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SURVEY OF ECONOMIC AND SOCIAL CONDITIONS IN AFRICA

1980-1981

Explanatory notes

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The following symbols have been used in the Survey:

... not available                      - nil or negligible

A billion is one thousand million.

Tonnes or tons mean metric tons unless otherwise specified.

Prefatory note

This Survey, entitled Survey of Economic and Social Conditions in Africa, 1980-1981 reviews developments in the African region during 1980-1981 with emphasis on the conditions obtaining in the year 1980.

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## INTRODUCTION

This year the Survey of Economic and Social Conditions in Africa will not be published simultaneously in two parts as was the case previously. Part II of the Survey concerning individual country studies will from now on be disaggregated so to speak and, instead of a single yearly publication, there will be individual in-depth country studies. The countries will be selected in such a way as to provide a good picture of the problems facing African countries as a whole for a given period. This procedure, which takes into account the great number of countries in the African region compared to other regions of the world, is intended to give more relevance to the Survey. Moreover, it is planned to incorporate in future Surveys short-term projections of the African economy, so that the analysis of the past will be linked with a review of the alternatives for economic policy in the short term. In this way, the Survey will be more a tool of economic policy at the disposal of African States rather than a mere accounting of past trends.

The Survey for 1980/1981 concentrates therefore on economic trends during the years 1980 and 1981, a complete analysis being given however only for 1980 for which the greatest amount of information is available. For 1981, an estimate of economic growth is presented globally and for the major economic variables, as well as a tentative forecast of the results likely in 1982. This represents a first step towards the full outlook exercise which will be undertaken in future Surveys.

The two years 1980 and 1981 have been ones of acute difficulties for most African countries. In 1980, because of the huge terms of trade gains made by the oil exporters, the rate of economic growth climbed to 6.5 per cent in real terms. But in 1981 the terms-of-trade gains effect evaporated and both oil exporters and non-oil exporters had to face serious financial difficulties. The over-all rate of growth fell to around 4 per cent, and while oil exporters had to cut down on prices and reduce their investment programmes, non-oil exporters experienced severe balance of payments difficulties. Their current account deficit, which was around 12 billion dollars in 1980 (6.9 per cent of GDP) increased to 14 billion and, with declining capital inflows and a stagnant level of official aid and transfers, they had to reduce their reserves by 2 billion dollars compared to a small surplus in 1980. The balance-of-payments crisis expressed itself in reduced oil consumption, difficulties in spare parts and other imported inputs with a direct impact on industry and many Governments had to turn to IMF for financial assistance. Even growth leaders like the Ivory Coast and Kenya were affected and they not only saw their growth rate fall drastically but also had to apply retrenchment measures in order to restore equilibrium.

The main lesson learned from the experience of the two last years is the necessity for African Governments to review their policies and adjust them to the changed circumstances of the 1980s. Since independence, government intervention has grown considerably in African economies



where government is now responsible for a large if not dominant share of investment, and contributes also a large share of output through government-managed parastatals. Under the prodding of Governments, the share of investment in total resources has increased and is now in the neighbourhood of 20 per cent even in relatively low-income countries. But what experience shows and has been brought out quite clearly in 1980/81, is that the efficient use of investment is the decisive factor and that a large amount of investment is not by itself a guarantee for rapid economic development. What is necessary is first of all a redistribution of effort in favour of the key sector of African economies, agriculture, whose poor performance during 1970-1980 is a matter of great concern. Despite the uncertainty of data, it is quite certain that agricultural production has barely kept abreast with population growth and may even have fallen behind. The rapid increase of food imports in a number of African countries, while agricultural exports in others have actually dropped, is a clear indicator of trouble and measures have to be taken to redress the situation if a growing dependence on external food supplies is to be averted. The measures have to be mainly oriented towards providing the farmers with the right set of incentives in terms of prices, inputs supplies, credits, and consumer goods availability and cannot be limited to providing the material inputs necessary for production. Experience shows that even technically sound projects will fail unless the farmers have a net return for their efforts. At another level, the operations of public enterprises require urgent attention as they have proved to be in too many cases a burden on national treasuries instead of adding to national wealth. Poor countries like the African ones cannot afford to maintain costly public institutions mainly for social purposes. More generally the thrust of economic policy should be taken into account the real cost of projects and their real net return to the economies and provide economic agents an adequate set of incentives.

