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Serie Research Memoranda

Export Constraints for Subsaharan Growth
The role of non-fuel primary commodities

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CONTENTS:

I. INTRODUCTION

This report is concerned with the question which role primary commodity exports have played, and in the coming decade probably will continue to play, for economic growth in Subsaharan Africa.

It is becoming common sense that many African economies, especially those in the Subsaharan region, find themselves in a severe economic crisis since the early 1980s. It can be called a developmental crisis, because it is not confined to the sphere of economics but extends itself to political and social life. The crisis manifests itself in the form of weak agricultural growth (with food production rising more slowly than population since 1970), a decline in industrial output (deindustrialisation in many countries), a poor export performance, a climbing debt, a deterioration of social indicators (falling school enrollment, worsening nutrition intake, and high infant mortality), and deterioration of institutions, infrastructure and environment.

In late 1989 the World Bank released the report *Sub-Saharan Africa. From crisis to sustainable growth*. It is called a long-term perspective study and it analyses the continuing economic crisis in the region. It presents strategies and policies designed to achieve what is called *sustainable development with equity* during the decades to come. The report is not just one in the continuous flow of World Bank publications, but rather the result of a large-scale research project. Apart from the World Bank staff hundreds of African researchers, development specialists, private businessmen and public officials were consulted, as well as academics and representatives from various OECD countries were consulted during the preparation of the report (*1*). At the same time the World Bank ran a large multi-disciplinary research project concerned with the social dimensions of 'adjustment' in Subsaharan Africa.

Given the urgency of the problem and the comprehensiveness of the research efforts, the report *Sub-Saharan Africa. From crisis to sustainable growth* achieved extensive attention. It has been widely lauded, and rightly so, it seems, since its approach is very comprehensive and integrates many aspects of economic, social, environmental and demographic conditions. In reading it, one aspect struck me, however, namely the way in which the Subsaharan external sector is treated. In the analysis of the causes of the present crisis little weight is given to external factors

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of development, especially the role of non-fuel primary commodity exports. In its projections of future growth the World Bank team that prepared the report, displays an unmotivated optimism with regard to the foreign-currency-earning capacity of non-fuel primary commodity exports. It is on these aspects that the present report will concentrate. Though written in reaction to the World Bank study, this report can well be read independent of the IBRD report. The critical points will now be elaborated in the rest of this introductory chapter.

In the report *Sub-Saharan Africa. From crisis to sustainable growth* three factors are mentioned as being the main causes of the Subsaharan socio-economic crisis:
  o inadequate international trade performance. "Declining export volumes, rather than declining export prices, account for Africa's poor export revenues. Low-income African countries have been worst hit, with substantial income losses in the 1970s and 1980s." (p.3)
  o a high and steadily rising population growth rate.
  o a low level of investment (its growth figures in the 1980s declined) and especially a low efficiency of investment.

Considering these three causes the World Bank assigns a clear-cut ranking in relative importance: "Although many African countries have seen their development efforts disrupted by sharp falls in the world price of key commodities, viewed over the longer term, falling per capita incomes for Africa as a whole since the late 1970s are explained largely by the declining level and efficiency of investment, compounded by accelerating population growth - and not primarily by external factors. Many countries, especially the poorer ones, did suffer severe external shocks. But the low return on investment is the main reason for Africa's recent decline" (pp.2-3).

The World Bank report lays out a whole set of policy advises to tackle the causes of crisis. It devises a target GDP growth rate of 5 percent a year, to be reached by 2000. To attain this a rise in investment is necessary from the present rate of 15 percent of GDP to 25 percent. Finance for these investments must come from higher public and private savings, but especially from an improved external resource balance: "If Africa's economies are to grow, they must earn foreign exchange to pay for essential imports. Thus it is vital that they increase their share of world markets. The prospects for most primary commodities are poor, so higher export earnings must come from increased output, diversification into new commodities and an aggressive export drive into the rapidly growing Asian markets." (p.13)

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It is here that we reach a critical point in the Bank's policy advise. The apparent easiness with which the financial preconditions are sketched, especially regarding the external resource balance, masks a number of problematic issues and research questions. Suppose that all Subsaharan governments are convinced by the World Bank analysis and embrace a strategy of *increased output* and *commodity diversification*. A number of hidden assumptions must be fulfilled for such a strategy to be successful for the region as a whole:

1. Countries in the region possess unexploited opportunities for commodity diversification and export diversification in general.

2. The policy is a positive sum game for the Subsaharan region as a whole, i.e. positive effects for one country are not neutralized by other countries seeing existing export markets threatened by newcomers in the region. Problems can arise from the fact that the region does not act as an integrated entity.

3. Subsaharan governments are in a position to step up national commodity export and its geographical destinations. Alternatively stated, the governments have the sovereign power to decide and enforce, whether by carrot or by stick, that farmers, and local or transnational companies operating in the commodity export sector of the country actually change their activities in the desired way.

4. Putting more of the same type of commodities on the world market must not invoke price decreases that neutralize export volume growth effects.

This report examines the first three of these preconditions on the basis of recent historical trends in Subsaharan Africa's exports of primary commodities. Most data series refer to the period 1971-1987, though in some cases comparable statistics beyond 1985 were not yet available.

Chapter II considers the importance of non-fuel primary commodity exports for Subsaharan Africa's economies. After reviewing recent historical trends in commodity dependence, the focus will be on quantitative implications of World Bank projections for the year 2000, especially with regard to the non-fuel commodities. Chapter III surveys the development of exports and market shares of the region's main non-fuel commodities. Chapter IV reviews trends in export diversification, both regarding commodity compo-

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sition and geographical destination. Chapter V is devoted to the role of transnational companies in production and export of a number of Subsaharan primary commodities. The final chapter draws some conclusions with regard to the status and significance of the export constraint for future Subsaharan growth. The text refers to an extensive statistical annex. For brevity's sake no countrywise analyses are presented, although the statistical annex would offer much material for such an analysis.

Some definitions
The study concentrates on non-fuel primary commodities. Fuel exports are excluded because of their specific dynamics. The group of non-fuel commodities is includes the following SITC (Rev.1) sections: 0, 1, 2, 4 and 68 (food and live animals, beverages and tobacco, inedible crude materials, oils, fats, waxes, and non-ferrous metals). In some parts of the report and the Statistical Annex the analysis concentrates on a subgroup of the seventeen most important export commodities for which trust-worthy statistics are available: twelve agricultural and forestry commodities and five so-called 'industrial' metals.
Subsaharan Africa is used for the total set of African countries, excluding South Africa and the North African countries (Morocco, Algeria, Libya, and Egypt).

II. NON-FUEL PRIMARY COMMODITY EXPORTS AND THEIR IMPORTANCE FOR SUBSAHARAN ECONOMIES

This chapter is devoted to three general issues, each regarding the significance of non-fuel primary commodity exports for Subsaharan countries. The first issue is that of the share of non-fuel commodity share in total Subsaharan exports and in total GNP. The development of this portion is considered for the period 1971-1987. The second issue in this chapter is the implication of trends in non-fuel primary commodity exports for the import capacity of Subsaharan countries. A third item regards future projections for Subsaharan exports of non-fuel commodities as formulated by the World Bank, and their underlying assumptions.

II.1 Trends in commodity dependence

When measured by the contribution of non-fuel primary commodity exports to GNP, the importance of these products for Subsaharan national economies was in 1987 approximately the same as it was in 1971. In Subsaharan non-oil countries the weighted average share of non-fuel commodity exports in GNP was sixteen percent in both years (*2*). In thirteen of these countries it increased, in two countries it remained the same, while in twelve countries the share decreased. During the period between 1971 and 1987 the commodity export share has been higher in a number of years. This was due to high commodity prices, especially in the middle of the 1970s. In 1974 it even equaled a quarter of GNP on average, while in four countries (Liberia, Mauritania, Mauritius and Zambia) it was over 50 percent of GNP. Since 1980 the share of non-fuel commodity exports in GNP diminished, as shown in Table 1, primarily due to declining commodity prices
Six Subsaharan oil countries are included in the sample. Only a relatively small part of their national product stems from non-fuel commodity exports. It diminished from 13 percent in 1971 to 7 percent in 1987 (*3*).

The growth of non-fuel primary commodity exports appeared to be statistically significant in explaining GNP growth. This was found in a cross section analysis for a sample of 27 Subsaharan non-oil countries. In the subperiods 1971-74 and 1977-80 and 1983-87 a significant relationship could be established, which was also the case when all observations of five subperiods (1971-87) were pooled. In the subperiods 1974-77 and 1980-82 the relationship was not statistically significant from zero. On average for the entire period the growth of non-fuel commodity exports explained 27 percent of Subsaharan GNP growth (*4*).

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TABLE 1
DISTRIBUTION OF SUBSAHARAN COUNTRIES ACCORDING TO PERCENTAGE
OF NON-FUEL COMMODITY EXPORTS IN GNP, 1971 - 1987

SHARE OF N.F.COMMODITY EXPORTS IN GNP	1971	1974	1977	1980	1983	1987
Countries with:						
over 50 % of GNP	0	4	1	1	0	0
40 - 50 % of GNP	2	2	0	0	2	2
30 - 40 % of GNP	1	1	5	2	1	5
20 - 30 % of GNP	7	6	7	9	5	1
15 - 20 % of GNP	5	6	8	1	4	6
10 - 15 % of GNP	9	9	7	10	7	5
5 - 10 % of GNP	8	4	4	6	12	10
Less than 5 % of GNP	1	1	1	3	2	4
Total number of countries	33	33	33	33	33	33

Source: derived from Annex Table 7.

In 1987 the share of non-fuel commodities in total Subsaharan exports amounted to 86 percent for non-oil countries in the Subsaharan region, only four percentage points lower than in 1971 (*5*). So there is no exaggeration in speaking of an extreme dependence on non-fuel primary commodities exports for generation of foreign exchange. Some differentiation must be made as to types of countries. If we weigh commodity dependence shares figures with the magnitude of exports, the decrease in average export share appeared to be more pronounced. Especially from 1977 onwards a fall took place, from 88 to 80 percent in 1987. This indicates that larger countries in the region became less dependent on this category of exports. Cross section analysis showed a strong linear relationship between the growth of total exports of Subsaharan non-oil countries and the growth of non-fuel primary commodity exports. In all periods except 1977-1980 the coefficient of determination R^2 appeared to be higher than 0.90. Table 2 gives a frequency distribution of country commodity export dependence over time.

For the oil countries in the region the average share of non-fuel exports in total exports decreased from two thirds in 1971 to a quarter in 1983. Due to lower oil prices it grew again to one third of their total exports by 1987 (*6*).

In comparison with other developing countries commodity dependence in the Subsaharan region remains relatively high. When a policy objective of decreasing commodity dependence is used as benchmark, Subsaharan countries performed worse during the period

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1967-1986 than other countries in a sample of 86 developing countries (*7*). Table 3 summarises the results (which include fuels) from an UNCTAD report.

TABLE 2
DISTRIBUTION OF SUBSAHARAN COUNTRIES ACCORDING TO PERCENTAGE
OF NON-FUEL COMMODITY EXPORTS IN TOTAL EXPORTS, 1971 - 1987

SHARE OF N.F.COMMODITIES IN TOTAL EXPORTS	1971	1974	1977	1980	1983	1987
Over 90 % of exports	20	16	19	13	13	13
70 - 90 % of exports	7	11	8	10	7	8
50 - 70 % of exports	3	1	2	3	7	5
30 - 50 % of exports	2	2	0	3	2	4
10 - 30 % of exports	1	2	3	2	3	2
Less than 10 % of exports	0	1	1	2	1	1
Total number of countries	33	33	33	33	33	33

Source: Derived from Annex Table 5.

TABLE 3
COMMODITY DEPENDENCE[a] IN EXPORT EARNINGS OF DEVELOPING COUNTRIES,
1967 - 1986

	Number of countries		Percentages	
	Total group	Subsaharan group	Total group	Subsaharan group
[b] DECREASING DEPENDENCE	28	6	33	18
LITTLE CHANGE IN DEPENDENCE	51	24	59	71
INCREASING DEPENDENCE	7	4	8	12
TOTAL	86	34	100	100

Notes: a) Percentage of total export earnings accounted for by exports of all primary commodities, including fuel. b) A change in dependence greater than ten percentage points is considered significant.
Source: compiled from UNCTAD (1989b)

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II.2 International purchasing power of NF commodity exports

In current terms, Subsaharan export income from non-fuel primary
commodities more than trebled between 1971 and 1980 as is shown
in Chart 1. This spectacular growth in earnings was not continued
in the 1980s. On the contrary, current earnings decreased by
28 percent between 1981 and 1987. It is useful to examine the
question whether price or volume factors were responsible for the
development of export receipts. Therefore, Chart 1 also pictures
export earnings in constant 1980 prices. Their development is
much less explosive in the mid-1970s, which implies that the
growth of current earnings in that subperiod can largely be
attributed to price factors. The fall in current earnings of the
early 1980s was apparently caused by both volume decreases and
price fall. In 1984 the volume of non-fuel commodity export was
back at its average level of a decade before, but from then
onwards a period of slight but steady improvement sets in. Volume
growth is the main force behind the recovery.

CHART 1
SUBSAHARAN EXPORT EARNINGS FROM NON-FUEL COMMODITIES
(in current terms and constant 1980 prices)

Based on Table 43 of Statistical Annex
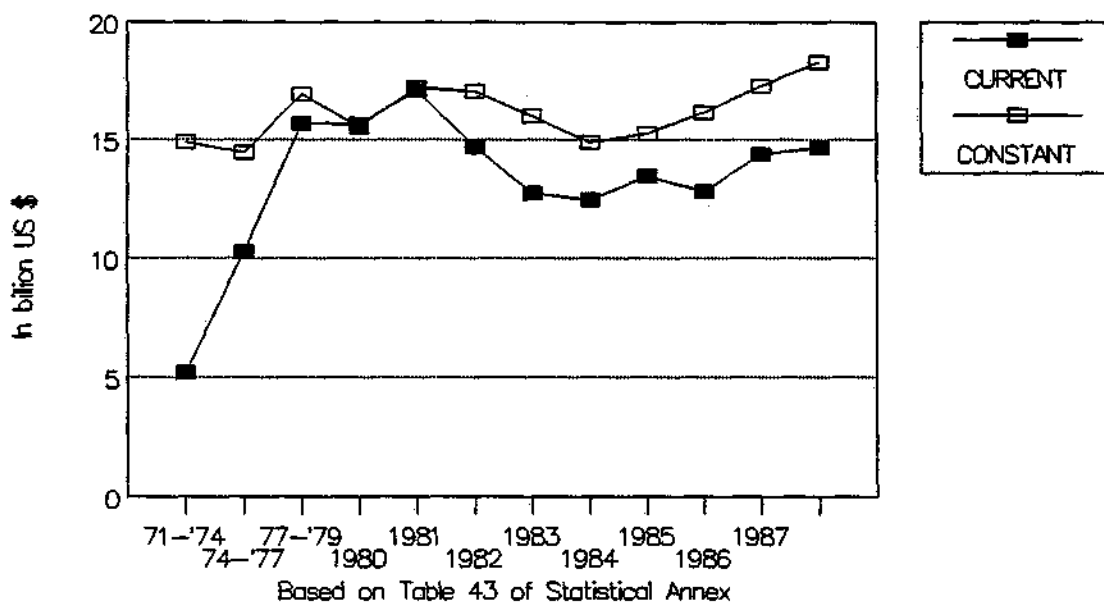
Export of non-fuel commodities is no end in itself. It is a method to generate international purchasing power - in the form of hard currency - with which the import of commodities from the world market can be financed. In principle, three effects influence the international purchasing power of non-fuel commodity exports: (a) changes in commodity prices,
                                (b) changes in import prices, and
                                (c) changes in export volume.

The price effect of (a) and (b) can be expressed by the net barter terms of trade of the commodity exports. Most Subsaharan imports still stem from industrialised countries in the OECD. The index of export prices of industrial countries is used as a dummy for the unit price of Subsaharan imports. In Chart 2 the net barter terms of trade for seventeen Subsaharan non-fuel export commodities is displayed. In the 1970s, especially in the period 1973-1977, the Subsaharan region realised considerable terms of trade gains. From then onwards, however, price increases of Subsaharan non-fuel commodity exports were more than matched by increasing export prices of industrial countries. With exception of 1983 and 1984 terms of trade deteriorated in each subsequent year. In 1987 the net barter terms of trade were 30 percent below their 1980 level and 58 percent below their peak of 1977. Therefore, it is no exaggeration to state that the international pur-

CHART 2
EXPORT PRICES AND TERMS OF TRADE FOR 17 MAIN SUBSAHARAN
N.-F. COMMODITIES, 1971 - 1987

Source: Annex Table 34
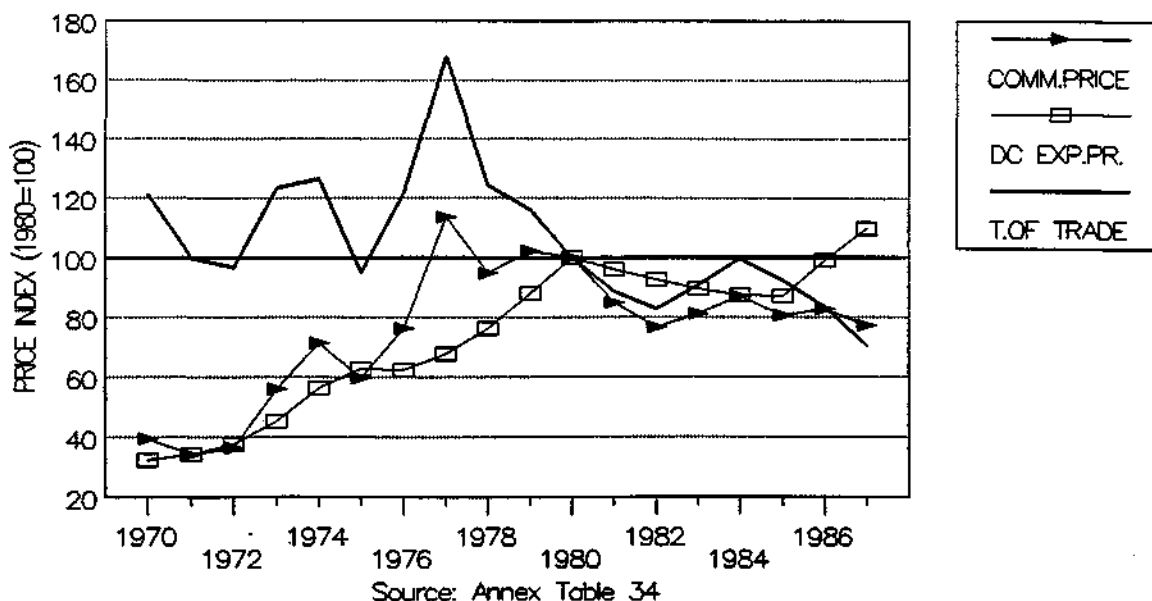
chasing power of Subsaharan non-fuel commodity exports deteriorated sharply during last decade. Expressed in 1980 prices the loss in import capacity due to terms of trade changes amounted to $ 7.5 billion, cumulative over the period 1980-'87 (*8*). This is equal to 5.7 percent of Subsaharan non-fuel commodity exports in that period (in 1980 prices).

As shown in Chart 1 actual export earnings (in current terms) dropped considerably in the 1980s. The cumulative earnings loss that Subsaharan countries since 1979 experienced with their non-fuel primary commodity exports, amounts to $ 12.5 billion in current terms. This is equal to approximately 11 percent of the cumulative total of these exports (*9*).

When the terms of trade loss is responsible, as stated above, for a shortfall of import capacity of $ 7.5 billion, that would leave a cumulative shortfall of approximately $ 5 billion to be explained by volume losses.

TABLE 4
DISTRIBUTION OF SUBSAHARAN COUNTRIES ACCORDING TO LOSSES OF NON-FUEL PRIMARY COMMODITY EXPORTS EARNINGS 1980-1987
(Cumulative loss/gain in export earnings as percentage of cumulative exports over the period)

	NUMBER OF COUNTRIES	COUNTRIES
COUNTRIES WITH EARNINGS SHORTFALL		
60 - 80 %	2	Niger, Benin
40 - 60 %	4	Zambia, Nigeria, Gambia, Rwanda
20 - 40 %	6	Cameroon, Ghana, Madagascar, S.Leone, Tanzania, Uganda
10 - 20 %	4	Senegal, Liberia, Burundi, Zaire
0 - 10 %	3	Kenya, Sudan, Ethiopia
COUNTRIES WITH EARNINGS GAIN		
0 - 10 %	4	Zimbabwe, Ivory Coast, Malawi, Mauritius
10 - 20 %	6	B.Fasso, Togo, Gabon, Somalia, Mali, Seychelles
20 - 40 %	2	Botswana, C.Afr.Republic
40 - 60 %	2	Mauretania, PR Congo

Source: Annex Table 10.

Losses and gains were unevenly distributed over the Subsaharan region as shown in Table 4. In interpreting these individual country shortfalls or gains one has to be careful, because the figure is very sensitive for exceptional conditions in the base

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year 1979.
Some countries with a high dependence on non-fuel primary commo-
dity exports like Niger, Cameroon, Ghana and Zambia were very
severely hit. In absolute terms, Zambia experienced the largest
losses of all thirty-three Subsaharan countries. A group of seven
countries remained relatively unaffected (plus ten to minus ten
percent) by the difficulties that many non-fuel commodities expe-
rienced in the early 1980s. Finally, a group of ten countries
gained more than ten percent in export receipts from non-fuel
commodities.
It is beyond the scope of this report to analyse the export
results at an individual country level. Nevertheless, a number of
factors can be listed that influence export losses or gains of
individual countries:

● Price change of individual commodities.
● Volume change. This may for instance explain part of the
  gains for countries dependent on cotton, coffee and timber.
● Change in commodity composition of exports.
● Degree of export diversification. A high degree tends to stabi-
  lise export earnings by spreading gains and losses for indivi-
  dual commodities.
● Overall degree of dependence on non-fuel commodity exports.
  When low, this factor may have double positive effect. It
  allows countries to specialise in the production and export of
  those commodities or varieties which were well in demand and
  had a stable or upward-inclined price. Besides, it frees them
  from the pressure to step up the export volumes of non-fuel
  primary commodities and so to get caught in the vicious circle
  of becoming more and more dependent on these products. Some
  Subsaharan oil countries may well have benefited from these
  effects (*10*).

To evaluate the growth effect of an export earnings shortfall it
could be advocated to calculate the cumulative loss on a compoun-
ded interest basis, e.g. with annual averages of LIBOR+1 (*11*).
Anyway, it is rather evident that the shortfall of foreign
exchange earnings has contributed to the Subsaharan economic
crisis and debt problems. It has also contributed to the fiscal
crisis in many countries, since export taxes and other taxes that
are linked to export production, often form an important portion
of government income. Via this fiscal linkage the export earnings
shortfall has certainly contributed to the growth of governments
deficits.

Subsaharan capacity to import (and to pay interest on debts)
depends to a large share on non-fuel commodity exports. Other
sources of hard foreign currency like overseas development aid
(ODA) and net loan disbursements are less important than non-fuel
primary commodity exports. However, the latter lost part of its
significance during the 1980s. In 1987 primary commodity exports
still are the largest single source of foreign exchange for the
region, but relative to ODA its share in the foreign currency

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inflow has shrunken since 1980. This is pictured in Chart 3. It appears that Subsaharan economies became more aid-dependent in the 1980s, due not only to decreased non-fuel commodity export earnings, but also because of contraction of net loan disbursements.

CHART 3

MAIN SOURCES OF FOREIGN CURRENCY INFLOW FOR SUBSAHARAN COUNTRIES, 1980 AND 1987: NF commodity exports, development aid (ODA), net loan disbursements
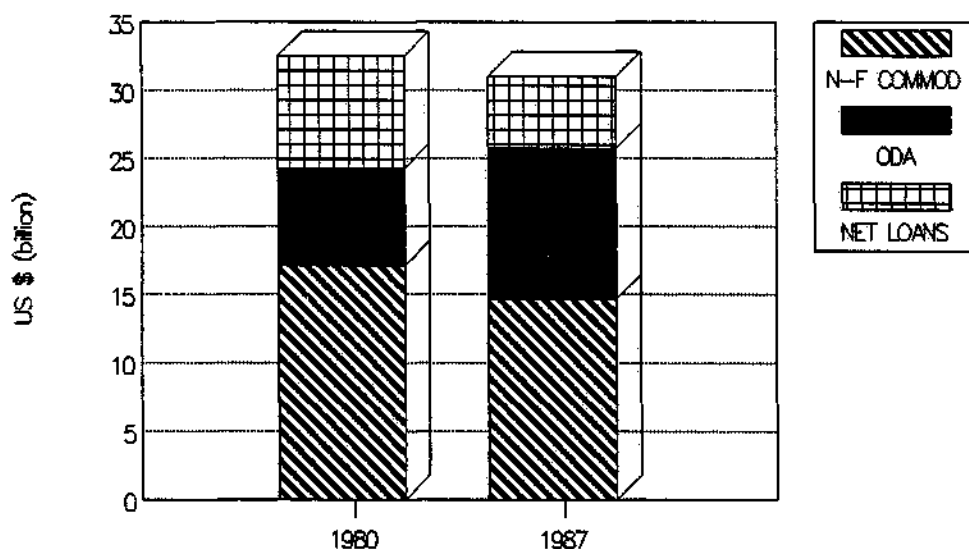
Source: Annex Table 33

II.3 World Bank projections for the year 2000

The World Bank's synthesis report on Subsaharan Africa (1989) is a long-term study and sets out a series of macro-economic projections up to the year 2020, with intermediate projections for the year 2000. Given the enormous uncertainties and potential for structural change we don't feel ourselve competent to judge or even to comment on the projections for 2020. Therefore, we will concentrate on the 2000 projections, particularly those relating to the Subsaharan external sector.

According to the World Bank (1989,p.174) an annual GDP growth rate of 5 percent should be reached by the year 2000. In order to attain this a considerable growth in both the rate of investment in GDP and in the efficiency of investment is necessary. To step

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up the investment rate to the projected 25 per cent of GDP (from
15.1 percent in 1986/87), additional finance is required. Even
with increased domestic savings efforts (GDP savings rate up from
11.8 to 18 percent), a considerable amount of finance will be
required from the external sector. To cover both the domestic
savings gap and interest payments of foreign debts, additional
foreign savings will be necessary to the rate of 9 of GDP by the
year 2000, up from 6.2 percent in 1986/87.

How will this gap be bridged ? The World Bank does not foresee a
trade balance surplus for the region:
   *"Given the decline in African imports during the past
   decade -and remembering that per capita imports are
   almost half those of the early 1980s- some recovery
   in imports is needed in the short term"* (p.175).
The Bank projects the import share of GDP to increase from 25.5
to 33 percent by 2000. Though export growth is not expected to
match the growth of imports, it will nevertheless climb to a rate
of 24 percent of GDP (up from 19.3 percent in 1986/87). So, the
trade balance will only deteriorate until 2000, to a rate of
9 percent of GDP. This leaves us with the question how this gap
can be bridged. The Bank's answer is that ODA should be doubled
to a target of US$ 22 billion.

Though the model on which all projections are based, is not
included in the World Bank report, a number of crucial parameters
and assumptions are given (1989, pp.172-177). From these data it
is not too difficult to reconstruct the core model that is used
for the external sector. This has been done in Table 37 of the
Statistical Annex. Crucial elements on which we will focus here
are the projected growth rate of total exports and that of non-
fuel primary commodity exports. In the central projection it is
assumed that some export diversification out of primary commo-
dities will take place, so that by 2000 the share of non-fuel
primary commodities in total exports will have decreased from on
average 48 to 44 percent.

A next step was to calculate what projections would result when
some assumptions or parameters are changed, especially those
regarding the effect of economic policy. The alterations in
assumptions and parameters are relatively small, but they do show
the sensitivity of World Bank projections for changing condi-
tions. Four variants are discerned:
  1. less export diversification: the share of non-fuel commodi-
     ties in total export remains unchanged;
  2. no growth of GDP per capita takes place;
  3. growth of GDP is 0.5 percent higher than annual population
     growth
  4. the openness of Subsaharan economies increases less than
     expected in terms of the GDP of imports and export.

It appears that the implications of the World Bank's projections

are that total exports and non-fuel primary commodity exports
must grow in a way that would present a dramatic break with past
experience.
Compared to the negative growth rates of the period 1980-87 a
positive growth differential is postulated in all variants.
Results of these calculations are summarised in Table 5. The
largest increase in growth (nine percentage points) occurs in the
case of Variant 1. This reflects the importance of diversifica-
tion efforts. In Variant 4, representing a smaller increase in
external openness of Subsaharan economies, postulated growth of
non-fuel primary commodity exports is the lowest. Nonetheless,
even here the growth rate is 7.4 percentage points above actual
growth rates.

TABLE 5
WORLD BANK PROJECTIONS FOR SUBSAHARAN NON-FUEL COMMODITY EXPORTS:
ACTUAL AND FOR THE PERIOD 1987-2000
(Central projection and four variants)

		PROJECTIONS FOR 1987 - 2000				
	ACTUAL DATA	CENTRAL CASE	VARIANT 1	VARIANT 2	VARIANT 3	VARIANT 4
Amounts[a]						
Total exports	28.0	56.5	56.5	51.8	60.2	50.6
NF comm. exports	13.3	24.9	27.1	22.8	26.5	22.3
Average annual growth rates (%)[b]						
Total exports	-1.3	5.6	5.6	4.8	6.1	4.7
NF comm. exports	-3.4	4.9	5.6	4.2	5.4	4.0
Growth differentials (%) with actual growth						
Total exports		+6.9	+6.9	+6.1	+7.4	+6.0
NF comm. exports		+8.3	+9.0	+7.6	+8.8	+7.4

Notes: a) Actual data are averages of 1982-1987; projections in 1990
dollars (bln.); b) Actual growth rates for period 1980-87; projected
rated are averages for period 1987-2000.
Source: Table 38 of Statistical Annex.

When future export growth rates are lower than their postulated
values, this will mean, ceteris paribus, that either projected
investment and GDP-growth levels are not reached, or that the
continent will become more dependent on foreign savings via an
additional flow of ODA or net loans (debts). This is illustrated
by Variant 4. To attain the original GDP growth target an addi-

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tional ODA flow of nearly $ 3 billion annually is required in
this variant (*12*).

It is difficult to see in which way such export growth targets
could be reached, given the composition of African exports and
historical export performance. Of course, the World Bank is well
aware of this: "The expansion of world trade during the past
three decades appears to have largely bypassed Africa. If its
economies are to grow, they must improve their share in world
markets and diversify their exports. [...] Subsaharan Africa
needs to find new markets" (1989, p.173). So, essentially the
reversal in export performance is thought to depend on the
success of three policies:
  ● increasing the supply of existing export products and increase
    Subsaharan share in these markets;
  ● diversification of exports;
  ● explore new geographical markets, become less dependent on
    Europe and direct more of export flows to the US market and
    Asian countries.

The next chapters of this report are devoted to the question what
perspectives these export outlets offer, given the experience of
the period 1971-1987.

II.4 Conclusion

By 1987 exports of non-fuel primary commodities were about as
important for Subsaharan economies as they were in the early
1970s. For non-oil countries in the region -the majority- one
sixth of GDP stems directly from this export category. It
still represents the lion's share of total merchandise exports
Though the share of non-fuel commodities in total exports did
decline since the early 1970s, the decrease in commodity depen-
dence in Subsaharan Africa is much slower than in other develo-
ping countries. For Subsaharan Africa it is the largest single
source of foreign exchange inflow. Growth of non-fuel primary
commodity exports is statistically significant as explaining
factor for GDP growth in the non-oil countries of the region.

The international purchasing power generated by Subsaharan
exports of non-fuel commodities declined by $ 12.5 billion since
1980. Approximately $ 7.5 billion of this loss can be explained
by falling terms of trade for these commodities. The residual
loss reflects a volume effect (to be considered more closely in
next chapter). Not all Subsaharan countries experienced a short-
fall of export earnings. Gains and losses were unevenly distribu-
ted: slightly less than half the countries experienced gains (in
current terms). In other countries the export losses contributed
to deterioration of their trade balances, debt problem and to the
fiscal crisis of the state.

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For any future growth strategy that is dependent on imported inputs (intermediates, production equipment, fuel) expansion or at least stabilisation of non-fuel primary commodity exports remains a vital issue. The World Bank's long-term perspective study *Subsaharan Africa: From crisis to sustainable development* sketches a growth scenario in GDP is to grow five percent annually by 2000. To attain this target an average annual growth rate of non-fuel primary commodity exports of five percent a year is required during the period 1987-2000. That would, however, represent a dramatic break with the negative growth rates recorded during the period 1980-1987. Given the expectation that prices will not improve very much, the success of such an export and growth strategy depends on increasing the volume of non-fuel primary commodity exports by finding new markets, (re-)gaining international market share, and on diversification of exports. The viability of this program will be considered more closely in next chapters.

III. COMMODITY-SPECIFIC TRENDS IN SUBSAHARAN EXPORTS

This chapter concentrates on the validity of the World Bank diagnosis that *"Declining export volumes, rather than declining export prices, account for Africa's poor export revenues"* (1989, p.3). The implication of this diagnosis is far beyond that of a casual observation. It suggests that internal factors like lagging production and competitiveness are dominant factors behind Subsaharan Africa's sluggish export performance. On an aggregate level, the validity of the statement has already been contested in the preceding chapter. Terms of trade losses appeared to be more important than volume losses in explaining the export earnings shortfall of the 1980s.

However, making statements on non-fuel primary commodities in general is subject to limitations. For example, aggregate terms of trade losses could be caused by price developments for one or two preponderant commodities, while in most other cases volume factors explain export performance. To cope with such commodity-specific developments this chapter will review the main Subsaharan primary commodities in a more detailed way.

Two main groups are discerned: agricultural and forestry commodities and mineral products. In each category only the most important commodities are considered. The agricultural an forestry category consists of twelve commodities: the tropical beverages coffee, tea, cocoa; the food crops sugar, groundnuts, palm oil, and groundnut oil; and a group of non-food raw materials consisting of: rubber, cotton, sisal, tobacco, and timber.

The category of minerals includes the five main industrial minerals: bauxite, copper, iron ore, manganese ore and phosphate rock.

During last decade the group of agricultural commodities represented approximately 75 percent of the combined Subsaharan exports of both groups of commodities. When gold, diamonds, uranium and other minerals would be included, the role of mining products in total non-fuel primary commodity exports would, of course, be larger. Due to lacking accurate and trustworthy statistics these minerals are left out here.

III.1 Agricultural products

In current dollar terms the value of Subsaharan agricultural exports nearly doubled over the last fifteen years. The share of tropical beverages and tobacco in this package amounted to fifty-five per cent in the early 1970s. Since then it increased to more than two thirds. Table 6 distinguishes agricultural crops with growing and declining shares in total agricultural exports. Among the 'growers' coffee and cocoa are by far the most important. Together they represent nearly 60 percent of all Subsaharan agricultural exports.

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TABLE 6
COMPOSITION OF AGRICULTURAL EXPORT PACKAGE
(in percentage)

	1973/'75	1985/'87	Average 1973-87
GROWING SHARE			
Coffee	26.6	34.3	33.3
Cocoa	21.4	24.7	23.5
Tobacco	3.9	5.6	4.8
Tea	2.6	4.5	3.8
DECLINING SHARE			
Timber	13.5	10.5	10.6
Cotton	10.5	8.6	9.4
Sugar	8.5	7.4	7.6
Rubber	2.5	2.3	2.1
Palm oil	1.7	0.6	0.9
Groundnut oil	3.1	0.8	1.7
Groundnuts	3.2	0.4	1.5
Sisal	2.5	0.3	0.9
TOTAL	100.0	100.0	100.0
In mln.US $ (curr.)	4721.0	7480.0	6986.0

Source: Annex Table 1.

In Table 7 the change in export earnings per commodity between
1973 and 1987 is differentiated for five partly overlapping sub-
periods. From this table it appears that coffee and cocoa are
only medium performers in terms of their ranking as 'growers'.
Tea, tobacco, rubber and sugar all show a higher overall growth
ranking, while sisal and groundnut products clearly lag behind.

Now we reach the question whether price or volume changes were
more important in explaining aggregate change in export earnings
for each commodity. Obviously some relations between price and
volume change do exist. A test that treats both as independent
factors can be advocated on basis of the so-called *small country
assumption*. It states that for small countries international
price changes are economic data which will not or hardly be
influenced by changes in their export volume. Cocoa represents
the only of all twelve commodities for which this assumption is
not valid, because Subsaharan Africa supplied two-thirds of world
market supply (1985-87). In other cases the small country assump-
tion allows us to treat price and volume changes as more or less
independent of each other.

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GROWTH OF SUBSAHARAN EXPORT EARNINGS, AGRICULTURAL COMMODITIES
(percentage of change, based on export value in current US $)

| | 73/75 to 76/78 | 76/78 to 78/80 | 78/80 to 80/82 | 80/82 to 82/84 | 82/84 to 85/87 | GROWTH RANKING | | | | |
						76/ 78	78/ 80	80/ 82	82/ 84	85/ 87
Tea	96	16	-6	29	-3	2	4	8	2	8
Tobacco	52	11	25	3	3	4	8	1	5	7
Rubber	9	18	5	-6	15	8	3	5	6	4
Sugar	8	32	16	-24	10	9	1	2	10	6
Coffee	126	2	-16	-10	18	1	9	10	7	3
Cocoa	86	15	-25	-11	28	3	5	11	9	2
Cotton	30	13	-13	13	-10	5	6	9	3	9
Palm oil	-27	2	-3	4	32	11	10	7	4	1
Timber	6	13	1	-10	13	10	7	6	8	5
Sisal	-61	26	7	-34	-47	12	2	4	11	12
Groundnut oil	20	-34	-35	46	-46	6	11	12	1	11
Groundnuts	20	-57	12	-37	-45	7	12	3	12	10
Total agric. commodities	61	8	-12	-7	12					

Source: Annex Table 31.

The test concentrates on the group of twelve agricultural commodities. The period since the early 1970s is divided into five sub-periods. For each of the subperiods a simple regression analysis is performed with subsequently price change and volume change as explanatory variable for change in export earnings. The procedure was first to establish the statistical significance of each relation (rejection of zero hypothesis) and, secondly, to compare the coeficients of determination (*13*). In the test as it has been performed all commodity observation received the same weight. Data and results are summarised in Table 8. It appeared that:

● in two of the subperiods volume changes explained most of the fluctuations in export income;
● in two subperiods price changes were the dominant factor;
● in the last sub-period (1985-87) neither the price nor the volume factor was individually found to be significant as explaining variable.

So, it seems that the World Bank's conjecture on volume determinancy lacks sufficient empirical ground for Subsaharan Africa's main agricultural commodities. At a commodity-specific level some further qualifications are possible.

