	44.5	39.7
Calcium	28.0	29.3	17.9	20.5
Iron	26.9	38.3	13.6	21.2
Vitamin A	62.6	40.7	52.1	29.2
Thiamine	22.4	39.7	14.8	19.1
Riboflavin	88.0	76.5	75.9	62.8
Niacin	60.3	68.7	39.5	48.9
Ascorbic acid	35.9	32.4	27.3	24.3

Source: PAHO Survey (1976).

cent respectively. Severe anemia was over 9 per cent in 1987 up from 5 per cent in 1986.

Morbidity

Life expectancy and mortality data conform to the pattern revealed in the nutrition data (Table 19). Life expectancy is

65 years. This is lower than in other Caricom territories where the figure is 70+ years. The infant mortality rate at 45+ is significantly higher than what it was during the period 1975-80 when it averaged 30 and than in other Caricom territories; e.g. Jamaica, 18, Barbados, 11, Dominica, 10. Regional variation within

TABLE 19

## GUYANA: MORTALITY AND LIFE EXPECTANCY AT BIRTH, 1986-1990

ITEM		1986	1987	1988	1989	1990
Mortality	1/	8.0	8.0	8.0	7.9	5.0
Infant Mortality	2/	45.3	49.0	47.0	45.0	45.0
Life Expectancy	3/	63.0	63.0	63.0	65.2	65.0

Source: Government of Guyana as cited in IICA (1991)

1/ Annual Rate Per Thousand Inhabitants

2/ Annual Rate Per Thousand Live Births

3/ Years

Guyana is also significant. As the data in Table 20 show the rate ranges from 13.3 per 1000 live births to 65.<sup>22</sup>

The principal causes of death among children up to five years are nutritional deficiencies (estimated to be 44 per cent for infants and 30 per cent for children aged 1-5) and intestinal infections, reflecting poor sanitation. As a recent report stated

"Malnutrition, diarrhoeal disease and pneumonia which have declined significantly as major causes of mortality in most Caribbean countries remain the major causes of mortality in children under 5 years in Guyana".<sup>23</sup>

TABLE 20

INFANT MORTALITY RATES PER 1000 Live Births, 1990\*

Region	Estimated Mortality Rate
1. Barima - Waini	40.0
2. Pomeroon - Supernaam	53.3
3. W. Demerara - Essequibo Island	17.6
4. Demarara - Mahaica	48.3
5. Mahaica - Rosignal/Berbice	52.5
6. E. Berbice - Corentyne	21.4
7. Cuyuni - Mazaruni	13.3
8. Potaro - Siparuni	57.1
9. Upper Takatu - Upper Essequibo	n.a
10. Upper Demerara	65.0
Country Average	37.0

Note: \* Mortality rates are estimated from birth and death registration records for 1990. Unregistered births and deaths are thus not included.

Source: Statistical Bureau, Government of Guyana as cited in World Bank (1992).

In 1984, maternal mortality was estimated to be 0.6 per 1000 births. The World Bank (1992) reported that Georgetown Hospital data for 1987, shows the figure at 1.8.

Data showing the high incidence of diseases associated with poor environment are shown in Table 21.

TABLE 21

INCIDENCE OF DISEASES ASSOCIATED WITH POOR ENVIRONMENTAL HEALTH, 1983-1988

Disease	1983	1984	1985	1986	1987	1988
Infectious Hepatitis	181	168	126	310	151	241
Typhoid Fever	51	193	118	119	66	154
Gastroenteritis	2142	3907	3598	3895	4770	4396
Malaria	n.a.	n.a.	7680	16388	34136	35451

Source: Ministry of Health as cited in World Bank (1992).

### Education

Data on the entry level of secondary schools examinations show extremely weak performances in core subjects at the final year of primary education with a worsening trend over the decade 1980-90. (see Table 22). A similar pattern is revealed at the exit level in performance at the Caribbean Examinations Council (CXC) examinations. In the core subjects the performance was poor and worsening. The performance of students taking English was the

TABLE 22

PERCENTAGE OF STUDENT PASSES IN THE SECONDARY SCHOOL ENTRANCE EXAMINATION, 1980-90.