Among African countries, the least developed ones require special mention. These countries, which represent among themselves more than a third of the total population of Africa, have a level of GDP per capita which is less than half the average for the other African countries. Their rate of economic growth has barely exceeded population growth during the 1970s, being in fact lower than in the 1960s, and they have been severely hit by the impact of the world recession in 1980/1981. In some of them the shortage of fuel has forced the introduction of rationing, while in others there has been a renewal of drought like in the Sahel area. The international community has adopted a Substantial New Programme of Action for the 1980s for Least Developed Countries, and a key piece of the programme is the increase of aid flows. It is estimated that if African least developed countries, are to achieve a reasonable rate of economic growth during the 1980s (5 per cent), the flow of resources should double relative to its level of the late 1970s, or reach approximately 30 billion dollars at 1980 prices during the 1980s. With the change of policies in major donor countries, it appears now that it will be difficult to secure this amount through official channels at least. It is therefore even more imperative for African countries to strengthen their mutual co-operation which appears to be one key element for the progress of least developed countries.

For 1982 the prospects appear to be mixed. The demand for African products on international markets is weak and all price forecasts indicate declining prices for most commodities in 1982. This will be the case for cocoa, coffee, sugar, oil seeds and cotton. There are growing indications of bumper crops in the United States and other countries and this is depressing the outlook for a number of commodities. For oil also there are no prospects of a pick up in demand and therefore of higher prices. Of course, these developments have positive aspects since they imply favourable prices for cereal imports and no increase in the oil bill of oil importing countries. For agriculture the 1981/82 season appears favourable in most countries, in the Sahel in particular, and with bumper crops in parts of Southern Africa. Consequently it seems that over-all growth in 1982 will not be significantly different from the one achieved in 1981 and will be in the range of 4 to 5 per cent. However, the balance of payments problem will remain and may even intensify as the outlook for resource inflows is not favourable. In the longer term it is clear that significant changes will occur in a number of African countries during the first half of the 1980s because of the beginning of oil production. In particular along the West African Coast, many countries will achieve energy sufficiency and become net exporters before 1985, among them the Ivory Coast and the United Republic of Cameroon and this will have a tremendous effect on their development trends. Such a situation is likely in other areas also, and the Sudan for example is expected to become self-sufficient in the same period. This shows that the prospects for Africa are not all unfavourable and that the magnitude of its resources preclude any form of pessimism.

L. END-OF-YEAR STATEMENT BY PROF. ADEBAYO ADEDEJI  
UNITED NATIONS UNDER-SECRETARY GENERAL AND EXECUTIVE  
SECRETARY, ECONOMIC COMMISSION FOR AFRICA

As the old year approaches its end and the new year, 1982, rolls in, the time has come for me to undertake my annual end-of-year assessment of our economic performance and to examine the prospects for the coming year.

You will recall that this time last year, I summed up my 1980 end-of-year assessment as follows:

"In addition to sagging and sluggish economic growth, escalating inflation and growing unemployment and mass poverty, the African continent continued to face four devastating and debilitating problems in 1980: chronic food deficits, pernicious drought; the impact of inexorably rising costs of imported energy; and, deteriorating terms of trade, chronic balance-of-payments deficits and mounting external debt."

With respect to prospects in 1981 I stated that "many African countries are today on the verge of economic bankruptcy while a few others are simply trotting along. Unless African countries make immediate contingency plans, another round of oil price increase in 1981, a fall in the prices of Africa's major export commodities leading to a further deterioration in the terms of trade and above all the expected failure of the rains in 1981 will spell disaster and economic ruin for many an African country in 1981.

The economic performance of most African countries during the past 12 months has, unfortunately, confirmed this forecast.

On the basis of available information, the African economy has grown by about 3 to 4 per cent only in 1981 - a rate of growth which is only slightly higher than that of population growth and which, therefore, means that there has been no improvement in the living conditions of the people. Whereas in 1980, the economy of the oil-exporting African countries achieved respectable high rates of growth, in 1981, poor economic performance struck both oil-exporting and non-oil-exporting African countries.