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TABLE 8
PRICE AND VOLUME COMPONENTS OF CHANGE IN SUBSAHARAN AGRICULTURAL EXPORT EARNINGS, 1973-1987

(Percentage of change in period averages)

COMMODITY	1973/5 - 1976/8			1976/8 - 1978/80			1978/80 - 1980/2			1980/2 - 1982/4			1982/4 - 1985/7		
	E	Pe	Qe	E	Pe	Qe	E	Pe	Qe	E	Pe	Qe	E	Pe	Qe
COFFEE	126	110.9	15.1	2	6.0	-4.0	-16	-19.4	3.4	-10	-8.8	-1.2	18	19.0	-1.0
COCOA	86	96.1	-10.1	15	18.2	-3.2	-25	-41.8	16.8	-11	-9.3	-1.7	28	19.5	8.5
COTTON	30	31.5	-1.5	13	16.3	-3.3	-13	-4.3	-8.7	13	-2.2	15.2	-10	-38.3	28.3
TIMBER	6	16.5	-10.5	13	13.6	-0.6	1	18.1	-17.1	-10	-4.8	-5.2	13	19.4	-6.4
SUGAR	8	14.9	-6.9	32	16.5	15.5	16	6.2	9.8	-24	-26.5	2.5	10	11.7	-1.7
TEA	96	80.9	15.1	16	3.8	12.2	-6	-7.9	1.9	29	21.0	8.0	-3	-22.1	19.1
TOBACCO	52	42.1	9.9	11	4.3	6.7	25	7.7	17.3	3	12.2	-9.2	3	-10.4	13.4
GROUNDNUTS	20	13.7	6.3	-57	-1.5	-55.5	12	29.7	-17.7	-37	-17.9	-19.1	-45	-0.2	-44.8
RUBBER	9	22.2	-13.2	18	28.3	-10.3	5	12.9	-7.9	-6	-19.0	13.0	15	-16.6	31.6
SISAL	-61	-21.2	-39.8	26	37.4	-11.4	7	17.4	-10.4	-34	-9.6	-24.4	-47	-16.8	-30.2
PALM OIL	-26.9	4.6	-31.5	1.7	24.2	-22.5	-3.4	-6.6	3.2	3.6	25.2	-21.6	-22.4	-91.4	69.0
GROUNDNUT OIL	20	-17.3	37.3	-34	4.6	-38.6	-35	-14.8	-20.2	46	8.2	37.8	-46	-2.9	-43.1
ARITHMIC MEAN	30.4	32.9	-2.5	4.7	14.3	-9.6	-2.7	-0.2	-2.5	-3.1	-2.6	-0.5	-7.2	-10.8	3.6
REGRESS.RESULTS a)															
- coefficient		1.144	1.576		1.322	1.102		0.670	0.260		1.030	1.025		0.320	0.378
- R^2		.85	.40		.36	.80		.57	.04		.47	.56		.14	.22
- t value		7.573c	2.599b		2.387b	6.310c		3.653c	0.630		2.981b	3.546c		1.276	1.6427
- H(0) (5%, 10df)		rej.	rej.		rej.	rej.		rej.	non-r.		rej.	rej.		non-r.	non-r.
DOMINANT CHANGE FACTOR		price			volume			price			volume			none	

NOTES: a) Simple regression for each subperiod, with growth in export earnings (E) as dependent variable, and, alternately, export price changes (Pe) or export volume changes (Qe) as explanatory variable. b) Significant at 5% level (10 degrees of freedom). c) Significant at 1% level (10 degrees of freedom).

SOURCES: Calculated from tables 1 and 2 of Statistical Annex.

Coffee owes its preponderant export position partly to strong price increases during the 1976-1978 period, which were not completely leveled out by price fall in the early 1980s. In quantity terms the growth record of coffee contrasted to its growth in money terms. Overall Subsaharan coffee export volume declined slightly during the last fifteen years, so that changes in its contribution to Subsaharan export income can grosso mode be attributed to the development of its prices. The current period of very low prices for coffee is expected to last at least to 1992. In July 1989 the International Coffee Organisation failed to reach unanimity on renewal of the export quota system that was used to stabilise prices. Since then oversupply at the world market holds prices at low levels. In the first quarter of 1990 the price of Robusta coffee, the dominant African variety, was only one third of its level in 1980 (*14*) . The effect of global oversupply is enhanced by a gradual shift of world demand towards arabica coffee, while demand for robusta varieties tends to stagnate. Subsaharan countries are only weakly represented in the production and export of these arabica varieties (*15*). These developments dim prospects for medium-term growth of African export earnings from coffee.

Since 1973 cocoa retained its position as the region's most important agricultural export commodity after coffee. Its position as generator of export earnings was boosted by large price increases during the 1975/79 period, while volumes actually declined. In the subsequent period (1980/84) production and export volumes climbed, but prices sharply declined so fast that export incomes severely dropped for this commodity. They recovered again in the 1985/87 period, due to volume growth and even more to increases in unit values. Since then, the non-renewal of the International Cocoa Agreement, international oversupply and detrimental development of cocoa prices eroded Subsaharan export incomes. An important reason for current global oversupply is a lagged effect of price elasticity of supply. As a reaction to high real cocoa prices in the 1970s many high-yielding cocoa trees were planted. As they entered their most productive age, world cocoa production increased at an average annual rate of ten percent during the last five crop years (*16*).

Export of hardwood logs represents a special case. Though export volumes continuously decline, this was compensated for by price increases in most subperiods. However it was not enough to prevent timber's export share from falling.

Exports of tea and tobacco gained a growing share in total agricultural exports. When export earnings growth figures are decomposed into subperiods, tobacco, concentrated in Zimbabwe and Malawi, shows the most stable growth pattern of all twelve commo-

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dities. Even during the depression period of 1980-1984 its growth remained positive though growth percentages steadily decline. In all but one subperiods tobacco's export volume increased. Of the twelve commodities tea has the highest average growth ranking in all sub-periods. This is due to a consistently growing increased export volume and to a price surge in the late 1970s. Especially Kenya benefits from this growth, though it largely depends on the policy of one transnational company (*17*).

Export earnings from rubber and sugar exports developed reasonably well in most sub-periods since 1971, but experienced a setback in the years 1982/84. The prices of both commodities plummeted after 1980. Important structural changes in the world sugar market took place in last decade which resulted in harsh competition in world sugar markets (*18*). However, during the last couple of years the sugar price recovered due to increased consumption in Third World countries.

For cotton the subperiod 1980/82 appeared to be a watershed between the first period in which falling export volume was more than compensated for by rising prices, and a subsequent period in which sharply increasing export volumes were offset by severe price fall.

Groundnut products and sisal together represented only 1.5 percent of agricultural exports (1985/87). Of all twelve commodities, their export shares faced the sharpest decreases since the early 1970s. In the cases of both groundnut meal and sisal this was the result of continuously decreasing export volumes. For groundnut oil price and volume falls alternately contributed to their declining export share. Since 1987 prices for groundnut products recovered considerably.

The volume of Subsaharan palm oil exports was halved between 1980 and 1985. Most of the shortfall was experienced by Nigeria (*19*) and Ivory Coast. Since 1986 a strong recovery of export volumes occurred, but at very low levels, so that overall effect on export income was flattened out.

From the foregoing commodity-specific considerations it can be concluded that general statements on the volume-determinacy of a decline in commodity export earnings are not allowed. Only for timber, sisal and groundnuts such a statement would be valid for most of the period. One has to recognise, however, that together these products represented only 11.2 percent of total agricultural exports of Subsaharan Africa (1985/87). As a general proposition, however, the World Bank statement is incorrect. This is the more so, as under influence of low price levels export volumes for many products are actually driven up during the period 1980-

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1987 (and also in more recent years). 'Adjustment' conditions
associated with IMF credits and World Bank Structural Adjustment
Loans may well have reinforced this very pattern.

TABLE 9
COMMODITY CONTRIBUTION TO AGGREGATE CHANGE OF SUBSAHARAN AGRICULTURAL
EXPORT INCOME, PER SUBPERIOD a)
(percentages)

	1973-75 to 1976-78	1976-78 to 1978-80	b) 1978-80 to 1980-82	b) 1980-82 to 1982-84	1982-84 to 1985-87	Cumulat. 5 sub-periods
Coffee	55	9	48 -	49 -	43	45
Cocoa	30	47	56 -	34 -	45	29
Tea	4	6	2 -	-15 -	2	8
Cotton	5	14	10 -	-16 -	1	8
Tobacco	3	5	-8 -	-2 -	1	8
Timber	1	15	-1 -	14 -	10	5
Sugar	1	24	-10 -	31 -	3	5
Rubber	0	4	-1 -	2 -	0	1
Palm oil	-1	0	0 -	-0 -	2	-0
Groundnut oil	1	-10	4 -	-7 -	-6	-3
Sisal	-2	2	-0 -	4 -	-2	-3
Groundnuts	1	-17	-1 -	6 -	-0	-3
Total Subsaharan Africa	100	100	100 -	100 -	100	100
Total amount in mln. current US $	2875	594	-964	-522	852	2835

Notes: a) Change is calculated on the basis of period averages. b) The
sign behind this column is to remind that a positive percentage refers
to a fall in aggregate income. Source: Annex Table 31.

In Table 9 contributions of individual commodity to cumulative
periodical changes in Subsaharan agricultural export earnings are
evaluated. As was to be expected on the basis of their large
share in total agricultural exports, cumulative contributions of
coffee and cocoa over the five sub-periods outstripped that of
all other commodities. During the 1985-1987 period coffee's con-
tribution to Subsaharan export earnings was excellent. Rubber
contributed marginally to improvement of export earnings of the
region as a whole, while the contribution of palm oil, groundnut
products and sisal exports has been negative. Promoting further
growth of exports of the latter commodities seems not advisable
on the basis of recent trends, though some countries may lack

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sufficient alternatives in the short run.

III.2   Mineral products

The eight most important (non-fuel) mineral commodities for Sub-
saharan countries are copper, diamonds, gold, bauxite, iron ore,
manganese ore, phosphate rock and uranium. Other minerals from
the region are cobalt, asbestos, platinum, nickel, chromite,
nickel, lead, zinc and cadmium. Uranium is an important export
commodity for Gabon, Namibia and Niger. Cobalt is often found in
combination with copper, and Zaire, Angola and Zambia together
produce 74 percent of the non-communist world's export of this
metal. Zimbabwe is the world's fourth largest producer of
asbestos and has also platinum deposits of some importance.
From Table 10 it is evident that the role of gold and diamond
exports has become more prominent since 1980, both in absolute
and in relative terms. Gold exporting countries include Ghana and
Ethiopia. Especially in Botswana, but also in Namibia, Angola and
Zaire diamond exports contribute considerably to total exports.

TABLE 10
VALUE OF MINERAL EXPORTS IN SUBSAHARAN AFRICA, 1960 AND 1987
     a)
(Values in US dollars of 1987)

	Values		Percentages	
	1960	1987	1960	1987
Selected				
commodities				
Copper	2638	1736	56	27
Diamonds	471	1608	10	25
Gold	283	900	6	14
Bauxite b)	141	579	3	9
Uranium	..	322	..	5
Other minerals	1178	1286	25	20
Total	4710	6430	100	100

Notes: a) Prices deflated by manufacturers unit value index.
b) Bauxite includes alumina and aluminium.
Source: World Bank (1989,p.123).

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Because adequate statistics for uranium, diamonds and gold are hardly available we will further concentrate on the 'industrial minerals' bauxite, copper, iron ore, manganese ore, and phosphate rock. Together they represent 24-28 percent of total Subsaharan non-fuel primary commodity exports. Fifteen years ago this share used to be larger. During the period 1973-1975 it was on average 37 percent. A number of factors contributed to the relative decline of the mineral export share.

A first factor was the shortfall in mining investment and exploration expenditures, which is closely connected to debt problems and malaise in minerals markets during the first half of the 1980s. Subsaharan mineral exploration activities were on a low level during recent years, because transnational mining companies (the dominant source of investment in mining development) found Subsaharan Africa not an attractive place to operate due to important macroeconomic disturbances and high levels of effective costs (*20*).

Secondly, the volume of demand for metals during the last decade was negatively influenced by a general economic recession in many OECD countries. Major metal consuming sectors like iron and steel industry, construction and transport industries are strongly dependent on business cycles in economic activity.

Thirdly, apart from this business cycle component, OECD demand for some metals like tin, lead and copper shows a structural saturation tendency. Market saturation can be measured by confronting actual demand (metal consumption, metal absorption) with a hypothetical maximum demand level. When actual demand tends to reach the maximum level one can speak of demand saturation. Of course, definition of the hypothetical maximum is crucial. For one country this level is mostly related to macro-economic variables like GDP, gross domestic investment or manufacturing value added. A conventional measure is 'GDP-based intensity of use' (IOU), defined as tons of the consumed metal per million constant dollars GDP (*21*). It is furthermore supposed that this intensity of use is a parabolic, inverted U-shaped function of GDP per capita. In this way all countries follow a hypothetical demand path from which a saturation degree can be calculated.
Malenbaum (1978) found for many metals and countries an increasing intensity of use when per capita GDP rose, but from a level of about $ 5000 (1980 dollars) onwards the IOU tended to fall.
Chart 6 pictures such a hypothetical relationship between IOU and per capita gross domestic product. The inverted U-form of the function is explained by a changing product composition of the GDP. With a low per capita GDP unmechanised agriculture is predominant, with low metal requirements. Increasing GDP per capita is accompanied by industrialisation and construction of infrastructure, both of which are heavily metal-using. At higher levels of GDP per capita service sectors and manufacturing sectors with a high technology-component but low metal-absorbing

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characteristics tend to represent larger shares of the GDP so the
the IOU starts to fall.

CHART 4
METAL DEMAND AND INTENSITY OF USE HYPOTHESIS
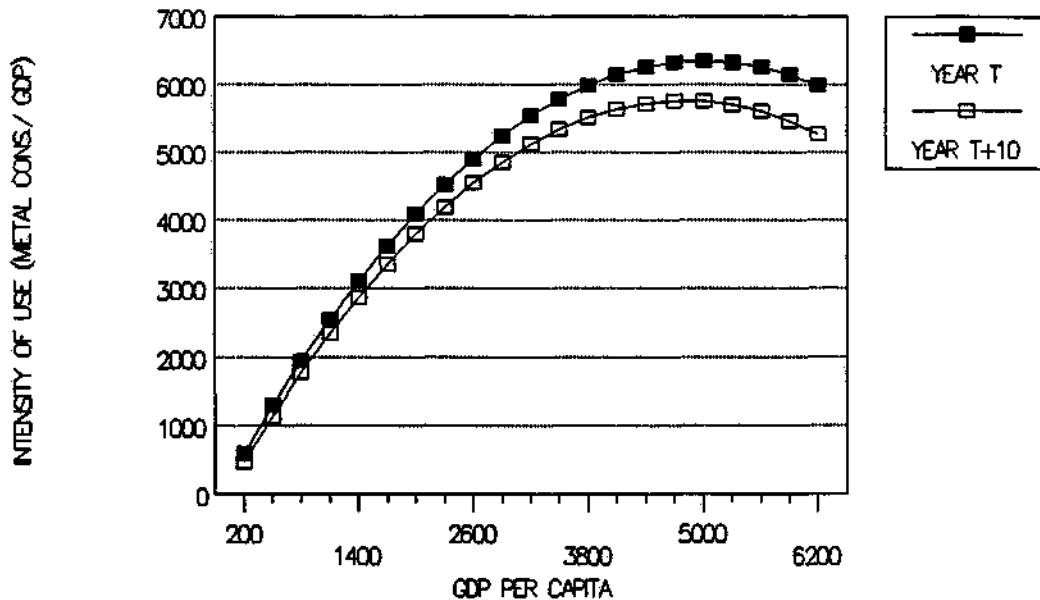
Technological innovation plays an important role in shaping
structural demand prospects for metals. Since the 1970s many
innovations tend to have a metal-saving character. The hypothesi-
sed 'inverted U' IOU function can be criticised for being a
static concept. If valid, it most probably is so only at a given
point in time, so that it could be used in cross section
research (*22*). In a dynamic context and for time series
analysis a concept is needed that deals with the influence
of technical change on metal consumption patterns. A dominant
character of many innovations in OECD countries is the shift
towards a material-saving growth pattern. Many new industrial
products tend to be 'thin, small, light and clever', i.e.
containing a growing electronic component. Growth of metal

consumption in OECD countries presumably will, therefore, structurally lag behind GDP growth figures and even behind growth figures of industrial production. In Chart 4 this would imply a shift from the IOU curve in year *t* to an IOU curve at a lower level in year *t+10*. This also applies to newly industrialising countries which may leapfrog the heavily metal-intensive development stages of pioneer countries in the OECD, and adopt the latest, material-saving technology (*23*). Though this seems a general pattern of the last decades, of course not all technological changes always imply material-saving. For example, efforts to make a product cheaper, lighter or more widely applicable may well result in (at least temporarily) increased IOU for some metals. In this sense IOU of aluminium (bauxite) increased at the expense of tin or iron ore. Often, however, substitute materials appeared to be of a non-metallic nature: plastics, synthetic fibers, optical fibers, ceramics, etc. Future major innovative breakthroughs could for certain metals lead to radically changed demand conditions in OECD countries, e.g. as a consequence of a major technological innovation. But such breakthroughs can because of their very nature hardly be predicted. An important tendency in the 'new materials revolution' is that they

TABLE 11
CONTRIBUTION OF MINERALS TO AGGREGATE CHANGE IN SUBSAHARAN
EXPORT INCOME FROM NON-FUEL PRIMARY COMMODITIES a)
(percentages)

	1973-75 to 1976-78	1976-78 to 1978-80	1978-80 b) to 1982-84
Bauxite	3	0	- 9 -
Copper	-10	40	22 -
Iron ore	0	0	- 0 -
Manganese ore	1	- 1	0 -
Phosphate rock	- 1	2	1 -
All NF commodities	100	100	100 -
Aggregate change (all NF commodities) in mln. current US $	2726	1003	-1717

Notes: a) Change is calculated on the basis of period averages.
b) The sign behind this column is to remind that a positive percentage refers to a fall in aggregate income.
Source: Table 32 of Statistical Annex.

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increasingly use locally available raw materials, e.g. silicium
for optical fibers and for electronic chips.

Though copper is still the most important single mineral non-fuel
export commodity for Subsaharan Africa, it appears from Table 10
that its role eroded both in absolute and in relative terms since
the 1960s. This decrease contributed considerably to aggregate
changes in exports. Table 11 shows that since 1976 change in
copper export earnings between 1982/84 and 1978/80 explains
22 percent of total decrease in NF commodity exports, while in
the preceding period it explained 40 % of the aggregate change.
Copper has very seriously been effected by substitution effects.
In OECD countries the growth of copper consumption has virtually
come to a halt, as is shown in Table 12. In developing countries,
on the other hand, demand is clearly growing.

TABLE 12
REFINED COPPER CONSUMPTION IN INDUSTRIALISED AND DEVELOPING
MARKET ECONOMIES

	Consumption (1000 tons)			Annual growth	
	1964	1973	1984	1964-73	1973-84
Industrialised countr.	4610	6502	6605	3.8	0.2
Developing countries	256	434	968	5.9	7.3
(Share of total, %)	(5.3)	(6.3)	(12.8)		

Notes: Industrialised countries are defined as OECD plus South
Africa minus Turkey. Developing countries are defined as all
other countries except the centrally planned economies of
Eastern Europe and Asia. Source: Radetzki & Takeuchi (1989,p.2)

Not only the near-stagnation of demand growth in OECD countries ,
but also the decline in world market prices had a strong negative
impact on Subsaharan export earnings. For instance, by 1984 the
price of copper had fallen to less than 40 percent of its level
ten years before. The economies of Zaire and Zambia whose exports
consist for 70-80 percent of copper, were heavily affected. The
declining copper price caused a strongly negative terms of trade
effect on their national income. This is illustrated in Chart 6
for the case of Zambia. In some cases (bauxite, refined copper,
manganese ore, phosphate rock) price decreases could be partially

offset by stepping up export quantities of these minerals (*24*).

The main Subsaharan mineral showing a growth in export earnings
during the 1971-1984 period was bauxite. One reason for this was
the fact that a Guinean mine, run by a consortium of internatio-
nal aluminum companies, came on steam. On the demand side, struc-
tural prospects for bauxite/aluminium seem better than for many
other metals.

CHART 6
RELATION BETWEEN ZAMBIAN GROSS NATIONAL INCOME AND
INTERNATIONAL COPPER PRICE (1980 - 100)
(LME price in 1980 US dollars, GNI in 1980 Zambian kwachas)
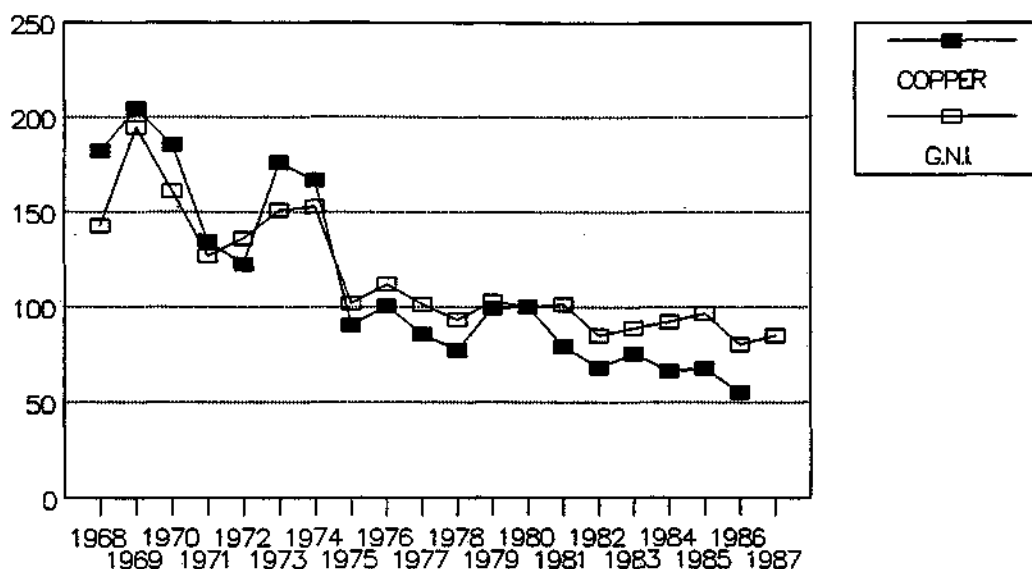
As to 'industrial minerals' it can be concluded that copper
is the most important Subsaharan mineral export commodity
(Zambia, Zaire, Namibia). A sluggish growth of demand for this
metal in major OECD countries spoils the future export outlook.
An export-led growth based on copper therefore seems to have very
bleak prospects. This is also the case for most other mineral
markets, excluding bauxite. Future growth will to an important
extent depend on demand from other Third World countries.
However, developing countries still have a limited share in world
demand for most metals, so that it will be difficult for them to
fully compensate demand stagnation in OECD countries.

III.3   Global market shares

Global market shares for individual commodities can be calculated
in various ways. An adequate measure could be the share of a
country's export in the worldwide consumption of the commodity.
That would include domestically produced quantities which are not
internationally traded. Since we are interested in foreign
exchange earning perspectives, it is more convenient to define
the market as the world market consisting of exports (imports) of
the commodity. A further modification is to focus on that section
of the world market in which Subsaharan countries could success-
fully compete when existing comparative advantages and protection
structures are taken into consideration. Given international
trade power structures, it will be difficult for Subsaharan coun-
tries to penetrate effectively some segments of the world market,
like US or EC markets for sugar or vegetable oils. In the case of
other commodities this would perhaps be less of a problem. For a
general analysis an appropriate market indicator is probably the
share of Subsaharan countries in total LDC exports of a commodi-
ty. Here we will use that indicator, subsequently for agricultu-
ral and mineral products.

As a general pattern Subsaharan Africa's share in LDC exports of
twelve agricultural core commodities diminished with 5 percent
since the early seventies (cf. Table 13). For the main crops,
coffee and cocoa, the fall in market share was even eight per-
cent. None of the other Subsaharan crops gained vis-à-vis total
LDC exports. The best performing commodities only succeeded in
maintaining a stable market share. This was the case for tea,
sugar, rubber, and (almost) for cotton. Groundnut products, sisal
and palm oil all lost 10 percentage points in market share.

Since reference is made to market shares in value terms (export
earnings), it is interesting to examine to what extent losses in
market share were caused by deterioration of relative prices vis-
à-vis total LDC exports. Table 13 shows that for most agricultu-
ral commodities value based market shares are approximately equal
to volume based market shares. This suggests that on average
equal price conditions prevailed for Subsaharan countries and
other LDCs. There are a few exceptions to this observation (*25*).

TABLE 13
SUBSAHARAN SHARE IN LDC EXPORTS OF SELECTED COMMODITIES,
1973/75 AND 1985/87   (percentages)

	In value terms (earnings)			In volume terms	
	1973/75	1985/87	Difference (% point)	1973/75	1985/87
INCREASING SHARE					
Bauxite	18	38 (a)	+20	..	..
Manganese ore	24	30 (a)	+ 6	..	..
STABLE SHARE					
Tea	18	18	0	21	23
Sugar	9	8	0	9	9
Rubber	6	6	0	6	5
DECREASING SHARE					
Cotton	23	22	- 1	22	23
Tobacco	27	24	- 3	18	23
Iron ore	9	6 (a)	- 3	..	..
Phosphate rock	11	8 (a)	- 3	..	..
Copper	24	17	- 7	..	..
Coffee	31	23	- 8	34	24
Cocoa	74	66	- 8	75	67
Timber	25	17	- 8	16	13
Palm oil	12	2	-10	11	2
Sisal	57	40	-17	64	43
Groundnut oil	69	36	-33	55	35
Groundnuts	64	9	-55	62	11
PM					
Total agrarian comm.	25	20	- 5	..	..
Total minerals	34	25	- 9	..	..

Note: (a) 1982/'84.   Source: Annex Tables 1 and 3.

In 1973/75 tobacco and groundnut oil fetched a larger value share
than would have been expected on the basis of their volume share.
In 1985/87 their value market share had become close to its
volume equivalent, so that obviously deteriorating relative
prices eroded their apparent price premium vis-à-vis other LDCs.
With hardwood logs (timber) and groundnuts a similar process took
place, though the apparent price premium did not completely dis-
appear. In the case of sisal the opposite process took place. The
comparative price discount was reduced thanks to an improvement
in relative prices.

CHART 7
MARKET SHARE AND MARKET VOLUME GROWTH FOR
SELECTED AGRICULTURAL COMMODITIES

A. 1971-79
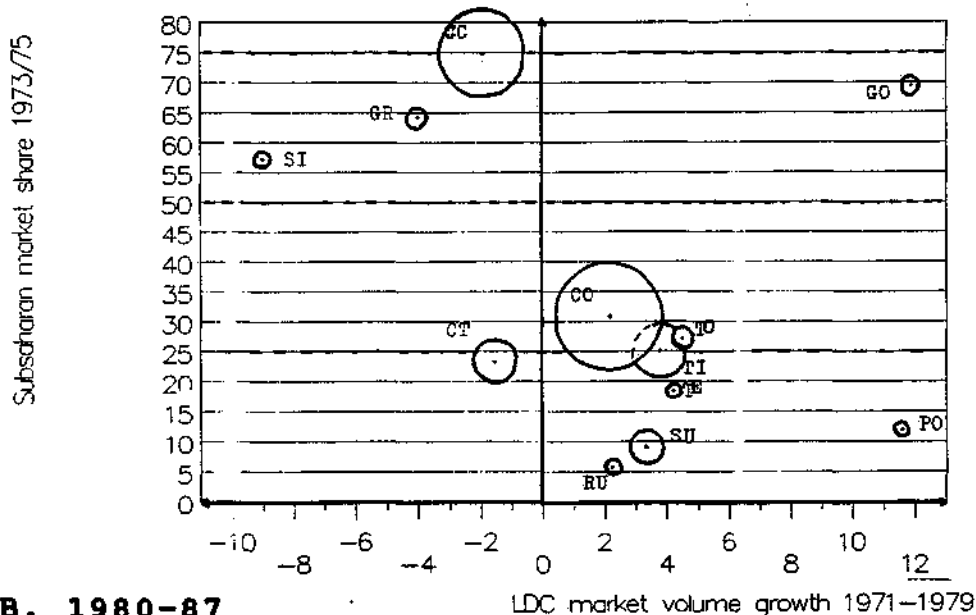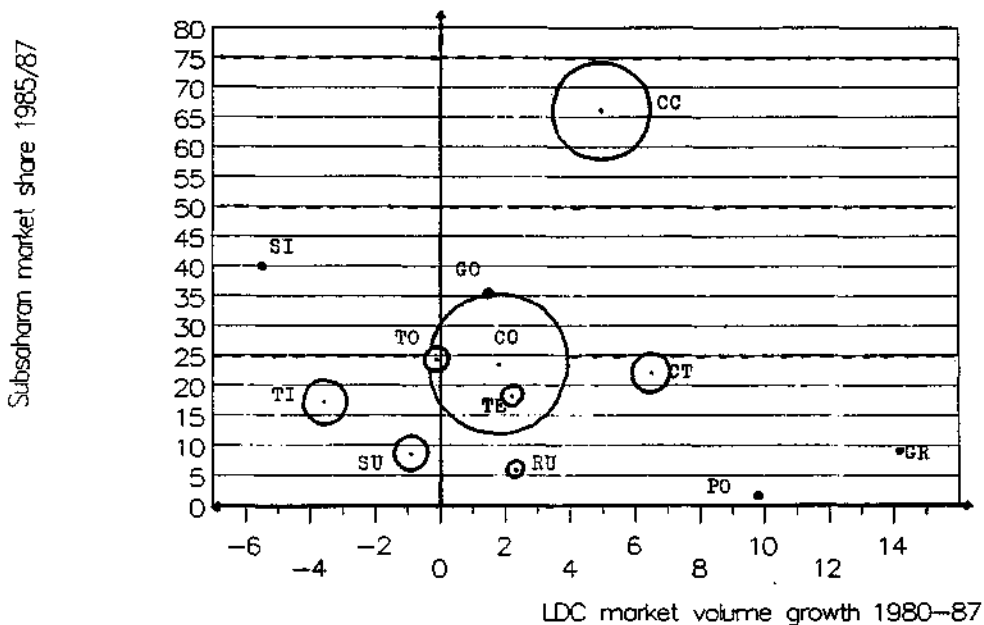
LDC market volume growth 1971-1979

B. 1980-87

LDC market volume growth 1980-87

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The relation between market share, market volume growth and com-
position of the Subsaharan export package is shown in Chart 7 for
the twelve dominant agricultural commodities. Comparison of the
chart for the 1970s and the one for the 1980s shows clearly the
general downward shift in market share for agricultural products.
Also commodity concentration (de-diversification) becomes visual.
A number of products became of minor importance for the region as
a whole. It appears that both cocoa and cotton markets have moved
into the positive quadrant in the 1980s, but the increased volume
growth has probably been a main factor behind declining export
prices for both products (*26*). A number of commodities which
rank as export commodities directly behind coffee an cocoa,
appear to have shifted to negative growth in the 1980s: tobacco,
timber and sugar.

For the five industrial minerals the combined decline in market
share was nine percent (cf. Table 13). Increasing market shares
were only achieved for bauxite and manganese ore. For the region
as a whole the fall in copper market share explains much of the
fall in the combined market share of Subsaharan minerals. In 1960
Zambia and Zaire has a 24 percent share in world mine production
of copper, but in 1987 it diminished to only 15 percent (*27*).
Transportation problems -partly as a consequence of civil war in
Angola- hindered Zambia's copper exports. But other factors also
played a role. Though Zambia and Zaire possess very rich and high
grade copper ore deposits, they have not been able to keep up
with production increases in other less developed coun-tries (*28*).

Apart from the minerals mentioned in Table 13 it is noteworthy to
mention that Subsaharan Africa still has important global market
shares for diamonds (Namibia, Botswana, Angola, Zaire) and cobalt
(Zaire, Angola, and Zambia contribute 74 per cent to non-commu-
nist world export).

Conclusion. Subsaharan Africa lost market share to other develo-
ping countries in the case of all major export commodities. In
most cases this was associated with a declining share in total
LDC export volume. For a number of agricultural commodities the
loss could at least partially be attributed to declining relative
prices vis-à-vis other LDCs.

IV. EXPORT DIVERSIFICATION

This chapter will focus on two questions. The first is whether, and to which extent, Subsaharan countries do actually have opportunities for successful export diversification based on non-fuel commodities. Such a generalised question is not very meaningful, of course, when the time horizon and other constraints are not specified. Therefore, we will focus on historical experience in the period 1971 - 1987 and on three main types of export diverification which will be specified below.

The second question is whether diversification by individual countries in the region also means that the region as a whole is better off. In other words, does historical evidence from the last fifteen years support the expectation (as stated e.g. by the World Bank, 1989a) that diversification is a positive sum game for the Subsaharan region.

IV.1   Diversification indicators

Several forms of diversification can be distinguished. Most often, the issue is related to product characteristics. It would, however, be more appropriate to describe diversification in terms of product/market combinations. Export diversification could then be defined as a policy to broaden a present export commodity mix so that other product/market combinations are explored.

In this chapter we will subsequently consider three possible approaches that may be followed in such a policy: horizontal, vertical, and geographical diversification. In the case of horizontal diversification the exporting country adopts additional export products without significantly changing its international market 'positioning', in terms of world market segment and geographical export destinations. In the practice of Subsaharan region it means that other primary commodities are added to the present export package. Vertical export diversification means that on the basis of existing products a new scope of export products is added, e.g. commodity-based manufactures. This neatly fits in with industrialization strategies adopted by most developing countries. The third road to diversification implies a widening or shift of geographical export destinations of a given mix of export products.

IV.2   Horizontal diversification

In Chapter II it has been noted that in 1987 approximately eighty percent of Subsaharan exports is accounted for by non-fuel primary commodities, down eight percent from the 1977 weighted average for non-oil countries. A high degree of commodity export dependence per se is not a problem, however. Such aggregate percentage figures could veil large shifts in commodity composition of exports. A successful diversification program could well have been accomplished by shifting from commodities with low-growth, low-earnings prospects to commodities with better demand prospects. Therefore a closer look at actual developments is required.

An indicator of horizontal diversification at country level is the commodity concentration ratio, expressing the share of the most important (C1 ratio) or the three most important commodities (C3 ratio) in total non-fuel exports. Table 14 gives the frequency distribution of the C3 ratio for forty Subsaharan countries. Measured in this way, it appears that over the period 1973 - 1984 some degree of export diversification did take place. In the period 1973-75 the average C3-ratio was over 70 percent in almost half of the Subsaharan countries. By 1984 this was only the case in less than one third of the countries. The average C3-ratio in the period 1982-1984 was 53 percent, while in the period 1973-1975 it was 63 percent.

TABLE 14
DISTRIBUTION OF SUBSAHARAN COUNTRIES ACCORDING TO EXPORT
CONCENTRATION RATIOS, 1973/75, 1978/80, 1982/84
Share of 3 main non-oil commodities in non-fuel exports

CONCENTRATION RATIO	1973/75	1978/80	1982/84
COUNTRIES WITH:			
C3-RATIO OVER 90 %	4	3	3
C3-RATIO 70 - 90 %	14	9	9
C3-RATIO 50 - 70 %	8	15	8
C3-RATIO 30 - 50 %	9	7	12
C3-RATIO 10 - 30 %	5	6	8
C3-RATIO LESS THAN 10 %	0	0	0
TOTAL NUMBER OF COUNTRIES	40	40	40

Source: Derived from Annex Table 9.

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Though it may be concluded that at a country level horizontal diversification took place, this doesn't tell us anything about what happened to the export package of the region as a whole. Keeping in mind Chart 7 and Table 6, it could well be the case that Subsaharan countries diversified into 'each others' commodities so that the aggregate diversification effect is negligible. On the contrary, the region might have become increasingly dependent on the booms and busts of the same set of non-fuel commodities.

Table 15 specifies for 41 Subsaharan countries which commodities rank among the first (C1) and first three (C3) most important non-fuel export commodities. Though the table does neither show shifts in commodity ranking for individual countries nor changes in relative inequality of commodity export shares, it can be used as an indicator for the direction of diversification (*29*). The general picture that emerges Table 15 is that no dramatic changes took place between the middle of the 1970s and the middle of the 1980s. Consistent with the findings mentioned earlier, coffee's position as export crop increased further. It became one of the three most important export commodities in two extra countries. Cotton, another traditional Subsaharan export commodity, was adopted by three extra countries. In the case of tobacco and tea we may speak of successful diversification. Other commodities whose position was strengthened, were maize, uranium and groundnut oil. Diversification can also be approached from the other side. Exits, be it forced or voluntary, from oversupplied markets would also be an important result. In that sense, it is favourable that five countries became less dependent on groundnuts, two countries became less dependent on sugar and the same applies to iron ore.

Overall, the results of Subsaharan horizontal diversification over this decade are not too impressive. The enhanced position of coffee and cotton can hardly be regarded as successful diversification from a regional point of view. It only means that more countries become dependent on these commodities and that supply sides of these markets become even more crowded.

For a thorough evaluation of horizontal diversification efforts it is necessary to assess the feasible scope for exploiting further export commodities. The viability of horizontal diversification programs is primarily constrained by factors which are given to a country, such as resource endowment (mineral base, soil characteristics and human resources), geophysical and climatic attributes (*30*). The relevance of this constraint is evident in the case of coffee.
Consumer preferences and coffee demand in OECD markets is characterised by a shift from robusta coffee varieties towards arabica varieties having a much milder taste. For Subsaharan coffee

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TABLE 15

COUNTRY EXPORT CONCENTRATION, BY COMMODITY
Country frequencies of commodities ranking as most
important (C1) or among the three (C3) most important
non-fuel export commodities, for 41 Subsaharan countries

	1973-1975		1982-1984	
	C1	C3	C1	C3
a)				
ENTRANCES				
Coffee	9	14	10	16
Cotton	6	13	5	16
Tea	-	4	1	6
Tobacco	2	2	2	3
Groundnut oil	2	4	2	5
Uranium	-	1	1	2
Maize	-	-	-	1
STABLE				
Hides	-	10	-	10
Cocoa	3	9	4	9
Timber	3	9	2	9
Copper	3	5	3	5
Sisal	-	2	-	2
Tin	-	2	-	2
Lead	-	2	-	2
Fish meal	-	2	-	2
Manganese	-	2	-	2
Phosphate	1	2	1	2
Bauxite	1	1	1	1
Wool	1	1	1	1
Bananas	1	1	1	1
Rice	-	1	-	1
EXITS				
Sugar	4	10	3	8
Groundnuts	2	7	1	2
Beef	1	5	1	3
Rubber	-	3	-	2
Copra	-	1	-	-
Iron ore	3	4	2	2
Palm oil	-	1	-	-
Zinc	-	3	-	2

Notes: a) Entrances and exits assessed by the number
of countries where the commodity belonged to the
C3-group (see text). Source: Statistical Annex Table 9.

exporters it would be a rational diversification strategy to
follow the altered preferences in their planting and export deci-
sions. However, only a few Subsaharan countries will be able to

diversify their coffee production towards arabica varieties
because it requires specific geographical conditions. Arabica
coffee originates in Ethiopia, but most of it is now grown in the
western hemisphere. This variety is generally less tolerant of
extreme temperatures and climate; therefore it thrives best in
highland areas. In tropical countries arabica coffees are grown
at altitudes of 500 to over 2000 meters. Robusta coffee trees
grow in low, hot areas, where the arabica tree generally does not
thrive (*31*).