Subject	1980	1984	1987	1989	1990
Mathematics	19.3	13.2	18.0	17.0	17.6
English	20.1	17.4	18.0	21.0	19.3
Science	26.5	17.8	20.0	17.0	20.5
Social Science	23.3	18.1	20.0	19.5	19.0

Source: "Access Quality and Efficiency in Caribbean Education."  
World Bank. October, 1991.

worst in the entire region for all students taking the regional examinations (see Table 23).

Arising out of the complex socio-economic crisis has been very poor daily attendance rates for schools. In primary schools the attendance rate nation wide was 68 per cent, with a marked regional variation, ranging from 80 per cent in Georgetown to 50 per cent in the more isolated Region 1. The pattern in secondary schools was the same, with a range from 78 per cent in Georgetown to 30 per cent in Region 1.

TABLE 23

PERCENTAGE OF CXC EXAMINATION CANDIDATES ACHIEVING PASSES IN SELECTED SUBJECTS, 1985-1990

Subject	1984	1985	1988	1989	1990
English	23	20	11	12	13
Mathematics	20	16	16	13	15
Social Science	n.a.	25	18	10	12
Business	n.a.	n.a.	20	15	22

Source: National Examination Board, Guyana as cited in World Bank (1992).

Food Output and Rural Poverty

The index of food production in Guyana conforms to the economic indicators already looked at. Using 1974-76 as the base period, the index was down to 89 in 1991. The per capita supply of calories was also down to 83 in 1991. Protein supply per day was down from 65 grams per capita in 1985 to 52 grams per capita in 1991. (see Table 24)

In a recent IICA agricultural sector assessment report, six groups of rural poor were indentified, using the Boyd (1989) estimate of the poverty line in 1988. These are:

- households headed by women
- wage labourers
- landless farmers

TABLE 24

FOOD

Index of Food Production per capita (1974-76 = 100)	90.3	97.0	95.4	93.8	89.7	89.0	89.0
Per capita supply of: calories (percent of requirements)	101.1	96.0	88.5	87.0	77.0	70.0	83.0
Proteins (grams per day)	65.0	59.2	61.9	58.0	50.1	49.0	52.0

Source: Budget 1992, Ministry of Finance.

- small landowners
- Aboriginal Indians
- pensioners.

Households headed by women were estimated at just over 12 per cent of all households. In these households, child labour appears as a major phenomenon. The wage labourers are those employed in a variety of unskilled occupations in both the private and public sectors. Their circumstances are dictated by low wages, high inflation and virutally non-existent social security. The landless farmers are those who are squatting on public and private lands. Because of insecurity of tenure, most of their cultivation is focussed on short-term crops. The small farmers have been referred to already. The Aboriginal Indians comprise just over 5 per cent of the population and live in small communities. They are most likely the most disadvantaged community in Guyana. Pensioners are both those who receive a public social security provision and those who have retired from wage and salaried employment with their own pension arrangement.

The IICA survey provided a map which gives a visual indication of the spatial distribution of poverty in Guyana. (Appendix 1) Two marked pockets are identifiable, that along the Venezuela and Brazil borders and the coastal strip. In their assessment, the authors of the survey share the views expressed here that:

"Rural Poverty has always been a reality in Guyana, however as shown by several indicators, there has been a marked increase in the incidence of this problem during the last decade"<sup>21</sup>

Four factors are listed in the report as the major causes of this situation, namely, inflation; the dis-integration of the agricultural infrastructure; the decline in real expenditure on agriculture support services (extension, research, marketing and transport); and the overall decline of the economy.