Oil-exporting African countries have had to cope with a sharp fall in the demand for oil in industrialized countries. Demand in fact fell by 4 per cent in the first quarter of 1981 compared to the corresponding period in 1980 after having fallen by 7 per cent in 1980 as compared to 1979. Indeed, despite cutbacks in production, oil prices had to be lowered by the end of the year in order to boost demand. Over-all African oil production has consequently been reduced by 14 per cent in 1981 to around 251 million tons as against 292 million tons in 1980. With a fall in both volume and value terms, the trade surplus of oil-exporting countries has shrunk drastically from around \$US24.5 billion in 1980 to only \$US8.9 billion in 1981, and their over-all balance of payments is forecast to be in deficit to the tune of \$US3.5 billion. Oil-prices were on average slightly higher than in 1980, but the terms of trade gain has been too low (\$US1.5 billion in current terms as against \$US19.6 billion in 1980) to offset the large loss in export volume. It is little wonder then that economic growth has not been very high in 1981 for African oil-exporting countries and a provisional estimate shows the percentage increase in output to be 3 per cent only.

In the non-oil exporting African countries, conditions worsened again in 1981 after the setback of 1980. Many countries especially in the Sahel suffered from the impact of the poor agricultural season of 1980/81 which reached catastrophic proportions in a country like Senegal where the groundnut crop was the lowest since 1972/73. In 1981 itself, crops were disappointing in many areas especially in East Africa where the situation is particularly critical in the United Republic of Tanzania, while drought hit some parts of North Africa where Morocco has reported heavy losses in cattle and the authorities have had to take emergency measures to save the situation.

Over-all agricultural and food production has grown by 1.7 per cent only in 1981. This poor performance has led to higher food imports which are forecast to reach 21.4 million tons in 1981/82 compared to 18.5 million tons in 1980/81. Whereas in 1980 Africa's food import bill was \$US6 billion, the figure escalated to an estimated figure of \$US7 billion in 1981. Had grain prices not fallen appreciably in 1981, our food import bill would have even been higher.

Export prices of non-petroleum commodities have again fallen and, with lower demand in industrialized markets, exports have declined in both value and volume. A forecast based on the results of the first half of 1981 indicates that the value of the exports of the non-oil-exporting African countries will be only \$US28 billion in 1981 as against \$US29.8 billion in 1980. In volume terms, there will be a 12 per cent reduction. However, because of the virtual stagnation of imports at \$US40 billion in 1981, the trade deficit will not increase greatly and will be around \$US12 billion as against \$US11 billion in 1980. But even then this is a considerable figure representing a loss of around 5 per cent of GDP in current terms.

The current account deficit worsened during the year reaching roughly \$US14 billion. Since, moreover financial transfers of official development assistance increased only marginally and fell in real terms and capital inflows dropped significantly, African non-oil-producing developing countries had to dip into their meagre foreign exchange reserves to the tune of \$US2 billion. The balance-of-payments problem on non-oil-exporting African countries has not, therefore, by any means eased. Many of the Governments have had to turn to IMF for assistance and because of the well known IMF conditionality requirement, have had to introduce stabilization programmes which entail cuts in expenditures and painful income losses particularly for the low-income group.

As already indicated, oil prices were slightly higher on average in 1981 than in 1980. Hence the cost of the oil bill remains the main determinant of the payments crisis faced by non-oil-exporting African countries. Oil imports represent now more than 30 per cent of total imports in a number of these countries and since the large price increase of 1979/80, they have been obliged to reduce or at best not to increase their oil imports, cutting down, therefore, on energy consumption with disastrous consequences for economic growth.

Data on the over-all growth rate are still tentative and incomplete but they suggest a growth rate for non-oil-exporting African countries which is not higher than in 1980 (4 per cent).

The unstable and precarious food situation in Africa continues to be the major cause for concern of the Economic Commission for Africa. Per capita food production continues to decline. During the past ten years it has declined at the rate of about 1 per cent per annum. Consequently, two thirds of the African countries are at present malnourished and most of them continue to be threatened by starvation. The rural poor (the landless labourers, tenants, small farmers, the unemployed and the underemployed) are the first to suffer from food shortages and are the hardest hit. It is gratifying to note that an increasing number of African Governments are giving priority to the food situation. One of the major objectives of ECA is to intensify its support to African Governments and African intergovernmental organizations working in the field of food development. Through its African Training and Research Centre for Women, ECA will in the new year intensify its assistance to African women engaged in farming and agro-allied industries with a view to increasing their efficiency in food production. ECA also intends to organize early in the new year a round-table meeting of African intergovernmental institutions engaged in research activities and extension services in the field of food production.