TABLE 16
SUBSAHARAN SHARE IN GLOBAL COFFEE SUBMARKETS, 1981/82 - 1988/89

SUBMARKETS	GLOBAL SHARES (%)		SUBMARKET VOLUME GROWTH 1981/82 -
	1981/82	1988/89	1988/89 (in %)
BASIC QUOTAS FOR ARABICA COFFEES			
1. Columbian milds	18.3	18.5	9.5
* Subsahara (Kenya, Tanzania)	4.2	3.6	-6.6
2. Other milds	23.2	27.2	27.5
3. Brazilian & other arabicas	28.5	25.5	-2.9
* Subsahara (Ethiopia)	2.1	2.0	5.4
Total	70.1	71.2	10.4
ARABICA EXPORTS BY ICO-MEMBERS EXEMPT FROM BASIC QUOTAS	3.1	3.7	33.1
Of which: Subsaharan countries	1.5	2.0	42.2
TOTAL ARABICA COFFEES	73.2	74.9	11.4
Of which: Subsaharan countries	7.8	7.6	6.0
BASIC QUOTAS FOR ROBUSTA COFFEES	25.9	23.5	-1.4
Of which: Subsaharan countries	19.8	15.0	-17.4
ROBUSTA EXPORTS BY ICO-MEMBERS EXEMPT FROM BASIC QUOTAS	0.9	1.6	88.0
Of which: Subsaharan countries	0.6	0.5	-21.3
GRAND TOTAL	100.0	100.0	8.8

SOURCE: Coffee International Directory (1990)

Only Kenya, Ethiopia, Tanzania, and to a smaller extent Rwanda,
Burundi and Zimbabwe, are now producing arabica coffee. Table 16
shows that it is especially because of the export advance of the
smaller Subsaharan arabica producers that the fall in Subsahara's
total share in global export demand could be limited to only 0.2
percent. From a regional point of view this is a form of success-
ful horizontal diversification. Further horizontal diversifica-
tion towards coffee submarkets with more promising demand
prospects is hindered by physical obstacles. Robusta producers

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seldom have the possibility to convert their coffee production towards arabica. It means that they have to compete in a shrinking market segment (*32*) with an increased number of African countries that have diversified into coffee and with fierce competition from non-African 'newcomers' in this market segment. Indonesia and to a lesser extent Thailand have been been able during the last decade to secure higher shares in global exports of robusta coffees, largely at the expense of Subsaharan countries.

Not only physical endowments but also investments determine the chances for success of horizontal diversification. This is especially of importance in the case of minerals. Africa's rich geological endowments with minerals could offer good opportunities for horizontal diversification. A precondition for using Subsahara's mineral basis is a sufficient level of investment in exploration, mine development and exploitation. Last decades have been characterised by low levels of investment in mineral exploration and mine development (*33*). Many state-owned mining companies were primarily concerned with continuation of existing mineral production and employment, while foreign mining multinationals apparently considered the uncertainties and costs of further involvement in Subsaharan countries as prohibitive. As a consequence horizontal diversification into minerals hardly took place, with exception perhaps of gold mining in countries like Ghana.

Tariff structures in potential important export markets may deter horizontal diversification into non-traditional export crops. Imports in some OECD markets of fresh tropical fruits, cut flowers, vegetables, cashew nuts and other products are charged with relatively high tariffs (*34*).

IV.3   Vertical diversification

In general, vertical diversification programs are less constrained by given resource endowments than horizontal programs. Often they are embedded in primary sector-based industrialization strategies. Domestic factors like the size of the domestic market, infrastructure, human resources, and the existence of an entrepreneurial class, all have a profound influence on the viability of primary sector-based industrialization (*35*). Government policies -sector policy, tax and tariff regimes, export promotion activities, pricing policies, exchange-rate policies - may create considerable incentives or disincentives.

Not only domestic conditions and policies are important conditions for successful vertical diversification, but also external factors. Success also depends on access to markets for processed products in OECD countries, restrictive business practices and

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vertical integration by transnational companies, and, more gene-
rally, on the institutional structure of industry and trade in
such products. Restrictive business practices and the role of
transnational companies in commodity export markets will be
treated in Chapter V.

Market access conditions in principal markets for processed com-
modity products are negatively affected by tariff and non-tariff
barriers, and especially tariff escalation. Several processed
agricultural and mining products face relatively high tariffs.
This is the case for processed cocoa, coffee and tea, processed
beef and fish, preserved vegetables and fruits, refined sugar,
processed cereals, manufactured tobacco, leather and leather
products, yarn and woven fabrics. A enlightening example is that
of vegetable oils, where the raw material receives a duty-free
treatment in the EEC, while a 25 percent tariff applies to marga-
rine (*36*). Tariffs and tariff escalation create no absolute
fence to imports of processed commodities, but will effectively
hinder vertical diversification strategies in some cases.

Vertical diversification in Subsaharan countries has, in general,
not been too successful. Commodities, like cocoa, groundnut oil,
sisal, coffee and hardwood, for which Subsaharan production
represents a more or less important share of the world market,
would seem to offer bright perspectives for vertical diversifica-
tion.
In the case of cocoa Subsaharan Africa produces two-thirds of
world exports. Several cocoa exporters did adopt strategies and
policies to foster local processing of cocoa beans (*37*).
Table 17 shows however that little progress has been made in
obtaining a larger share in world markets of processed cocoa
products. Though exports in current dollars increased for cocoa
powder and chocolate, it decreased for cocoa butter and cocoa
liquor. In terms of world market share, Subsaharan Africa saw its
position seriously erode, except for chocolate products, where a
share of less than one percent of world exports could be maintai-
ned. The international cocoa and chocolate sector is characteri-
sed by a high degree of concentration, with a limited number of
transnational companies dominating the trade. Penetration of
these companies' core markets is very hard to accomplish, espe-
cially in the case of chocolate products, but a higher Subsaharan
share in intermediate exports could be expected on the basis of
comparative advantages. Most cocoa processing plants in Subsaha-
ran Africa are at least partially owned by major OECD companies
in the industry. It is apparently not in their interest to
further develop secondary processing in Subsaharan cocoa coun-
tries (*38*). The industry structure functions as an effective
barrier to vertical diversification.

Subsaharan sugar exporters ship the overwhelming part of this
commodity in raw form. Minor vertical diversification into
refined sugar took place in Mauritius and Swaziland, each of

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TABLE 17
SUBSAHARAN SHARE IN EXPORTS OF PROCESSED COCOA
PRODUCTS, 1971 - 1989
(exports in 1000 metric tons)

PRODUCT	average 1971/73	average 1979/80	average 1987/89	Growth 1971/89
COCOA BEANS EXPORT				
Subsahara	950.0	730.0	1021.7	8 X
World total	1192.0	991.0	1530.0	28 X
Subsaharan share (X)	79.7	73.7	66.8	
COCOA BUTTER EXPORT				
Subsahara	48.0	40.7	41.3	-14 X
World total	159.0	171.3	275.0	73 X
Subsaharan share (X)	30.2	23.7	15.0	
COCOA POWDER & CAKE EXP.				
Subsahara	19.3	42.0	36.7	90 X
World total	111.0	168.3	268.3	142 X
Subsaharan share (X)	17.4	25.0	13.7	
COCOA PASTE/LIQUOR EXP.				
Subsahara	47.0	20.7	43.7	- 7 X
World total	62.7	135.7	148.0	135 X
Subsaharan share (X)	75.0	15.2	29.5	
CHOCOLATE/CHOC.PRODUCTS				
Subsahara	3.1	7.8	6.1	97 X
World total	365.0	543.6	922.0	153 X
Subsaharan share (X)	0.8	1.4	0.7	

Sources: ICCO, Quarterly bulletin of cocoa statistics.

which is now exporting one percent of their sugar exports in
refined form (*39*).

In the case of tropical hardwood four major Subsaharan timber
exporters succeeded in diversifying their wood exports into pro-
cessed wood products, like veneer sheets, sawnwood, plywood and
blockboard (*40*). In three of these countries log exports still
represent the largest share of all hardwood exports.
Another case in point is copper. In the early 1970s Zambia still
exported 15 percent of its copper exports in unrefined form, but
in the 1980s this was reduced to zero. In Zaire, however, the
share of refined copper in total copper exports diminished (41*).

IV.4   Geographical market diversification

A third possible approach in an export diversification strategy
is to broaden the scope of export destinations for given
products. It is noted by various observers that many traditional
OECD markets for primary commodities are characterised by slow
growth or even decline in volume. The reasons for this tendency
are manifold:

- o raw material-saving technological development,
- o low marginal propensity to consume primary commodities when
  income levels rise (Engel's law),
- o replacement by synthetic substitutes,
- o market saturation for industries that are major commodity
  importers (e.g. automobile industry),
- o sectorial shifts towards industries characterised by low
  commodity input coefficients (e.g. most services).
- o growing degree of self-sufficiency for several agricultural
  commodities in Europe, traditionally the Africa's most impor-
  tant export market.

Apart from these structural reasons some commodities face consi-
derable demand fluctuations due to business cycles in OECD coun-
tries. Conjunctural developments have a strong impact on demand
volumes of many metals, because of the relatively high import
share of capital goods industries, like construction, shipbuil-
ding, and the automobile industry.

Diversifying export destinations is a rational policy to diminish
structural dependence on traditional markets characterised by low
growth and periodical demand flaws due to business cycle develop-
ment. Geographical market diversification should target on non-
traditional markets with high growth potential and a stable (or
at least a non-synchronously fluctuating) demand. High growth
potential of country markets for specific commodities can be
assessed by considering per capita GDP growth, income distribu-
tion, industry structure, and elasticity of commodity demand with
respect to income.

Southeast-Asian NICs, China, and selected other Asian and Latin
American countries (*42*) could represent promising commodity
markets when the above mentioned selection criteria for geogra-
phical diversification are applied. Developing countries (*43*)
often are characterised by a higher income elasticity of demand
for agricultural commodities than developed countries. This is
illustrated for four commodities in Table 18. Apart from diver
sifications towards these regions, it might also be an advisable
strategy for Subsaharan Africa to diversify from its traditional
concentration on EC countries to the USA, which is nowadays the
largest single market for LDC exports. To the extent that
Subsaharan export commodities directly compete with Latin Ameri-
can products it may be a hard task, however, to outcompete these
in the US market.

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TABLE 18

INCOME ELASTICITY OF DEMAND FOR SELECTED COMMODITIES

COMMODITY	LEVEL		SOURCE
Cocoa			
North America	0.3416	a)	World Bank (1982)
Western Europe	0.354	a)	
Latin America	0.22	a)	
Other developing countries	1.536	a)	
Sugar			
USA	0.09		World Bank (1981b)
EEC	0.22		
Brazil	0.41		
Mexico	0.68		
Centrally Planned Asia	1.64		
India	1.31		
Indonesia	1.18		
Thailand	1.94		
Coffee			
EEC	0.722		World Bank (1985a)
USA	0.0	b)	
Scandinavia	0.208		
Southern Europe	0.723		
Japan	1.611		
CPE	1.00		
Cotton			
Industrial countries	0.07		World Bank (1985b)
Centrally Planned Economies	0.2		
Developing countries	0.5		

Notes: a) Significant at 99% level. b) Zero, but statistically insignificant.

Let us now turn to empirical evidence on geographical diversification for Subsaharan non-fuel commodity exports. Table 19 presents summary figures on shifts in destinations of aggregate African non-oil commodity exports (*44*). A few trends clearly emerge. Since the early 1970s the share of the industrialised countries diminished with five percentage points, but by the mid-1980s it still accounted for three quarters of Subsaharan commodity exports. Most marked was their declining share in Subsaharan exports of minerals and ores.

Export flows to centrally-planned economies of Eastern Europe increased during the second half of the 1970s but now represent a smaller share than in the late 1960s. Particularly their imports of non-food agricultural products were considerably lower. Exports to developing countries show clearly a rising tendency. A favorable trend is the steadily growing intra-African trade in

primary commodities. Though intra-African exports are largest for
food commodities, gains could also be registered with regard to
non-food agricultural commodities and minerals. The growth of
intra-African trade in non-fuel primary commodities is a remarka-
ble development, because it contrasts with a shrinking portion of
intra-African trade in total African exports (*45*).

TABLE 19
EXPORT DESTINATION OF TOTAL NON-FUEL PRIMARY COMMODITIES
FROM DEVELOPING AFRICA a)
Percentages of total export b)

Export destination	1966-70	1975-79	1984-86
Developed market economies	80.4	78.1	75.2
Developing Asia	4.7	4.4	6.5
Developing America	0.4	1.1	2.2
Developing Africa	4.5	5.5	7.3
Total developing countries	9.9	11.3	16.7
Centrally-planned economies Asia	1.2	1.4	1.2
Centrally-planned economies Europe	7.4	8.1	6.5

Notes: a) This includes North Africa. Total non-fuel commodities
defined as SITC 0+1+2+4+68. b) Percentages do not add up to 100
owing to an unallocated export residual.
Source: Statistical Annex, Table 28

In the mid-1970s overall export absorption by Asian countries
declined, but it strongly recovered during the 1980s. The largest
increases were found to be those for minerals and non-food agri-
cultural products. Latin American countries absorbed a small,
though systematically increasing part of Subsaharan agricultural
commodity exports. The overall share of exports flowing to
'socialist Asia' (China) remained roughly stable. Though in the
case of China imports of non-food agricultural products drasti-
cally diminished, their share in the absorption of Subsaharan
minerals and ores doubled since the 1970s.

Subsaharan geographical diversification results could be elabora-
ted on by differentiating between single OECD markets and by
discerning trends for important export commodities. Some general
conclusions will be presented here on the basis of Tables 12 - 27
of the Statistical Annex (*46*). With exception of tobacco and
textile fibers it appears that the largest portion of all twelve
main export commodities is destined for OECD countries. This
pattern hardly changed between 1977 and 1987. Trade relations

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with former colonial 'motherlands' still appear to be strong in
many cases. This cannot always be explained by the location of
raw material processing industries. Common language, business
culture, institutional similarity, established trade channels and
monetary ties continue to be relevant factors for explaining the
persistence of such trade structures.

Within the group of OECD countries Japan is of relatively minor
weight as export destination, though its importance has conside-
rably increased during the decade following 1977. The share of
Subsaharan exports going to the USA is larger than the Japane-
se share, in all cases except iron ore. The role of the USA as
export destination has also increased during this decade. In the
cases of crude rubber and coffee the United States imports one
fifth to more than one third of Subsaharan exports. The EC
undoubtedly still is the largest buyer of Subsaharan non-fuel
primary commodities. Three quarters or more of Subsaharan exports
of palm oil, groundnut oil, iron ore and timber are consumed by
EC countries. For tropical beverages two thirds of exports flow
to EC countries, with the largest shares fairly evenly spread
over France, Germany and Great Britain. More than half of tea
exports is destined for the latter country.

Combination of Subsahara export figures and OECD import figures
proved to be problematic, even when export data were corrected
for FOB/CIF conversion factors, and it is difficult to discover a
systematic pattern in deviations between both data series (*47*).

IV.5 Conclusions

For many year already export diversification is among the main
economic targets of Subsaharan governments. Given Subsaharan
Africa's natural endowments and existing export experience,
diversification programmes in the sphere of non-fuel primary
commodities seem to be a first choice. From a technical point of
view many 'non-traditional' alternatives in horizontal commodity
diversification can be envisaged: agricultural, mineral, fishery-
based as well as forestry-based. Examples of such products that
were actually introduced in some Subsaharan countries include:
cut flowers, tropical fruits, vegetables, cashew nuts, spices,
crustaceans, and other sea fish products.

Implementation of horizontal diversification programmes is,
however, meeting constraints stemming from physical endowments
(climate, soil conditions, mineral base). The importance of
physical constraints is illustrated for Africa's most important
export commodity, coffee. Constraints stemming from available
human capabilities (know-how, entrepreneurship) and existing
production capacity are man-made and therefore surmountable,
though often only beyond the medium-term. Finally, other

operative constraints can and do exist in the form of tariff structures and non-tariff barriers in major (potential) export markets.

The latter is of particular importance in the case of vertical diversification. Success of African countries in this area is generally very modest. In the case of processed sugar and cocoa products it was even non-existant. Some progress has been made with refined copper and hardwood products. Apart from tariff escalation, important constraints for further vertical diversification stem from existing international market structures and restrictive business practices.

With regard to geographical diversification some progress has been made in the past fifteen years. South-South trade, especially with other African partners and with Asian countries, has become more important as export outlet for Subsaharan countries. The Subsaharan region, however, diminished its dependence on OECD markets more slowly than LDC countries as a total.

The question can be asked whether diversification efforts of individual countries contributed diversification for the region as a whole, in other words, whether its has been a positive sum game for the region. The general picture arising from the data on commodity-concentration ratios is that the majority of Subsaharan countries became less dependent on one or a few commodities only. Their non-fuel primary commodity export became more evenly distributed by an increased importance of 'other' commodities. It was found that in five country cases where a new commodity was added to the core export package, it was coffee or cotton. Such diversification of individual countries clearly is not helpful for the region as a whole, given the fierce (price) competition that already governs these commodity markets. Though the aggregation level of available data does not permit exhaustive conclusions, evidence from the past does not support the assumption of positive sum diversification.

When the experience of the period 1971-1987 is used as a benchmark, it may be concluded that diversification is far from easy and that only limited progress has been made. Because of lacking co-operation among countries in the region diversification efforts of individual countries may even lead to more intensive competition in commodity markets that are crowded already.

V. TRANSNATIONAL COMPANIES AND SUBSAHARAN EXPORTS OF NON-FUEL PRIMARY COMMODITIES

It would be mystifying and unsatisfactory to treat Subsaharan Africa's trade in primary commodities as free trade. Nor can it be regarded as primarily country-to-country trade, with 'countries' (or governments) as principal agents. Often country boundaries are quite illusory and haphazard demarcation lines for trade structures.

For many primary commodities only a limited segment of world trade flows can be considered as 'free trade', e.g. that part of the trade that is channeled via commodity exchanges (London, New York, etc.). Some commodities, like bauxite, phosphate rock, iron ore and bananas, are mostly traded by and within vertically integrated international companies. In other cases (beverages, vegetable oil, tobacco) a restricted number of large companies -traders as well as processors- from OECD countries operate as oligopolistic buyers. And of course, several intermediate market structures exist. Table 20 gives a typification of the nature of the international trade regime for commodities at the start of the period under consideration.

This report cannot completely elaborate the role of transnational corporations for future Subsaharan non-fuel primary commodity exports. The role of transnational companies in the production of

TABLE 20
NATURE OF PRIMARY COMMODITY MARKETS
(1973-75 average, in billions of US $)

GENERALLY FREE		CONTROLLED / DISTORTED		CLOSED		OLIGOPOLISTIC BUYERS		PARTLY OPEN, PARTLY CLOSED	
Oilcake	2.4	Wheat	9.3	Phosphate	1.5	Coffee	4.3	Wood, wood products	7.1
Cotton	3.7	Sugar	8.0	Iron ore	3.8	Oilseeds	3.2	Copper	7.0
Wool	2.5	Beef	3.7	Bananas	0.7	Veget. oils	3.6	Aluminium	2.0
Hides/leather	2.8	Maize	5.7	Bauxite	1.5	Tobacco	2.1	Nickel	0.8
Nat. rubber	2.6	Rice	2.0			Cocoa	1.4	Lead	0.8
Tin	1.2	Wine	1.9			Tea	0.8	Zinc	1.3
Hard fibres	0.2	Citrus fruit	1.2						
Jute	0.2	Butter	1.3						
Pepper	0.2								
TOTAL	15.8	TOTAL	33.1	TOTAL	7.5	TOTAL	15.4	TOTAL	19.0
% of cumul. total	17.4%		36.5%		8.3%		17.0%		20.9%

Source: L.N.Rangarajan (1978).

primary commodities (especially in minerals) has decreased during the last twenty years, but their role in 'downstream' activities is as strong as ever. There is ample evidence on transnational corporation's involvement in international primary commodity trade (*48*). Their presence in these activities ensures a relatively large share in value added. Empirical estimates of 'retained value' for developing countries showed that developing countries generally receive only a small part of exports value and only a fraction of the retail price of end-products of commodities (*49*). UNCTAD regularly reports on restrictive business practices in trade in commodities (*50*).

Here we will not repeat these research results, but relate TNC presence in commodity sectors to policy margins of Subsaharan governments with respect to non-fuel commodity exports.
To a large extent production, export and marketing policy of transnational companies is decided upon independently from Subsaharan government decisions. Thus, the question is what instruments governments have when they would adopt one or a combination of the following policy goals with respect to their trade in non-fuel primary commodities:
- step up export volume
- increase (their share in) retained value in export earnings
- accomplish horizontal diversification
- increase local processing of primary commodities (vertical diversification)
- accomplish a re-direction of export destinations, e.g. increase exports to other LDCs.

How can governments secure that transnational companies with dominant positions in their commodity production and export co-operate and behave in the desired way ? In principle governments possess the stick and the carrot as main instruments. Given international market power relations as they exist(ed), the stick has been proved not to be an efficient device. In the past nationalisation and indigenisation programs often didn't bring expected results in terms of increased export income, increased retained value, access to international markets and up-to-date technology. In some cases the stick strategy was even counter-productive and led to a nearly complete withdrawal of TNCs instead of a compromising behaviour and acceptance of offered joint-venture opportunities. In Subsaharan mining this has led to a drastic contraction of TNC investment in exploration and risk-bearing mine construction.
So, in many cases the government, especially in the majority of small Subsaharan economies, will be left with the carrot as main instrument. International credit ratings of most Subsaharan have decreased and foreign investors show a reservedness to invest given past experiences and dim medium-term growth perspectives of most Subsaharan economies. Therefore, it may become a costly affair to bring the horse to drink from the water. The urge to step up exports of primary commodities, resulting from IMF and World Bank adjustment packages, and therefore secure more TNC

commitment in this sector, will probably necessitate governments
to allow these firms a larger share in the value of exports than
has been the case for many years.

To substantiate earlier remarks on TNC involvement in the Subsa-
haran primary commodity sectors a number of illustrations will be
given.

Sugar

Most of Subsaharan sugar exports is processed by only two
companies (Sucres et Denrées in France and Tate & Lyle in Great
Britain). Tate & Lyle owns a two-thirds stake in the Mauritius
Molasses Company which refines for the local Mauritian market and
tourist sector. It also owns sugar estates in Zimbabwe and sugar
mills in Zambia, Kenya, Mozambique, Nigeria and Somalia. Recently
T & L was asked to manage a newly set-up sugar estate in Ethio-
pia. The British company Lonrho owns a large sugar estate on
Mauritius, as well as sugar mills in Swaziland and Mauritius.

The supply of cane sugar to the EC was regulated by a recipro-
cal exclusive dealing arrangement, which was authorized by the EC
Commission (*51*) as it was considered not to lead to a signifi-
cant restriction of competition within the Community. For the
exporters, however, including 11 ACP countries, the arrangement
involved important restrictions. The suppliers were obliged to
deliver ninety percent of the cane sugar they were permitted to
sell in the EC to a single group of firms, the T & L Group. Only
for the remaining ten percent they had a free choice of custo-
mers. T & L obtained virtually all its cane sugar requirements
from the countries that endorsed the arrangement (*52*). In early
1990 Tate & Lyle announced plans to take over British Sugar (beet
sugar producer) and since under current EC pricing policy beet
sugar processing is more profitable, this might well be a step
towards phasing out its cane sugar refining activities (*53*).

Cocoa

Contrary to the situation in Latin America where cocoa is mostly
grown on large plantation estates, African cocoa is generally
produced by small farmers. Traditionally Marketing Boards played
an important role in purchasing the farmer's cocoa production.
IMF and World Bank press hard to resolve African government's
intervention in cocoa marketing and have made future loans con-
ditional on discontinuation of government-led Marketing Boards.
Transnational corporations are most important in international
trade (E.D.& F.Man/Gill & Duffus, Philipp Brothers, Merkuria
SucDen); cocoa processing (W.R. Grace-Berisford, Sucre et
Denrées, Cargill) and chocolate processing industries (Mars,
Hershey, Cadbury, Rowntree, Nestlé, Jacobs Suchard). Private
enterprises from OECD countries have set up own subsidiaries in
West-Africa that purchase cocoa production direct from farmers.
Among them are firms like E.D.& F.Man (formerly Gill & Duffus)
and large chocolate processors like the Swiss company Jacobs
Suchard. In 1988 the complete cocoa harvest of Ivory Coast was

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bought by the French group Sucres et Denrées (SucDen). The deal was facilitated by the French government which payd a large sum ($ 67 million) in price subsidy to the company. The deal was important in sofar as it saved the local marketing board (Caisse de Stabilisation) from a near bankruptcy.

Transnational companies are also active in cocoa-related research that may affect future export possibilities and rural employment in Subsaharan cocoa countries. A number of large firms like Hershey, Cadbury and Mars are involved in research on tissue-culture techniques that aim at larger cocoa production per tree, increased pest-immunity and the development of cocoa beans that already contain thaumatine (a sweetener). Other companies (like Unilever) develop enzymatic substitutes for cocoa butter, an important intermediate cocoa product for the preparation of chocolate. These substitutes are made from cheaper sorts of vegetable oil, like palm oil. It is to be expected that in the EC beyond 1992 these substitutes will be allowed to replace 5 percent of the cocoa butter ingredients. If this happens, it will reduce global cocoa consumption with 60,000 to 80,000 tons annually (*54*), which is nearly double the combined production of ten smaller Subsaharan cocoa producers (Benin, Togo, Equatorial Guinea, Liberia, Madagascar, Sierra Leone, Zaire, Tanzania, Guinea, and Congo).

Coffee
Coffee production is typically run by independent (small) farmers. The role of TNC's is to be found in trading, processing and marketing. A large part of Subsaharan coffee exports is handled by large international trading companies like E.D.& F.Man, Rothfoss and Berisford. For instance, half of Cameroon's coffee export was sold to two international trading houses in 1989 (*55*). Since African Robusta coffee is especially suited for instant coffee products, much of it finds its way to large international processing companies like Nestlé, Jacobs Suchard and Sara Lee. Helped by the EC's high tariff on processed coffee, they rather than local African firms process Subsaharan Africa's green coffee.

Copper
Much of Subsaharan Africa's copper mining and export is run by joint ventures between state companies and foreign mining TNC's. For instance Zambian Consolidated Copper Mines is majority-owned by the Zambian government, but operated by Anglo-American Corporation (South Africa). Namibia's copper exports are managed by a subsidiary of the South African Gold Fields group. In Zaire a Belgian company is still involved in copper mining.

Tea
A major factor behind the growth of Kenya's tea exports is the strategy of Unilever (*56*). Unilever (owner of Lipton and Brooke Bond) is the world's largest tea packer and controls roughly 30 percent of tea consumption in the OECD. Unilever seems to

follow a strategy of diversifying its global tea supply, which was until recently heavily concentrated in India and Sri Lanka. Kenya is one of the countries profiting most from this development. Fifty per cent of Kenyan tea production is controlled by the government-controlled Kenyan Tea Development Authority.

In Malawi most tea is grown in 25 large estates. Of these, four are owned by individual private owners. The rest is controlled by big companies: Unilever, Lonrho and Easten Produce (*57*). In Uganda the British company Mitchell Cotts has a large stake in production.

Diamonds
The Southafrican company De Beers controls 80 percent of world trade in rough (uncut) diamonds and strongly dominates CSO, the London-based international marketing cartel of diamond producers. De Beers completely controls Namibia's diamond mining and exports (30 percent of total Namibian exports). In 1989 Angola rejoined De Beers's diamond cartel, as was done before by Zaire (US$ 300 million diamond exports in 1988), Botswana ((US$ 800 million diamond exports in 1988) and Tanzania (*58*).

Uranium
Namibia's uranium exports (24 percent of total Namibian exports) rest in the hands of the British group Rio Tinto Zinc. French, US and German companies dominate exploration, exploitation and exports of uranium in Gabon and Niger.

Bauxite
In the aluminium industry four stages of production can be discerned, bauxite mining production, alumina refining, aluminium smelting and processing of aluminium. All stages take place within vertically integrated transnational companies. The two last-mentioned stages are scarcely found in developing countries, unless there is a cheap (subsidized) supply of (hydro-) energy (*59*). All Subsaharan bauxite exports are tightly fitted in the international division of labour that is designed by a limited number of TNC's. In Guinea all major aluminium TNCs are involved in a joint venture for bauxite mining. Most of the output is sent by them to Ireland where they collectively own a secondary refining plant.

Tobacco (*60*)
Export of leaf tobacco from Subsaharan countries is to a large extent dominated by a handful international companies: SEITA (France); Universal Leaf Tobacco (USA); British American Tobacco Company (UK); Casalee (Belg.); Gallaher (UK); A.L.van Beek (Neth.); Andrew Chalmers International (UK). Vertical diversification of Subsaharan tobacco exports is of no importance, since tobacco manufacture is small and mainly for domestic consumption. It is almost entirely in hands of British American Tobacco Company (UK), Rothmans (South Africa) and Philip Morris (USA).

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VI. SUMMARY AND CONCLUSIONS

This report addresses some questions arising from the World
Bank's long term perspective study on Subsaharan Africa (1989).
The questions deal with the role of non-fuel primary commodity
exports both in the past fifteen years (1971-1987), and in a
growth scenario for the period 1987-2000. Since it is hardly
possible to make meaningful statements on non-fuel primary commo-
dities in general, the main Subsaharan primary commodities are
reviewed at a more detailed level. Two main groups are discerned:
agricultural and forestry commodities and mineral products.

By 1987 exports of non-fuel primary commodities were about as
important for Subsaharan economies as they were in the early
1970s. For non-oil countries in the region -the majority- one
sixth of GDP stems directly from this export category. It
still represents the lion's share of total merchandise exports
Though the share of non-fuel commodities in total exports did
decline since the early 1970s, the decrease in commodity depen-
dence in Subsaharan Africa is much slower than in other develo-
ping countries. For Subsaharan Africa it is the largest single
source of foreign exchange inflow. Growth of non-fuel primary
commodity exports is statistically significant as explaining
factor for GDP growth in the non-oil countries of the region.

The international purchasing power generated by Subsaharan
exports of non-fuel commodities declined by $ 12.5 billion since
1980. Approximately $ 7.5 billion of this loss can be explained
by falling terms of trade for these commodities. The residual
loss reflects a volume effect. This finding contradicts with the
World Bank's diagnosis that *"Declining export volumes, rather
than declining export prices, account for Africa's poor export
revenues"* (1989, p.3). At a more disaggregated level the validity
of this conjecture was tested for the twelve most important agri-
cultural commodities. For these commodities it was found that
general statements on the volume-determinacy of a decline in
commodity export earnings are not allowed. For timber, sisal
and groundnuts such a statement would be valid for most of the
period 1971-1987, but together these three products represented
only 11.2 percent of total agricultural exports of Subsaharan
Africa in 1985-1987. Here again, price changes appeared to be at
least as important as volume changes for explaining changes in
Subsaharan export earnings. As a general proposition, however,
the World Bank's diagnosis is incorrect. This is the more so, as
under influence of low price levels export volumes for many
products are actually driven up during the period 1980-1987 (and
also in more recent years). 'Adjustment' conditions associated
with IMF credits and World Bank Structural Adjustment Loans may
well have reinforced this very pattern.

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Not all Subsaharan countries experienced a shortfall of export
earnings. Gains and losses were unevenly distributed: slightly
less than half the countries experienced gains (in current
terms). In other countries the export losses contributed to dete-
rioration of their trade balances, debt problem and to the fiscal
crisis of the state. As a whole, the Subsaharan region lost
market share to other developing countries in the case of all
major export commodities. Copper, the Subsaharan Africa 's most
important mineral export commodity (Zambia, Zaire, Namibia) faces
a sluggish future growth of demand in major OECD countries.
A strategy of export-led growth based on copper therefore seems
to offer bleak prospects. This is also the case for most other
mineral markets, excluding bauxite.

For any future growth strategy that is dependent on imported
inputs (intermediates, production equipment, fuel) expansion or
at least stabilisation of non-fuel primary commodity exports
remains a vital issue. The World Bank's long-term perspective
study on Subsaharan Africa (1989) sketches a growth scenario in
GDP is to grow five percent annually by 2000. This is equal to an
average growth rate of about five percent in the period 1987-
2000. To attain this target an average annual growth rate of non-
fuel primary commodity exports of five percent a year is required
during this period. That would, however, represent a dramatic
break with the negative growth rates recorded during the period
1980-1987. Given the expectation that prices will not improve
very much, the success of such an export and growth strategy
depends on increasing the volume of non-fuel primary commodity
exports by finding new markets, (re-)gaining international market
share, and on diversification of exports.

For many year already export diversification is among the main
economic targets of Subsaharan governments. Given Subsaharan
Africa's natural endowments and existing export experience,
diversification programmes in the sphere of other non-fuel primary
commodities (horizontal diversification) seem to be a first
choice. From a technical point of view many 'non-traditional'
alternatives in horizontal commodity diversification can be envi-
saged: agricultural, mineral, fishery-based as well as forestry-
based. Examples of such products that were actually introduced in
some Subsaharan countries include: cut flowers, tropical fruits,
vegetables, cashew nuts, spices, crustaceans, and other sea fish
products.
Implementation of horizontal diversification programmes is,
however, meeting constraints stemming from physical endowments
(climate, soil conditions, mineral base). The importance of
physical constraints is illustrated for Africa's most important
export commodity, coffee. Constraints stemming from available
human capabilities (know-how, entrepreneurship) and existing
production capacity are man-made and therefore surmountable,
though often only beyond the medium-term. Finally, other

operative constraints can and do exist in the form of tariff
structures and non-tariff barriers in major (potential) export
markets.
The latter is of particular importance in the case of vertical
diversification ('downstream' processing of primary commodities).
Success of African countries in this area is generally very
modest. In the case of processed sugar and cocoa products it was
even non-existent. Some progress has been made with refined
copper and hardwood products. Apart from tariff escalation,
important constraints for further vertical diversification stem
from existing international market structures and restrictive
business practices.
With regard to geographical diversification some progress has
been made in the past fifteen years. South-South trade, especial-
ly with other African partners and with Asian countries, has
become more important as export outlet for Subsaharan countries.
The Subsaharan region, however, diminished its dependence on OECD
markets more slowly than LDC countries as a total.

The question can be asked whether diversification efforts of
individual countries contributed diversification for the region
as a whole, in other words, whether its has been a positive sum
game for the region. The general picture arising from the data on
commodity-concentration ratios is that the majority of Subsaharan
countries became less dependent on one or a few commodities only.
Their non-fuel primary commodity export became more evenly dis-
tributed by an increased importance of 'other' commodities. It was
found that in five country cases where a new commodity was added
to the core export package, it was coffee or cotton. Such diver-
sification of individual countries clearly is not helpful for the
region as a whole, given the fierce (price) competition that
already governs these commodity markets. Though the aggregation
level of available data does not permit exhaustive conclusions,
evidence from the past does not support the assumption of positi-
ve sum diversification.

When the experience of the period 1971-1987 is used as a bench-
mark, it may be concluded that diversification is far from easy
and that only limited progress has been made. Because of lacking
co-operation among countries in the region diversification
efforts of individual countries may even lead to more intensive
competition in commodity markets that are crowded already.

Diversification programmes do not only depend on governments
decisions. For implementation of such programmes governments
generally depend on a range of private agents:
  o small farmers, farmers co-operatives, large local producers,
    foreign firms involved in local production;
  o (in some cases) transport companies, or primary processing
    firms;
  o export agents, international trading companies;
  o import agents and / or processing and marketing firms in

export markets.
Especially foreign firms have their own objectives and policies
which may or may not coincide with those of Subsaharan govern-
ments with diversification plans. Given their important role in
production, marketing and processing of Subsaharan commodities,
they often play a crucial role when it comes to success or non-
success of diversification efforts.

How can governments secure that transnational companies with
dominant positions in their commodity production and export
co-operate and behave in the desired way ? In principle govern-
ments possess the stick and the carrot as main instruments. Given
international market power relations as they exist(ed), the stick
has been proved not to be an efficient device. In the past
nationalisation and indigenisation programs often didn't bring
expected results in terms of increased export income, increased
retained value, access to international markets and up-to-date
technology. In some cases the stick strategy was even counter-
productive and led to a nearly complete withdrawal of TNCs
instead of a compromising behaviour and acceptance of offered
joint-venture opportunities. In Subsaharan mining this has led to
a drastic contraction of TNC investment in exploration and risk-
bearing mine construction. In many cases the government, espe-
cially in the majority of small Subsaharan economies, will be
left with the carrot as main instrument. International credit
ratings of most Subsaharan have decreased and foreign investors
show a reservedness to invest given past experiences and dim
medium-term growth perspectives of most Subsaharan economies.
Therefore, it may become a costly affair to bring the horse to
drink from the water. The urge to step up exports of primary
commodities, resulting from IMF and World Bank adjustment packa-
ges, and therefore secure more TNC commitment in this sector,
governments may have hardly another choice than to allow these
firms a larger share in the value of exports than before (or in
other countries).

A general conclusion of this report is that the scenario of
future growth for Subsaharan Africa as sketched by the World
Bank's long-term perspective study is too optimistic with regard
to the region's external sector. The requirement to generate on
average a five percent growth of non-fuel primary commodity
exports during 1987-2000 is a far cry from experience in the
recent past. Though some improvement may be expected, it seems
probable that the target will not be met. This would undermine
the possibility of securing a GDP growth of four percent during
this period, unless additional ODA flows become available on top
of already optimistic World Bank targets.

The capacity of Subsaharan Africa's export sector to earn addi-
tional foreign currency probably would be enhanced by some
changes in international trade environment and trade policies.
If economic recession in the US would be of limited duration and

it does not spread to European countries, this would of course
provide a favorable effect on the growth of demand for non-fuel
commodities. The same effect (but probably smaller) occurs when
Asian NIC's and China continue their growth path of the 1980s.
Furthermore, the outcome of Uruguay Round of GATT (still uncer-
tain at the moment of writing these lines) could offer additional
market perspectives for a commodity like sugar or for processed
commodities (e.g. on basis of cocoa and coffee).

Subsaharan governments themselves can also play an active role
when they succeed in increasing the quality of their export
commodity. Though not all commodities lend themselves for product
differentiation, upgrading of product quality may enhance export
perspectives and possibly permit the exporting country to fetch a
price premium in a quality niche of the world market. In order to
reach such a position for their current export commodities
government could create institutions that foster quality improve-
ments and technological innovations. Examples are the Tea Insti-
tute in Malawi and the cocoa institute of the Ghanaian Cocoa
Marketing Board.
Government policies with regard to small farmers (granting them a
larger share of incremental export earnings) could create addi-
tional stimuli to increase production and capacity utilisation,
and so to lower production costs. Diversification efforts of
individual Subsaharan countries could become more promising when
governments would succeed in establishing more intra-region co-
operation and specialisation.

NOTES

(*1*) The World Bank (1989). As part of the project many background
papers have been prepared. A selection of them has been published
in four volumes (World Bank, 1990). Together with UNDP the Bank
also published a separate statistical volume on economic and finan-
cial data for Subsaharan countries (UNDP / World Bank 1989).

(*2*) Subsaharan countries have been labeled oil countries when in
1979 more then 50% of their export income stemmed from fuel
exports. Six countries belong to this group.

(*3*) Table 7 of the Statistical Annex present further details.

(*4*) For the subperiods 1971-'74, 1977-'80 and for pooled observa-
tions of the five subperiods the relationship was found to be
statistically significant at the 99% confidence interval. For the
subperiod 1983-'87 it was significant at the 95% interval. The
coefficient of determination was highest for the subperiod 1971-
'74, namely 0.57, while it was 0.30 for the entire period. On
average 27% of GNP growth was explained by growth of non-fuel
commodity exports. Further details are given in Table 8 of the
Statistical Annex.

(*5*) Price movements increased the share to 92 percent in 1977. (Cf.