In conclusion, although no acceptable scientific data have been collected to place an accurate fix on the poor in Guyana, all three categories of evidence supplied in this paper (the economic indicators, direct and indirect approximations and information from partial data sets) support the view that the problem of poverty in Guyana has become more acute than it was in the late colonial period and the early years of independence. Ameliorative measures are clearly imperative, but what has been undertaken so far is badly underfunded and face immense difficulties of implementation, precisely because the data available do not permit effective monitoring of what is taking place.



#### 4. Conclusion and Recommendation

All recent analyses of the economic and social situation of Guyana support the view expressed here, of a worsening poverty situation, over the past decade and more. This has prompted remedial action, but to date this seems to have been to no avail.

##### A. Experience

The absence of an accurate fix on the poor in Guyana has forced agencies concerned with poverty alleviation to target general population groups such as the unemployed, urban and rural poor, small farmers on poor land, residents of remote areas, households headed by unskilled women, children under 5, pregnant and lactating women, and dependants on government social security. Because of the overwhelming poverty situation, undeniably their action does rescue some needy. The problem, however, is, that these broad categories do not allow us to determine the severity of poverty within them; thus preventing us from arriving at the conclusion that the best use is being made of the limited resources available to alleviate poverty. This can only be achieved by means of systematic poverty measurement across the country and through time.

From interviews and discussions with those involved, the experience in Guyana also indicates that serious mistakes may have been made in the rush to implement amelioration programmes in the dark. These mistakes are of a wide variety: overlapping of

responsibilities among different agencies; frustration and fatigue among beneficiaries over administrative and logistical delays and bottlenecks; some alienation of staff engaged to execute the programmes; the substitution of solid project work with public relations exercises, and cynicism in the population at large about the objectives of these programmes. What emerges from this is that proper pre-planning of poverty amelioration programmes is a must. The apparent time lost while engaged in pre-planning activity, which invariably causes some political discomfiture, can be rapidly made up through the effective implementation which it makes possible.

Monitoring of on-going activities, based on an accurate mapping of poverty is also the only secure way of establishing whether progress is being made and of identifying problems as they emerge so that speedy corrective action may be taken. In addition it is the only means available of keeping track of changes in household characteristics and behaviour through the various phases of economic activity and adjustment programmes.

Poverty measurement in Guyana, however, will raise serious methodological and conceptual difficulties, some of which have already been mentioned in the text. One of these is the set of problems associated with the exceptional occurrence of immiserizing growth and the rapid spread of poverty to non-traditional sectors. The distinction referred to earlier between the transient,

structural and systemic poor will clearly have to be identified, as each category has its own specific set of difficulties of measurement and treatment.

Secondly, state domination of the economy and labour market has encouraged a centrally directed wages and incomes policy and the emergence of non-wage industrial social welfare benefits as a major source of "resource command" in many households. The traditional cash/non-cash income dichotomy will not hold in the circumstances. Both households and enterprises' behaviour seem to have adjusted to cope with the situation of sustained falls in real incomes and rapid inflation.

Thirdly, marked ethnic and cultural variation among population groups affects the composition of households, gender access to household/family resources and other such forms of household and family heterogeneity. In addition, there is the spatial segmentation of the population, especially as between coastlanders, the hinterland population and other remote areas. The situation in Guyana, therefore, is more complex than in other Caribbean countries and calls for special analysis and survey methods.

The development of complex survival techniques in the long period of sustained declines in real income will also pose difficulties of resource reporting among households and hence of poverty measurement. These problems range from unwillingness to

admit receipt of remittances and "barrels" to the illegalities of the narco-economic trade.

On top of all of these problems identified here, we have to add the local peculiarities attached to the wide range of traditional problems encountered in poverty measurement in developing countries. These include such difficulties as the time period for income accounting, the accurate determination of inputs into household production for the market, where the inputs are used for both production and consumption, e.g., owner operated hire cars, bicycles and small river craft; and the conflation of irregular, cyclical, and short-term variations of production in the rural sector.