The fragmentation of Africa into small national markets continues to aggravate the region's deteriorating economic conditions. Fortunately, 1981 saw the achievement of a major breakthrough in the development of larger African markets through multinational regional co-operation. After four years of intensive negotiations by the 18 countries of Eastern and Southern Africa under the aegis of ECA, the countries signed the Treaty establishing a Preferential Trade Area for Eastern and Southern Africa in Lusaka, Zambia, on 21 December 1981. Although only nine countries signed the Treaty on that day, there is every indication that the remaining nine will follow soon.

Whatever critics and detractors may say to downplay the significance of the signing of the Treaty after many of them had wagered that the negotiations would collapse, the signing of the PTA Treaty was an event of considerable historic significance and of tremendous potential. It marks a decisive step in establishing a new system of economic relationships among the countries of Eastern and Southern Africa which will eventually enable them individually and collectively to reduce their economic dependence and at the same time to strengthen their links with other African countries in the subregion. For the fundamental objective of the PTA is to provide a framework for endogenous economic development that conforms to the needs of the peoples of the subregion. The Treaty and the protocols annexed to it provide not only for the liberalization of trade but also for co-operation and intercountry specialization in the development of basic and strategic industries, production of food crops and livestock, development of science and technology, human resources development and the creation of an intercountry transport and telecommunications network.

I would like once again to congratulate the nine countries - the Comoros, Djibouti, Ethiopia, Kenya, Malawi, Mauritius, Somalia, Uganda and Zambia - which have already signed the Treaty. Similarly, I would like to appeal once more to the remaining nine - Angola, Botswana, Lesotho, Madagascar, Mozambique, Seychelles, Swaziland, the United Republic of Tanzania and Zimbabwe - to sign the Treaty without further delay. All the countries of the subregion participated fully in the four-year-long negotiations. They should now all join hands together to give the PTA a fair chance of success. The interest which Burundi and Rwanda continue to show in the PTA is most encouraging and the open policy of the PTA member States has already manifested itself in the decision of the Lusaka Summit to grant these two countries observer status until such time as they have decided to join and have successfully negotiated the terms of their membership with the PTA countries. It is my hope that before long Namibia too will become a full member of the PTA. I would like to assure all the member States that ECA, which has been designated by the Lusaka Summit to serve as **the interim** secretariat for the PTA, will do all **in its power**, as it did during the negotiating process, to ensure a successful take off.

Another encouraging development was the recent Summit of Central African Heads of States in Libreville which resulted in the Libreville Declaration of 19 December 1981 by which the Governments of Central Africa agreed to set in motion the process for establishing a wider economic co-operation arrangement for the whole subregion. This is one of the results of the recent ECA Mission on the Evaluation of UDEAC and the feasibility of enlarging economic co-operation in Central Africa, which was commissioned by the UDEAC Heads of State in 1980. 1982 should, therefore, see the negotiation of a wider co-operation arrangement for Central Africa and thus, the strengthening of regional co-operation in Africa.

However, with regard to the prospects for the African economy as a whole, I regret to say that they are far from being bright. Even if there is slight recovery in the industrialized countries, conditions in Africa are unlikely to change much for African oil-exporting countries, since there are no immediate prospects for an increase in real terms in the price of oil, and for the other countries, the balance of payments constraints are not going to be removed quickly.