Annex Table 5).

(*6*) Further details are provided in Table 5 of the Statistical Annex.

(*7*) UNCTAD Secretariat (1989b). The report includes fuel.

(*8*) All data for these calculations stem from Tables 4, 34 and 40 of the Statistical Annex. The calculations used index numbers of the weighted export price for these commodities and index numbers of the unit value of industrial country exports. Though the IMF IFS Yearbooks offer an all-Africa import price index, this is based on a limited number of African economies, including South Africa and North African countries, while many important Subsaharan are not included. Therefore, the industrial countries' export price index has been used as a dummy for the Subsaharan import price index. In Table 34 of the Statistical Annex two other terms of trade indicators are given.

(*9*) Various methods could be used for calculating export earnings shortfalls, e.g. deviation from 10-years exponential trends, geometric or arithmetic averages over 3,4, or 5 years. In UNCTAD (1987b) the effects of several methods are compared. The method followed in this report is rather straithforward: actual annual earnings are compared with those in a base year, 1979. This same method is used in e.g. UNCTAD (1987a). In Table 10 of the Statistical Appendix the results of this method for individual Subsaharan countries are shown.

(*10*) The P.R. Congo, Gabon and the Seychelles all are oil countries. Botswana depends to a large extent on diamond exports. and, moreover, has a positive external balance in the area of manufactures. Mauritius succeeded in considerably increasing the hare of manufactures in its export package.

(*11*) When calculated on a compound interest basis the earnings shortfall amounts to nearly $ 18 billion. The debt build-up that was caused by this earnings shortfall did however not have such proportions, because many Subsaharan countries received loans from governments and multilateral organisations on concessional conditions.

(*12*) Cf. Table 37 of the Statistical Annex. The incremental annual ODA requirement equals 25% of average ODA flows ($ 11.1 billion) in the period 1982-1987. However, it is important to stress that in Variant 4 the incremental amount comes on top of postulated ODA flows of US$ 22 billion annually, i.e. double the historical average.

(*13*) If price changes and volume were equally important in explaining changes in export earnings, each of both would explain half of the latter. Together they explain (by definition) the total change in export earnings in a given sub-period. To determine which of both elements was the dominant determinant of change in export earnings for the group of (twelve most important) agricultural commodities, the explanatory value of subsequently the price and volume changes has been regarded. A simple regression of the type

$a_1 \dot{P_e} + a_0$ (or subsequently $a_1 \dot{Q_e} + a_0$) was used. For rejection of the zero hypothesis the t value at the 5% interval (two-tailed) was

used, so that with ten degrees of freedom (n-2) the critical t value was 2.228. For reasons of comparison of the two regression results in each sub-period also the t value at the 1% interval was considered (critical value 3.169).

(*14*) IMF (1990, Appendix Table 8). In his opening statement at the conference of 25 African coffee producing countries (November 1990) G.Saitoti, vice-president of Kenya, declared that the countries together experienced a shortfall of $ 1.6 billion on their coffee exports since the world coffee market was liberalised in July 1989. (Fin.Times).

(*15*) Cf. World Bank (1985); Vogelvang (1988). The International Coffee Agreement (ICA) used a quota system to defend its reference price. During the 1988/89 coffee year Arabica varieties accounted for 76.5% of total production basic quotas of which only 6.2% was for Subsaharan countries. Robusta coffees had only 23.5% of total basic quotas, of which 17.4% for Subsaharan countries. In October 1988 ICO decided that to cope with pressure on market prices cuts had to be applied to initial country quotas while at the same time arabica quotas would be more or less exempted from these cuts. Consequently, Robustas, Africa's main coffee variety, was relatively strongly hit (Stainer 1990).

(*16*) (IMF 1990,p.18). Particularly in Ivory Coast and Ghana strong production increases were realised. In Ivory Coast were cocoa is largely a smallholder crop, officially sponsored new planting and rehabilitation schemes resulted in a rapid growth of the area planted with high-yielding hybrid varieties, viz. from 80,000 hectares in 1976/77 to 210,000 hectares in 1986/87 (IMF 1989, p.64). As a result of the disparity between production and consumption growth in the global cocoa market large stocks were built up. At the end of the 1988/89 crop year the ratio of stock to consumption amounted to 57 percent, the highest level since World War II (IMF 1990, p.18).

(*17*) Cf. Chapter V. Apart from this structural factor, also weather conditions have been helpful. In 1989 Kenya realised the third consecutive record harvest in a row, while also production in Tanzania and Zimbabwe increased (IMF 1990,p.17).

(*18*) The changes include: a decline or stagnation of sugar consumption in most hard currency markets; substitution effects caused by the inroads of maize-based HFCS-sweeteners, particularly in the USA; the availability of substantial raw material reserves in the form of sugarcane now devoted to ethanol production; considerable gains in sugar beet productivity in EC countries; and the appearance of the EC as a major exporter.

(*19*) This was partly due to currency overvaluation caused by booming fuel exports and government policy (Cf. Bienen, 1988).

(*20*) Cf. World Bank (1989, p.10).

(*21*) Such figures are available from periodical publications like *Metals Analysis and Outlook*, *World Metal Statistics* and The Economist's *World Commodity Outlook: Industrial Raw Materials*.

(*22*) Radetzki & Takeuchi (1989, p.8-18) examined the hypothesis of inverted U-shaped intensity-of-use curve for the case of copper. They found only very limited support for it. Cross section research

with a sample of 16 industrial countries and nine developing countries for 1961 revealed nothing like an inverted U-shaped curve in a scatter diagram. Nor did it emerge for the year 1984 when eight more developing countries were added to the sample. Their observations did provide some support for the hypothesis that materials-saving technology reduces the IOUs over time. This support was statistically not significant (given the degrees of freedom) at the 5% confidence interval. They conclude from some country case studies that the IOU hypothesis in itself is insufficient for explaining copper consumption in developing countries, and that additional factors (e.g. general economic and industrial policies and circumstances in the country) have to be taken into consideration.

(*23*) For example, a developing country that decides to establish a nationwide telecommunications network in the 1980s, will not do it by installing copper cables covering long distances. Instead, it will employ microwave and optical fiber technologies. As a result, the network will be less copper-intensive than corresponding networks established 30 years earlier (Radetzki & Takeuchi, 1989).

(*24*) Cf. UNCTAD Commodity Yearbook 1986, Part III. Zambia's objective of increased exports is very much hampered by railway transportation problems.

(*25*) Small differences (up to two percent) are disregarded because of likely statistical deficiencies.

(*26*) In the case of cotton the price fall took place from 1984 onwards, and in the case of cocoa prices a deep slide downwards occurred from 1985 onwards. Long term price elasticities of supply for cotton are in the range of 0.25 and 0.44 (World Bank 1985b), while for cocoa it is estimated at 0.42 (World Bank 1982).

(*27*) World Bank 1989,p.124.

(*28*) Important mining facilities have been opened in Papua New Guinea (OK Tedi) and Chile (La Escondida), while mine production from Portugal and North America also came on steam recently (South,Oct.1989,p.38).

(*29*) Diversification findings obviously depend on the degree of detail in commodity classification. This is illustrated by Table 35 in the Statistical Annex (UNCTAD figures). It uses a more detailed commodity classification. Furthermore, it refers to 34 instead of 41 Subsaharan countries, thus disregarding seven smaller states. The periods under review are comparable (1972/76 and 1982/86). Comparing this table with Table 15 (World Bank figures) in the main text, several interesting differences emerge. Diversification into coffee and cotton appears to have been undertaken especially by smaller Subsaharan countries. Furthermore, in the Annex table several other diversification commodities are mentioned (cashew nuts, tropical fruit, zinc, spices).

Other differences between both tables make one uneasy about the trustworthiness or at least compatibility of figures produced by World Bank and UNCTAD. E.g. according to UNCTAD, fish ranks among C3 in six Subsaharan countries, while IBRD mentions that fish meal ranks among C3 in only two countries of their larger group. Similar incompatibilities exists for groundnut products, live animals and

bauxite.

(*30*) A more comprehensive list of factors influencing the viability of diversification programs is offered by UNCTAD (1989a).

(*31*) Timms, 1973,p.8/9.

(*32*) Together Subsaharan robusta producers lost 5 percentage points of their share in global coffee exports during the 1980s (cf. Table 16).

(*33*) Cf. World Bank (1989, p.124/125).

(*34*) Cf. UNCTAD (1989a, Annex Table 16).

(*35*) Even default of domestic infrastructure and demand market conditions may sometimes turn into a factor that favors horizontal diversification. Pineapple production in Ghana was hampered by a lack of domestic canning facilities, while on the other hand relatively low production levels ruled out the possibility of export by low-cost sea freight. Clever Ghanaian entrepreneurs turned this default into a benefit by setting up air-freight facilities that fly pineapples directly to the country of destination, so that they can be offered to the consumer with 48 hours after harvesting. For the freshness of their products Ghanaian exporters fetch a price premium that more than compensates extra freight costs. (cf. W.Keeling, Ghana's high-flying pineapple exports, Fin.Times, London, September 25th, 1990).

(*36*) Though smaller than for most-favoured-nation tariffs, GSP and other preferential rates for a number of products also possess an escalated structure. Even preferential ACP tariffs granted by the EEC have a degree of escalation, e.g. for coffee, vegetable oil and tropical fruits. (Cf. UNCTAD 1989a, Ap.10/11).

(*37*) Cf. Schuurs (1980); UNCTC (1981).

(*38*) UNCTC (1981).

(*39*) UNCTAD (1989a, Annex Table 5).

(*40*) Cf. Table 36 of Statistical Annex.

(*41*) UNCTAD (1989a, Annex Table 14).

(*42*) East European centrally planned economies (CPE) also represented a growth market during the 1970s, but virtually dropped out and ceased to be an interesting alternative in the 1980s. If the 'market economy' catches on in these countries, they may become a promising new outlet in the 1990s.

(*43*) To some extent this also applies to European centrally-planned economies with relatively low levels of disposable income or to West European countries at low income stages in their development. Vogelvang (1988, p.138): "Coffee studies for a sample period with a low income level, e.g. those which have been done for the period shortly after the war, show a significant influence of income on coffee consumption."

(*44*) In Table 28 of the Statistical Annex export destinations are decomposed for three main commodity groups.

(*45*) In 1960 6.6 percent of all African exports was destined for African countries, in 1970 5.6 percent, in 1980 3.1 percent and in 1986 it was up to 4 percent again. (Cf. Mulat, 1990, p.156). A possible explanation for these diverging developments with respect to the intra-African trade segment could be found in fuel exports of which the overwhelming part is exported to developed market econo-

mies.

(*46*) Tables 12 - 27 of the Statistical Annex describe OECD import
flows of selected commodities. If printed data were available, a
comparison between two years, 1977 and 1987, has been made. Amounts
are in current US dollars, so that price changes of commodities
inhibit conclusions on intertemporal change in import demand
volume. However, the figures allow us to trace shifts in trade
patterns between OECD countries and Subsaharan countries.

(*47*) For conversion of F.O.B. in C.I.F. values IMF data were used
(International Financial Statistics Yearbook 1989). The 1977
conversion factor is on average 1.17 while it is on average 1.19
for 1987. But even with fob/cif correction considerable discrepan-
cies persist. In 1987 OECD import figures were higher than Subsaha-
ran export data in the case of coffee (+60%), oilseeds and oleagi-
nous fruits (groundnuts, +100%) and fixed vegetable oils (groundnut
oil, palm oil, +690%), whereas the opposite was true for textile
fibers (cotton, sisal, -60%), timber (-30%), rubber (-50%) and
tobacco (-80%). Only for tea and cocoa a fair correspondence between
both data series existed. Due to these discrepancies Table 11 of the
Statistical Annex, in which both data series are related to derive
export concentration ratios, should therefore be regarded as guesti-
mates only.

(*48*) Cf. Unctad Review, No. 4 (Winter 1982), where J.Cavanagh &
F.Clairmonte establish that for each of the following commodities
15 or less transnational corporations controlled world trade in
this commodity in 1980: iron ore (controlled share 95% of world
trade); timber & wood, pineapple, jute, tobacco, cotton, maize,
coffee, and wheat (controlled share 90%); cocoa, copper, and
bauxite (controlled share 85%); tea and tin (controlled share 75-
80%); bananas and rubber (75%); sugar and phosphate rock (60%). Such
evidence is also provided in a series of studies, under the general
title *Studies in the processing and marketing of commodities*,
prepared for the permanent UNCTAD Sub-Committee on Commodities.

(*49*) Cf. UNCTC (1986); N.Girvan (1987); UNCTAD studies on Marketing,
Processing and Transportation of Commodities, made for various
commodities. An excellent magazine with contributions on the role
of companies in production, marketing and processing of primary
commodities is *Raw Materials Report* (Stockholm). Cf. Clairmonte &
Cavanagh (1982).

(*50*) Restrictive business practices are defined by UNCTAD as: "prac-
tices used by enterprises to strengthen their position on a given
market - either individually in order to acquire or reinforce what
is called a 'dominant position of market power', or in concert
with other enterprises supplying (or purchasing) similar goods or
services, by agreeing to refrain from competing with each other by
sharing markets and fixing monopolistic (or monopsonistic) prices -
in which case a cartel is formed." (Unctad, 1989a,p.13).

(*51*) EEC (1979, paragraphs 91-93).

(*52*) UNCTAD (1989a, p.14)

(*53*) In 1987 an identical step by T & L was halted by British
government.

(*54*) TIE (1988).

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(*55*) Fin. Times, June 27th 1990.
(*56*) Interview Paul Elshof, Center for Research on Multinational
    Corporations (SOMO), Amsterdam.
(*57*) M. Hall, *Blending tea with technology in Malawi* (Fin. Times,
    14/3/1989)
(*58*) Fin.Times 1/6/89.
(*59*) Cf. Faber (1990, p.65-92)).
(*60*) WTD (1990).

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EXPORT CONSTRAINTS OF SUBSAHARAN GROWTH

the role of non-fuel primary commodities

STATISTICAL ANNEX

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LIST OF TABLES

TABLE 1

SUBSAHARAN EXPORTS OF SELECTED AGRICULTURAL COMMODITIES: VALUES

(in mln US $, f.o.b., averages per period)

		---------- EXPORTS PER PERIOD ----------					------- CHANGE IN BILLION $ -------			
							FROM	FROM	FROM	FROM	FROM
	1973-75	1976-78	1978-80	1980-82	1982-84	1985-87	1973-75	1976-78	1978-80	1980-82	1982-84
	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE	TO	TO	TO	TO	TO
							1976-78	1978-80	1980-82	1982-84	1985-87
COFFEE (SITC-R.2 071.1)											
Angola	209	210	193	143	63	47	1	-17	-50	-80	-16
Benin	1	1	4	6	5	3	0	3	2	-1	-2
Burundi	24	66	68	66	77	101	42	2	-2	11	24
Cameroon	107	210	278	218	188	192	103	68	-60	-30	4
Central Afr. Repub.	11	25	24	30	29	28	14	-1	6	-1	-1
P.R. Congo	1	7	12	5	4	2	6	5	-7	-1	-2
Equat. Guinea	8	13	14	13	2	2	5	1	-1	-11	0
Ethiopia	79	221	289	249	246	254	142	68	-40	-3	8
Ghana	2	9	3	4	2	1	7	-6	1	-2	-1
Guinea	4	9	7	9	7	8	5	-2	2	-2	1
Ivory Coast	250	639	656	534	434	549	389	17	-122	-100	115
Kenya	102	347	311	267	264	333	245	-36	-44	-3	69
Liberia	5	23	29	25	18	18	18	6	-4	-7	-0
Madagascar	64	142	176	137	116	112	78	34	-39	-21	-4
Nigeria	1	7	4	6	4	1	6	-3	2	-2	-3
Rwanda	21	62	62	52	58	99	41	0	-10	6	41
Sierra Leone	8	20	27	21	11	20	12	7	-6	-10	9
Tanzania	63	183	152	148	141	150	120	-31	-4	-7	9
Togo	8	18	26	20	13	25	10	8	-6	-7	12
Uganda	213	389	367	334	347	373	176	-22	-33	13	26
Zaire	74	241	182	132	129	217	167	-59	-50	-3	88
Zimbabwe	0	0	14	15	21	32	0	14	1	6	11
TOTAL SUBSAHARAN AFRICA	1255	2842	2898	2434	2179	2565	1587	56	-464	-255	386
TOTAL OTHER AFRICA	0	0	2	5	32	16	0	2	3	27	-16
TOTAL AFRICA	1252	2838	2900	2439	2211	2581	1586	62	-461	-228	370
TOTAL LDC's	3998	9751	11063	9336	9081	11152	5753	1312	-1727	-255	2071
TOTAL NON-LDC's	287	837	920	808	858	1155	550	83	-112	50	297
WORLD GROSS EXPORTS	4284	10590	11983	10144	9939	12307	6306	1393	-1839	-205	2368
RUBBER (SITC-R.2 232)											
Cameroon	8	10	6	6	11	14	2	-4	0	5	3
Ivory Coast	9	14	22	24	28	40	5	8	2	4	12
Liberia	51	61	87	85	73	81	10	26	-2	-12	8
Mauretania	3	0	0	0	0	0	-3	0	0	0	0
Nigeria	31	23	22	23	24	26	-8	-1	1	1	2
Zaire	15	20	15	21	14	11	5	-5	6	-7	-3
TOTAL SUBSAHARAN AFRICA	117	128	151	159	150	173	11	23	8	-9	23
TOTAL OTHER AFRICA	0	0	0	0	0	1	0	0	0	0	1
TOTAL AFRICA	117	128	151	159	150	173	11	23	8	-9	23
TOTAL LDC's	1860	2616	3763	3354	3065	3093	756	1147	-409	-289	28
TOTAL NON-LDC's	79	56	59	58	62	79	-23	3	-1	4	17
WORLD GROSS EXPORTS	1939	2672	3821	3412	3127	3172	733	1149	-409	-285	45

TABLE 1 CONTINUED (EXPORT INCOME AGRICULTURAL COMMODITIES)

	EXPORTS PER PERIOD						CHANGE IN BILLION $				
	1973-75 AVERAGE	1976-78 AVERAGE	1978-80 AVERAGE	1980-82 AVERAGE	1982-84 AVERAGE	1985-87 AVERAGE	FROM 1973-75 TO 1976-78	FROM 1976-78 TO 1978-80	FROM 1978-80 TO 1980-82	FROM 1980-82 TO 1982-84	FROM 1982-84 TO 1985-87
TEA (SITC-R.2 074.1)											
Burundi	1	2	2	2	4	5	1	0	0	2	1
Kenya	57	141	172	155	209	232	84	31	-17	54	1
Malawi	21	37	36	39	57	39	16	-1	3	18	23
Mauritius	4	7	7	6	11	9	3	0	-1	5	-18
Mozambique	11	9	18	22	17	2	-2	9	4	-5	-2
Rwanda	2	9	11	10	6	12	7	2	-1	-4	-15
Tanzania	10	19	22	21	22	16	9	3	-1	1	6
Uganda	16	14	3	1	1	3	-2	-11	-2	0	-6
Zaire	2	7	2	2	4	3	5	-5	0	2	2
Zimbabwe	1	0	10	9	13	13	-1	10	-1	4	-1
TOTAL SUBSAHARAN AFRICA	125	245	283	267	344	335	120	38	-16	77	-0
TOTAL OTHER AFRICA	0	1	4	1	4	1	1	3	-3	3	-9
TOTAL AFRICA	124	246	287	268	348	336	122	41	-19	80	-3
TOTAL LDC's	694	1263	1394	1540	1844	1879	569	131	146	304	-12
TOTAL NON-LDC's	180	303	423	289	313	314	123	120	-134	24	35
WORLD GROSS EXPORTS	874	1566	1817	1829	2157	2194	692	251	12	328	1
											37
COCOA (SITC-R.2 072.1)											
Benin	7	3	11	12	7	22	-4	8	1	-5	15
Cameroon	106	148	197	160	139	167	42	49	-37	-21	28
P.R. Congo	4	5	8	4	3	2	1	3	-4	-1	-1
Equat. Guinea	14	12	10	15	14	13	-2	-2	5	-1	-1
Gabon	4	7	8	8	4	4	3	1	0	-4	-0
Ghana	390	649	684	493	324	420	259	35	-191	-169	96
Guinea	0	0	0	6	6	7	0	0	6	0	1
Ivory Coast	202	475	655	675	611	936	273	180	20	-64	325
Liberia	3	7	12	11	12	9	4	5	-1	1	-3
Madagascar	2	3	4	3	3	4	1	1	-1	0	1
Nigeria	239	509	487	181	265	207	270	-22	-306	84	-58
Sierra Leone	8	16	25	15	17	22	8	9	-10	2	5
Tanzania	1	2	3	2	2	3	1	1	-1	0	1
Togo	23	31	48	28	27	21	8	17	-20	-1	-6
Zaire	6	13	8	6	6	9	7	-5	-2	0	3
TOTAL SUBSAHARAN AFRICA	1009	1880	2160	1619	1440	1847	871	280	-541	-179	407
TOTAL OTHER AFRICA	10	16	24	13	9	8	6	8	-11	-4	-1
TOTAL AFRICA	1019	1896	2184	1632	1449	1854	877	288	-552	-183	405
TOTAL LDC's	1363	2601	2970	2179	2070	2779	1238	369	-791	-109	709
TOTAL NON-LDC's	29	112	170	171	197	229	83	58	1	26	32
WORLD GROSS EXPORTS	1392	2713	3139	2350	2267	3008	1321	426	-789	-83	741

TABLE 1 CONTINUED (EXPORT INCOME AGRICULTURAL COMMODITIES)

		--------- EXPORTS PER PERIOD ---------------			------- CHANGE IN BILLION $ -------				
	1973-75 AVERAGE	1976-78 AVERAGE	1978-80 AVERAGE	1980-82 AVERAGE	1982-84 AVERAGE	1985-87 AVERAGE	FROM 1973-75 TO 1976-78	FROM 1976-78 TO 1978-80	FROM 1978-80 TO 1980-82	FROM 1980-82 TO 1982-84	FROM 1982-84 TO 1985-87

SUGAR (SITC-R.2 061.1+061.2)

Cameroon	0	0	1	5	2	1	0	1	4	-3	-1
P.R. Congo	5	5	4	2	5	3	0	-1	-2	3	-2
Ethiopia	5	3	3	1	4	3	-2	0	-2	3	-1
Ivory Coast	0	0	5	18	13	13	0	5	13	-5	0
Kenya	0	1	10	24	2	2	1	9	14	-22	0
Madagascar	13	8	10	9	8	3	-5	2	-1	-1	-5
Malawi	10	19	29	52	22	23	9	10	23	-30	1
Mauritius	201	210	250	235	213	263	9	40	-15	-22	50
Mozambique	37	9	16	30	8	6	-28	7	14	-22	-2
Reunion	61	89	103	80	65	91	28	14	-23	-15	26
Swaziland	65	58	96	132	105	94	-7	38	36	-27	-11
Tanzania	2	6	6	3	3	2	4	0	-3	0	-1
Zimbabwe	1	25	40	74	55	45	24	15	34	-19	-10
TOTAL SUBSAHARAN AFRICA	400	433	573	665	505	556	33	140	92	-160	51
TOTAL OTHER AFRICA	47	250	317	254	91	139	203	67	-63	-163	48
TOTAL AFRICA	447	683	890	919	596	696	236	207	29	-323	100
TOTAL LDC's	4279	3114	3672	8875	7949	7282	-1165	558	5203	-926	-667
TOTAL NON-LDC's	4258	4505	6942	4466	2774	2474	247	2437	-2476	-1692	-300
WORLD GROSS EXPORTS	8537	7619	10615	13340	10721	9756	-918	2996	2725	-2619	-965

GROUNDNUTS (SITC-R.2 222.1)

Benin	3	0	0	0	1	3	-3	0	0	1	3
Burkina Fasso	5	2	1	0	0	1	-3	-1	-1	-0	1
Cameroon	6	2	1	0	0	0	-4	-1	-1	-0	0
The Gambia	17	20	17	12	14	10	3	-3	-5	2	-4
Guinee-Bissau	4	7	3	3	4	1	3	-4	0	1	-3
Malawi	7	9	12	12	3	6	2	3	0	-9	3
Mali	4	10	4	6	0	1	6	-6	2	-6	1
Niger	3	1	0	0	0	0	-2	-1	0	-0	0
Nigeria	27	0	0	0	0	0	-27	0	0	-0	0
Senegal	5	28	5	3	7	0	23	-23	-2	4	-7
Sudan	69	101	34	50	26	5	32	-67	16	-24	-21
Togo	0	0	0	0	1	3	0	0	0	1	2
TOTAL SUBSAHARAN AFRICA	150	180	77	87	55	30	30	-103	10	-32	-24
TOTAL OTHER AFRICA	13	26	34	43	18	53	13	8	9	-25	34
TOTAL AFRICA	163	206	111	130	73	83	43	-95	19	-57	10
TOTAL LDC's	233	292	206	383	294	317	59	-86	177	-89	23
TOTAL NON-LDC's	188	231	317	252	240	246	43	86	-65	-12	6
WORLD GROSS EXPORTS	421	524	523	634	535	564	103	-1	111	-99	29

TABLE 1 CONTINUED (EXPORT INCOME AGRICULTURAL COMMODITIES)

		----------	EXPORTS PER PERIOD	----------			-------	CHANGE IN BILLION $	-------	
	1973-75	1976-78	1978-80	1980-82	1982-84	1985-87	FROM 1973-75 TO 1976-78	FROM 1976-78 TO 1978-80	FROM 1978-80 TO 1980-82	FROM 1980-82 TO 1982-84	FROM 1982-84 TO 1985-87
	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE					
GROUNDNUT OIL (SITC-R.2 423.4)											
The Gambia	11	14	9	6	7	5	3	-5	-3	1	-2
Mali	2	6	6	4	1	1	4	0	-2	-3	0
Mozambique	2	0	0	0	0	2	-2	0	0	0	2
Niger	9	3	2	0	0	0	-6	-1	-2	-0	0
Nigeria	18	0	0	0	0	0	-18	0	0	0	0
Senegal	104	143	86	56	93	49	39	-57	-30	37	-44
Sudan	1	10	14	10	10	3	9	4	-4	0	-7
TOTAL SUBSAHARAN AFRICA	147	176	117	76	111	60	29	-59	-41	35	-51
TOTAL OTHER AFRICA	3	13	17	15	7	8	10	4	-2	-8	1
TOTAL AFRICA	150	189	134	91	118	68	39	-55	-43	27	-50
TOTAL LDC's	214	311	299	224	216	168	97	-12	-75	-8	-48
TOTAL NON-LDC's	92	98	107	94	77	74	6	9	-13	-17	-3
WORLD GROSS EXPORTS	306	409	406	318	293	242	103	-3	-88	-25	-51
COTTON (SITC-R.2 263.1)											
Angola	18	17	14	1	2	1	-1	-3	-13	1	-1
Benin	12	6	8	8	13	36	-6	2	0	5	23
Burkina Fasso	7	21	23	31	33	33	14	2	8	2	0
Burundi	1	2	3	2	2	0	1	1	-1	0	-2
Cameroon	8	17	28	40	28	19	9	11	12	-12	-9
Central Afr. Repub.	9	7	5	6	9	14	-2	-2	1	3	5
Chad	26	51	41	35	56	33	25	-10	-6	21	-23
Ethiopia	5	1	1	9	6	0	-4	0	8	-3	-6
Ivory Coast	18	30	49	63	72	76	12	19	14	9	4
Kenya	4	1	5	5	1	1	-3	4	0	-4	0
Madagascar	1	1	0	1	4	4	0	-1	1	3	0
Malawi	3	2	2	4	1	3	-1	0	2	-3	2
Mali	16	48	71	70	70	66	32	23	-1	0	-4
Mozambique	37	14	16	15	14	15	-23	2	-1	-1	1
Nigeria	2	8	15	0	0	0	6	7	-15	0	0
Senegal	9	15	12	7	13	13	6	-3	-5	6	0
Sudan	195	300	280	161	228	165	105	-20	-119	67	-63
Swaziland	1	3	3	7	4	5	2	0	4	-3	1
Tanzania	52	60	67	65	52	32	8	7	-2	-13	-20
Togo	2	3	4	12	17	32	1	1	8	5	15
Uganda	38	16	12	3	6	7	-22	-4	-9	3	1
Zaire	3	0	1	1	9	0	-3	1	0	8	-8
Zambia	3	0	2	7	3	3	-3	2	5	-4	-0
Zimbabwe	28	26	71	82	79	85	-2	45	11	-3	6
TOTAL SUBSAHARAN AFRICA	498	649	733	635	716	643	151	84	-98	81	-73
TOTAL OTHER AFRICA	574	408	390	438	448	425	-166	-18	48	10	425
TOTAL AFRICA	1072	1057	1123	1073	1164	1068	-15	66	-50	91	-96
TOTAL LDC's	2173	2911	3185	3164	3033	2972	738	274	-21	-131	-61
TOTAL NON-LDC's	2308	2834	3714	4020	3606	3021	526	880	306	-414	-585
WORLD GROSS EXPORTS	4481	5746	6900	7184	6639	5993	1265	1154	284	-545	-646

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TABLE 1 CONTINUED (EXPORT INCOME AGRICULTURAL COMMODITIES)

	EXPORTS PER PERIOD						CHANGE IN BILLION $				
	1973-75 AVERAGE	1976-78 AVERAGE	1978-80 AVERAGE	1980-82 AVERAGE	1982-84 AVERAGE	1985-87 AVERAGE	FROM 1973-75 TO 1976-78	FROM 1976-78 TO 1978-80	FROM 1978-80 TO 1980-82	FROM 1980-82 TO 1982-84	FROM 1982-84 TO 1985-87
PALM OIL (SITC-R.2 424.4)											
Benin	4	1	4	3	8	2	-3	3	-1	5	-6
Cameroon	5	4	5	5	3	5	-1	1	0	-2	2
Ivory Coast	43	42	42	41	31	33	-1	0	-1	-10	2
Liberia	0	1	2	3	3	2	1	1	1	0	-1
Nigeria	2	0	2	0	6	0	-2	2	-2	6	-6
Zaire	24	9	3	4	7	2	-15	-6	1	3	-5
TOTAL SUBSAHARAN AFRICA	78	57	58	56	58	45	-21	1	-2	2	-13
TOTAL OTHER AFRICA	3	1	1	0	1	2	-2	0	-1	1	2
TOTAL AFRICA	81	58	59	56	59	47	-23	1	-3	3	7
TOTAL LDC's	625	868	1308	1412	1672	2007	243	440	104	260	335
TOTAL NON-LDC's	133	163	384	396	420	104	30	221	12	24	-316
WORLD GROSS EXPORTS	758	1031	1693	1808	2092	2110	273	662	115	284	18
TIMBER (SITC-R.2 245-248)											
Angola	11	11	11	11	0	1	0	0	0	-11	1
Cameroon	51	77	114	103	87	59	26	37	-11	-16	-28
Central Afr. Repub.	13	13	27	30	20	12	0	14	3	-10	-8
P.R. Congo	34	26	36	41	51	72	-8	10	5	10	21
Equat. Guinea	1	1	3	3	9	15	0	2	0	6	6
Gabon	135	79	87	145	143	168	-56	8	58	-2	25
Ghana	89	78	32	23	60	77	-11	-46	-9	37	17
Guinea	4	4	4	4	0	1	0	0	0	-4	1
Ivory Coast	240	323	346	311	265	289	83	23	-35	-46	24
Liberia	17	28	74	63	32	55	11	46	-11	-31	23
Mozambique	8	13	13	6	2	1	5	0	-7	-4	-1
Nigeria	16	8	1	1	1	0	-8	-7	0	0	-1
Swaziland	7	7	7	15	12	10	0	0	8	-3	-2
Zaire	23	7	10	11	12	23	-16	3	1	1	11
Zimbabwe	3	3	3	6	5	3	0	0	3	-1	-2
TOTAL SUBSAHARAN AFRICA	639	678	768	773	699	787	39	90	5	-74	88
TOTAL OTHER AFRICA	0	8	20	16	35	52	8	12	-4	19	52
TOTAL AFRICA	639	686	788	789	734	838	47	102	1	-55	197
TOTAL LDC's	2527	3682	5515	5237	4530	4600a)	1155	1833	-278	-707	..
TOTAL NON-LDC's	7245	9587	12970	12752	11904	12500a)	2342	3383	-218	-848	..
WORLD GROSS EXPORTS	9772	13270	18486	17989	16434	14320	3498	5216	-497	-1555	-2114
SISAL (SITC-R.2 265.4)											
Angola	34	6	4	4	1	0	-28	-2	0	-3	-1
Kenya	27	9	16	22	19	13	-18	7	6	-3	-6
Madagascar	10	5	8	7	5	3	-5	3	-1	-2	-2
Tanzania	46	26	30	29	16	6	-20	4	-1	-13	-10
TOTAL SUBSAHARAN AFRICA	117	46	58	62	41	22	-71	12	4	-21	-19
TOTAL OTHER AFRICA	7	4	3	4	0	1	-3	-1	1	-4	1
TOTAL AFRICA	124	50	61	66	41	22	-74	11	5	-25	-19
TOTAL LDC's	205	94	116	111	78	55	-111	22	-5	-33	-23
TOTAL NON-LDC's	5	2	1	2	2	2	-3	-1	1	0	0
WORLD GROSS EXPORTS	210	96	117	113	80	57	-114	21	-4	-33	-23

TABLE 1 CONTINUED (EXPORT INCOME AGRICULTURAL COMMODITIES)

		---------- EXPORTS PER PERIOD ---------------					------- CHANGE IN BILLION $ --------			
							FROM	FROM	FROM	FROM	FROM
	1973-75	1976-78	1978-80	1980-82	1982-84	1985-87	1973-75	1976-78	1978-80	1980-82	1982-84
	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE	TO	TO	TO	TO	TO
							1976-78	1978-80	1980-82	1982-84	1985-87

TOBACCO (SITC-R.2 121)

Angola	7	4	5	4	5	6	-3	1	-1	1	1
Cameroon	2	5	5	4	7	2	3	0	-1	3	-5
Malawi	51	93	120	129	140	137	42	27	9	11	-3
Mozambique	2	6	0	0	0	1	4	-6	0	0	1
Tanzania	15	30	31	0	14	14	15	1	-31	14	0
Zambia	12	7	7	5	3	8	-5	0	-2	-2	5
Zimbabwe	97	137	146	251	237	255	40	9	105	-14	18
TOTAL SUBSAHARAN AFRICA	186	282	314	393	406	418	96	32	79	13	12
TOTAL OTHER AFRICA	7	21	22	36	12	19	14	1	14	-24	7
TOTAL AFRICA	193	303	336	429	418	437	110	33	93	-11	19
TOTAL LDC's	677	1497	1707	2176	2161	1718	820	210	469	-15	-443
TOTAL NON-LDC's	1619	1746	2100	2100	2159	2244	127	354	0	59	85
WORLD GROSS EXPORTS	2296	3244	3807	4277	4319	3962	948	563	470	42	-357

GROSS TOTALS AGRARIAN COMMODITIES

TOTAL SUBSAHARAN AFRICA	4721	7596	8190	7226	6704	7480	2875	594	-964	-522	776
TOTAL OTHER AFRICA	664	748	834	825	657	723	84	86	-9	-168	66
TOTAL AFRICA	5381	8340	9024	8051	7361	8203	2959	684	-973	-690	842
TOTAL LDC's	18848	29000	35198	37991	35993	38022	10152	6198	2793	-1998	2029
TOTAL NON-LDC's	16423	20474	28107	25408	22612	22442	4051	7633	-2699	-2796	-170
WORLD GROSS EXPORTS	35270	49480	63307	63398	58603	57685	14210	13827	91	-4795	-918

Note: a) Estimate.
Sources: World Bank, Commodity trade and price trends (various editions).
    UN, Yearbook of International Trade Statistics, vol.II (various editions
    FAO, Trade Statistics Yearbook 1987.