#### B. Future Action

Fortunately, the future looks better. At present two large public surveys are in process which could provide a major data base for poverty measurement. These are the national population and housing census, and the household income and expenditure survey. The former is collecting and processing data from the entire population on such characteristics as household composition and structure, economic activity, housing, education and training. The latter is based on a sample of 7000 households in all parts of the country for four survey rounds over the period of one year. This sample survey will be collecting data on household characteristics; economic activity; income from all sources; other receipts;

consumption; non-consumption and other expenditure categories; savings and indebtedness.

In addition two University based studies of some relevance are now being conducted. One is a study of non-wage income arising from employment in the major industries (sugar and bauxite) and the other is an urban study of low income household survival under the present economic conditions. Both are collecting data which could offer important insights, and both are expected to be completed before the end of 1993. The former is being done by full time researchers at the Institute of Development Studies at the University of Guyana and the latter is for a doctoral thesis at the University of Cambridge.

Despite the existence of this on-going work, and the desperate need for the data, there is as yet no evidence of a serious effort to bring together the various agencies, organisations, and individuals interested in the poverty issues. While we may regret that these individuals and groups did not make their inputs at the design stage, important initiatives are still possible, and it is hoped that this study could provide the catalyst. In the report to ECLAC it was recommended that that institution in consultation with UNDP who are helping in the financial and technical execution of the income and expenditure survey, should bring together the various potential user groups of the survey data. These would include: poverty alleviation agencies such as SIMAP and the FUTURES

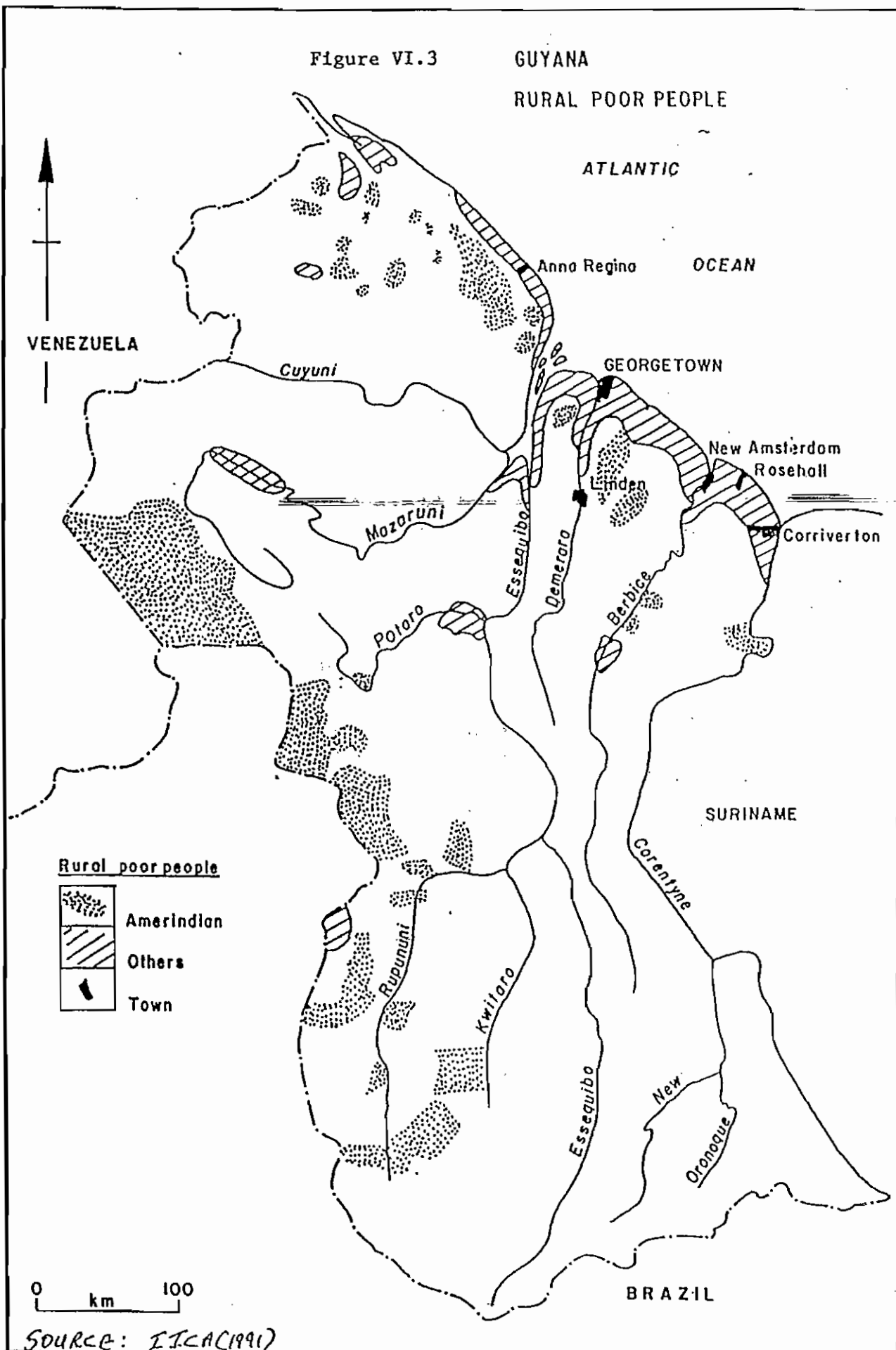
FUND; relevant public sector agencies such as the Ministries of Health, Education and Agriculture; research and University personnel; local NGO's directly involved; individual researchers working in this field e.g., consultants, post-graduate students; regional bodies such as the Caribbean Food and Nutrition Agency; and international agencies. These can promote an interface grouping to provide for the following:

- i) access and dissemination of the data which are collected;
- ii) a series of studies and analyses of the data sets;
- iii) follow up surveys using methodologies compatible with those currently in use, while at the same time being consistent with the task of providing an accurate fix on poverty;
- iv) a pooling of skills that can be drawn upon by any agency from time to time.




Such an initiative could lay the basis for important work on poverty measurement during 1993.

Figure VI.3

GUYANA  
RURAL POOR PEOPLE



Rural poor people

-  Amerindian
-  Others
-  Town

0 km 100

SOURCE: IICA(1991)

## NOTES

1. Inter-American Development Bank, IDB, June 1992, p. 8.
2. G. Standing and R. Szal, Poverty and Basic Needs: Evidence from Guyana and the Phillipines, ILO, Geneva, 1979. p 17.
3. Ibid, p. 17.
4. World Bank, Guyana: From Economic Recovery to Sustained Growth, Washington, 1992, p. 80.
5. The most comprehensive report can be found in, M. Ravallion, (1992)
6. See Dreze and Sen (1990), J.E Foster (1984), J.E Foster, et al (1984), Lanjouw and Stern (1991), M. Ravallion (1992) and Ravallion and Huppi (1991) Sen (1987).
7. Ravallion (1992) p. 32-33.
8. Ibid
9. The population comprises several ethnic categories. The largest group is East Indian (50%), followed by African (30%). The indigeneous group of Amerindian peoples account for 5 per cent. Fourteen per cent of the population is "mixed". About 90 per cent of the population lives on a narrow coastal strip occupying about four per cent of the total land area.
10. ~~Government of Guyana (1992).~~
11. IADB, (1990), p. 80.
12. World Bank, (1992).
13. IICA, (1991).
14. Ibid, p. 35.
15. This is the acronym for Social Impact Amelioration Programme.
16. D. Boyd, (1989).
17. PAHO, (1976).
18. FITUG, (1989).



19. Up to the time of writing I have been unable to discover the basis of this estimate. It may be a reporting based on the Boyd estimate. See World Bank (1992) p. 80.
20. SIMAP, Manual of Operations, (1989).
21. P. Chan, (1992).
22. The data in Table 19 show a different mortality rate from that cited by IICA from a Government source. This underscores the problems of data unreliability in Guyana.
23. GAHEF, (1991), p. 7.
24. IICA, (1991), p. 42.

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