However, there may be some improvement in agriculture, particularly food production, if the FAO forecasts for cereal production and our own forecasts prove correct. Generally speaking, the 1981/82 crop year has begun well in most of Africa and the level of agricultural output in 1982 will, therefore, be improved. This will relieve some pressure on the balance of payments by reducing food imports, but any significant improvement in the economic performance of African countries can come about only through a change of economic policies designed to break down barriers between African countries and provide incentives to producers and through better and more efficient economic management. For, in many African countries, Government-managed enterprises, instead of making a net contribution to the output of goods and services, have on the contrary proved only too often to be a burden on the national treasuries. The resources used in maintaining them have, therefore, been lost at a great opportunity cost. There is no reason why, as provide in the Lagos Plan of Action, the considerable resources of water, land, minerals and energy in Africa should not be used to provide a decent standard of living for the peoples of Africa. The fact that some countries like the Ivory Coast and the United Republic of Cameroon, which up to now have been dependent on oil imports, will become net exporters in the future, and that self-sufficiency in energy will be reached by other countries, is sufficient proof of existing possibilities.

But favourable external conditions are also essential if Africa is going to overcome its present stagnation. In the short term, external support is necessary to provide balance-of-payments relief. In the longer term, Africa will need in the present decade a level of foreign assistance at least double the current one and in particular the least developed countries, which account for one third of the total population of Africa, and which are the most affected by the current difficulties, will need a stable and guaranteed level of external assistance to develop their agriculture, find new sources of energy and start to industrialize their economies. Developed countries should, therefore, live up to their commitments including those taken to implement the SNPA during the United Nations Conference on Least Developed Countries held in Paris.

But whatever the external developments, African countries should give the utmost priority to adjusting their internal economic policies and to extending and deepening their co-operation. Economic strategy has too often been outward-looking and dependent on external resources, while available domestic resources are not always efficiently and productively used. The Lagos Plan of Action in this respect provides the requisite framework for African countries to come out of their present difficulties and achieve the goal of providing a better life and a better future for their citizens.



## II. THE MACRO-ECONOMIC PICTURE

### A. OVER-ALL DEVELOPMENTS IN 1980-1981

#### 1. Over-all growth

The African economies plunged into a deep recession in 1980, and about half of the 50 countries of the region either stagnated or actually lost ground. The all-round malaise afflicted even countries with previously high growth records like the Ivory Coast, Kenya, and Malawi. Thirteen countries, most of them in West Africa, recorded negative growth rates, of as much as 9.9 per cent in the case of Equatorial Guinea<sup>1/</sup>, while another 10 failed to achieve any gain in per capita incomes<sup>2/</sup>. Only nine countries were able to achieve or surpass the 6 per cent growth targeted for the Third United Nations Development Decade<sup>3/</sup>. Details appear in the statistical annex.

For the African region as a whole, GDP grew by 4.5 per cent in 1980, which compares unfavourably with growth rates of 5.9 per cent in 1978, 6.0 per cent in 1979 and an average of 5.2 per cent a year for the 1970s. With growth in the non-oil-exporting countries showing a marginal improvement of 0.6 percentage points to reach 3.7 per cent in 1980, the entire deceleration of regional growth in 1980 is attributable to the major oil-exporting countries, notably the Libyan Arab Jamahiriya and Nigeria, where growth declined from 7.0 per cent and 12.3 per cent to 5.0 per cent and 6.0 per cent respectively, following the world oil glut and the decision of their Governments to conserve their oil resources (see table II.A.1).

Meanwhile, GDP growth in the developed countries as a whole dropped from 3.7 per cent in 1979 to 1.5 per cent in 1980, while growth in the developing countries fell from 4.5 per cent to 3.9 per cent. Although these low figures suggest a better performance for Africa than for any of the other regions, the low absolute level of per capita income and limited access to services in the region renders this result a mediocre achievement indeed.

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<sup>1/</sup> Chad, Central African Republic, Equatorial Guinea, Gambia, Guinea-Bissau, Ghana, Lesotho, Liberia, Madagascar, Mauritius, Mali, Senegal and Uganda.

<sup>2/</sup> Benin, Malawi, Mozambique, Morocco, Sierra Leone, Somalia, Togo, Upper Volta, Zaire and Zambia.

<sup>3/</sup> Botswana, Egypt, Ethiopia, Guinea, Mauritania, Nigeria, Swaziland, Tunisia and Zimbabwe.

However, if the terms-of-trade effect was taken into account then the rate of growth of real GDP for developing Africa would jump by an additional 2.2 per cent to 6.7 per cent in 1980. The major oil-exporting countries, benefiting from the near-doubling of oil prices, would gain 4.2 percentage points to 9.8 per cent, but the non-oil-exporting countries would gain only a marginal 0.2 of a percentage point.