TABLE 2

SUBSAHARAN EXPORTS OF SELECTED AGRICULTURAL AND FORESTRY COMMODITIES: VOLUMES

In thousands of metric tons

	|---- EXPORT VOLUME IN METRIC TONS ------------||------------- VOLUME GROWTH (IN %) -----------|										
							1971-72 TO	1973-75 TO	1976-78 TO	1978-80 TO	1980-82 TO	1982-84 TO
	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE	TO	TO	TO	TO	TO	TO
	1973-75	1976-78	1978-80	1980-82	1982-84	1985-87	1973-75	1976-78	1978-80	1980-82	1982-84	1985-87
COFFEE (SITC-R.2 071.1)												
Angola	200	75	61	46	32	16	11.2	-62.6	-18.2	-24.9	-30.8	-49.6
Benin	1	0	0	1	2	1	-72.0	-52.4	-89.5	2066.7	111.0	-16.7
Burundi	23	21	23	25	28	33	4.5	-10.1	10.5	11.1	10.8	16.1
Cameroon	92	83	90	87	84	71	42.1	-10.1	7.9	-2.9	-2.9	-15.8
Central Afr. Repub.	10	11	10	14	15	13	7.4	10.3	-9.7	42.2	7.5	-12.4
P.R. Congo	0	3	3	2	2	1	-66.7	700.0	-1.2	-29.1	1.8	-52.6
Equat. Guinea	7	5	4	1	1	1	-4.8	-25.0	-26.7	-80.0	9.1	25.0
Ethiopia	63	61	76	82	88	72	-22.3	-3.2	24.6	7.2	7.4	-18.5
Ghana	3	3	1	1	1	1	-33.3	-11.1	-62.5	26.7	-47.4	-20.0
Guinea	4	1	2	3	3	3	-26.7	-63.6	47.5	44.1	-7.1	16.5
Ivory Coast	244	264	234	237	228	209	30.5	8.1	-11.3	1.3	-3.8	-8.1
Kenya	71	86	82	89	96	110	18.9	21.0	-4.9	8.6	7.8	14.8
Liberia	5	8	10	10	7	8	-22.2	64.3	29.1	4.4	-28.1	9.0
Madagascar	66	57	61	60	52	45	21.6	-12.7	5.5	-0.7	-13.9	-12.9
Nigeria	1	3	1	2	2	0	-65.0	138.1	-58.0	35.7	-15.8	-77.1
Rwanda	23	23	24	26	29	41	76.9	1.4	4.9	6.9	11.8	38.4
Sierra Leone	7	6	9	9	5	8	-18.5	-22.7	64.1	0.0	-41.9	44.4
Tanzania	52	51	46	55	53	51	13.6	-0.6	-10.8	21.0	-5.1	-2.6
Togo	10	7	8	10	6	9	-13.0	-26.7	9.1	19.2	-37.1	51.1
Uganda	206	136	121	138	151	148	5.9	-34.0	-10.8	13.5	9.5	-2.1
Zaire	67	76	73	70	70	98	-7.8	12.4	-3.5	-4.3	-0.5	41.5
Zimbabwe	0	0	2	5	8	12				128.6	50.6	48.1
TOTAL SUBSAHARA	1155	980	941	973	961	951	11.6	-15.1	-4.0	3.4	-1.2	-1.0
TOTAL LDC	3430	3145	3446	3617	3864	4027	1.9	-8.3	9.6	5.0	6.8	4.2
TOTAL WORLD	3579	3313	3629	3806	4064	4306	4.0	-7.4	9.6	4.9	6.8	5.9
TEA (SITC-R.2 074.1)												
Burundi	1	1	1	2	2	4	147.6	15.4	43.3	32.6	29.8	60.8
Kenya	54	75	92	86	100	141	14.4	38.0	22.0	-5.6	15.8	40.9
Malawi	24	31	31	33	37	37	26.3	30.6	-0.7	5.8	10.9	1.4
Mauritius	3	3	4	4	5	7	-4.8	0.0	15.0	4.3	34.2	25.5
Mozambique	16	12	17	24	15	2	-3.9	-28.6	45.7	39.4	-35.2	-89.4
Rwanda	3	6	6	7	7	10	50.0	88.9	11.8	7.4	9.8	35.3
Tanzania	10	12	13	14	13	14	13.7	20.7	12.3	3.3	-3.7	10.2
Uganda	18	12	4	1	2	2	-1.9	-32.1	-70.8	-79.0	131.8	31.4
Zaire	6	5	3	2	3	2	-12.8	-17.6	-39.3	-22.4	25.8	-10.8
Zimbabwe	1	0	5	7	8	11	0.0	-100.0		39.4	27.8	26.9
TOTAL SUBSAHARA	136	156	175	179	193	230	10.1	15.1	12.2	1.9	8.0	19.1
TOTAL LDC	659	781	251	285	909	1013	3.2	18.4	-67.9	13.6	219.4	11.4
TOTAL WORLD	797	859	276	307	991	1096	3.4	7.9	-67.9	11.2	222.9	10.6

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TABLE 2 CONTINUED

	----- EXPORT VOLUME IN METRIC TONS -----------						------------ VOLUME GROWTH (IN %) -----------					
							1971-72 TO	1973-75 TO	1976-78 TO	1978-80 TO	1980-82 TO	1982-84 TO
	AVERAGE 1973-75	AVERAGE 1976-78	AVERAGE 1978-80	AVERAGE 1980-82	AVERAGE 1982-84	AVERAGE 1985-87	1973-75	1976-78	1978-80	1980-82	1982-84	1985-87
COCOA (SITC-R.2 072.1)												
Benin	7	1	4	2	4	12	-52.7	-81.8	177.5	-40.5	101.5	165.4
Cameroon	81	62	71	82	83	97	0.4	-23.4	13.9	15.4	1.0	17.4
P.R. Congo	3	2	3	2	2	1	166.7	-12.5	14.3	-25.0	-18.3	-18.4
Equat. Guinea	14	7	6	8	9	7	-41.7	-52.4	-11.5	35.6	8.8	-15.3
Gabon	4	4	4	4	2	2	-11.1	0.0	0.0	-8.3	-36.4	-14.3
Ghana	336	261	198	211	183	192	-7.4	-22.2	-24.4	6.7	-13.4	5.3
Guinea	0	0	3	4	4	4			50.0	0.0	0.0
Ivory Coast	173	202	241	365	373	468	12.9	17.2	19.1	51.6	2.2	25.4
Liberia	3	3	4	5	5	4	-11.1	12.5	18.9	40.2	9.3	-26.8
Madagascar	1	2	2	2	2	2	0.0	66.7	-10.0	4.4	31.9	8.1
Nigeria	203	199	183	155	158	109	-18.8	-2.1	-7.7	-15.3	1.8	-30.9
Sierra Leone	7	6	8	9	9	9	11.1	-10.0	36.1	8.2	4.2	0.4
Tanzania	1	1	1	1	1	2	100.0	0.0	6.7	15.6	0.0	29.7
Togo	17	14	14	14	14	11	-35.8	-21.2	1.2	3.4	-5.4	-22.4
Zaire	5	4	4	4	4	5	-9.1	-20.0	-6.7	14.3	0.8	20.9
TOTAL SUBSAHARA	855	768	744	868	853	926	-8.6	-10.1	-3.2	16.8	-1.7	8.5
TOTAL LDC	1141	1026	1021	1111	1158	1381	-5.8	-10.1	-0.5	8.8	4.2	19.2
TOTAL WORLD	1160	1063	1066	1171	1235	1472	-4.8	-8.4	0.3	9.8	5.5	19.2
SUGAR (SITC-R.2 061.1+061.2)												
Cameroon	1	1	4	9	8	7	-60.0	-33.3	485.0	138.5	-10.8	-14.9
P.R. Congo	21	13	5	5	15	26	-56.7	-36.5	-64.7	12.8	177.4	77.3
Ethiopia	18	10	9	9	16	20	-11.7	-41.5	-17.7	11.4	70.4	22.1
Ivory Coast	0	0	4	47	62	20	-33.3	-100.0		1244.7	31.5	-67.8
Kenya	1	2	24	48	5	0		200.0	1083.3	103.9	-88.7	-99.3
Madagascar	32	27	23	16	25	33	-12.6	-17.5	-12.4	-30.4	55.9	29.4
Malawi	24	52	67	98	82	83	585.7	118.1	28.2	45.5	-15.7	1.1
Mauritius	612	585	613	549	579	603	5.4	-4.4	4.8	-10.3	5.3	4.2
Mozambique	130	40	51	52	23	21	-35.6	-69.5	29.2	1.0	-55.0	-12.0
Reunion	198	228	221	208	225	89	13.1	15.3	-3.4	-5.9	8.5	-60.4
Swaziland	184	212	260	347	367	438	14.1	15.2	22.7	33.5	5.9	19.3
Tanzania	6	16	13	9	10	11		172.2	-18.4	-35.5	15.9	6.4
Zimbabwe	123	70	159	196	214	254	32.6	-42.9	127.1	23.3	9.2	18.8
TOTAL SUBSAHARA	1349	1256	1451	1593	1632	1604	2.0	-6.9	15.5	9.8	2.5	-1.7
TOTAL LDC	15950	18052	17857	18646	19344	17187	8.7	13.2	-1.1	4.4	3.7	-11.2
TOTAL WORLD	22687	26062	26768	29446	29786	28162	4.4	14.9	2.7	10.0	1.2	-5.5
RUBBER (SITC 231.1)												
Cameroon	14	13	5	6	12	18	-4.4	-7.0	-62.5	20.0	100.0	52.8
Ivory Coast	15	17	18	22	30	47	12.5	15.6	5.8	21.8	32.8	58.4
Liberia	84	77	80	71	70	87	-0.4	-7.9	3.9	-11.2	-1.9	24.3
Mauritania	4	0	0	0	0	0	0.0	-100.0				
Nigeria	44	33	23	19	28	37	-5.7	-25.6	-29.3	-18.6	49.1	30.6
Zaire	28	24	21	18	14	13	-22.0	-15.3	-12.5	-15.9	-20.8	-4.8
TOTAL SUBSAHARA	190	165	148	136	154	203	-5.0	-13.2	-10.3	-7.9	13.0	31.6
TOTAL LDC	3174	3247	3323	3149	3352	3755	4.7	2.3	2.4	-5.2	6.5	12.0
TOTAL WORLD	3235	3299	3366	3186	3395	3819	5.5	2.0	2.0	-5.3	6.6	12.5

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TABLE 2 CONTINUED

	----- EXPORT VOLUME IN METRIC TONS -----------						------------ VOLUME GROWTH (IN %) ----------					
							1971-72 TO	1973-75 TO	1976-78 TO	1978-80 TO	1980-82 TO	1982-84 TO
	AVERAGE 1973-75	AVERAGE 1976-78	AVERAGE 1978-80	AVERAGE 1980-82	AVERAGE 1982-84	AVERAGE 1985-87	1973-75	1976-78	1978-80	1980-82	1982-84	1985-87
PALM OIL (SITC-R.2 424.2)												
Benin	3	2	5	7	3	6	-54.5	-40.0	133.3	57.1	-63.6	125.0
Cameroon	9	8	9	10	7	17	180.0	-14.3	16.7	7.1	-26.7	136.4
Gabon	0	0	0	0	0	3						
Ghana	0	0	0	0	0	1						
Ivory Coast	91	84	69	68	56	90	106.1	-7.7	-17.1	-1.4	-17.6	60.4
Liberia	0	2	4	5	6	3		400.0	120.0	36.4	13.3	-41.2
Nigeria	10	2	0	0	0	0	40.9	-83.9	-80.0	-100.0		
Zaire	64	25	7	7	4	8	-28.2	-61.3	-71.6	-4.8	-35.0	76.9
TOTAL SUBSAHARA	178	122	94	97	76	129	17.9	-31.5	-22.5	3.2	-21.6	69.0
TOTAL LDC	1668	2034	2744	3453	3930	5586	27.4	22.0	34.9	25.8	13.8	42.1
TOTAL WORLD	1761	2136	2849	3563	4047	5743	26.4	21.3	33.4	25.1	13.6	41.9
COTTON (SITC-R.2 263.1)												
Angola	15	13	7	0	1	1	-38.4	-11.1	-50.0	-95.0	198.8	0.0
Benin	12	7	6	7	13	34	-18.2	-44.4	-4.0	6.8	84.9	168.9
Burkina Fasso	9	16	21	23	24	39	3.7	75.0	26.3	12.0	2.5	66.8
Burundi	2	2	2	1	1	1	-25.0	-16.7	34.0	-46.3	22.2	-20.5
Cameroon	10	12	18	25	25	19	-29.5	19.4	45.1	41.7	-0.1	-23.9
Central Afr. Repub.	12	14	11	11	10	14	-18.2	19.4	-24.9	6.5	-16.9	51.7
Chad	38	54	43	30	24	38	1.8	42.1	-21.2	-30.5	-19.5	60.8
Ethiopia	3	0	3	6	4	1	66.7	-90.0	680.0	123.1	-32.8	-74.4
Ivory Coast	15	18	30	38	44	67	0.0	17.8	67.7	29.5	14.2	53.8
Kenya	4	1	2	2	0	1	-14.3	-75.0	100.0	10.3	-87.6	229.3
Madagascar	1	1	0	3	3	5	0.0	50.0	-56.7	615.4	2.2	47.4
Malawi	2	2	2	2	1	3	-50.0	-16.7	0.0	-10.0	-45.6	312.2
Mali	19	34	44	40	37	53	-3.4	82.1	27.9	-7.6	-7.9	43.0
Mozambique	37	12	12	11	11	13	-6.8	-67.3	-0.8	-3.6	-4.7	21.0
Nigeria	3	5	9	0	0	0	-75.0	87.5	80.0	-100.0		
Senegal	8	11	8	7	11	9	130.0	43.5	-24.8	-19.0	63.2	-13.4
Sudan	153	193	153	96	157	164	-35.3	25.7	-20.7	-37.3	63.9	4.5
Swaziland	2	2	3	5	2	4	-37.5	20.0	36.7	70.7	-51.4	73.5
Tanzania	50	41	29	38	35	33	-16.2	-17.3	-29.4	31.3	-7.7	-6.4
Togo	1	3	3	9	11	28	-20.0	100.0	15.0	185.9	29.3	149.1
Uganda	42	8	5	2	5	5	-37.3	-81.7	-29.1	-67.5	188.7	-5.2
Zaire	3	0	1	1	0	0	-43.8	-100.0		0.0	-100.0	
Zambia	3	0	2	3	2	3	-16.7	-100.0		50.9	-15.7	30.0
Zimbabwe	30	18	40	52	53	71	-5.3	-39.3	120.0	32.2	1.5	34.4
TOTAL SUBSAHARA	474	467	451	412	475	609	-24.2	-1.5	-3.3	-8.7	15.2	28.3
TOTAL LDC	2142	2073	1988	1905	1885	2676	-16.1	-3.2	-4.1	-4.2	-1.0	42.0
TOTAL WORLD	4121	4096	4512	4509	4316	4793	-3.6	-0.6	10.2	-0.1	-4.3	11.0

TABLE 2 CONTINUED

	----- EXPORT VOLUME IN METRIC TONS ------------						------------ VOLUME GROWTH (IN %) ----------					
							1971-72	1973-75	1976-78	1978-80	1980-82	1982-84
	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE	TO	TO	TO	TO	TO	TO
	1973-75	1976-78	1978-80	1980-82	1982-84	1985-87	1973-75	1976-78	1978-80	1980-82	1982-84	1985-87
TIMBER (SITC-R.2 245-248)												
Angola	140	117	78	0	0	0	-0.8	-16.1	-33.3	-100.0		
Cameroon	504	512	669	483	385	619	5.8	1.6	30.8	-27.8	-20.3	60.9
Central Afr. Repub.	115	209	291	80	58	72	66.0	82.1	39.1	-72.6	-27.8	24.3
P.R. Congo	232	132	171	192	174	221	-33.3	-43.3	30.3	11.7	-9.3	26.9
Equat. Guinea	13	13	12	40	61	59	134.8	-2.1	-5.6	234.3	51.3	-3.4
Gabon	989	866	852	814	927	814	-11.2	-12.4	-1.6	-4.5	13.9	-12.1
Ghana	753	374	175	89	77	155	-17.1	-50.4	-53.2	-49.2	-13.4	100.7
Guinea	31	31	21	0	0	0	0.0	0.0	-33.3	-100.0		
Ivory Coast	2332	2451	2372	2026	1869	1317	-4.9	5.1	-3.2	-14.6	-7.8	-29.5
Kenya	99	13	10	9	10	10	-36.2	-86.7	-22.8	-13.8	9.2	0.9
Liberia	215	215	284	252	162	193	-6.4	0.1	31.9	-11.2	-35.7	19.2
Mozambique	113	107	77	17	5	1	4.3	-4.6	-28.1	-78.3	-71.7	-84.3
Nigeria	185	21	16	35	52	46	-9.6	-88.9	-20.0	110.4	51.8	-11.7
Swaziland	162	187	178	232	250	257	29.6	15.6	-4.7	30.3	7.6	3.0
Zaire	43	56	60	58	71	102	-4.3	30.3	6.9	-3.5	22.0	44.4
Zimbabwe	0	0	5	15	13	9				200.0	-12.7	-26.9
TOTAL SUBSAHARA	5925	5304	5273	4370	4142	3875	-7.6	-10.5	-0.6	-17.1	-5.2	-6.4
TOTAL LDC	37877	41147	41298	33675	30332	29620	0.4	8.6	0.4	-18.5	-9.9	-2.3
TOTAL WORLD	122577	135466	141563	129647	130797	142391	2.2	10.5	4.5	-8.4	0.9	8.9
SISAL (SITC-R.2 265.4)												
Angola	57	15	8	7	3	0	-9.6	-72.9	-45.7	-14.0	-62.8	-94.9
Kenya	54	27	31	40	39	33	36.4	-49.1	13.9	29.3	-2.0	-15.5
Madagascar	21	15	13	14	13	13	-8.6	-29.7	-11.1	8.5	-10.1	0.8
Mozambique	14	13	11	6	0	0	-17.3	-11.6	-15.8	-40.6	-100.0	
Tanzania	104	80	70	51	35	16	-26.8	-22.8	-12.9	-26.8	-31.4	-53.3
TOTAL SUBSAHARA	250	150	133	119	90	63	-12.2	-39.8	-11.4	-10.4	-24.4	-30.2
TOTAL LDC	394	267	235	196	175	146	-19.7	-32.1	-12.1	-16.5	-11.0	-16.2
TOTAL WORLD	408	272	238	199	178	151	-19.3	-33.4	-12.5	-16.1	-10.7	-15.2
GROUNDNUT OIL (SITC-R.2 423.4)												
The Gambia	16	16	10	7	9	7	8.9	0.0	-36.7	-29.0	18.2	-23.1
Mali	4	8	6	5	2	1	-8.3	109.1	-17.4	-15.8	-62.5	-50.0
Mozambique	3	0	0	0	0	2	-47.1	-100.0				
Niger	16	4	2	0	0	0	-11.3	-76.6	-45.5	-100.0		
Senegal	130	188	96	82	141	77	2.9	44.4	-48.8	-14.9	72.7	-45.6
Sudan	3	24	31	22	9	4	300.0	800.0	29.2	-28.0	-58.2	-57.1
Zimbabwe	3	0	1	1	1	0	0.0	-100.0		-50.0	0.0	-100.0
TOTAL SUBSAHARA	174	239	147	117	162	92	1.2	37.3	-38.6	-20.2	37.8	-43.1
TOTAL LDC	316	408	356	303	334	266	-12.1	29.0	-12.6	-14.9	10.2	-20.3
TOTAL WORLD	426	511	461	419	429	354	-7.7	19.8	-9.7	-9.1	2.3	-17.6

TABLE 2 CONTINUED

	----- EXPORT VOLUME IN METRIC TONS -----------						------------ VOLUME GROWTH (IN %) ---------					
							1971-72 TO	1973-75 TO	1976-78 TO	1978-80 TO	1980-82 TO	1982-84 TO
	AVERAGE 1973-75	AVERAGE 1976-78	AVERAGE 1978-80	AVERAGE 1980-82	AVERAGE 1982-84	AVERAGE 1985-87	1973-75	1976-78	1978-80	1980-82	1982-84	1985-87
GROUNDNUTS (SITC-R.2 222.1)												
Burkina Fasso	13	6	1	1	1	2	69.6	-53.8	-77.8	-50.0	15.0	204.3
The Gambia	40	40	34	28	33	18	18.8	0.8	-15.7	-18.6	20.5	-46.0
Guinee-Bissau	11	12	9	6	8	4	22.2	9.1	-22.2	-32.1	26.3	-54.2
Malawi	25	17	16	17	4	15	-19.6	-29.7	-9.6	6.4	-76.0	283.3
Mali	12	23	7	2	1	3	-30.2	89.2	-71.4	-70.0	-45.0	142.4
Mozambique	2	4	3	2	1	1	400.0	120.0	-27.3	-25.0	-33.3	-50.0
Nigeria	77	1	1	1	1	0	-47.9	-98.7	-33.3	50.0	0.0	-100.0
Senegal	10	67	9	3	11	1	-38.8	566.7	-87.0	-65.4	255.6	-94.1
Sudan	156	198	84	73	47	8	29.0	27.4	-57.6	-12.7	-35.9	-83.7
Togo	0	0	0	0	0	7	-100.0					
Zimbabwe	1	0	1	2	.2	2	33.3	-100.0		133.3	-14.3	16.7
TOTAL SUBSAHARA	347	369	164	135	109	60	-10.4	6.3	-55.5	-17.7	-19.1	-44.8
TOTAL LDC	558	536	350	441	335	556	-11.0	-3.9	-34.7	25.9	-24.1	66.0
TOTAL WORLD	901	876	763	666	430	883	-0.8	-2.8	-12.9	-12.7	-35.5	105.4
TOBACCO (SITC-R.2 121)												
Angola	4	2	2	2	2	1	18.2	-53.8	-6.7	-14.3	16.7	-64.3
Cameroon	2	2	2	2	1	1	0.0	0.0	1.7	-26.2	-22.2	-2.9
Malawi	30	41	53	49	53	60	8.4	37.8	29.0	-7.9	8.6	12.5
Mozambique	2	3	1	0	0	0	0.0	50.0	-55.6	-100.0		
Tanzania	9	14	10	10	7	7	33.3	50.0	-30.2	0.0	-31.7	4.5
Zambia	5	4	3	2	1	4	7.1	-20.0	-36.7	-28.9	-20.4	155.8
Zimbabwe	68	67	71	103	87	99	24.2	-2.4	6.5	44.6	-15.6	14.2
TOTAL SUBSAHARA	121	133	142	166	151	171	18.6	9.9	6.7	17.3	-9.2	13.4
TOTAL LDC	662	733	742	808	764	737	12.1	10.8	1.2	8.9	-5.5	-3.5
TOTAL WORLD	1284	1346	1383	1421	1389	1352	11.8	4.9	2.8	2.7	-2.2	-2.7

SOURCES: FAO, TRADE STATISTICS YEARBOOK (VARIOUS EDITIONS); UNDP / WORLD BANK, AFRICAN ECONOMIC AND FINANCIAL DATA (NEW YORK, 1989).

TABLE 3

EXPORT INCOME FROM SELECTED MINERAL COMMODITIES, 1973-1984

In mln current US $, F.O.B. prices, averages per period

| | |-------- EXPORTS PER PERIOD -----| | |-- CHANGE IN BILLION $ ----| | |
	1973-75 AVERAGE	1976-78 AVERAGE	1978-80 AVERAGE	1982-84 AVERAGE	FROM 1973/75 TO 1976/78	FROM 1976/78 TO 1980/82	FROM 1980/82 TO 1982/84
BAUXITE (SITC-2 287.31)							
Guinea	82	179	181	331	97	2	150
Sierra Leone	9	5	5	7	-4	0	2
TOTAL SUBSAHARAN AFRICA	91	184	186	338	93	2	152
TOTAL OTHER AFRICA	5	4		1	-1	-4	1
TOTAL AFRICA	96	188	190	339	92	2	149
TOTAL LDC's	376	593	648	794	217	55	146
TOTAL NON-LDC's	153	85	121	106	-68	36	-15
WORLD GROSS EXPORTS	529	679	769	900	150	90	131
COPPER (SITC 287.1 + 682.1)							
Botswana		14	24	23	14	10	-1
Namibia	42	61	78	50	19	17	-28
Zaire	719	594	778	560	-125	184	-218
Zambia	1038	859	1046	894	-179	187	-152
Zimbabwe				29			29
TOTAL SUBSAHARAN AFRICA	1799	1528	1926	1556	-271	398	-370
TOTAL OTHER AFRICA	43	195		217	152	-195	217
TOTAL AFRICA	1842	1723	2162	1773	-119	439	-389
TOTAL LDC's	3965	3969	5529	4875	4	1560	-654
TOTAL NON-LDC's	3522	2053	3462	7507	-1469	1409	4045
WORLD GROSS EXPORTS	7487	6022	8992	9000	-1465	2970	108
IRON ORE (SITC-2 281)							
Liberia	255	293	303	287	38	10	-16
Mauritania	134	123	117	138	-11	-6	21
Sierra Leone	14			3	-14		3
TOTAL SUBSAHARAN AFRICA	403	416	420	428	13	4	8
TOTAL OTHER AFRICA	88	183	275	229	95	92	-46
TOTAL AFRICA	491	599	695	657	108	96	-38
TOTAL LDC's	1701	2198	2702	3105	497	504	403
TOTAL NON-LDC's	2584	3143	3563	3810	559	420	247
WORLD GROSS EXPORTS	4285	5341	6266	6915	1056	925	649

TABLE 3 CONTINUED

		EXPORTS PER PERIOD			CHANGE IN BILLION $	
	1973-75 AVERAGE	1976-78 AVERAGE	1978-80 AVERAGE	1982-84 AVERAGE	FROM 1973/75 TO 1976/78	FROM 1976/78 TO 1980/82	FROM 1980/82 TO 1982/84

MANGANESE ORE (SITC-R.2 281.7)

	1973-75	1976-78	1978-80	1982-84			
Gabon	68	103	91	101	35	-12	10
Ghana	13	14	14	5	1		-9
Zaire	4	3	2		-1	-1	-2
TOTAL SUBSAHARAN AFRICA	85	120	107	106	35	-13	-1
TOTAL OTHER AFRICA	10	125	136	109	115	11	-27
TOTAL AFRICA	95	245	243	215	150	-2	-28
TOTAL LDC's	178	325	319	278	147	-6	-41
TOTAL NON-LDC's	183	523	91	73	340	-432	-18
WORLD GROSS EXPORTS	361	847	410	351	486	-437	-59

PHOSPHATE ROCK (SITC 271.3)

Senegal	75	58	55	51	-17	-3	-4
Togo	84	82	102	86	-2	20	-16
TOTAL SUBSAHARAN AFRICA	159	140	157	137	-19	17	-20
TOTAL OTHER AFRICA	840	599	712	623	-241	113	-89
TOTAL AFRICA	999	739	869	760	-260	130	-109
TOTAL LDC's	1200	975	1206	1123	-225	231	-83
TOTAL NON-LDC's	302	506	641	569	204	135	-72
WORLD GROSS EXPORTS	1502	1481	1848	1692	-21	367	-156

GROSS TOTAL ALL MENTIONED COMMODITIES

SUBSAHARA	2537	2388	2800	2565	-149	412	-235
TOTAL AFRICA	3523	3494	4159	3744	-29	665	-415
TOTAL LDC's	7420	8060	10404	10175	640	2344	-229
TOTAL NON-LDC's	6744	6310	7878	12065	-434	1568	4187
WORLD GROSS EXPORTS	14164	14370	18285	18958	206	4121	4794

Sources: World Bank, Commodity trade and price trends (various editions).
UN, International trade statistics yearbook 1986, vol.II (1988).

TABLE 4

AGGREGATE EXPORT EARNINGS FROM NON-FUEL PRIMARY COMMODITIES, 1971 - 1987

In million current US dollars

Country	1971	1974	1977	1979	1980	1981	1982	1983	1984	1985	1986	1987
Benin	65	72	129	120	101	71	63	80	64	69	39	52
Botswana	19	70	180	177	150	192	166	241	266	282	298	368
Burkina Fasso	23	61	95	115	143	136	109	116	118	93	125	198
Burundi	18	29	89	104	61	67	83	73	93	103	147	119
Cameroon	192	447	704	836	893	619	481	561	647	724	677	779
Central Afr.Rep.	27	45	105	68	109	81	77	79	83	93	98	102
Congo P.R.	21	32	174	51	60	107	135	112	131	119	127	155
Ethiopia	120	252	334	399	392	343	370	368	389	307	439	385
Gabon	87	180	1343	389	340	418	412	404	496	486	454	525
The Gambia	14	39	48	55	30	26	42	46	47	41	44	32
Ghana	326	615	951	989	1212	931	789	506	529	572	868	987
Ivory Coast	425	1070	2154	2182	2658	2082	1743	1615	2188	2446	2782	2556
Kenya	229	460	1195	710	734	655	588	645	766	708	931	645
Liberia	216	393	454	522	570	510	459	416	433	416	399	380
Madagascar	129	198	347	358	355	274	280	266	300	246	285	259
Malawi	65	108	200	208	253	243	219	204	279	216	203	222
Mali	33	57	125	115	171	128	121	139	159	142	134	154
Mauritania	86	178	157	143	190	215	235	306	285	363	412	391
Mauritius	62	285	310	271	306	203	248	252	236	245	386	485
Niger	37	46	160	443	561	441	322	301	74	72	218	206
Nigeria	434	607	750	925	942	991	521	652	621	277	299	580
Rwanda	22	51	127	202	133	112	107	123	141	125	165	131
Senegal	89	315	623	426	315	215	331	392	421	354	465	542
Seychelles	1	3	11	5	5	4	3	4	9	9	5	6
Sierra Leone	35	52	131	82	81	61	56	63	69	57	51	44
Somalia	36	63	71	104	126	174	167	96	53	89	103	116
Sudan	326	421	661	562	574	507	404	544	679	538	441	422
Tanzania	184	292	559	398	428	492	350	331	285	205	287	282
Togo	63	209	199	245	354	351	312	237	205	210	258	250
Uganda	233	315	588	431	342	241	346	369	396	391	441	220
Zaire	627	1311	1110	1826	2288	1853	1396	1267	1426	1393	1417	1479
Zambia	669	1389	897	1345	1331	976	911	977	863	786	666	842
Zimbabwe	331	684	877	853	1002	1060	944	774	779	713	790	802
Total	5244	10349	15858	15659	17210	14779	12790	12559	13530	12890	14454	14716
Growth %	..	97	53	-1	10	-14	-13	-2	8	-5	12	2

Source: World Bank, World Tables 1988/89; UNCTAD Commodity Yearbook 1988.

TABLE 5

NON-FUEL PRIMARY COMMODITY EXPORTS AS PERCENTAGE OF TOTAL EXPORTS, 1971 - 1987

SELECTED SUBSAHARAN AFRICAN COUNTRIES, (Mln. current US $)

COUNTRY	TOTAL EXPORTS						SHARE (%) OF N.F. COMMODITY IN TOTAL EXPORTS					
	1971	1974	1977	1980	1983	1987	1971	1974	1977	1980	1983	1987
NON-OIL COUNTRIES (a)												
Botswana	28	121	180	503	637	1010	68	58	64	30	38	36
Burkina Fasso	25	66	95	161	130	202	92	92	94	89	89	98
Burundi	19	30	89	65	77	140	95	97	98	94	95	85
Central Afr.Rep.	44	57	105	147	115	154	61	79	76	74	69	66
Ethiopia	126	267	334	425	403	402	95	94	97	92	91	96
The Gambia	15	40	48	31	48	35	95	97	95	97	96	91
Ghana	341	647	951	1257	536	1056	96	95	95	96	94	93
Ivory Coast	456	1214	2154	3142	2092	2961	93	88	89	85	77	86
Kenya	314	661	1195	1389	979	985	73	70	71	53	66	65
Liberia	224	400	454	597	438	385	96	98	97	95	95	99
Madagascar	147	244	347	402	310	310	88	81	89	88	86	84
Malawi	72	121	200	285	229	264	90	89	93	89	89	84
Mali	36	64	125	205	167	217	92	89	98	83	83	71
Mauritania	94	182	157	196	315	403	91	98	97	97	97	97
Mauritius	65	313	310	431	368	817	95	91	76	71	68	59
Niger	38	53	160	580	311	214	97	87	91	97	97	96
Rwanda	22	54	127	134	124	133	100	94	98	99	99	98
Senegal	125	391	623	477	581	723	71	81	80	66	67	75
Sierra Leone	99	146	131	207	120	120	35	36	53	39	53	37
Somalia	38	64	71	133	98	118	95	98	97	95	98	98
Sudan	332	441	661	594	581	482	98	95	98	97	94	88
Tanzania	251	388	559	537	379	348	73	75	88	80	87	81
Togo	73	215	199	476	274	272	86	97	96	74	86	92
Uganda	235	316	588	345	372	222	99	100	99	99	99	99
Zaire	687	1381	1110	2507	1388	1594	91	95	91	91	91	93
Zambia	679	1407	897	1360	997	869	99	99	99	98	98	97
Zimbabwe	404	864	877	1423	1128	1358	82	79	75	70	69	59
SUBTOTAL (b)	4989	10147	12747	18009	13197	15794	90	90	92	86	87	86
SUBTOTAL (c)							89	89	88	83	81	80
OIL COUNTRIES (a)												
Benin	70	93	129	223	122	121	93	77	92	45	66	43
Cameroon	213	491	704	1447	1830	1170	90	91	94	62	31	67
P.R.Congo	35	208	174	980	1097	884	60	15	26	6	10	18
Gabon	178	768	1343	2173	1975	1285	49	23	19	16	20	41
Nigeria	1793	9195	11848	25968	10370	7475	24	7	6	4	6	8
Seychelles	2	7	11	21	20	24	74	45	26	24	20	25
SUBTOTAL (b)	2291	10762	14209	30812	15414	10959	65	43	44	26	25	33
SUBTOTAL (c)							35	12	13	8	12	19

NOTES: (a) Countries are called oil countries when in 1979 >50% of their exports stemmed from fuel exports.
(b) Percentage shares are arithmic averages. (c) Percentage shares are weighted averages.
SOURCES: UNCTAD Commodity Yearbook 1986; World Bank, World Tables 1988/90.

TABLE 6

AVERAGE ANNUAL GROWTH (b) OF NON-FUEL PRIMARY COMMODITY EXPORTS, 1971 - 1987

Country	1971-74	1974-77	1977-80	1980-83	1983-87
NON-OIL COUNTRIES (a)					
Botswana	89	21	10	20	13
Burkina Fasso	55	15	20	-6	18
Burundi	20	67	-10	7	16
Central Afr.Rep.	22	26	12	-9	7
Ethiopia	37	10	7	-2	1
The Gambia	60	5	-11	18	-8
Ghana	30	16	11	-19	24
Ivory Coast	51	26	13	-13	15
Kenya	34	28	-4	-4	
Liberia	27	4	10	-9	-2
Madagascar	18	19	5	-8	-1
Malawi	22	24	12	-6	2
Mali	24	39	13	-6	3
Mauritania	36	-5	8	20	7
Mauritius	20	-6	10	-6	23
Niger	8	72	95	-15	-8
Rwanda	44	48	2	-3	2
Senegal	85	19	-12	8	10
Sierra Leone	16	11	6	-7	-8
Somalia	25	3	28	-8	5
Sudan	10	18	-4	-2	-6
Tanzania	20	23	-4	-8	-4
Togo	77	-3	28	-11	1
Uganda	12	28	-14	3	-10
Zaire	36	-8	42	-15	4
Zambia	36	12-	17	-9	-3
Zimbabwe	36	-1	17	-8	1
AVERAGE N-O COUNTRIES	39	18	11	-4	4
IDEM, WEIGHTED	34	8	11	-9	4
OIL COUNTRIES (a)					
Benin	4	22	-5	-7	-9
Cameroon	44	16	12	-12	10
P.R.Congo	17	15	10	29	10
Gabon	36	13	12	6	7
Nigeria	13	8	9	-10	-3
Seychelles	45	-4	24	-7	13
AVERAGE OIL COUNTRIES	9	4	3	-0	1
IDEM, WEIGHTED	23	12	9	-8	4

Notes: a) see Table 5 Statistical Annex. (b) Growth figures based on value of exports in current US dollars.
Source: IBRD, World Tables 1988/89 (Washington 1988).

TABLE 7

NON-FUEL PRIMARY COMMODITY EXPORTS AS PERCENTAGE OF GROSS NATIONAL PRODUCT, 1971 - 1987

Country	1971	1974	1977	1980	1983	1987
NON-OIL COUNTRIES (a)						
Botswana	20	28	34	21	23	31
Burkina Fasso	7	11	11	10	9	12
Burundi	7	9	16	7	7	10
Central Afr.Rep.	14	15	16	15	11	11
Ethiopia	6	10	10	9	7	7
The Gambia	25	38	32	12	23	18
Ghana	14	22	30	28	12	19
Ivory Coast	27	42	39	27	23	31
Kenya	12	17	21	11	10	9
Liberia	48	69	52	52	41	36
Madagascar	13	14	16	12	9	11
Malawi	17	19	26	23	16	17
Mali	9	11	12	11	11	9
Mauritania	41	51	29	28	40	48
Mauritius	25	56	28	27	22	31
Niger	5	5	12	24	16	12
Rwanda	10	17	17	11	8	7
Senegal	10	24	25	11	15	15
Sierra Leone	8	10	10	8	5	4
Somalia	10	14	7	13	8	7
Sudan	15	14	10	7	7	6
Tanzania	13	14	15	8	5	7
Togo	22	45	26	32	31	27
Uganda	11	13	18	10	12	5
Zaire	16	22	13	20	15	30
Zambia	36	57	34	39	27	47
Zimbabwe	19	22	19	20	12	15
AVERAGE N-O COUNTRIES	17	25	21	18	16	18
IDEM, WEIGHTED	16	23	20	18	13	16
OIL COUNTRIES (a)						
Benin	24	16	19	9	8	4
Cameroon	16	23	20	14	7	7
P.R.Congo	7	6	6	4	5	9
Gabon	24	17	9	11	11	18
Nigeria	3	2	1	1	1	1
Seychelles	6	8	5	4	3	3
AVERAGE OIL COUNTRIES	13	12	10	7	6	7
IDEM, WEIGHTED	5	4	3	2	2	4

Note: a) see Table 5 Statistical Annex.
Source: IBRD, World Tables 1988/89 (Washington 1988).

TABLE 8

CROSS SECTION RESULTS FOR 27 SUBSAHARAN NON-OIL COUNTRIES[a] WITH RESPECT TO RELATION BETWEEN GROWTH OF NON-FUEL COMMODITY EXPORTS AND GNP GROWTH

ESTIMATED EQUATION: $Y = a_0 + a_1.XNF$

WITH: Y = GROWTH OF GNP (IN US $)

XNF = GROWTH OF NON-FUEL COMMODITY EXPORTS

	SUB-PERIODS					POOLED OBSERVA-TIONS
	1971-74	1974-77	1977-80	1980-83	1983-87	1971-87
NUMBER OF OBSERV.	27	27	27	27	27	135
a_0	5.92	14.61	14.62	1.52	0.37	7.138
a_1	0.27	0.19	0.16	0.17	0.30	0.271
SER OF a_1	0.046	0.11	0.07	0.138	0.11	0.0358
R^2	0.57	0.10	0.18	0.05	0.22	0.30
t STATISTIC	5.857	1.727	2.286	1.231	2.727	7.49
CRITICAL VALUE t AT 95% CONF.INTERVAL	2.060	2.060	2.060	2.060	2.060	1.979
H(O) HYPOTHESIS	REJ.	NON-REJ.	REJ.	NON-REJ.	REJ.	REJ.
CRITICAL VALUE t AT 99% CONF.INTERVAL	2.787	2.787	2.787	2.787	2.787	2.616
H(O) HYPOTHESIS	REJ.	NON-REJ.	REJ.	NON-REJ.	NON-REJ.	REJ.

Note: a) Countries are considered as oil-countries when in 1979 more than 50% of their exports stemmed from fuel exports.
Data sources: World Bank, World Tables 1989-90 (for GNP data); Table 4 of Statistical Annex (for NF commodity export earnings).