The terms-of-trade effect aside, growth performance remains modest and disappointing, especially for the non-oil-exporting countries. Diverse local and international factors, some of which have persisted for a number of years, have contributed to this result. Firstly, the inflationary recession ("stagflation") in the industrialized countries has stifled demand and thus affected production and prices of the region's main export products. The index of export volume for developing Africa (1975=100) dropped from 120 in 1979 to 103 in 1980; that of the region's major oil-exporting countries declined from 125 to 110, while that of non-oil-exporting developing Africa fell from 115 to 95. The effects on export volume have varied from country to country, depending on the composition of exports. However, after several years of stagnation for many commodities, 1980 showed a favourable swing in the prices of the major exportable commodities -- copper was up by 10 per cent, coal by 12 per cent, iron ore by 14 per cent, and cotton by 7.7 per cent, though coffee and cocoa fell by 11 per cent and 20 per cent respectively. But this was followed by a sharp downswing in 1981; beverage prices dropped by 21 per cent and metal prices by 13 per cent, and both are expected to remain low throughout the first half of the 1980s. If they do they will eventually affect production and investment decisions.

Secondly, the near-doubling of oil prices in 1979 and 1980 a few years after their quadrupling in 1973 and 1974, together with the concomitant rise in the prices of manufactures at a time of stagnant exports, intensified already acute payments problems. In 1980 the current account deficit of the non-oil-exporting developing African countries reached the equivalent of 35.7 per cent of exports, from 25 per cent in 1979.

Thirdly, the ensuing foreign exchange squeeze forced many countries either to reduce imports and thereby tolerate lower growth, or to undergo considerable hardship, as in Malawi, Mauritius, Somalia, the Sudan, the United Republic of Tanzania, and Zaire in the last two years or so, or else to borrow heavily abroad, increasingly at commercial rates as their credit-worthiness deteriorated and their problems intensified. The higher interest rates and the short maturity of these types of loan has exacerbated an already heavy debt servicing burden, currently running at over 25 per cent of exports of goods and services for countries like Algeria, the Congo, Mauritania, the Sudan and the United Republic of Tanzania.

Domestically the critical constraints include the poor performance of agriculture, which has repercussions on other aspects of economic activity, inadequate or faulty economic policies complicated by the generally low levels of economic management in many countries, and political unrest in some countries.

Agriculture, the mainstay of the majority of countries, has consistently failed to expand, with the result that exports have stagnated, food supplies have been inadequate and supplies of raw materials for the manufacturing sector have been interrupted. During the 1970s agricultural value added increased by a lamentable 1.3 per cent a year, less than half the rate of population growth in the region. Although growth improved slightly to 2.2 per cent in 1980, this was both well below the level of population growth and an inadequate achievement in absolute terms. Thirteen countries registered negative growth in agriculture in 1980, and in another 17 the growth of agricultural value added was less than the rate of population growth. Angola and Equatorial Guinea value added in 1980 was only a half and a fifth that of 1970 respectively. Although Algeria, Botswana, Cape Verde, Ethiopia, Guinea, the Libyan Arab Jamahiriya, Mauritania, the Niger, Swaziland, Tunisia and Zambia did particularly well in 1980, the over-all picture remains poor.

This decline in agriculture in turn affected incomes, employment and government revenue and, in countries where food imports are necessary, led to a further worsening in the payments position. On the export side, in the Gambia, Ghana, Senegal, the Sudan, Uganda and the United Republic of Tanzania the principal exports - cotton, coffee, groundnuts and cocoa - were lower in volume in 1980 than at the beginning of the 1970s.

A formidable array of factors have been responsible for the sluggish growth in agriculture, first and foremost drought. The various parts of the region have all experienced some form of drought or unfavourable weather at one time or another during the last decade, and in the Sahel and Eastern Africa the quick succession of drought years has affected food and cash crop production, caused severe losses in livestock and contributed to the deterioration of the environment. Other factors include inadequate attention given to agriculture and support facilities in investment programmes and government policy, the obsolescence or inadequacy of basic infrastructure, poor incentives, the high cost, insufficient volume and poor timing of the supply of inputs and conservative farming practices in rural areas. The Sudan and many other countries are revising the entire gamut of their agricultural production and pricing policies in an effort to reverse the present trends.