TABLE 9

COMMODITY EXPORT CONCENTRATION RATIOS

SHARE OF 3 MAIN NON-OIL PRIMARY COMMODITIES IN NON-FUEL EXPORTS

COUNTRY	COMMODITY	1973/75		1978/80		1982/84	
		%	CUMULATIVE	%	CUMULATIVE	%	CUMULATIVE
NAMIBIA	Copper	67.4		60.2		25.1	
	Lead	27.6	100.0	30.2	97.3	8.9	57.5
	Zinc	5.0		6.9			
	Uranium					23.5	
LESOTHO	Wool	30.0	30.0	10.8	10.8	14.1	14.1
UGANDA	Coffee	72.2		89.4		93.0	
	Cotton	13.0	89.9	2.8	92.8	2.3	95.8
	Copper	4.7					
	Hides			0.6		0.5	
BURUNDI	Coffee	75.9		85.4		87.3	
	Cotton	3.5	86.4	3.2	90.7	2.3	94.3
	Hides	7					
	Tea			2.1		4.7	
EQUAT. GUINEA	Coffee	29.5		46.4		7.4	
	Cocoa	55.7	90.3	34.2	89.6	51.2	91.9
	Palm oil	5.1					
	Timber			9.0		33.3	
ZAMBIA	Copper	91.9		86.1		79.1	
	Zinc	3.0	95.8	2.4	89.2	2.6	82.3
	Lead	0.9		0.7		0.6	
LIBERIA	Iron ore	68.3		56.0		63.4	
	Rubber	13.7	86.6	16.0	85.6	16.1	86.5
	Timber	4.6		13.6		7.0	
BOTSWANA	Beef	20.0		12.6		10.5	
	Copper		22.2	6.4	19.1	3.9	14.4
	Cotton	0.5					
	Hides	1.7					
	Maize			0.1		0.0	
MAURETANIA	Iron ore	78.1		75.6		49.6	
	Copper	13.8	93.3	2.4	79.5	0.0	52.8
	Rubber	1.4					
	Fish meal			1.5		3.2	
MALAWI	Tobacco	42.7		50.5		53.2	
	Tea	17.3	68.1	15.3	77.9	21.7	83.4
	Sugar	8.1		12.1		8.5	

TABLE 9 CONTINUED

COUNTRY	COMMODITY	1973/75		1978/80		1982/84	
		%	CUMULATIVE	%	CUMULATIVE	%	CUMULATIVE
GHANA	Cocoa	61.6		69.5		24.3	
	Timber	14.0	77.6	3.2	74.1	0.9	25.6
	Manganese	2.0		1.4		0.4	
CHAD	Cotton	69.8		71.7		69.4	
	Beef	7.4	82.3		73.2		73.2
	Hides	5.1		1.5		3.8	
REUNION	Sugar	85.3		72.8		..	
	Rice	0.0	85.3	0.1	72.9	..	..
ETHIOPIA	Coffee	32.3		70.7		62.4	
	Cotton		45.1	0.2	77.2	1.4	70.8
	Sugar	2.1					
	Hides	10.7		6.3		7.0	
MAURITIUS	Sugar	80.2		66.2		57.6	
	Tea	1.6	81.8	1.8	68.0	2.9	60.6
	Fish meal	0.0		0.0		0.1	
RWANDA	Coffee	58.0		52.7		67.8	
	Tea	6.4	76.4	9.6	67.7	7.5	78.3
	Tin	12.0		5.4		3.0	
CENTRAL AFR. REP.	Timber	30.5		32.1		21.7	
	Coffee	24.8	74.6	28.3	66.7	32.4	63.6
	Cotton	19.3		6.3		9.5	
THE GAMBIA	Groundnuts	43.3		31.6		30.3	
	Groundnut oil	27.7	71.2	17.8	49.4	15.6	46.4
	Hides	0.2		0.0		0.5	
IVORY COAST	Coffee	23.5		25.1		26.9	
	Cocoa	19.0	65.3	25.1	63.4	19.1	57.6
	Timber	22.7		13.2		11.6	
ZAIRE	Copper	69.6		50.1		70.6	
	Coffee	7.2	80.8	11.7	63.4	16.3	93.2
	Zinc	3.9		1.6		6.3	
SUDAN	Cotton	46.0		52.1		39.0	
	Groundnuts	16.2	65.2	6.2	60.8	4.4	46.8
	Hides	3.0		2.5		3.4	
TOGO	Phosphate	62.0		33.4		48.5	
	Cocoa	17.0	85.0	15.8	57.7	15.1	72.9
	Coffee	6.0		8.5			
	Cotton					9.3	

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TABLE 9 CONTINUED

COUNTRY	COMMODITY	1973/75		1978/80		1982/84	
		%	CUMULATIVE	%	CUMULATIVE	%	CUMULATIVE
GUINEA	Bauxite	77.0		54.2		80.0	
	Coffee	3.8	84.2	2.0	57.3	1.7	83.1
	Timber	3.4		1.1			
	Cocoa					1.4	
MALI	Cotton	27.2		46.7		41.7	
	Groundnut oil	3.3	38.0	3.9	53.1	0.7	44.0
	Groundnuts	7.5		2.5			
	Hides					1.6	
BENIN	Cocoa	17.9		26.2		10.2	
	Cotton	31.9	57.6	17.8	52.2	17.6	35.0
	Groundnuts	7.8					
	Coffee			8.2		7.2	
SWAZILAND	Sugar	50.4		44.6		36.1	
	Beef	2.3	58.3	3.6	53.5		41.8
	Timber	5.6				4.3	
	Iron ore			5.3			
	Cotton					1.4	
TANZANIA	Coffee	20.6		30.5		35.2	
	Cotton	17.2	52.8	13.4	50.1	12.9	53.7
	Sisal	15.0					
	Tobacco			6.2			
	Tea					5.6	
MADAGASCAR	Coffee	26.9		41.1		37.0	
	Beef	5.7	37.9	3.1	46.5		41.0
	Sugar	5.3		2.3		2.4	
	Sisal					1.6	
KENYA	Coffee	26.6		27.2		26.0	
	Tea	14.9	48.7	15.1	44.2	20.6	48.2
	Hides			1.9			
	Sisal	7.2				1.6	
BURKINA FASSO	Cotton	20.0		33.5		51.3	
	Sugar		40.9	4.2	39.5		55.5
	Groundnuts	15					
	Hides	5.9		1.8		3.7	
	Beef					0.5	
MOZAMBIQUE	Tea			12.5		11.4	
	Copra	5.2					
	Sugar	15.7	36.6	11.3	34.5	5.2	26.1
	Cotton	15.7		10.7		9.5	

TABLE 9 CONTINUED

COUNTRY	COMMODITY	1973/75 %	1973/75 CUMULATIVE	1978/80 %	1978/80 CUMULATIVE	1982/84 %	1982/84 CUMULATIVE
SENEGAL	Groundnut oil	30.8		18.6		18.5	
	Phosphates	22.2	55.7	11.8	32.9	10.2	31.3
	Cotton	2.7		2.5		2.6	
SIERRA LEONE	Coffee			13.5		10.0	
	Iron ore	10.6					
	Cocoa	6.1	23.4	12.4	28.6	15.2	31.6
	Bauxite	6.6		2.7		6.4	
ZIMBABWE	Tobacco	14.9		12.4		20.8	
	Cotton	4.3	24.5	6.0	21.8	6.9	32.6
	Beef						
	Sugar	5.3		3.4		4.9	
GUINEA_BISSAU	Groundnut oil			19.4		20.2	
	Groundnuts	38.6	41.7		20.6		24.5
	Timber	1.0		0.9		0.7	
	Hides	2.1					
	Palm oil			0.3			
	Cotton					3.6	
SOMALIA	Bananas	16.8		8.1		11.1	
	Hides	4.1	21.3	3.8	12.6	3.4	14.6
	Beef	0.4		0.7		0.1	
NIGER	Groundnut oil	14.0		0.7		0.0	
	Hides	2.4	21.5	0.7	31.4	1.6	34.4
	Groundnuts	5.1					
	Uranium	..		30.0		32.8	
GABON	Manganese	27.2		24.8		19.1	
	Timber	54.1	83.1	23.9	50.9	27.3	47.3
	Cocoa	1.8		2.1		0.8	
NIGERIA	Cocoa	26.5		51.9		24.4	
	Tin	3.0	32.5	3.8	57.7	2.3	29.0
	Rubber	3.0		1.9		2.3	
ANGOLA	Coffee	38.7		48.4		70.0	
	Timber		52.5	2.6	52.0		77.1
	Iron ore	9.5					
	Fish meal	4.2					
	Hides					2.9	
	Tobacco			1.1		4.3	
P.R. CONGO	Timber	64.6		20.1		22.2	
	Cocoa	7.8	82.7		32.1		29.1
	Coffee			7.1		3.4	
	Sugar	10.2		4.8		3.4	

SOURCES: WORLD BANK, COMMODITY TRADE AND PRICE TRENDS (VARIOUS EDITIONS).

TABLE 10

ESTIMATES OF ANNUAL LOSSES (a) OF NON-FUEL PRIMARY COMMODITY EXPORT EARNINGS

In million US dollars. Base period = 1979

Country	|------------------ ESTIMATED LOSSES /GAINS -------------|								LOSSES /GAINS 1980/87	% OF TOT. EXPORTS 1980/87b)
	1980	1981	1982	1983	1984	1985	1986	1987		
Benin	-19	-49	-57	-40	-56	-51	-81	-68	-421	-78.1
Botswana	-27	15	-11	64	89	105	121	191	547	27.9
Burkina Fasso	28	21	-6	1	3	-22	10	83	118	11.4
Burundi	-43	-37	-21	-31	-11	-1	43	15	-86	-11.5
Cameroon	57	-217	-355	-275	-189	-112	-159	-57	-1307	-24.3
Central Afr.Rep.	41	13	9	11	15	25	30	34	178	24.7
P.R.Congo	9	56	84	61	80	68	76	104	538	56.9
Ethiopia	-7	-56	-29	-31	-10	-92	40	-14	-199	-6.6
Gabon	-49	29	23	15	81	97	65	136	397	11.3
The Gambia	-25	-29	-13	-9	-8	-14	-11	-23	-132	-42.9
Ghana	223	-58	-200	-483	-460	-417	-121	-2	-1518	-23.7
Ivory Coast	476	-100	-439	-567	6	264	601	374	615	3.4
Kenya	24	-55	-122	-65	56	-2	221	-65	-8	-0.1
Liberia	48	-12	-63	-106	-89	-106	-123	-142	-593	-16.6
Madagascar	-3	-84	-78	-92	-58	-112	-73	-99	-599	-26.4
Malawi	45	35	11	-4	71	8	-5	14	175	9.5
Mali	56	13	6	24	44	27	19	39	228	19.9
Mauritania	47	72	92	163	142	220	269	248	1253	52.3
Mauritius	35	-68	-23	-19	-35	-26	115	214	193	8.2
Niger	118	-2	-121	-142	-369	-371	-225	-237	-1349	-61.5
Nigeria	17	66	-404	-273	-304	-648	-626	-345	-2517	-51.5
Rwanda	-69	-90	-95	-79	-61	-77	-37	-71	-579	-55.8
Seychelles	0	-1	-2	-1	4	4	0	1	5	11.1
Senegal	-111	-211	-95	-34	-5	-72	39	116	-373	-12.3
Sierra Leone	-1	-21	-26	-19	-13	-25	-31	-38	-174	-36.1
Somalia	22	70	63	-8	-51	-15	-1	12	92	10.0
Sudan	12	-55	-158	-18	117	-24	-121	-140	-387	-9.4
Tanzania	30	94	-48	-67	-213	-193	-111	-116	-624	-24.4
Togo	109	106	67	-8	-40	-35	13	5	217	10.0
Uganda	-89	-190	-85	-62	-35	-40	10	-211	-702	-25.6
Zaire	462	27	-430	-559	-400	-433	-409	-347	-2089	-16.7
Zambia	-14	-369	-434	-368	-482	-559	-679	-503	-3408	-46.4
Zimbabwe	149	207	91	-79	-74	-140	-63	-51	40	0.6
TOTAL	1551	-880	-2869	-3100	-2255	-2769	-1204	-943	-12469	-11.1
BY COMPOUNDED INTREST										
(LIBOR+1) c)	1775	1048	-2088	-5768	-9052	-13016	-15350	-17696	-17696	

Notes: a) The annual loss is the difference between actual export earnings in the year indicated, and actual export earnings in the base year (1979). b) Export loss over the period 1980-1987 is compared to aggregate actual exports in these periods.
c) Cumulative losses from 1980 onwards, calculated on compounded interest basis (LIBOR plus 1 percentage point).
SOURCES: UNCTAD Commodity Yearbook 1986; World Bank, World Tables 1988/90.

TABLE 11

GEOGRAPHICAL EXPORT CONCENTRATION FOR SELECTED COMMODITIES, 1977 AND 1987

Share (%) of selected importing countries in total Subsaharan exports a)

Commodity	1977									1987 b)								
	Total non-OECD	Total OECD	USA	Japan	Total EEC	GBr	FRG	Fra	Neth	Total non-OECD	Total OECD	USA	Japan	Total EEC	GBr	FRG	Fra	Neth
Tropical beverages (SITC 07)	21	79	12	3	59	10	15	11	10	6	94	19	5	64	13	13	17	9
Coffee (SITC 071)	..	..	..	..	..	..	..	..	..	3	97	24	5	63	7	13	21	5
Cocoa (SITC 072)	..	..	..	..	..	..	..	..	..	19	81	11	5	59	13	12	10	15
Tea (SITC 074)	..	..	..	..	..	..	..	..	..	24	76	9	0	63	55	0	0	4
Text. fibres (SITC 26)	58	42	0	1	37	2	8	5	1	59	41	0	8	31	2	6	9	1
Fixed vegetable oils and fats (SITC 42)	58	42	0	0	42	6	7	19	4	21	79	0	0	79	6	6	52	3
Oil seeds and oleaginous fruits (SITC 22)	74	26	0	3	15	7	0	1	2	36	64	0	8	51	9	8	12	6
Sugar (SITC 06)	11	89	4	0	81	40	0	27	1	31	59	6	0	51	37	0	12	1
Tobacco (SITC 12)	8	92	8	6	68	13	24	3	13	72	28	2	0	24	12	2	1	5
Crude rubber (SITC 23)	17	83	29	0	52	9	7	21	0	21	79	38	0	39	13	3	14	1
Timber,wood (SITC 24)	5	95	1	5	86	4	10	22	4	13	87	0	1	83	5	16	20	4
Iron ore (SITC 281)	..	..	..	..	..	..	..	..	..	12	88	5	7	75	4	28	13	3

Notes: a) FOB/CIF conversion factors have been estimated on the basis of averages for Subsaharan countries in IMF, International financial statistics yearbook 1989.
b) Figures can only be regarded as guestimates (cf. footnote 47 of main text).
Source: Tables 1, 3, and 15-27 of Statistical Annex; Estimates; UNDP / World Bank (1989).

TABLE 12

OECD IMPORTS OF TROPICAL BEVERAGES (SITC 07) FROM SELECTED SUBSAHARAN COUNTRIES

SITC 07 includes cocoa, coffee, tea and spices. Mln. current US $.

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETHER-LANDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1977														
ANGOLA	29	0		23		1	3	0	0	0	8	11		6
BENIN	16			16		9	2	0	2	0	0		1	0
BURUNDI	83	5	3	64	2	43	7	2	7	1	0		1	11
CAMEROON	484	17	10	448	2	81	84	61	195	6	15	3	2	10
CENTRAL AFRICAN REP.	16	2		14	0	1	8	5					0	0
ETHIOPIA	217	61	34	108	0	75	18	10	1	4			1	14
GHANA	374	62	61	221	139	28	17	2	3	2	10		19	30
GUINEA	22	1		21	0	13	4	0	2	1	0		0	0
IVORY COAST	1480	349	18	1049	76	251	235	125	217	49	44	5	47	65
KENYA	456	51	2	337	148	113	8	12	36	6	1		12	66
LIBERIA	17	1		15	0	4	2	0	8	0			1	0
MADAGASCAR	215	60	11	140	1	22	86	10	2	7	11	1	1	5
MALAWI	52	3	0	42	34	6	1	0	1	1			0	7
MOZAMBIQUE														
NIGER	11	0		11		7	0		4					0
NIGERIA	187	4		179	88	49	10	4	19	2	3	0	4	4
RWANDA	117	10	1	105	7	69	11	1	12	2	1		4	1
SIERRA LEONE	25	1		23	9	4	5		4	1	0		0	-0
TANZANIA	161	5	12	124	22	64	5	6	22	1	0		4	20
TOGO	44	3		36	1	6	6	8	11	2	1		-0	5
UGANDA	302	84	17	195	57	18	39	8	31	6	30	2	5	5
ZAIRE	298	8	3	284	6	31	79	128	6	12	15	5	1	3
ZIMBABWE	40	4	1	24	8	11	0		4	0			0	10
SUBSAHARA	4642	730	173	3477	600	906	629	383	585	104	138	27	106	261
PERCENTAGE OF TOTAL	23	15	13	31	37	28	34	34	42	13	24	25	18	9
TOTAL IMPORTS	20309	4944	1361	11219	1638	3197	1825	1125	1381	775	569	106	603	2786

TABLE 12 (TROPICAL BEVERAGES) CONTINUED

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETHER-LANDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1987														
ANGOLA	53	13	10	19		3			11	1			4	11
BENIN	8			8		1	5	1	1					
BURUNDI	65	25		34	3	19	6	1	2	3			1	6
CAMEROON	464	38	12	412	7	98	118	49	131	4	5	1	0	2
CENTRAL AFRICAN REP.	48			48			38	9					1	
ETHIOPIA	169	87	22	45	2	17	13	13	0	0			-0	15
GHANA	738	85	123	444	173	64	20	13	88	5	52		28	86
GUINEA	7	1		6		4	2	1		0			-1	1
IVORY COAST	1671	310	77	1243	101	153	527	145	154	13	136	3	11	41
KENYA	733	78	8	547	221	194	19	13	71	10			18	100
LIBERIA	48	17		31	2	4	9		7			0	9	1
MADAGASCAR	213	71	12	127	0	23	82	8	1		8		5	3
MALAWI	51	8		41	36	0	0		2				2	2
MOZAMBIQUE	42	3		31	26				4				1	8
NIGER														
NIGERIA	483	61	9	385	132	73	50	44	69	4	1	4	8	28
RWANDA	76	32	4	38	9	12	12	2			1		2	2
SIERRA LEONE	40	17		23	11	0	2		7		2	1	0	
TANZANIA	249	65	12	151	33	79	5	24	6	1			4	22
TOGO	71			68		21	14	4	22	2	1		4	3
UGANDA	464	247	35	164	49	13	42	19	3		37		2	18
ZAIRE	436	89	1	314	10	48	117	90	10	19	8	2	9	32
ZIMBABWE														
SUBTOTAL SUBSAHARA	6129	1247	324	4177	816	826	1081	435	589	62	250	11	108	382
PERCENTAGE OF TOTAL	33	23	31	43	54	33	61	48	47	12	42	17	24	16
TOTAL IMPORTS	18587	5496	1045	9605	1519	2535	1766	910	1264	512	536	64	499	2441

TABLE 12 (TROPICAL BEVERAGES) CONTINUED

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETHER-LANDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
INCREASE / DECREASE PER EXPORTING COUNTRY 1987 -1977														
ANGOLA	25	13	10	-4		2	-3	-0	11	1	-8	-11	4	6
BENIN	-8			-8		-8	3	1	-1	-0	-0		-1	-0
BURUNDI	-18	20	-3	-30	1	-24	-1	-1	-6	1	-0		-1	-4
CAMEROON	-20	21	2	-36	5	17	34	-12	-64	-3	-10	-2	-2	-8
CENTRAL AFRICAN REP.	32	-2		34	-0	-1	31	4					1	-0
ETHIOPIA	-48	27	-12	-63	2	-58	-5	3	-0	-3			-1	1
GHANA	364	23	62	223	34	36	3	11	85	3	42		9	56
GUINEA	-14	1		-15	-0	-9	-3	0	-2	-0	-0		-1	0
IVORY COAST	191	-39	59	194	25	-98	292	21	-63	-36	93	-2	-36	-23
KENYA	277	27	6	210	73	81	11	1	35	4	-1		6	34
LIBERIA	32	15		16	1	-0	8	-0	-0	-0		0	8	1
MADAGASCAR	-3	11	1	-13	-0	1	-4	-3	-1	-7	-2	-1	3	-2
MALAWI	-1	5	-0	-1	3	-5	-0	-0	1	-1			2	-5
MOZAMBIQUE	42	3		31	26				4				1	8
NIGER	-11	-0		-11		-7	-0		-4				-0	
NIGERIA	296	57	9	206	44	24	40	40	50	2	-2	3	4	24
RWANDA	-41	22	3	-67	2	-57	2	1	-12	-2	0		-2	1
SIERRA LEONE	16	16		-1	2	-4	-3		3	-1	1	1	-0	0
TANZANIA	88	60	-1	27	11	15		19	-16	-0	-0		-1	2
TOGO	27	-3		33	-1	15	8	-4	11	-0			4	-2
UGANDA	162	163	18	-31	-8	-5	3	11	-28	-6	6	-2	-3	13
ZAIRE	138	81	-2	30	4	17	38	-38	4	7	-7	-3	8	29
ZIMBABWE	-40	-4	-1	-24	-8	-11	-0		-4	-0			-0	-10
TOTAL SUBSAHARA	1487	516	151	699	215	-80	452	52	4	-42	112	-16	2	120
PERCENTAGE OF TOTAL	•	93	-	-	-	12	-	-	-	16	-	38	-	•
TOTAL IMPORTS	-1722	553	-316	-1614	-119	-662	-59	-215	-117	-263	-33	-42	-104	-345

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987, 1977 (PARIS 1979,1989).

TABLE 13

OECD IMPORTS OF COFFEE (SITC 071) FROM SELECTED SUBSAHARAN COUNTRIES, 1987

In mln. current US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETH. LANDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1987														
ANGOLA	52	13	10	18		3			11				4	11
BENIN	3			3			3							
BURUNDI	62	25		31	0	19	6	1	2	3			1	6
CAMEROON	265	33	11	220	6	60	79	48	20	3	3	1	1	1
CENTRAL AFRICAN REP.	48			48		38	9						1	
ETHIOPIA	169	87	22	45	2	17	13	13	0	0			-0	15
GHANA	15	0		13	12								0	2
GUINEA	6	1		4		2	2	1					0	1
IVORY COAST	1123	187	74	841	68	56	384	116	85	1	118	3	10	22
KENYA	557	55	7	407	102	193	18	13	62	9			10	88
LIBERIA	42	15		26	2	2	9		5			0	9	1
MADAGASCAR	156	47	10	99		14	66	7	1		8		3	
MALAWI	2			1	0	0	0						0	1
MOZAMBIQUE	8			0									0	8
NIGERIA	15			15	7	3	1					4	1	
RWANDA	68	32	4	30	3	12	12	2					1	2
SIERRA LEONE	32	17		14	9	0	2		1		2	1	0	0
TANZANIA	207	60	11	117	6	76	4	24	4	1			2	19
TOGO	33			30		6	11	1	11	1				3
UGANDA	458	247	35	159	45	13	42	19	2		37		2	17
ZAIRE	416	89	1	295	8	44	116	90	3	14	8	2	9	31
SUBTOTAL SUBSAHARA	3736	909	185	2415	270	520	805	343	206	32	174	11	53	228
PERCENTAGE OF TOTAL	29	21	25	38	54	27	60	46	32	9	39	20	17	13
TOTAL IMPORTS	13072	4258	727	6327	496	1906	1344	751	640	369	446	53	322	1760

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987 (PARIS 1989).

TABLE 14

OECD COCOA IMPORTS (SITC 072) FROM SELECTED SUBSAHARAN COUNTRIES, 1987

In min. current US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETH. LANDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES														
ANGOLA	1			1						1				
BENIN	5			5		1	2	1	1					
CAMEROON	199	5	1	192	1	38	39	1	111	0.8	.2		-1	1
GHANA	723	85	123	431	161	64	20	13	88	5	52		28	84
GUINEA	1.5			1.5		2				0.4			-1	
IVORY COAST	548	123	3	402.4	33	97	143	29	69	12	18		1	20
LIBERIA	6.4	1.6		4.8		2			2.8					
MADAGASCAR	6			6		1	4						1	
NIGERIA	465	60	9	368	124	70	49	44	69	4	1		7	28
RWANDA	1			1							1			
SIERRA LEONE	6.4			6.4					6.4					
TANZANIA	2			2	1	1								
TOGO	38			38		15	3	3	11	1	1		4	
UGANDA	1			1					1					
ZAIRE	17			17		4	1		7	5				
SUBTOTAL SUBSAHARA	2020	275	136	1477	320	295	261	91	366	29	75	0	40	133
PERCENTAGE OF TOTAL	52	30	64	64	78	56	73	69	67	23	59	-	57	31
TOTAL IMPORTS	3875	925	213	2304	411	528	356	131	546	127	127	8	70	433

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987 (PARIS 1989).

TABLE 15 .

OECD IMPORTS OF TEA (SITC 074) FROM SELECTED SUBSAHARAN COUNTRIES, 1987

In mln. current US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETH.-LANDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES														
BURUNDI	3			3	3									
KENYA	175	23	1	139	119	1	1		9	1			8	12
MALAWI	49	8		40	36				2				2	1
MOZAMBIQUE	34	3		31	26				4				1	
RWANDA	7			7	6								1	
SIERRA LEONE	1			1	1									
TANZANIA	30	1		27	25				1				1	2
UGANDA	5			4	4									1
ZAIRE	3			2	2									1
ZIMBABWE														
SUBSAHARA	307	35	1	254	222	1	1	0	16	1	0	0	13	17
% OF TOTAL	26	20	3	32	38	3	4	-	25	14	-	-	28	9
TOTAL IMPORTS	1190	175	39	785	585	34	25	13	63	7	11	1	46	191

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987 (PARIS 1989).

TABLE 16

OECD IMPORTS OF TEXTILE FIBRES (SITC 26) FROM SELECTED SUBSAHARAN COUNTRIES

SITC 26 includes cotton, sisal and their waste, but excludes wool. In mln current US $.

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETH. LNDS	BELG.	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1977														
BENIN	42			36.9	0.1	2.6	1.6	1.2	0.1	0.1	3.4	27.7	0	6
BURKINA FASO	20		1	19	0	1	9	1		3	2	4		
CENTRAL AFRIC. REP.	0													
CAMEROON	41			38	3.5	13.8	6.5	4.7		3.3	0.6	5.6		3
CHAD	36			36.3	0.3	11.7	3.6		0.3	2.4	1	14.3	3	
IVORY COAST	52	0	4	38	2	10	8	2	3	0	2	11		10
MALI	46		2	44	10	9	7	0	3	2	4	7	2	0
SENEGAL	0													
SUDAN	0													
TANZANIA	26			21.6	1.3	1.7	0.1	2.4			2.3	12.3	2	5
TOGO	22		0	20	0	2	2	1			5	10	0	2
ZIMBABWE	60		5	51	0	13		30	1		0	7		4
SUBSAHARA	345	0	12	304	18	63	38	42	7	11	20	7	98	29
% OF TOTAL	3	-	0	4	2	5	3	2	3	1	4	100	15	2
TOTAL IMPORTS	11817	584	2525	7490	1040	1262	1088	1964	213	773	487	7	656	218
EXPORTING COUNTRIES 1987														
BENIN	6		4	2			2							
BURKINA FASO	22		2	20		4	12	1	1			1		1
CENTRAL AFRIC. REP.	16		6	9		3	6							
CAMEROON	..													
CHAD	77		17	57		12	14	4	1	3	13	8	2	3
IVORY COAST	26		4	22		4	9	1	4				4	
MALI	51		6	45	2	7	24	2	5			3	2	
SENEGAL	15			15	2	3	7							3
SUDAN	127	1	26	96	7	19	2	51		1	4	6	6	4
TANZANIA	19		3	11	3		1	1		2	1	1	2	5
TOGO	..													
ZIMBABWE	..													
SUBSAHARA	359	1	68	277	14	52	77	60	11	6	22	21	14	13
% OF TOTAL	4	0	3	5	2	5	8	5	6	1	7	8	2	1
TOTAL IMPORTS	9450	225	2004	6100	815	1091	945	1127	193	614	305	276	734	121

TABLE 16 (TEXTILE FIBRES) CONTINUED

	OECD TOTA	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETH.-LANDS	BELG.	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
INCREASE / DECREASE EXPORTING COUNTRY 1987 - 1977														
BENIN	-36		4	-35	-0	-3	0	-1	-0	-0	-3	-28	-0	-6
BURKINA FASO	2		1	1	-0	4	3	0	1	-3	-1	-4	1	
CENTRAL AFRIC. REP.	16		6	9		3	6							
CAMEROON	-41			-38	-4	-14	-7	-5		-3	-1	-6		-3
CHAD	41		17	21	-0	0	10	4	1	1	12	-6	-1	3
IVORY COAST	-26	-0	.0	-16	-2	-6	1	-1	1	-0	-2	-7		-10
MALI	5		4	1	-8	-2	17	2	2	-2	-1	-5	-2	-0
SENEGAL	15			15	2	3	7						3	
SUDAN	127	1	26	96	7	19	2	51		1	4	6	6	4
TANZANIA	-7		3	-11	2	-2	1	-1		2	-1	-11	1	0
TOGO	-22		-0	-20	-0	-2	-2	-1			-5	-10	-0	-2
ZIMBABWE	-60		-5	-51	-0	-13		-30	-1			-0	-7		-4
SUBSAHARA	14	1	56	-27	-4	-11	39	18	4	-5	2	14	-84	-16
% OF CHANGE	-	-	-	2	2	7	-	-	-	3	-	5	-	17
TOTAL IMPORTS	-2367	-359	-521	-1390	-225	-171	-143	-857	-20	-159	-182	269	78	-97

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987, 1977 (PARIS 1979,1989).

TABLE 17

OECD IMPORTS OF FIXED VEGETABLE OILS AND FATS (SITC 42) FROM SELECTED SUBSAHARAN COUNTRIES

In mln. current US $. SITC 42 includes palm & groundnut oil

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGDOM	WEST-GERMANY	FRANCE	ITALY	NETHER-LANDS	BELG.	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1977														
CAMEROON	14			14	6	2	0		5				-0	
BENIN	0													
GAMBIA	0													
IVORY COAST	52			52	11	18	10	6	5	1		0	1	
SUDAN	0													
ZAIRE	0													
SENEGAL	53			53		0	41	9	0	2			0	
SUBSAHARA	119	0	0	119	18	21	52	15	10	3	0	0	1	0
% OF TOTAL	1	-	-	1	9	1	5	1	1	0	-	1	0	-
TOTAL IMPORTS	23527	2597	6132	11414	201	3194	1055	1609	775	1606	948	37	1989	3384
EXPORTING COUNTRIES 1987														
CAMEROON														
BENIN	10		1	9	4		1	1	3		1		-1	
GAMBIA	17			17	8		9							
IVORY COAST	38			38	4	16	8	4	3	2			1	
SUDAN	20			20		1	14	1		1			3	
ZAIRE	23			23	5	5	5	1	4	1		1	1	
SENEGAL	174			174	1	1	149	17	1	4			1	
SUBSAHARA	282	0	1	281	22	23	186	24	11	8	1	1	5	0
PERCENTAGE OF TOTAL	10	-	1	15	8	7	38	7	4	6	2	9	12	-
TOTAL IMPORTS	2957	514	139	1928	282	334	484	327	274	127	46	11	43	356
INCREASE / DECREASE PER EXPORTING COUNTRY 1987 - 1977														
CAMEROON	-14			-14	-6	-2	-0		-5				0	
BENIN	10		1	9	4		1	1	3		1		-1	
GAMBIA	17			17	8		9							
IVORY COAST	-14		.	-14	-7	-2	-2	-2	-2	1		-0	0	
SUDAN	20			20		1	14	1		1			3	
ZAIRE	23			23	5	5	5	1	4	1		1	1	
SENEGAL	121			121	1	1	108	8	1	2			1	
SUBSAHARA	163	0	1	162	4	2	134	9	2	5	1	1	4	0
% OF CHANGE	-	-	-	-	5	-	-	-	-	-	-	-	-	-
TOTAL IMPORTS	-20590	-2083	-5993	-9486	81	-2860	-571	-1282	-501	-1479	-902	-26	-1946	-3028

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987, 1977 (PARIS 1979,1989).

TABLE 18

OECD IMPORTS OF OIL SEEDS AND OLEAGINOUS FRUITS (SITC 22) FROM SELECTED SUBSAHARAN COUNTRIES

SITC 22 includes groundnuts. In mln. current US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETH.-LANDS	BELG.	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1977														
BENIN	6		2	3				2	1		0		0	1
BURKINA FASO	3		2	0		0	0							1
THE GAMBIA	7			0	0							0	-0	7
IVORY COAST	0													
MALAWI	7			7	6	0	1						0	
MALI	0													
MOZAMBIQUE	0													
NIGERIA	11			11	7				3			1		
SENEGAL	0													
SUDAN	14	0		8	1				0	0		2	4	7
TOGO	6		3	3	0			1	0			0	2	1
SUBSAHARA	54	0	6	31	15	0	1	3	4	0	0	3	6	17
% OF TOTAL	1	-	0.	1	3	-	·0	1	0	-	-	1	6	5
TOTAL IMPORTS	7767	61	1617	5736	419	1710	225	314	1279	718	637	338	96	354
EXPORTING COUNTRIES 1987														
BENIN	2		1	1			0						0	0
BURKINA FASO	11		2	9	4		2	2					1	
THE GAMBIA	19			10	1	0	3	1				5	0	9
IVORY COAST	16		1	14.4	2.9	4.3	1.8	1.3	1.3	0.3	1.7		1	1
MALAWI	15			15	13				1				1	
MALI	19		3.2	8.7	0.7		6						2	7
MOZAMBIQUE	16		3.4	12.2		2	2		1		1	6	0	0
NIGERIA	81		4	73	18	18	2	1	25				9	4
SENEGAL	29			28	3	0.4	0.9	8.4	3			12	0	1
SUDAN	111		27	80	0	15	42	12	1		0	6	5	4
TOGO	2			2									2	
SUBTOTAL SUBSAHAR	321	0	42	254	43	40	60	26	32	0	3	28	22	25
PERCENTAGE OF TOT	5	-	3	6	8	3	19	6	5	-	1	22	12	7
TOTAL IMPORTS	6354	48	1532	4422	522	1438	316	409	618	258	550	131	180	352

TABLE 18 (OIL SEEDS) CONTINUED

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETH.-LANDS	BELG.	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
INCREASE / DECREASE														
PER EXPORTING COUNTRY														
1988 - 1977														
BENIN	-4		-0	-2			0	-2	-1		-0		-0	-1
BURKINA FASO	8		0	9	4		2	2					1	-1
THE GAMBIA	12			10	1	0	3	1			-0	5	0	2
IVORY COAST	16	1	14	3	4		2	1	1	0	2		1	1
MALAWI	8	·	8	7	-0	-1			1	·			1	
MALI	19	3	9	1			6						2	7
MOZAMBIQUE	16	3	12			2	2		1		1	6	0	0
NIGERIA	70	4	63	11	18		2	1	22			-1	9	4
SENEGAL	29		28	3	0		1	8	3			12	0	1
SUDAN	97	27	73	-1	15	42	12	1		0	3	1	-3
TOGO	-4	-3	-0	-0				-1	-0		-0		1	-1
SUBSAHARA	267		36	222	28	39	59	23	29	0	3	25	16	9
% OF TOTAL CHANGE	-	-	-	-	27	-	65	24	-	-	-	-	19	-
TOTAL IMPORTS	-1413	-13	-85	-1314	103	-272	91	95	-661	-460	-87	-207	84	-2

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987, 1977 (PARIS 1979,1989).

TABLE 19

OECD IMPORTS OF SUGAR (SITC 06) FROM SELECTED SUBSAHARAN COUNTRIES

IN MLN. US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETHER-LANDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1977														
P.R. CONGO	10	3		6			6	0					0	
ETHIOPIA	1			1			0	0	1			1	-0	
IVORY COAST	13	3		10	1		7		1			0	1	0
KENYA	2			2	0		0	0			1		0	0
MADAGASCAR	10	3		7			7							
MALAWI	16			16	11		3		0	1	0	1	-0	0
MAURITIUS	300	6		277	204	2	51	4	3	2	1	9	1	17
MOZAMBIQUE	13	9	·	4	1				2	1	·	1	0	0
REUNION	135			135	2	1	86		0			46	0	
SWAZILAND	78			76	39		28		0		0	8	0	2
TANZANIA	7			7	1		6	0				0	-0	
ZIMBABWE	48	4		33	23		0					10	-0	10
SUBSAHARA	633	28	0	575	283	3	194	5	7	4	2	75	2	30
% OF TOTAL	12	3	-	19	33	1	45	2	2	2	2	53	1	4
TOTAL IMPORTS	5147	920	476	3025	856	499	429	269	312	149	130	143	238	726
EXPORTING COUNTRIES 1987														
P.R. CONGO	4			4	0	0	3						0	
ETHIOPIA	1			1			0	0		0			-0	
IVORY COAST	0	0												
KENYA	3	0		2	1		1		1				-0	0
MADAGASCAR	9	2		7			6						1	
MALAWI	10	6		3	2		2							
MAURITIUS	195	12		178	170		1	2	1	1			2	6
MOZAMBIQUE	67	21	·	45	38	1	1		3	0	·	0	2	1
REUNION	105			105	34	0	68		0			3		
SWAZILAND	6			5	4			0	0	1			0	0
TANZANIA	3			3	3	0			0					
ZIMBABWE	3													3
SUBTOTAL SUBSAHARA	405	42	0	354	252	2	82	2	6	2	0	3	5	10
SUBSAHARA AS % OF TS	10	4	-	21	35	1	51	1	5	3	-	5	7	2
TOTAL IMPORTS	4135	1157	837	1646	717	162	159	208	107	71	81	65	76	495

TABLE 19 (SUGAR) CONTINUED

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITAL.	NETH. LANDS	BELG.	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
INCREASE/DECREASE PER EXPORTING COUNTRY 1987 - 1977														
P.R. CONGO	-6	-3		-3	0	0	-3	-0					0	
ETHIOPIA	-1			-1			0		-1	0	-1		0	
IVORY COAST	-13	-3		-10	-1		-7		-1			-0	-1	-0
KENYA	1	0		0	0		1	-0	1		-1	-0	-0	0
MADAGASCAR	-1	-1		0			-1						1	
MALAWI	-6	6		-12	-10		-1		-0	-1	-0	-1	0	-0
MAURITIUS	-105	5		-99	-34	-2	-50	-2	-2	-1	-1	-9	1	-11
MOZAMBIQUE	54	12		41	37	1	1		1	-1		-1	2	0
REUNION	-30			-30	32	-1	-18		0			-43	-0	
SWAZILAND	-73			-71	-35		-28	0	-0	1	-0	-8	-0	-2
TANZANIA	-4			-4	2	0	-6	-0	0			-0	0	
ZIMBABWE	-45	-4		-33	-23		-0					-10	0	-7
SUBSAHARA	-228	13	0	-221	-31	-1	-112	-3	-1	-1	-2	-72	3	-20
% OF TOTAL CHANGE	22	6	-	16	22	0	42	4	1	2	4	93	-	9
TOTAL IMPORTS	-1012	237	361	-1378	-139	-357	-270	-61	-205	-78	-49	-78	-162	-231

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987, 1977 (PARIS 1979,1989).

TABLE 20

OECD IMPORTS OF SPICES (SITC 075) FROM SELECTED SUBSAHARAN COUNTRIES, 1987

In mln. current US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGDOM	WEST-GERMANY	FRANCE	ITALY	NETHER-LANDS	BELG.	SPAIN	PORT. GAL	OTH. EEC	OTH. OECD
EXPORTING COUNTRIES														
KENYA	1			1	0	0			0				0	
MADAGASCAR	51	24	2	22	0	8	12	1	0		0		1	3
NIGERIA	3	1		2	1	0							0	0
SIERRA LEONE	1			1	1									
TANZANIA	10	4	1	5	1	2	1	0	1	0			1	1
SUBSAHARA	66	28	2	31	4	10	13	1	1	0	0		1	4
% OF TOTAL	15	21	3	16	14	15	32	4	7	1	4		24	7
TOTAL IMPORTS	450	138	66	189	27	67	41	15	15	9	7	2	6	57

TABLE 21

OECD IMPORTS OF TOBACCO AND TOBACCO MANUFACTURES (SITC 12) FROM SELECTED SUBSAHARAN COUNTRIES

IN MLN. CURRENT US DOLLARS

	OECD TOTAL	USA	JAPAN	EEC	UNIT. KINGD.	WEST-GERM.	FRAN.	ITALY	NETH. LANDS	BELG.	SPAIN	PORT. GAL	OTHER EEC	OTHER OECD
IMPORTS 1977														
CAMEROON	12	7		5	1	0	2		2	0	1		-1	0
MALAWI	191	21	25	126	13	58	8		34	5	3	0	5	19
MOZAMBIQUE														
TANZANIA	14			14	6	2	0		4	0			1	0
ZAMBIA	13	0		9	1	5	0		2	1		0	-0	4
ZIMBABWE	169	6	3	140	34	37	3	1	16	28	0	6	16	20
SUBTOTAL	398	34	28	293	55	102	13	1	58	33	4	7	21	43
% OF TOTAL	6	5	3	6	10	11	2	0	9	11	1	25	9	6
TOTAL IMPORTS	6998	730	996	4582	538	917	767	788	660	308	351	27	226	689
IMPORTS 1987														
CAMEROON	16	8		7	1	1	1		3	0	2		-0	1
MALAWI	70	2	1	61	33	5	3		14	1	1	0	4	6
MOZAMBIQUE	14	0.3		13	2.5	1	0.4		4.2	3.7		0.4	1	1
TANZANIA	23			22	16	1	0		3				2	1
ZAMBIA	7			7	3	1	0		0	1			3	
ZIMBABWE	2													2
SUBTOTAL	132	10	1	110	55	8	5		24	6	3	1	9	10
% OF TOTAL	6	3	0	8	14	2	7		13	5	2	6	11	4
TOTAL IMPORTS	2343	319	288	1472	392	393	74	105	184	103	128	14	79	264
INCREASE / DECREASE OF IMPORTS 1977 - 1987														
CAMEROON	4	1		3		0	-0		1		1		0	0
MALAWI	-121	-19	-24	-65	21	-53	-5		-20	-4	-2		-1	-13
MOZAMBIQUE	14	0		13	3	1	0		4	4		0	1	1
TANZANIA	9	.		8	10	-1			-1	-0	.		1	0
ZAMBIA	-6	-0		-2	2	-4	-0		-2			-0	3	-4
ZIMBABWE	-167	-6	-3	-140	-34	-37	-3	-1	-16	-28	-0	-6	-16	-18
SUBTOTAL	-267	-24	-27	-183	1	-94	-8	-1	-34	-28	-1	-6	-12	-33
% OF TOTAL	6	6	4	6	-	18	1	0	7	14	0	45	8	8
TOTAL IMPORTS	-4655	-411	-708	-3110	-146	-524	-693	-683	-476	-205	-223	-13	-147	-425

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987, 1977 (PARIS 1979,1989).

TABLE 22

OECD IMPORTS OF CRUDE RUBBER (SITC 23) FROM SELECTED SUBSAHARAN COUNTRIES

IN MLN. CURRENT US DOLLARS

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGDOM	WEST- GERMANY	FRANCE	ITALY	NETHER- LANDS	BELGIUM	SPAIN	PORT. GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1977														
CAMEROON	25	0		25	0	1	21	1	0		1		0	-0
IVORY COAST	55	5		49	4	12	22	5	0	0	5		1	1
LIBERIA	91	65		26	2	2	5	11	1	0	4	0	0	1
NIGERIA	32	1		27	15	3	3	3	0	0	3		0	3
ZAIRE														
SUBSAHARA	203	71	0	127	22	18	52	20	1	1	12	0	2	5
% OF TOTAL	4	6	-	4	6	3	10	4	1	0	4	-	2	1
TOTAL IMPORTS	5482	1220	661	2857	373	705	504	455	130	263	288	52	87	744
EXPORTING COUNTRIES 1987														
CAMEROON	14			14	2	1	10	1			0	0	-0	
IVORY COAST	13	0		13	1	1	7	3	0	0	0		1	0
LIBERIA	68	55		11	1	1	3	5	1	0	0		-0	2
NIGERIA	19	1		19	15	1	0	1	1	0	0		0	-1
ZAIRE	21	1		20	1	7.3	3	3			15	4	-13	
SUBSAHARA	115	56	0	57	19	4	20	10	2	1	1	0	0	1
% OF TOTAL	4	7	-	3	6	1	6	4	3	1	1	-	1	0
TOTAL IMPORTS	3172	792	284	1678	290	390	311	247	82	96	173	26	63	418
INCREASE / DECREASE PER EXPORTING COUNTRY 1987 - 1977														
CAMEROON	-11	-0		-11	1	-0	-11	0	-0	0	-1		-0	0
IVORY COAST	-41	-5		-36	-3	-11	-15	-2		-0	-5		-1	-0
LIBERIA	-23	-10		-15	-1	-1	-2	-6	1	-0	-4	-0	-1	1
NIGERIA	-13	-0		-8	0	-2	-3	-2	1	-0	-3		0	-4
ZAIRE	21	1		20	1	7	3	3			15	4	-13	
SUBSAHARA	-88	-15	0	-70	-3	-14	-31	-9	1	-0	-11	-0	-1	-3
% OF TOTAL	4	4	-	6	4	4	16	5	-	-	10	-	5	1
TOTAL IMPORTS	-2310	-428	-377	-1179	-83	-315	-193	-208	-48	-167	-115	-26	-24	-326

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987, 1977 (PARIS 1979,1989).

TABLE 23

OECD IMPORTS OF TIMBER AND WOOD (SITC 24) FROM SELECTED SUBSAHARAN COUNTRIES

SITC 24 includes cork. In mln. current US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGDOM	WEST-GERMANY	FRANCE	ITALY	NETHER-LANDS	BELG.	SPAIN	PORT. GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1977														
CAMEROON	173	1	4	163	5	18	27	33	18	11	38	7	7	6
P.R.CONGO	96	0	5	87	1	11	18	13	0	3	17	22	2	4
EQUAT. GUINEA	23			23		5	2	4	3	0	8	0	0	0
GABON	168	0	40	119	1	5	67	13	4	2	7	10	10	9
GHANA	112	3		105	20	34	7	19	3	1	9	3	10	3
IVORY COAST	286	3	0	275	14	10	55	88	4	4	49	17	33	8
LIBERIA	105			99	4	14	55	6	1	1	6	12	0	6
ZAIRE	37	0	1	35	2	10	1	7	5	3	4	5		1
SUBSAHARA	999	8	50	905	46	106	232	183	37	24	137	77	63	37
%OF TOTAL	5	0	1	10	2	7	27	10	5	4	28	65	10	1
TOTAL IMPORTS	21961	3528	7065	8645	1968	1454	864	1749	811	580	491	118	610	2723
EXPORTING COUNTRIES 1987														
CAMEROON	101	0	5	95	5	19	15	5	16	15	12	5	3	1
P.R.CONGO	34		1	33	1	8	6	5	1	1	5	6		
EQUAT. GUINEA	3			3		1	2							
GABON	132		1	129	1	10	71	2	4	1	12	1	27	2
GHANA	76	1	1	71	11	35	2	12	3	1	1		6	3
IVORY COAST	438	2	2	425	23	61	90	116	11	9	65	33	17	9
LIBERIA	63			60	8	19	13	2	4	2	11	1		3
ZAIRE	8			7	1	4							2	1
SUBSAHARA	855	4	10	823	50	157	199	142	39	29	106	46	55	19
% OF TOTAL	7	0	0	14	4	15	29	13	6	7	35	66	14	2
TOTAL IMPORTS	12610	1996	3820	5718	1124	1023	678	1071	665	395	306	70	386	1076

TABLE 23 (TIMBER) CONTINUED

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGDOM	WEST-GERMANY	FRANCE	ITALY	NETHER-LANDS	BELGIUM	SPAIN	PORT. GAL	OTHER EEC	OTHER OECD
INCREASE / DECREASE PER EXPORTING COUNTRY 1987 - 1977														
CAMEROON	-72	-0	1	-68	1	1	-12	-28	-2	4	-26	-2	-4	-6
P.R.CONGO	-62	-0	-4	-54	0	-3	-12	-8	1	-2	-12	-16	-2	-4
EQUAT. GUINEA	-20			-20		-4	-0	-4	-3	-0	-8	-0	-0	-0
GABON	-36	-0	-39	10	0	5	4	-11	0	-1	5	-9	17	-7
GHANA	-36	-2	1	-34	-9	1	-5	-7	0	0	-8	-3	-4	0
IVORY COAST	152	-1	2	151	9	51	35	28	7	5	16	16	-16	1
LIBERIA	-42			-39	4	5	-42	-4	3	2	5	-11	-0	-3
ZAIRE	-29	-0	-1	-28	-1	-6	-1	-7	-5	-3	-4	-5	2	0
SUBSAHARA	-144	-4	-40	-82	4	51	-33	-41	2	5	-31	-31	-8	-19
% OF TOTAL	2	0	1	3	-1	-	18	6	-	-	17	64	4	1
TOTAL IMPORTS	-9351	-1532	-3245	-2927	-844	-431	-186	-678	-146	-185	-185	-48	-224	-1647

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987, 1977 (PARIS 1979,1989).

TABLE 24

OECD IMPORTS OF IRON ORE (SITC 281) FROM SELECTED SUBSAHARAN COUNTRIES

SITC 281 includes iron ore plus concentrates. In mln. current US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERM.	FRANCE	ITALY	NETHER-LANDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1987														
GUINEA	0.4			0.4			0.4							
LIBERIA	370	30	8	329	5	157	31	64	22	14	28		8	3
MAURITANIA	174		19	155	20	22	53	22		21	14	3		
SWAZILAND	21		21											
SUBSAHARA	565	30	48	484	25	179	84	86	22	35	42	3	8	3
% OF TOTAL	9	3	2	20	7	20	28	31	16	14	37	30	35	2
TOTAL IMPORTS	6113	957	2554	2410	383	910	298	281	140	251	114	10	23	192

TABLE 25

OECD IMPORTS OF URANIUM (SITC 286) FROM SELECTED SUBSAHARAN COUNTRIES, 1987

SITC 286 includes ores and concentrates of uranium and thorium. In mln. current US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGDOM	WEST-GERMANY	FRANCE	ITALY	NETHER-LANDS	BELGIUM	SPAIN	PORT. GAL	OTH. EEC	OTH. OECD
EXPORTING COUNTRIES														
GABON	63			63			63							
NIGER	52			52			52							
SUBSAHA	115	0	0	115	0	0	115	0	0	0	0	0	0	0
% OF TOTAL	95	-	-	96	-	-	96	-	-	-	-	-	-	-
TOTAL IMPORTS	121	1	0	120	0	0	120	0	0	0	0	0	0	0

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987 (PARIS 1989).

TABLE 26

OECD IMPORTS OF NON-FERROUS ORES AND CONCENTRATES (SITC 283) FROM SELECTED SUBSAHARAN COUNTRIES, 1987

In mln. current US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGD.	WEST-GERMANY	FRANCE	ITALY	NETHER-LANDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES														
BOTSWANA														
GABON	105	34	6	49	2		28	6		1	6	6		16
GUINEA	156	43		89		37	43	10					-1	24
GHANA	26			23	11		1			3	6		2	3
LIBERIA	1			1			1							
MAURITANIA	10			10		2						7	1	
NIGER														
SIERRA LEONE	14	1		10	1	9								3
SWAZILAND														
ZAIRE	86	3	42	37	1	2				33			1	4
SUBSAHARA	398	81	48	219	15	50	73	16	0	37	19	6	3	50
% OF TOTAL	6	9	3	8	3	6	16	8	-	13	9	35	50	6
TOTAL IMPORTS	6242	871	1912	2681	519	772	448	196	226	282	215	17	6	778

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987 (PARIS 1989).

TABLE 27

OECD IMPORTS OF METALLIFEROUS ORES AND CONCENTRATES (SITC 28) FROM SELECTED SUBSAHARAN COUNTRIES

SITC 28 excludes scrap. In mln. current US $

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGDOM	WEST-GERMANY	FRANCE	ITALY	NETH. LNDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
EXPORTING COUNTRIES 1977														
BOTSWANA	44													44
GABON	90	5	2	65		2	40	14	8	0	1			18
GUINEA	387	114		254	12	48	19				67		109	20
GHANA														
LIBERIA	325	20	3	299	4	158	18	86		18	16		-0	3
MAURITANIA	157	8	2	147	7	11	39	28		48	9	5		
NIGER														
SIERRA LEONE	62	7		46	10	24	4		9				-0	8
SWAZILAND														
ZAIRE														
SUBSAHARA	1064	153	8	811	33	242	119	129	16	66	92	5	109	92
% OF TOTAL	5	6	0	7	17	8	11	8	2	4	10	12	5	3
TOTAL IMPORTS	23527	2597	6132	11414	201	3194	1055	1609	775	1606	948	37	1989	3384
EXPORTING COUNTRIES 1987														
BOTSWANA														
GABON	168	34	6	112	2		91	6		1	6	6		16
GUINEA	156	43		89		37	43	10					-1	24
GHANA	26			23	11		1			3	6		2	3
LIBERIA	371	30	8	330	5	157	32	64	22	14	28		8	3
MAURITANIA	184		19	165	20	24	53	22		21	21	3	1	
NIGER	52			52			52							
SIERRA LEONE	14	1		10	1	9								3
SWAZILAND	21		21											
ZAIRE	86	3	42	37	1	2				33			1	4
SUBSAHARA	1078	111	96	818	40	229	272	102	22	72	61	9	11	53
% OF TOTAL	9	6	2	16	4	14	31	21	6	14	19	33	38	5
TOTAL IMPORTS	12476	1829	4466	5211	902	1682	866	477	366	533	329	27	29	970

TABLE 27 (METALLIFEROUS ORES) CONTINUED

	OECD TOTAL	USA	JAPAN	EEC	UNITED KINGDOM	WEST-GERMANY	FRANCE	ITALY	NETH. LNDS	BELGIUM	SPAIN	PORTU-GAL	OTHER EEC	OTHER OECD
INCREASE / DECREASE PER EXPORTING COUNTRY 1987 - 1977														
BOTSWANA	-44													-44
GABON	78	29	4	47	2	-2	51	-8	-8	1	5	6		-2
GUINEA	-230	-71		-164	-12	-11	25	10			-67		-110	5
GHANA	26			23	11		1			3	6		2	3
LIBERIA	46	10	5.	31	1	-1.	14	-22	22	-4	13		8	-0
MAURITANIA	27	-8	17	18	13	13	14	-6		-27	12	-2	1	
NIGER	52			52			52							
SIERRA LEONE	-48	-6		-36	-9	-15	-4		-9				0	-5
SWAZILAND	21		21											
ZAIRE	86	3	42	37	1	2				33			1	4
SUBSAHARA	15	-42	88	7	7	-13	153	-26	6	6	-31	4	-98	-39
% OF TOTAL	-	5	-	-	1	1	-	2	-	-	5	-	5	2
TOTAL IMPORTS	-11051	-768	-1666	-6203	701	-1512	-189	-1132	-409	-1073	-619	-10	-1960	-2414

SOURCE: OECD, FOREIGN TRADE BY COMMODITIES, VOLUME II: IMPORTS, 1987, 1977 (PARIS 1979,1989).

TABLE 28

EXPORT DESTINATION OF NON-FUEL PRIMARY COMMODITIES FROM DEVELOPING AFRICA a)

Percentages of total export b)

COMMODITY SPECIFICATION AND PERIOD	WORLD	DMECs	DEVELOPING COUNTRIES				SOCIAL. ASIA (CHINA)	USSR &. SOCIAL. EUROPE
			TOTAL	ASIA	AMERICA	AFRICA		
TOTAL NON-FUEL COMMODITIES (SITC 0+1+2+4+68)								
1966-70	100	80.4	9.9	4.7	0.4	4.5	1.2	7.4
1975-79	100	78.1	11.3	4.4	1.1	5.5	1.4	8.1
1984-86	100	75.2	16.7	6.5	2.2	7.3	1.2	6.5
TOTAL FOOD PRODUCTS (SITC 0+1+22+4)								
1966-70	100	79.0	12.8	5.0	0.4	7.1	0.3	6.8
1975-79	100	78.3	13.1	4.7	0.7	7.4	0.5	7.7
1984-86	100	75.2	17.4	5.9	2.3	9.0	0.5	6.4
TOTAL AGRICULTURAL RAW MATERIALS [SITC 2-(22+27+28)]								
1966-70	100	65.1	13.4	9.8	0.2	3.1	3.4	17.4
1975-79	100	69.9	11.1	6.2	0.9	3.6	5.4	13.3
1984-86	100	68.5	20.1	10.8	2.0	5.9	1.7	9.5
TOTAL MINERALS AND ORES (SITC 27+28+68)								
1966-70	100	91.9	3.2	1.3	0.5	1.2	1.2	2.0
1975-79	100	82.7	7.3	2.4	2.0	2.4	1.2	5.8
1984-86	100	80.3	12.1	4.7	2.3	4.0	2.6	4.5

Notes: a) This includes North Africa. b) Percentages not always add up to 100 owing to an unallocated export residual. Source: UNCTAD, Commodity Yearbook 1988.

TABLE 29

PURCHASING POWER OF SUBSAHARAN EXPORT EARNINGS FROM NON-FUEL PRIMARY COMMODITIES, 1971-1987

(in developed countries export prices of 1980)

Country	1971	1974	1977	1979	1980	1981	1982	1983	1984	1985	1986	1987
Benin	190	128	191	136	101	74	68	89	73	79	39	47
Botswana	56	124	266	201	150	200	179	269	304	324	301	335
Burkina Fasso	67	108	140	131	143	142	117	129	135	107	126	180
Burundi	53	51	131	118	61	70	89	81	106	118	148	108
Cameroon	561	793	1040	949	893	644	518	625	739	831	683	709
Central Afr.Rep.	79	80	155	77	109	84	83	88	95	107	99	93
Congo P.R.	61	57	257	58	60	111	145	125	150	137	128	141
Ethiopia	351	447	493	453	392	357	399	410	445	352	443	350
Gabon	254	319	1984	442	340	435	444	450	567	558	458	478
The Gambia	41	69	71	62	30	27	45	51	54	47	44	29
Ghana	953	1090	1405	1123	1212	969	850	564	605	657	876	898
Ivory Coast	1243	1897	3182	2477	2658	2166	1878	1800	2501	2808	2807	2326
Kenya	670	816	1765	806	734	682	634	719	875	813	939	587
Liberia	632	697	671	593	570	531	495	464	495	478	403	346
Madagascar	377	351	513	406	355	285	302	297	343	282	288	236
Malawi	190	191	295	236	253	253	236	227	319	248	205	202
Mali	96	101	185	131	171	133	130	155	182	163	135	140
Mauritania	251	316	232	162	190	224	253	341	326	417	416	356
Mauritius	181	505	458	308	306	211	267	281	270	281	390	441
Niger	108	82	236	503	561	459	347	336	85	83	220	187
Nigeria	1269	1076	1108	1050	942	1031	561	727	710	318	302	528
Rwanda	64	90	188	229	133	117	115	137	161	144	166	119
Senegal	260	559	920	484	315	224	357	437	481	406	469	493
Seychelles	4	6	16	6	5	4	3	4	10	10	5	5
Sierra Leone	102	92	194	93	81	63	60	70	79	65	51	40
Somalia	105	112	105	118	126	181	180	107	61	102	104	106
Sudan	953	746	976	638	574	528	435	606	776	618	445	384
Tanzania	538	518	826	452	428	512	377	369	326	235	290	257
Togo	184	371	294	278	354	365	336	264	234	241	260	227
Uganda	681	559	869	489	342	251	373	411	453	449	445	200
Zaire	1833	2324	1640	2073	2288	1928	1504	1412	1630	1599	1430	1346
Zambia	1956	2463	1325	1527	1331	1016	982	1089	986	902	672	766
Zimbabwe	968	1213	1295	968	1002	1103	1017	863	890	819	797	730
Total	15335	18350	23424	17774	17210	15379	13782	14001	15462	14799	14585	13390
Growth %	..	20	28	-24	-3	-11	-10	2	10	-4	-1	-8

PM:
Industrialised coun-
tries' export price
index (1980=100)   34.2   56.4   67.7   88.1   100   96.1   92.8   89.7   87.5   87.1   99.1   109.9

Note: Current export earnings (See Table 4 of Statistical Annex) have been deflated by export unit price index (1980=100) of developed countries.
Source: World Bank, World Tables 1988/89; UNCTAD, Commodity Yearbook 1988; IMF, International Financial Statistics Yearbook 1990.

TABLE 30

NATURE OF PRIMARY COMMODITY MARKETS

(1973-75 average, in milliards US $)

GENERALLY FREE		CONTROLLED / DISTORTED		CLOSED		OLIGOPOLISTIC BUYERS		PARTLY OPEN, PARTLY CLOSED	
Oilcake	2.4	Wheat	9.3	Phosphate	1.5	Coffee	4.3	Wood, wood products	7.1
Cotton	3.7	Sugar	8.0	Iron ore	3.8	Oilseeds	3.2	Copper	7.0
Wool	2.5	Beef	3.7	Bananas	0.7	Veget. oils	3.6	Aluminium	2.0
Hides/leather	2.8	Maize	5.7	Bauxite	1.5	Tobacco	2.1	Nickel	0.8
Nat. rubber	2.6	Rice	2.0			Cocoa	1.4	Lead	0.8
Tin	1.2	Wine	1.9			Tea	0.8	Zinc	1.3
Hard fibres	0.2	Citrus fruit	1.2						
Jute	0.2	Butter	1.3						
Pepper	0.2								
Total	15.8	Total	33.1	Total	7.5	Total	15.4	Total	19.0
Percentage of cumulative total	17.4	Percentage	36.5	Percentage	8.3	Percentage	17.0	Percentage	20.9

Source: L.N.Rangarajan, Commodity conflict: the political economy of international commodity negotiations, Croom Helm, London 1978.

TABLE 31

CHANGE IN EXPORT EARNINGS AND CONTRIBUTION TO AGGREGATE CHANGE IN EARNINGS: AGRICULTURAL COMMODITIES

1). Percentage of change of export earnings per commodity for each region
2). Commodity contribution (%) to cumulative amount of change for each region

	CHANGE (PERCENTAGE)					COMMODITY CONTRIBUTION TO CUMULATIVE CHANGE OF TOTAL REGION a)				
	1973/75 TO 1976/78	76/78 TO 78/80	78/80 TO 80/82	80/82 TO 82/84	82/84 TO 85/87	1973/75 TO 1976/78	76/78 TO 78/80	78/80 TO 80/82	80/82 TO 82/84	82/84 TO 85/87
Coffee										
Total Subsaharan Africa	126	2	-16	-10	18	55 +	9 +	48 -	49 -	50 +
Total Africa	127	2	-16	-9	17	54 +	9 +	47 -	33 -	44 +
Total LDC's	144	13	-16	-3	23	57 +	21 +	-62 +	13 -	102 +
Total non-LDC's	192	10	-12	6	35	14 +	1 +	4 -	-2 -	-175 -
World gross exports	147	13	-15	-2	24	44 +	10 +	-2021 +	4 -	-258 -
Tea										
Total Subsaharan Africa	96	16	-6	29	-3	4 +	6 +	2 -	-15 -	-1 +
Total Africa	98	17	-7	30	-3	4 +	6 +	2 -	-12 -	-1 +
Total LDC's	82	10	10	20	2	6 +	2 +	5 +	-15 -	2 +
Total non-LDC's	68	40	-32	8	0	3 +	2 +	5 -	-1 -	-1 -
World gross exports	79	16	1	18	2	5 +	2 +	13 +	-7 -	-4 -
Cocoa										
Total Subsaharan Africa	86	15	-25	-11	28	30 +	47 +	56 -	34 -	52 +
Total Africa	86	15	-25	-11	28	30 +	42 +	57 -	27 -	48 +
Total LDC's	91	14	-27	-5	34	12 +	6 +	82 +	5 -	35 +
Total non-LDC's	286	52	1	15	16	2 +	1 +	-0 -	-1 -	-19 -
World gross exports	95	16	-25	-4	33	9 +	3 +	82 +	2 -	-81 -
Sugar										
Total Subsaharan Africa	8	32	16	-24	10	1 +	24 +	-10 -	31 -	7 +
Total Africa	53	30	3	-35	17	8 +	30 +	-3 -	47 -	12 +
Total LDC's	-27	18	142	-10	-8	-11 +	9 +	186 +	46 -	-33 +
Total non-LDC's	6	54	-36	-38	-11	6 +	32 +	92 -	61 -	177 -
World gross exports	-11	39	26	-20	-9	-6 +	22 +	2995 +	55 -	105 -
Groundnuts										
Total Subsaharan Africa	20	-57	12	-37	-45	1 +	-17 +	-1 -	6 -	-3 +
Total Africa	26	-46	17	-44	14	1 +	-14 +	-2 -	8 -	1 +
Total LDC's	25	-29	86	-23	8	1 +	-1 +	6 +	4 -	1 +
Total non-LDC's	23	37	-21	-5	3	1 +	1 +	2 -	0 -	-4 -
World gross exports	24	-0	21	-16	5	1 +	-0 +	122 +	2 -	-3 -

TABLE 31 CONTINUED (CHANGE EXPORT EARNINGS)

	CHANGE (PERCENTAGE)					COMMODITY CONTRIBUTION TO CUMULATIVE CHANGE OF TOTAL REGION a)				
	1973/75 TO 1976/78	76/78 TO 78/80	78/80 TO 80/82	80/82 TO 82/84	82/84 TO 85/87	1973/75 TO 1976/78	76/78 TO 78/80	78/80 TO 80/82	80/82 TO 82/84	82/84 TO 85/87
Groundnut oil										
Total Subsaharan Africa	20	-34	-35	46	-46	1 +	-10 +	4 -	-7 -	-7 +
Total Africa	26	-29	-32	30	-43	1 +	-8 +	4 -	-4 -	-6 +
Total LDC's	45	-4	-25	-4	-22	1 +	-0 +	-3 +	0 -	-2 +
Total non-LDC's	23	136	3	6	-75	1 +	3 +	-0 -	-1 -	186 -
World gross exports	36	64	7	16	1	2 +	5 +	126 +	-6 -	-2 -
Cotton										
Total Subsaharan Africa	30	13	-13	13	-10	5 +	14 +	10 -	-16 -	-9 +
Total Africa	-1	6	-4	8	-8	-1 +	10 +	5 -	-13 -	-11 +
Total LDC's	34	9	-1	-4	-2	7 +	4 +	-1 +	7 -	-3 +
Total non-LDC's	23	31	8	-10	-16	13 +	12 +	-11 -	15 -	345 -
World gross exports	28	20	4	-8	-10	9 +	8 +	312 +	11 -	70 -
Timber										
Total Subsaharan Africa	6	13	1	-10	13	1 +	15 +	-1 -	14 -	11 +
Total Africa	7	15	0	-7	27	2 +	15 +	-0 -	8 -	23 +
Total LDC's	46	50	-5	-14	2	11 +	30 +	-10 +	35 -	3 +
Total non-LDC's	32	35	-2	-7	5	58 +	44 +	8 -	30 -	-351 -
World gross exports	36	39	-3	-9	-13	25 +	38 +	-546 +	32 -	230 -
Sisal										
Total Subsaharan Africa	-61	26	7	-34	-47	-2 +	2 +	-0 -	4 -	-2 +
Total Africa	-60	22	8	-38	-46	-3 +	2 +	-1 -	4 -	-2 +
Total LDC's	-54	23	-4	-30	-30	-1 +	0 +	-0 +	2 -	-1 +
Total non-LDC's	-60	-50	100	0	17	-0 +	-0 +	-0 -	-0 -	-0 -
World gross exports	-54	22	-3	-29	-29	-1 +	0 +	-4 +	1 -	3 -
Rubber										
Total Subsaharan Africa	9	18	5	-6	15	0 +	4 +	-1 -	2 -	3 +
Total Africa	9	18	5	-6	16	0 +	3 +	-1 -	1 -	3 +
Total LDC's	41	44	-11	-9	1	7 +	19 +	-15 +	14 -	1 +
Total non-LDC's	-29	5	-2	7	27	-1 +	0 +	0 -	-0 -	-10 -
World gross exports	38	43	-11	-8	1	5 +	8 +	-449 +	6 -	-5 -

TABLE 31 CONTINUED (CHANGE EXPORT EARNINGS)

	CHANGE (PERCENTAGE)					COMMODITY CONTRIBUTION TO CUMULATIVE CHANGE OF TOTAL REGION a)				
	1973/75 TO 1976/78	76/78 TO 78/80	78/80 TO 80/82	80/82 TO 82/84	82/84 TO 85/87	1973/75 TO 1976/78	76/78 TO 78/80	78/80 TO 80/82	80/82 TO 82/84	82/84 TO 85/87
Tobacco										
Total Subsaharan Africa	52	11	25	3	3	3 +	5 +	-8 -	-2 -	2 +
Total Africa	57	11	28	-3	5	4 +	5 +	-10 -	2 -	2 +
Total LDC's	121	14	27	-1	-20	8 +	3 +	17 +	1 -	-22 +
Total non-LDC's	8	20	0	3	4	3 +	5 +	-0 -	-2 -	-50 -
World gross exports	41	17	12	1	-8	7 +	4 +	516 +	-1 -	39 -
GROSS TOTALS AGRARIAN COMMODITIES										
Total Subsaharan Africa	61	8	-12	-7	12	100 +	100 +	100 -	100 -	100 +
Total Africa	55	8	-11	-9	11	100 +	100 +	100 -	100 -	100 +
Total LDC's	54	21	8	-5	6	100 +	100 +	100 +	100 -	100 +
Total non-LDC's	25	37	-10	-11	-1	100 +	100 +	100 -	100 -	100 -
World gross exports	40	28	0	-8	-2	100 +	100 +	100 +	100 -	100 -

Note: a) The sign behind each column shows direction of change of cumulative totals.
A negative sign for a percentage therefore shows a different direction of change.
Sources: Calculated from Table 1 (Statistical Annex).

TABLE 32

CONTRIBUTION OF NON-FUEL MINERAL COMMODITY EXPORTS TO CUMULATIVE CHANGE IN EXPORT EARNINGS, 1973-1984

(Percentages)

	CHANGE IN EXPORTS - IN BLN US $			COMMODITY CONTRIBUTION (%) TO CUMULATIVE CHANGE SUBSAH. -- OF MINERAL EXPORTS			IDEM, TO CUMULATIVE CHANGE ALL COMMODITIES COMMOD. (INCL. AGRIC.)		
	1976-78	1978-80	1982-84	1976-78	1978-80	1982-84	1976-78	1978-80	1982-84
Bauxite									
Total Subsaharan Africa	93	2	152	-1745 -	7	-985 -	3	0	-9 -
Total Africa	92	2	149	-11642 -	6	-785 -	3	0	-7 -
Total LDC's	217	55	146	669 +	32	-1024 -	2	1	26 +
Total non-LDC's	-68	36	-15	691 -	170	-23 +	-2	0	1 -
World gross exports	150	90	131	1950 +	46	-91 -	1	1	-2 -
Copper									
Total Subsaharan Africa	-271	398	-370	257 -	152	232 -	-10	40	22 -
Total Africa	-119	439	-389	785 -	134	180 -	-4	33	18 -
Total LDC's	4	1560	-654	1 +	135	537 -	0	18	-116 +
Total non-LDC's	-1469	1409	4045	648 -	276	220 +	-41	15	-309 -
World gross exports	-1465	2970	-8092	-1345 +	172	483 -	-10	17	100 -
Iron ore									
Total Subsaharan Africa	13	4	8	-55 -	6	-23 -	0	0	-0 -
Total Africa	108	96	-38	-2672 -	84	55 -	4	7	2 -
Total LDC's	497	504	403	339 +	79	-678 -	5	6	71 +
Total non-LDC's	559	420	247	-336 -	54	13 +	15	5	-19 -
World gross exports	1056	925	649	1694 +	60	-56 -	7	5	-8 -
Manganese ore									
Total Subsaharan Africa	35	-13	-1	-701 -	-63	11 -	1	-1	0 -
Total Africa	150	-2	-28	-19181 -	-4	115 -	5	-0	1 -
Total LDC's	147	-6	-41	957 +	-6	584 -	1	-0	-7 +
Total non-LDC's	340	-432	-18	-2887 -	-332	-37 +	9	-5	1 -
World gross exports	486	-437	-59	9257 +	-180	77 -	3	-2	1 -
Phosphate rock									
Total Subsaharan Africa	-19	17	-20	203 -	71	154 -	-1	2	1 -
Total Africa	-260	130	-109	3162 -	92	126 -	-9	10	5 -
Total LDC's	-225	231	-83	-217 +	81	313 -	-2	3	-15 +
Total non-LDC's	204	135	-72	-1050 -	107	-21 +	6	1	6 -
World gross exports	-21	367	-156	-96 +	86	45 -	-0	2	2 -

TABLE 32 CONTINUED

	|--- CHANGE IN EXPORTS -| |--- IN BLN US $ -------|			| COMMODITY CONTRIBUTION (%) | TO CUMULATIVE CHANGE SUBSAH. | |-- OF MINERAL EXPORTS --------|			| IDEM, TO CUMULATIVE | CHANGE ALL COMMODITIES | COMMOD. (INCL. AGRIC.) |		
	1976-78	1978-80	1982-84	1976-78	1978-80	1982-84	1976-78	1978-80	1982-84
Gross total mineral commodities									
Total Subsahara	-149	409	-231	100 -	100	100 -	-5	41	13 -
Total Africa	-29	665	-415	100 -	100	100 -	-1	49	19 -
Total LDC's	640	2344	-229	100 +	100	100 -	6	27	-40 +
Total non-LDC's	-434	1568	4187	100 -	100	100 +	-12	17	-320 -
World gross exports	206	4121	-3406	100 +	100	100 -	1	23	42 -
Gross total agricultural and mineral commodities									
Total Subsahara	2726	1003	-1717				100	100	100 -
Total Africa	2930	1349	-2190				100	100	100 -
Total LDC's	10792	8542	566				100	100	100 +
Total non-LDC's	3617	9201	-1308				100	100	100 -
World gross exports	14416	17948	-8110				100	100	100 -

Sources: Calculated from Tables 1 and 3 (Statistical Annex).

TABLE 33

MAIN SOURCES OF FOREIGN EXCHANGE INFLOW, 1980 AND 1987

(in US $ bln.)

	1980	%	1987	%
N-F COMMODITY EXPORTS	17109	52.7	14664	47.3
ODA	7126	22.0	11066	35.7
NET FLOW OF DEBTS a)	8224	25.3	5299	17.1
TOTAL	32459	100	31029	100

Note: a) Net flow of debts is calculated as disbursements minus repayment of principal. It includes public and publicly guaranteed debt as well as private non guaranteed debt.
Sources: World Bank, World Tables 1988/90; World Bank, From crisis to sustainable growth (1989), Statistical Appendix.

TABLE 34

COMMODITY PRICES AND TERMS OF TRADE OF SUBSAHARAN NON-FUEL COMMODITIES, 1971-1987

		1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
COMMODITY PRICES																		
Bauxite e)	a)	49.5	53.3	60.7	71.9	105.3	117.3	134.8	138.4	152.6	212.4	216.3	208.3	179.5	164.9	164.3	164.8	164.8
Cocoa beans f)	b)	25.6	30.5	60.8	95.8	69.0	111.0	213.6	168.8	158.4	126.9	101.4	85.5	101.6	116.0	107.9	99.0	93.9
Coffee g)	b)	42.3	45.2	49.9	58.7	61.0	127.6	223.8	147.5	164.5	147.2	102.9	111.0	124.1	138.2	121.2	148.2	102.3
Copper h)	b)	49.0	48.6	80.6	93.2	56.1	63.6	59.4	61.9	89.5	99.1	79.0	67.2	72.2	62.5	64.3	62.1	80.8
Cotton i)	d)	27.9	34.0	47.6	71.6	62.6	67.0	89.3	113.7	94.1	101.4	130.6	71.2	69.6	90.1	96.9	77.8	75.5
Groundnut cake j)	a)	110.6	137.2	299.3	196.3	157.8	198.0	245.2	230.8	237.7	271.4	269.3	208.3	229.0	187.5	146.3	166.0	154.2
Groundnut oil k)	a)	440.6	425.9	546.3	1076.8	778.2	690.6	845.8	1079.2	888.7	858.8	1042.8	585.2	710.9	1016.7	905.3	569.4	499.8
Iron ore l)	a)	13.5	12.8	17.1	19.0	22.8	22.2	21.6	19.4	23.4	27.3	24.6	26.2	24.0	23.1	22.7	21.9	22.2
Timber (logs) m)	a)	44.5	52.5	133.6	120.5	126.6	142.3	158.8	191.3	211.5	251.6	212.8	175.9	160.8	175.6	173.9	221.6	210.0
Manganese n)	c)	63.8	64.5	76.2	114.2	140.0	147.3	150.3	144.4	140.0	155.3	167.8	164.1	151.8	143.2	141.0	140.8	127.5
Palm oil o)	a)	262.1	217.4	375.9	691.3	420.3	397.3	530.1	600.3	653.8	583.1	570.6	445.1	501.4	728.8	500.9	257.0	342.5
Phosphate rock p)	a)	11.3	11.5	13.8	52.8	68.0	35.8	30.7	29.0	33.0	46.7	49.5	42.4	36.9	38.3	33.9	34.4	31.9
Rubber q)	d)	18.0	18.1	35.2	39.8	29.9	39.6	41.6	50.0	64.2	73.5	57.0	45.3	56.2	49.6	41.8	41.2	44.1
Sisal r)	a)	170.0	240.0	527.0	1056.0	581.0	469.0	511.0	475.0	713.0	765.0	645.0	593.0	571.0	584.0	525.0	514.0	512.0
Sugar s)	d)	5.2	6.8	6.7	10.7	15.4	13.4	14.0	15.9	19.3	22.1	18.9	18.1	17.6	16.0	16.1	18.6	20.9
Tea t)	d)	47.8	47.8	48.0	63.3	62.7	69.7	122.0	99.3	97.9	101.1	91.6	87.6	105.4	156.8	90.0	87.4	77.5
Tobacco u)	d)	73.5	80.0	83.5	95.5	103.7	105.8	114.5	124.1	134.7	142.6	160.1	183.0	186.0	186.0	184.0	164.0	157.0
COMMODITY PRICE INDICES (1980=100)																		
Coffee		28.7	30.7	33.9	39.9	41.5	86.7	152.1	100.2	111.8	100.0	69.9	75.5	84.3	93.9	82.4	100.7	69.5
Cocoa beans		20.2	24.0	47.9	75.6	54.4	87.5	168.4	133.0	124.8	100.0	79.9	67.4	80.1	91.5	85.0	78.1	74.0
Sugar		23.4	30.7	30.1	48.3	69.9	60.6	63.4	72.0	87.3	100.0	85.7	82.0	79.5	72.6	73.0	84.2	94.8
Tobacco		51.5	56.1	58.6	67.0	72.7	74.2	80.3	87.0	94.5	100.0	112.3	128.3	130.4	130.4	129.0	115.0	110.1
Tea		47.3	47.3	47.5	62.6	62.0	69.0	120.7	98.2	96.8	100.0	90.6	86.7	104.3	155.2	89.0	86.5	76.6
Cotton		27.5	33.5	47.0	70.6	61.7	66.1	88.1	112.2	92.9	100.0	128.9	70.3	68.7	88.9	95.6	76.8	74.4
Groundnut cake		40.7	50.6	110.3	72.3	58.1	73.0	90.4	85.0	87.6	100.0	99.2	76.8	84.4	69.1	53.9	61.2	56.8
Groundnut oil		51.3	49.6	63.6	125.4	90.6	80.4	98.5	125.7	103.5	100.0	121.4	68.1	82.8	118.4	105.4	66.3	58.2
Rubber		24.5	24.6	47.9	54.1	40.7	53.9	56.6	68.0	87.3	100.0	77.6	61.6	76.4	67.5	56.9	56.1	60.0
Timber (logs)		17.7	20.9	53.1	47.9	50.3	56.6	63.1	76.0	84.1	100.0	84.6	69.9	63.9	69.8	69.1	88.1	83.5
Palm oil		44.9	37.3	64.5	118.6	72.1	68.1	90.9	103.0	112.1	100.0	97.9	76.3	86.0	125.0	85.9	44.1	58.7
Sisal		22.2	31.4	68.9	138.0	75.9	61.3	66.8	62.1	93.2	100.0	84.3	77.5	74.6	76.3	68.6	67.2	66.9
Copper		49.5	49.0	81.3	94.1	56.6	64.2	59.9	62.5	90.3	100.0	79.8	67.8	72.9	63.0	64.9	62.7	81.5
Bauxite		23.3	25.1	28.6	33.8	49.6	55.2	63.5	65.2	71.8	100.0	101.8	98.1	84.5	77.6	77.3	77.6	77.6
Phosphate rock		24.1	24.6	29.4	113.0	145.6	76.7	65.7	62.1	70.6	100.0	106.0	90.7	79.0	81.9	72.6	73.6	68.4
Manganese		41.1	41.5	49.1	73.5	90.2	94.9	96.8	95.0	90.2	100.0	108.1	105.7	97.8	92.2	90.8	90.7	82.1
Iron ore		49.4	46.9	62.9	69.7	85.7	81.5	79.2	71.2	86.0	100.0	90.3	96.2	88.0	84.8	83.2	80.3	81.6