Closely associated with the performance of the agricultural sector is that of manufacturing in countries where the processing of agricultural raw materials is the most important part of industrial activity. Largely because of the foreign exchange constraint the performance of the manufacturing sector has additionally

been affected by shortages of fuel, spare parts, raw materials and skilled man-powers. Only a few countries, notably such oil-exporting countries as Algeria, the Libyan Arab Jamahiriya and Nigeria and countries with an established industrial base such as Egypt, the Ivory Coast, Tunisia and Zimbabwe, showed consistent industrial growth.

Where mining is an important sector, as in Botswana, the Central African Republic, Guinea, Lesotho, Liberia, Mauritania, the Niger, Sierra Leone, the United Republic of Tanzania, Zaire and Zambia, its contribution to economic growth has been seriously constrained by the behaviour of the international market for minerals and, except for a few, by the structural limitations of their own economies. Demand for and prices of base metals were slow in recovering from the recession of 1975, and remained generally low until 1979. Largely because of the need to replenish stocks, prices picked up remarkably in 1980, coal by 11.8 per cent, copper by 10.3 per cent and iron ore by 13.9 per cent, although prices of other metals showed divergent movements. Yet despite the favourable out-turn, Zaire and Zambia failed to capitalize on the increased copper prices because of transport problems. At the same time, diamond production continued to decrease in Ghana, Sierra Leone and Zaire, stagnated in the Ivory Coast and Liberia and gained only marginally in Angola, Botswana and the Central African Republic, despite the relatively stable market for precious metals. In contrast the Niger is enjoying rapid growth in uranium exports, the returns from which have been ploughed back into productive projects and training.

Leaving demand considerations aside, the exploration and exploitation of the large mineral potential in Africa has been and may continue to be seriously constrained by such structural factors as the high costs of extraction, weak infrastructure, the shortage of skilled manpower for mineral prospecting and mining development, lack of capital and the general remoteness of potential mineral sites, unless serious efforts are taken to eliminate these obstacles and fully integrate mining activities within national or regional development programmes.

Increasingly the low level of economic management has been recognized as one of the most important constraints on growth in the countries of the region. This is evidenced by the high and rising incremental capital-output ratios (ICORs) in a number of countries which have suffered low growth.

Since the impact of the above-mentioned constraints is felt with greater severity in the agricultural and manufacturing sectors, their contribution to GDP has declined over the years. In 1980, for instance, they generated only 1.1 percentage points of the increase of 4.5 per cent in value added for the whole region. During the 1970s their contribution to GDP rose in only 10 countries, notably Algeria and the Libyan Arab Jamahiriya - thanks to forceful policies of industrialization - and the Central African Republic, the Comoros and Liberia. Elsewhere the share of commodity production either decelerated or stagnated.

With commodities, both agricultural and manufactured, constituting the greater portion of consumption, it is evident that the structure of growth is unfavourably skewed with respect to the consumption needs of the population. The situation seems worst for the non-oil-exporting developing African countries, where commodity production contributed only a third of the increment in GDP, notwithstanding the large share of basic goods in consumption for the lower income group.

The serious deterioration in the economic situation has prompted a number of countries to launch wide-ranging adjustment programmes aimed at restructuring their economies and correcting their external and internal imbalances. Even the familiar stringent policy packages of IMF and the World Bank have been accepted in exchange for support. See Section II.F.4.

## 2. Growth by per capita income group and subregion

The above picture, however, masks wide disparities between oil exporters and non-exporters, 1970 per capita income groups 4/ and subregions (see table II.A.1).

As mentioned earlier, the lower growth in the African region in 1980 was essentially due to the slowing down in the rate of growth of the oil exporters from an average of about 8.8 per cent in the preceding two years to 5.6 per cent. The decline in the combined rate of growth for the group is attributable to the Libyan Arab Jamahiriya and Nigeria, despite the marginal increase in Algeria and the considerable gain in Gabon, the smaller oil producers of the group.