TABLE 34 CONTINUED

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
AVERAGE EXPORT SHARE v)																	
Coffee	17.3	17.3	17.3	17.3	17.3	28.5	28.5	27.4	26.4	25.9	25.3	24.4	23.5	23.5	23.9	23.9	23.9
Cocoa beans	13.9	13.9	13.9	13.9	13.9	18.8	18.8	19.3	19.7	18.3	16.8	16.1	15.5	15.5	17.1	17.1	17.1
Sugar	5.5	5.5	5.5	5.5	5.5	4.3	4.3	4.8	5.2	6.1	6.9	6.2	5.4	5.4	5.0	5.0	5.0
Tobacco	2.6	2.6	2.6	2.6	2.6	2.8	2.8	2.8	2.9	3.5	4.1	4.3	4.4	4.4	3.9	3.9	3.9
Tea	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5	2.6	2.7	2.8	3.3	3.7	3.7	3.4	3.4	3.4
Cotton	6.9	6.9	6.9	6.9	6.9	6.5	6.5	6.6	6.7	6.7	6.6	7.2	7.7	7.7	6.8	6.8	6.8
Groundnut cake	2.1	2.1	2.1	2.1	2.1	1.8	1.8	1.3	0.7	0.8	0.9	0.8	0.6	0.6	0.5	0.5	0.5
Groundnut oil	2.0	2.0	2.0	2.0	2.0	1.8	1.8	1.5	1.1	1.0	0.8	1.0	1.2	1.2	0.6	0.6	0.6
Rubber	1.6	1.6	1.6	1.6	1.6	1.3	1.3	1.4	1.4	1.5	1.7	1.6	1.6	1.6	1.4	1.4	1.4
Timber (logs)	8.8	8.8	8.8	8.8	8.8	6.8	6.8	6.9	7.0	7.5	8.0	7.8	7.5	7.5	7.4	7.4	7.4
Palm oil	1.1	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Sisal	1.6	1.6	1.6	1.6	1.6	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.4	0.4	0.2	0.2	0.2
Copper	24.8	24.8	24.8	24.8	24.8	15.3	15.3	16.4	17.5	16.8	16.1	16.5	16.8	16.8	17.6	17.6	17.6
Bauxite	1.3	1.3	1.3	1.3	1.3	1.8	1.8	1.8	1.7	2.0	2.4	3.0	3.6	3.6	3.8	3.8	3.8
Phosphate rock	2.2	2.2	2.2	2.2	2.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5
Manganese	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2
Iron ore	5.6	5.6	5.6	5.6	5.6	4.2	4.2	4.0	3.8	3.8	3.9	4.3	4.6	4.6	4.8	4.8	4.8
WEIGHTED PRICE INDEX																	
Coffee	5.0	5.3	5.9	6.9	7.2	24.7	43.3	27.5	29.5	25.9	17.7	18.4	19.8	22.1	19.7	24.1	16.6
Cocoa beans	2.8	3.3	6.7	10.5	7.6	16.4	31.7	25.6	24.6	18.3	13.4	10.9	12.4	14.2	14.5	13.3	12.7
Sugar	1.3	1.7	1.7	2.7	3.8	2.6	2.7	3.4	4.5	6.1	5.9	5.0	4.3	3.9	3.6	4.2	4.7
Tobacco	1.3	1.5	1.5	1.7	1.9	2.1	2.2	2.5	2.7	3.5	4.6	5.5	5.7	5.7	5.0	4.5	4.3
Tea	0.8	0.8	0.8	1.1	1.1	1.7	3.0	2.5	2.5	2.7	2.5	2.8	3.9	5.7	3.0	2.9	2.6
Cotton	1.9	2.3	3.2	4.9	4.3	4.3	5.7	7.4	6.2	6.7	8.5	5.0	5.3	6.8	6.5	5.2	5.1
Groundnut cake	0.9	1.1	2.3	1.5	1.2	1.3	1.6	1.1	0.6	0.8	0.9	0.6	0.5	0.4	0.3	0.3	0.3
Groundnut oil	1.0	1.0	1.3	2.5	1.8	1.4	1.8	1.8	1.1	1.0	1.0	0.7	1.0	1.4	0.6	0.4	0.3
Rubber	0.4	0.4	0.8	0.9	0.7	0.7	0.7	0.9	1.2	1.5	1.3	1.0	1.2	1.1	0.8	0.8	0.8
Timber (logs)	1.6	1.8	4.7	4.2	4.4	3.8	4.3	5.2	5.9	7.5	6.8	5.4	4.8	5.2	5.1	6.5	6.2
Palm oil	0.5	0.4	0.7	1.3	0.8	0.4	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.7	0.6	0.3	0.4
Sisal	0.4	0.5	1.1	2.2	1.2	0.3	0.3	0.3	0.5	0.6	0.5	0.4	0.3	0.3	0.1	0.1	0.1
Copper	12.3	12.2	20.2	23.3	14.0	9.8	9.2	10.2	15.8	16.8	12.8	11.2	12.2	10.6	11.4	11.0	14.3
Bauxite	0.3	0.3	0.4	0.4	0.6	1.0	1.1	1.1	1.2	2.0	2.4	2.9	3.0	2.8	2.9	2.9	2.9
Phosphate rock	0.5	0.5	0.6	2.5	3.2	1.1	0.9	0.9	1.0	1.4	1.5	1.3	1.2	1.2	1.1	1.1	1.0
Manganese	0.5	0.5	0.6	0.9	1.1	1.1	1.2	1.0	0.9	1.0	1.1	1.1	1.1	1.0	1.1	1.1	1.0
Iron ore	2.8	2.6	3.5	3.9	4.7	3.4	3.3	2.8	3.3	3.9	3.5	4.1	4.0	3.9	4.0	3.9	3.9

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TABLE 34 CONTINUED

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
WEIGHTED PRICE INDEX SUBSAHARAN COMMODIT. (1980=100)	34.1	36.3	55.9	71.4	59.6	76.3	113.7	95.0	102.2	100.0	85.1	76.8	81.3	87.2	80.5	82.8	77.4
DEFLATORS (1980=100)																	
GDP INDUSTRIAL COUNTRIES	46.9	49.5	53.6	60.0	66.8	72.4	78.2	84.2	91.3	100.0	109.0	117.0	123.0	128.3	132.9	137.5	141.7
EXP.PRICE IND. COUNTRIES	34.2	37.5	45.3	56.4	62.8	62.6	67.7	76.3	88.1	100.0	96.1	92.8	89.7	87.5	87.1	99.1	109.9
IMPORT PRICE AFRICA	26.1	28.5	34.7	46.3	53.4	53.4	56.8	64.4	80.0	100.0	98.5	94.0	95.0	84.3	76.5	85.0	144.2
TERMS OF TRADE INDICATORS																	
T.O.T. (WITH IND. COUNTR. GDP DEFLATOR)	72.8	73.3	104.4	118.9	89.2	105.5	145.5	112.7	111.9	100.0	78.1	65.7	66.1	68.0	60.6	60.2	54.6
T.O.T. (WITH IND. COUNTR. EXP.PRICE)	99.8	96.7	123.4	126.6	94.8	122.0	168.0	124.5	116.0	100.0	88.5	82.7	90.7	99.7	92.4	83.5	70.4
T.O.T. (WITH AFRICAN IMPORT PRICE DEFL.)	131.0	127.2	161.0	154.3	111.6	143.1	200.2	147.5	127.7	100.0	86.4	81.7	85.7	103.5	105.3	97.3	53.7
ANNUAL CHANGE (%)																	
SUBSAH. WEIGHTED COMM.PRICE	-13.3	6.2	54.1	27.7	-16.6	28.2	49.0	-16.5	7.6	-2.1	-14.9	-9.8	5.9	7.2	-7.7	2.8	-6.5
IND.CTRY GDP DEFLATOR	6.6	5.5	8.2	12.1	11.2	8.4	8.0	7.8	8.4	9.5	9.0	7.3	5.2	4.3	3.6	3.4	3.1
IND.CTRY EXPORT PRICE	5.6	9.6	20.8	24.5	11.3	-0.3	8.1	12.7	15.5	13.5	-3.9	-3.4	-3.3	-2.5	-0.5	13.8	10.9
AFRICAN IMPORT PRICE	4.9	9.4	21.7	33.3	15.4	0.0	6.4	13.3	24.3	24.9	-1.5	-4.5	1.0	-11.3	-9.3	11.2	69.6
T.O.T. (GDP DEFL.)	-18.6	0.7	42.4	14.0	-25.0	18.2	38.0	-22.5	-0.7	-10.6	-21.9	-15.9	0.7	2.8	-10.9	-0.6	-9.3
T.O.T. (EXP.PRICE)	-17.8	-3.1	27.6	2.6	-25.1	28.6	37.8	-25.9	-6.8	-13.8	-11.5	-6.5	9.6	9.9	-7.3	-9.7	-15.7
T.O.T. (IMPORT PRICE)	-17.3	-2.9	26.6	-4.1	-27.7	28.2	40.0	-26.3	-13.5	-21.7	-13.6	-5.5	4.9	20.8	1.7	-7.6	-44.9

NOTES: a) US $/metric ton; b) US cents/metric ton; c) US $/long ton; d) US cents/pound; e) Guyana (Baltimore); f) Ghana (London); g) Uganda (New York); h) United Kingdom (London); i) Sudan; j) all origins (Europe); k) West Africa (Europe); l) Brazil (North Sea ports); m) West Africa, f.o.b.; n) India (US ports); o) Malaysia (Europe); p) Morocco (Casablanca); q) All origins (New York); r) East African (London); s) EC import price; t) Average auction (London); u) United States (all markets); v) annual share of each commodity in combined Subsaharan export earnings of all 17 commodities; w) summation of individual commodity index numbers (1980=100) weighted by export shares.

SOURCES: IMF, INTERNATIONAL FINANCIAL STATISTICS, YEARBOOK 1990; WORLD BANK, COMMODITY TRADE AND PRICE TRENDS, VARIOUS EDITIONS.

TABLE 35

EXPORT DIVERSIFICATION BY COMMODITY

Frequency in which a commodity is the most important (C1) or ranks between the four (C4) most important non-fuel export commodities, for 34 Subsaharan countries

	1972-1976		1982-1986 b)	
	C1	C3	C1	C3
a)				
NEW ENTRANCE				
Fish	-	2	2	6
Cotton	3	8	3	10
Bauxite	-	1	-	3
Live animals	3	6	3	7
Tea	-	5	-	6
Rubber	-	2	-	3
Cereals	-	1	-	2
Zinc	-	1	-	2
Bananas/fruit	-	1	-	2
Spices	-	-	1	1
Cashew nuts	-	-	1	1
Animal foodstuffs	-	-	-	1
STABLE				
Cocoa	5	9	5	9
Tobacco	2	2	2	2
Copper	2	2	2	2
Phosphate	1	2	1	2
Uranium	1	1	1	1
Tin	-	1	-	1
Sisal	-	1	-	1
Manganese	-	1	-	1
DEPARTURES				
Beef/meat	-	4	-	-
Coffee	8	13	8	11
Timber	2	7	2	5
Groundnut products	2	5	-	3
Palm oil	-	5	-	4
Sugar	2	4	1	3
Iron ore	2	4	2	3
Diamonds	1	2	1	1
Copra	-	2	-	1
Hides/skins/leather	-	2	-	1
Vegetables	-	2	-	1
Crude veg. materials	-	2	-	1

Notes: a) Entrances and exits assessed by the number of countries where it belonged to the C3-group (see text). b) For a number of countries available only cover part of this period.
Source: UNCTAD (1989b).

TABLE 36

SHARE OF PROCESSED WOOD PRODUCTS IN TOTAL WOOD EXPORTS OF SELECTED MAJOR EXPORTERS OF TROPICAL HARDWOOD

In percents of country's total wood exports

COUNTRY/PRODUCT	average 1967/71	average 1982/86
Cote d'Ivoire		
Timber logs (NC)	84	67
Wood products	16	33
Sawnwood (NC)	13	4
Veneer sheets	3	4
Plywood and blockboard	1	3
P.R. Congo		
Timber logs (NC)	76	54
Wood products	24	46
Sawnwood (NC)	3	13
Veneer sheets	21	33
Ghana		
Timber logs (NC)	55	41
Wood products	45	59
Sawnwood (NC)	37	49
Veneer sheets	0	10
Plywood and blockboard	8	1
Gabon		
Timber logs (NC)	81	82
Wood products	19	18
Sawnwood (NC)	1	0
Veneer sheets	3	2
Plywood and blockboard	16	17
Liberia		
Timber logs (NC)	99	94
Wood products	1	6
Sawnwood (NC)	1	6

Note: NC = non-coniferous. .
Source: UNCTAD (1989a, Annex Table 9).

TABLE 37

WORLD BANK PROJECTIONS FOR SUBSAHARAN AFRICA'S EXTERNAL SECTOR, 1986/87-2000
a)   b)

CENTRAL PROJECTION AND FOUR VARIANTS

VARIABLE		1986/7	PROJECTIONS FOR YEAR 2000					AVERAGE ANNUAL GROWTH 1986/87-2000				
			CENTRAL CASE	VARIANT 1	VARIANT 2	VARIANT 3	VARIANT 4	CENTRAL CASE	VAR. 1	VAR. 2	VAR. 3	VAR. 4
EXOGENOUS DATA												
POPGROWTH	AV.%/YR		3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
GDPGROWTH87-2000	AV.%/YR		3.8	3.8	3.1	4.3	3.8	3.8	3.8	3.1	4.3	3.8
DOMSAVPOL	% GDP		6.2	6.2	6.2	6.2	6.2	0.5	0.5	0.5	0.5	0.5
DOMINVPOL	% GDP		9.0	9.0	9.0	9.0	9.0	0.7	0.7	0.7	0.7	0.7
IMPGDPPOL	% GDP		7.5	7.5	7.5	7.5	6.5	0.6	0.6	0.6	0.6	0.5
TOTEXPOL	% GDP		4.7	4.7	4.7	4.7	2.2	0.4	0.4	0.4	0.4	0.2
NFCEXPOL	% EXP.		-4.0	0.0	-4.0	-4.0	-4.0	-0.3	0.0	-0.3	-0.3	-0.3
IOCRPOL	US $		15.0	15.0	15.0	15.0	15.0	1.2	1.2	1.2	1.2	1.2
ODA2000	BLN. $		22.0	22.0	22.0	22.0	22.0	0.8	0.8	0.8	0.8	0.8
RESULTS												
POPULATION	MLN.	451.0	670.7	670.7	670.7	670.7	670.7	3.1	3.1	3.1	3.1	3.1
GDP	BLN. $	145.0	235.5	235.5	215.6	250.6	235.5	3.8	3.8	3.1	4.3	3.8
GDP/CAPITA	US $	321.5	351.1	351.1	321.5	373.7	351.1	0.7	0.7	0.0	1.2	0.7
DOMINVGDP	% GDP	15.1	24.1	24.1	24.1	24.1	24.1	3.7	3.7	3.7	3.7	3.7
DOMSAVGDP	% GDP	11.8	18.0	18.0	18.0	18.0	18.0	3.3	3.3	3.3	3.3	3.3
DOMRESGAPGDP	% GDP	3.3	6.1	6.1	6.1	6.1	6.1	4.8	4.8	4.8	4.8	4.8
ADJFACTOR	% GDP	-2.9	-2.9	-2.9	-2.9	-2.9	-4.4					
IMPGDP	% GDP	25.5	33.0	33.0	33.0	33.0	32.0	2.0	2.0	2.0	2.0	1.8
TOTEXGDP	% GDP	19.3	24.0	24.0	24.0	24.0	21.5	1.7	1.7	1.7	1.7	0.8
EXTERNGAPGDP	% GDP	6.2	9.0	9.0	9.0	9.0	10.5	2.9	2.9	2.9	2.9	4.1
ODAGDP	% GDP	5.5	9.3	9.3	10.2	8.8	9.3	4.2	4.2	4.9	3.7	4.2
NFCEXGDP	% GDP	9.2	10.6	11.5	10.6	10.6	9.5	1.0	1.7	1.0	1.0	0.2
NFCEX	% EXP.	48.0	44.0	48.0	44.0	44.0	44.0	-0.7	0.0	-0.7	-0.7	-0.7
DOMINV	BLN.$	21.9	56.7	56.7	52.0	60.4	56.7	7.6	7.6	6.9	8.1	7.6
DOMSAV	BLN. $	17.1	42.4	42.4	38.8	45.1	42.4	7.2	7.2	6.5	7.7	7.2
DOMRESGAP	BLN. $	4.8	14.4	14.4	13.2	15.3	14.4	8.8	8.8	8.1	9.3	8.8
IMP	BLN. $	37.0	77.7	77.7	71.2	82.7	75.4	5.9	5.9	5.2	6.4	5.6
TOTEXP	BLN. $	28.0	56.5	56.5	51.8	60.2	50.6	5.6	5.6	4.8	6.1	4.7
NFCEXP	BLN. $	13.4	24.9	27.1	22.8	26.5	22.3	4.9	5.6	4.2	5.4	4.0
EXTERNGAP	BLN. $	9.0	21.2	21.2	19.4	22.6	24.7	6.8	6.8	6.1	7.3	8.1
ODA	BLN. $	11.1	22.0	22.0	22.0	22.0	22.0	5.4	5.4	5.4	5.4	5.4
IOCR	US $	5.0	20.0	20.0	20.0	20.0	20.0	11.3	11.3	11.3	11.3	11.3
EXTGAP-ODA	BLN. $	-2.1	-0.8	-0.8	-2.6	0.6	2.7					

LEGENDS: DOMINV= domestic investments; DOMSAV= gross domestic savings; DOMINVPOL= policy
effect on DOMINV; DOMSAVPOL= policy effect on DOMSAV; DOMRESGAP= domestic resource gap;
EXTERNGAP= external resource gap; ADJFACTOR= Adjustment for intrest payments and errors &
omissions (discrepancies between national accounts and balance of payments, including
treatment of technical assistance); IMP= imports; TOTEXP= total exports; NFCEXP= non-fuel
commodity exports; NFCEXPOL= policy effect on NF commodity share in total exports (diver-
sification); ODA= overseas development assistance; ODA2000= policy target for
ODA in 2000; IOCR= incremental output-capital ratio (efficiency of investment);
IOCRPOL= policy effect on IOCR; EXTGAP-ODA= external resource gap minus ODA.

NOTES: see next page

(a) Central projection and reconstruction of model for external sector is based on World Bank (1989a,p.173-179 and statistical annex).

b) The four variants are based on the central case. They show the effects on all results of small alterations in the model assumptions, especially those reflecting the outcome of policy on economic parameters. The variants are:

1) no commodity diversification (NFCEXPOL=0.0);
2) no GDP/Capita growth (average GDP growth 3.1% equals population growth);
3) average GDP growth 4.3 %, ie. 0.5% higher than population growth.
4) openness increases less than expected in central case: average import share in GDP increases with 6.5%, while average export share rises with 2.2 percent.

TABLE 38

EFFECTS OF WORLD BANK PROJECTIONS FOR SUBSAHARAN NON-FUEL COMMODITY EXPORTS

CENTRAL PROJECTION AND FOUR VARIANTS (CF. TABLE 37)

COMMODITY	ACTUAL 1982/87 NF COMM.EXPORTS		IMPLICATIONS OF WORLD BANK PROJECTIONS (2000) IN 1990 $ EXPORT EARNINGS PER COMMODITY c)				
	SHARE IN TOTAL EXP.	US $	CENTRAL CASE	VARIANT 1	VARIANT 2	VARIANT 3	VARIANT 4
Coffee	17.7	2.38	4.41	4.80	4.04	4.69	3.95
Cocoa beans	12.2	1.64	3.05	3.32	2.79	3.24	2.73
Copper	13.9	1.87	3.47	3.77	3.17	3.69	3.11
Timber (logs)	5.5	0.74	1.38	1.50	1.26	1.47	1.24
Cotton	5.0	0.68	1.25	1.37	1.15	1.34	1.12
Sugar	4.0	0.53	0.99	1.07	0.90	1.05	0.88
Iron ore	3.5	0.47	0.87	0.95	0.80	0.93	0.78
Tobacco	3.1	0.42	0.77	0.84	0.71	0.82	0.69
Tea	2.5	0.34	0.63	0.68	0.57	0.67	0.56
Bauxite	3.1	0.41	0.76	0.83	0.70	0.81	0.68
Rubber	1.2	0.16	0.30	0.33	0.28	0.32	0.27
Phosphate rock	1.1	0.15	0.28	0.30	0.25	0.30	0.25
Manganese	0.9	0.12	0.22	0.24	0.20	0.24	0.20
Groundnut oil	0.6	0.09	0.16	0.18	0.15	0.17	0.14
Palm oil	0.4	0.05	0.09	0.10	0.08	0.10	0.08
Groundnut cake	0.3	0.04	0.07	0.08	0.07	0.08	0.06
Sisal	0.2	0.03	0.05	0.06	0.05	0.06	0.05
Subtotal	75.2	10.10	18.73	20.38	17.15	19.93	16.77
Other NF commodities	24.8	3.33	6.17	6.72	5.65	6.57	5.53
(1) TOTAL NF EXPORTS	100.0	13.43	24.90	27.10	22.80	26.50	22.30
(2) TOTAL EXPORTS		28.0	56.50	56.50	51.80	60.20	50.60
(3) (1) as % of (2)		48 %	44 %	48 %	44 %	44 %	44 %
GROWTH RATES ('87-2000)							
TOTAL NF EXPORTS		-3.4 b	4.9	5.6	4.2	5.4	4.0
TOTAL EXPORTS		-1.3 b	5.6	5.6	4.8	6.1	4.7

NOTE: a) Average commodity share (1983-1987) in total non-fuel commodity exports (%). For the five metals an average of 1982-1984 is used, with a correction for price increases since then. b) Average growth rates 1980-1987. c) The commodity composition of total non-fuel commodity exports is assumed to be the same as the average of the period 1982/87. Amounts are in billions. SOURCES: Statistical Annex Table 37, Tables 1,3; UNDP/World Bank (1989); World Bank (1989a); own calculations.

TABLE 39

EXPORT PRICES OF NON-FUEL PRIMARY COMMODITIES, PER COUNTRY

Export price[a] f.o.b. (1980 = 100)

Country	1971	1974	1977	1979	1980	1981	1982	1983	1984	1985	1986	1987
A. INDEX NUMBERS												
Benin	33	65	114	104	100	89	79	87	86	73	67	78
Botswana	39	68	68	96	100	97	90	92	90	86	90	99
Burkina Fasso	40	69	73	94	100	91	80	90	89	70	64	81
Burundi	30	44	141	111	100	83	89	85	95	93	120	76
Cameroon	26	52	102	107	100	83	79	84	91	84	91	80
Central Afr.Rep.	28	47	86	97	100	84	85	83	89	80	89	90
P.R.Congo	24	43	66	96	100	83	81	78	85	74	81	95
Ethiopia	51	47	131	115	100	85	88	87	97	93	119	85
Gabon	25	53	65	92	100	93	90	87	91	81	83	95
The Gambia	44	87	92	93	100	105	77	84	84	74	69	66
Ghana	22	56	105	114	100	83	69	83	89	81	77	84
Ivory Coast	26	51	103	107	100	84	79	83	92	86	92	88
Kenya	34	60	116	104	100	88	87	92	108	87	102	79
Liberia	40	63	75	89	100	88	89	85	83	78	77	83
Madagascar	36	57	111	106	100	87	89	88	94	95	112	90
Malawi	38	63	77	88	100	96	92	92	92	66	72	69
Mali	43	75	76	88	100	95	79	89	88	71	60	77
Mauritania	50	73	82	88	100	91	89	87	90	81	64	61
Mauritius	17	101	32	37	100	61	33	33	23	18	24	27
Niger	41	72	84	102	100	102	99	101	101	97	92	82
Nigeria	24	67	124	121	100	82	70	84	95	83	72	74
Rwanda	33	53	111	106	100	86	90	86	94	94	122	79
Seychelles	38	112	79	120	100	90	77	99	128	82	55	74
Senegal	38	87	80	89	100	106	87	88	92	82	76	81
Sierra Leone	35	66	117	113	100	88	85	87	92	89	88	79
Somalia	45	56	58	105	100	92	88	92	86	82	82	90
Sudan	38	74	78	89	100	96	82	92	89	83	71	76
Tanzania	35	66	96	103	100	87	85	85	89	81	95	85
Togo	25	100	81	80	100	101	87	80	85	74	73	78
Uganda	32	47	132	107	100	83	88	85	93	89	116	74
Zaire	42	87	73	97	100	83	75	79	78	75	81	81
Zambia	48	96	61	91	100	81	69	74	65	66	64	82
Zimbabwe	41	65	78	90	100	94	82	89	88	71	66	79
AVERAGES												
* ARITHMIC	35	67	90	98	100	89	82	85	89	79	82	79
* WEIGHTED b)	35	71	94	101	100	87	80	84	89	80	84	80
B. ANNUAL CHANGE (% per period)												
Benin	..	100	76	-9	-4	-12	-11	11	-1	-15	-8	17
Botswana	..	73	-0	42	4	-3	-7	2	-2	-5	5	10
Burkina Fasso	..	72	7	29	6	-9	-12	12	-2	-20	-9	25

TABLE 39 CONTINUED (EXPORT PRICES)

Country	1974	1977	1979	1980	1981	1982	1983	1984	1985	1986	1987
Burundi	49	220	-21	-10	-17	8	-5	11	-2	30	-37
Cameroon	97	99	5	-7	-17	-5	6	8	-7	8	-11
Central Afr.Rep.	68	83	12	3	-16	1	-2	7	-11	12	1
P.R.Congo	82	53	46	4	-17	-2	-4	10	-13	9	17
Ethiopia	52	177	-12	-13	-15	4	-1	11	-4	28	-28
Gabon	111	23	40	9	-8	-2	-4	5	-11	2	15
The Gambia	100	6	1	7	5	-27	10	-1	-11	-7	-4
Ghana	153	89	8	-12	-18	-16	20	6	-8	-5	9
Ivory Coast	102	99	4	-6	-17	-5	5	10	-7	8	-5
Kenya	76	94	-10	-4	-12	-1	6	18	-19	17	-22
Liberia	57	19	18	13	-12	1	-4	-3	-6	-1	7
Madagascar	61	94	-4	-6	-14	3	-1	6	2	18	-20
Malawi	63	23	14	14	-4	-4	-1	0	-28	9	-4
Mali	77	1	15	14	-5	-17	13	-0	-20	-16	29
Mauritania	45	13	7	13	-9	-2	-2	4	-10	-21	-4
Mauritius	494	-69	16	173	-39	-47	1	-30	-23	36	10
Niger	74	17	21	-2	2	-3	2	-0	-4	-5	-11
Nigeria	173	85	-2	-18	-18	-15	21	13	-13	-13	3
Rwanda	62	110	-5	-6	-14	4	-4	9	0	30	-35
Seychelles	192	-29	51	-16	-10	-14	29	29	-36	-33	35
Senegal	126	-8	11	13	6	-18	2	5	-12	-7	7
Sierra Leone	88	78	-3	-12	-12	-4	3	6	-3	-1	-11
Somalia	24	5	80	-5	-8	-4	4	-7	-5	-1	11
Sudan	94	5	14	13	-4	-14	12	-4	-6	-14	7
Tanzania	90	46	6	-2	-13	-3	1	5	-9	18	-11
Togo	298	-18	-1	25	1	-14	-7	6	-13	-2	7
Uganda	48	180	-19	-7	-17	6	-3	10	-4	30	-36
Zaire	107	-16	32	3	-17	-9	5	-1	-4	8	0
Zambia	99	-36	50	9	-19	-15	7	-12	2	-2	28
Zimbabwe	59	20	15	12	-6	-13	8	-1	-19	-7	20
Subsaharan arithmic average (percentage of change per period)	95	34	9	2	-11	-8	4	4	-11	3	-3
Subsaharan weighted average b),percentage of change per period	103	31	8	-1	-13	-8	5	5	-10	5	-4

NOTES: a) Export price indices are World Bank estimates, based on international prices for primary commodities weighted by broad commodity groups for each country. b) Weighted average is calculated using annual country shares in total Subsaharan MF commodity exports.
SOURCE: 'World Bank, World Tables 1988-89 (IBRD Washington); own calculations.

TABLE 40

SUBSAHARAN NON-FUEL PRIMARY COMMODITY EXPORTS IN CONSTANT PRICES

(in mln US $ [a], prices of 1980)

Country	1971	1974	1977	1979	1980	1981	1982	1983	1984	1985	1986	1987
Benin	185	101	138	119	101	82	79	95	72	87	47	65
Botswana	54	98	192	176	150	221	208	286	300	354	357	458
Burkina Fasso	65	85	102	114	143	157	136	138	133	117	150	246
Burundi	51	41	95	103	61	77	104	87	105	129	176	148
Cameroon	546	626	752	830	893	714	602	666	730	909	811	969
Central Afr.Rep	77	63	112	68	109	93	96	94	94	117	117	127
Congo P.R.	60	45	186	51	60	123	169	133	148	149	152	193
Ethiopia	341	353	357	396	392	396	463	437	439	385	526	479
Gabon	247	252	1435	386	340	482	516	480	560	610	544	653
The Gambia	40	55	51	55	30	30	53	55	53	51	53	40
Ghana	927	861	1016	982	1212	1074	988	601	597	718	1039	1228
Ivory Coast	1208	1499	2302	2166	2658	2401	2182	1917	2470	3070	3331	3180
Kenya	651	644	1277	705	734	755	736	766	865	889	1115	802
Liberia	614	550	485	518	570	588	575	494	489	522	478	473
Madagascar	367	277	371	355	355	316	351	316	339	309	341	322
Malawi	185	151	214	206	253	280	274	242	315	271	243	276
Mali	94	80	134	114	171	148	151	165	179	178	160	192
Mauritania	244	249	168	142	190	248	294	363	322	456	493	486
Mauritius	176	399	331	269	306	234	311	299	266	307	462	603
Niger	105	64	171	440	561	509	403	357	84	90	261	256
Nigeria	1234	850	802	918	942	1143	652	774	701	348	358	722
Rwanda	63	71	136	201	133	129	134	146	159	157	198	163
Seychelles	253	441	666	423	315	248	414	465	475	444	557	674
Senegal	4	5	12	5	5	5	4	5	10	11	5	7
Sierra Leone	99	73	140	81	81	70	70	75	78	72	61	55
Somalia	102	88	76	103	126	201	209	114	60	112	123	144
Sudan	927	590	706	558	574	585	506	646	766	675	528	525
Tanzania	523	409	597	395	428	567	438	393	322	257	344	351
Togo	179	293	213	243	354	405	391	281	231	264	309	311
Uganda	662	441	628	428	342	278	433	438	447	491	528	274
Zaire	1782	1836	1186	1813	2288	2137	1748	1504	1610	1748	1697	1840
Zambia	1902	1946	959	1335	1331	1125	1141	1160	974	986	798	1048
Zimbabwe	941	958	937	847	1002	1222	1182	919	879	895	946	998
Total	14907	14497	16948	15544	17210	17042	16014	14907	15272	16177	17308	18308
Growth %	..	-3	17	-8	11	-1	-6	-7	2	6	7	6

PM:
Weighted price index
for NF Comm. exorts
of Subsaharan Arica
(1980 = 100) b) 35.18 71.39 93.57 100.74 100 86.72 79.87 84.25 88.59 79.68 83.51 80.38

Notes: a) Data on aggregate NF commodity exports from Table 4 of Statistical Appendix.
b) Price index as calculated in Table 39 of Statistical Annex on basis of World Bank data.

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TABLE 41

APPARENT CHANGE[a] IN EXPORT VOLUME
OF N.F. COMMODITIES, PER COUNTRY

(Percentage of change per period)

Country	1974	1977	1979	1980	1981	1982	1983	1984	1985	1986	1987
Benin	-89	-11	10	-12	-18	-0	16	-19	23	-35	16
Botswana	195	64	12	-19	31	-6	44	12	11	0	14
Burkina Fasso	94	39	0	18	4	-8	-6	3	-1	43	33
Burundi	12	-20	41	-31	27	16	-7	16	13	13	18
Cameroon	35	-51	22	13	-14	-18	11	7	19	-14	27
Central Afr.Rep.	-1	-5	-27	57	-10	-6	5	-2	23	-6	4
P.R.Congo	-29	-9	-35	14	96	28	-13	7	4	-3	5
Ethiopia	58	-148	35	11	3	4	0	-5	-17	15	16
Gabon	-4	15	16	-22	30	1	2	11	14	-8	1
The Gambia	78	10	21	-53	-19	88	-0	3	-1	15	-23
Ghana	-65	-42	1	34	-6	1	-56	-2	16	57	5
Ivory Coast	50	-21	10	28	-5	-11	-12	25	19	6	-3
Kenya	25	-10	-6	8	2	-9	4	1	12	15	-8
Liberia	25	-7	0	-4	1	-11	-5	7	2	-3	-12
Madagascar	-7	-38	20	5	-9	-1	-4	7	-20	-2	10
Malawi	3	49	-2	8	-0	-6	-6	36	6	-15	14
Mali	-4	115	-22	35	-20	12	2	15	9	10	-14
Mauritania	62	-27	-13	20	22	12	33	-10	37	35	-1
Mauritius	-134	52	-1	-160	5	69	1	23	27	22	15
Niger	-50	200	183	28	-23	-24	-9	-75	1	208	5
Nigeria	-133	-62	25	19	23	-32	4	-18	-43	21	91
Rwanda	70	35	66	-29	-2	-9	19	6	-12	2	14
Senegal	62	88	-65	-10	-22	68	-10	-22	20	64	-19
Seychelles	10	-4	62	-13	-26	-7	31	120	12	-38	13
Sierra Leone	-39	-45	22	11	-13	-4	10	4	-14	-9	-3
Somalia	51	4	-29	26	46	0	-47	-38	72	17	2
Sudan	-65	48	-27	-11	-8	-6	23	29	-14	-4	-11
Tanzania	-31	22	-25	10	28	-26	-6	-49	20	22	10
Togo	-66	10	30	20	-2	3	-17	-20	15	25	-11
Uganda	-13	-95	-7	-14	-13	38	10	-2	3	-17	-14
Zaire	2	-7	48	22	-2	-15	-14	14	1	-7	4
Zambia	8	0	2	-10	-8	8	0	0	-11	-13	-1
Zimbabwe	47	-24	15	6	12	2	-26	1	11	18	-18
TOTAL SUBSAHARA	7	20	17	7	6	5	-2	1	7	12	10

NOTE: a) Calculated as change in total export earnings minus price change per country.
SOURCES: Calculated from Table 4 (change in total earnings) and Table 39 (8. change in export prices indices per country) of Statistical Annex.

TABLE 42

BINARY SCORE FOR VOLUME-PRICE DOMINANCE IN EXPLAINING CHANGES IN EXPORT EARNINGS

(1 = price dominance, 0 = volume dominance)

Country	1974	1977	1979	1980	1981	1982	1983	1984	1985	1986	1987	FREQUENCY 1974-79	FREQUENCY 1980-87
Benin	1	1	0	0	0	1	0	0	0	0	1	2	2
Botswana	0	0	1	0	0	1	0	0	0	1	0	1	2
Burkina Fasso	0	0	1	0	1	1	1	0	1	0	0	1	4
Burundi	1	1	0	0	0	0	0	0	0	1	1	2	2
Cameroon	1	1	0	0	1	0	0	1	0	0	0	2	2
Central Afr.Rep.	1	1	0	0	1	0	0	1	0	1	0	2	3
P.R.Congo	1	1	1	0	0	0	0	1	1	1	1	3	4
Ethiopia	0	1	0	1	1	0	1	1	0	1	1	1	6
Gabon	1	1	1	0	0	1	1	0	0	0	1	3	3
The Gambia	1	0	0	0	0	0	1	0	1	0	0	1	2
Ghana	1	1	1	0	1	1	0	1	0	0	1	3	4
Ivory Coast	1	1	0	0	1	0	0	0	0	1	1	2	3
Kenya	1	1	1	0	1	0	1	1	1	1	1	3	6
Liberia	1	1	1	1	1	0	0	0	1	0	0	3	3
Madagascar	1	1	0	1	1	1	0	0	0	1	1	2	5
Malawi	1	0	1	1	1	0	0	0	1	0	0	2	3
Mali	1	0	0	0	0	1	1	0	1	1	1	1	5
Mauritania	0	0	0	0	0	0	0	0	0	0	1	0	1
Mauritius	1	1	1	1	1	0	0	1	0	1	0	3	4
Niger	1	0	0	0	0	0	0	0	1	0	1	1	2
Nigeria	1	1	0	0	0	0	1	0	0	0	0	2	1
Rwanda	0	1	0	0	1	0	0	1	0	1	1	1	4
Senegal	1	0	0	1	0	0	1	1	1	0	1	1	5
Seychelles	1	1	0	0	0	1	0	0	0	0	0	2	1
Sierra Leone	1	1	0	1	0	1	0	1	0	0	1	2	4
Somalia	0	1	1	0	0	1	0	0	0	0	1	2	2
Sudan	1	0	0	1	0	1	0	0	0	1	0	1	3
Tanzania	1	1	0	0	0	0	0	0	0	0	1	2	1
Togo	1	1	0	1	0	1	0	0	0	0	0	2	2
Uganda	1	1	1	0	1	0	0	1	1	1	1	3	5
Zaire	1	1	0	0	1	0	0	0	1	1	0	2	3
Zambia	1	1	1	0	1	1	1	1	0	0	1	3	5
Zimbabwe	1	0	1	1	0	1	0	0	1	0	1	2	4
Total	1	1	0	0	1	1	1	1	1	0	0	2	5

Note: For each subsequent period the binary score depends on the ratio of price change and volume change (both in percentages). The score '1' was granted when the absolute value of this ratio was above or equal to one.
Source: Inferred from Tables 39 and 41 of Statistical Appendix.

TABLE 43

PRICE AND VOLUME CHANGE OF AGGREGATE SUBSAHARAN
N.F. COMMODITY EXPORTS

	1971	71-'74 a)	74-'77 a)	77-'79 a)	1980	1981	1982	1983	1984	1985	1986	1987
Total Subsaharan NF commod. **export earnings (mln. US $)**												
* in current prices	5179	10277	15729	15659	17109	14708	12727	12479	13466	12821	14415	14664
* in const. 1980 prices	14907	14497	16948	15544	17210	17042	16014	14907	15272	16177	17308	18308
Annual change (%)												
* current earnings	..	33	18	-0	9	-14	-13	-2	8	-5	12	2
* price (weighted) b)	..	34	10	4	-1	-13	-8	5	5	-10	5	-4
* volume (value in constant 1980 prices)	..	-1	6	-4	11	-1	-6	-7	2	6	7	6

Notes: a) growth figures annualised on basis of values at start and end of period; b) Calculated on basis of country price indexes of NF commodity exports, weighted by annual country shares in aggregate Subsaharan export of NF commodities.

Sources: calculated from Tables 4, 39 and 40 of Statistical Annex.