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4/ Unless otherwise stated, all the tables presented in this section provide data on 50 African developing countries classified as follows. The major oil-exporting countries are Algeria, Gabon, the Libyan Arab Jamahiriya and Nigeria. The non-oil exporting countries fall into four groups:

(a) Those with a GDP as less than \$US 100 per capita are: Benin, Burundi, Chad, Ethiopia, Guinea, Lesotho, Malawi, Mali, the Niger, Rwanda, Somalia, the United Republic of Tanzania, the Upper Volta and Zaire.

(b) Those with a GDP of \$US 100 to under \$US 200 per capita are: Botswana, the Central African Republic, the Comoros, the Gambia, Kenya, Madagascar, Mauritania, Sierra Leone, the Sudan, Togo, Uganda, the United Republic of Cameroon and Zimbabwe.

(c) Those with a GDP of \$US 200 to under \$US 300 per capita are: Angola, Cape Verde, Egypt, Equatorial Guinea, Guinea-Bissau, Ghana, Liberia, Mauritius, Morocco, Mozambique, Senegal and Swaziland.

(d) Those with a GDP of \$US 300 to under \$US 400 per capita are: the Congo, Djibouti, the Ivory Coast, Sao Tome and Principe, Seychelles, Tunisia and Zambia.

The picture in the non-oil-exporting developing African countries is equally mixed. Countries with per capita incomes of less than \$US 100 showed the lowest growth, at 3.1 per cent in 1980, although this was about 0.3 percentage points up on their 1979 performance. The improvement was largely due to the relatively high growth in Ethiopia, Guinea, the Niger and the United Republic of Tanzania, as growth in the rest of the group was either very low or negative, especially in Chad, Lesotho and Mali. Countries with a per capita GDP of \$US 300-400 also improved their performance remarkably in 1980, with their rate of growth almost doubling from 2.2 per cent in 1979 to 4.2 per cent. Notable in this group was the performance of the Congo and Seychelles, as well as Tunisia, which emerged as a net oil exporter.

Likewise, countries with per capita GDP of \$US 100-200 continued to improve on their performance though marginally for the second year in a row, from 2.8 per cent in 1978 to 3.2 per cent and 3.5 per cent in 1979 and 1980 respectively. In contrast, countries with per capita GDP of \$US 200-300 showed systematic deceleration of growth, from 5.1 per cent to 4.3 per cent to 4 per cent meantime. Within these middle-income countries growth performance was particularly disappointing in countries like the Central African Republic, the Gambia, Madagascar and Uganda in the former group and Equatorial Guinea, Ghana, Guinea-Bissau, Liberia, Mauritius and Senegal in the latter.

In comparison, the African least developed countries as a group stagnated at the sluggish rate of about 3.2 per cent in the last two years, a substantial decline compared to their average growth of 4.9 per cent yearly in the first half of the 1970s. The economic weaknesses of this group are well recognized, most importantly in the Substantial New Programme of Action for the 1980s adopted by the United Nations Conference on the Least Developed Countries held in Paris in September 1981 (see below, Chapter V).

The Central and Eastern African subregions improved marginally on their record for the preceding two years. In 1980 they grew by 2.3 per cent and 3.4 per cent respectively, against 2 per cent and 1.8 per cent in 1979. Meanwhile, the generally stronger growth in the North and West African subregions slowed down considerably to 5.6 per cent and 4.4 per cent from 6 per cent and 8.9 per cent respectively. Whereas growth in North Africa was affected by the lower volume of Libyan oil exports and the poor performance of agriculture in the Sudan and of mining in Morocco, the lower performance in West Africa can be traced to the general deterioration in all aspects of economic activity, especially the unsatisfactory performance of the agricultural sector following irregular or insufficient rain in the majority of the countries of the region, notably the Gambia, Ghana, Guinea-Bissau, the Ivory Coast, Mali and Senegal, which also affected their manufacturing sectors. Another factor was the contraction in the mining sector in Ghana and Sierra Leone, in addition to the drop in the all-important oil production in Nigeria. All these factors were of course additional to the external factors alluded to above, which affected other regions to varying degrees.

The modest performance of the Central and Eastern African subregions can similarly be explained to a substantial extent by set-backs in agriculture and the transportation bottle-necks faced by the land-locked countries, as well as the widespread foreign exchange squeeze. In Central Africa the slower growth of manufacturing after an impressive performance in 1979, as well as the near-collapse of the Chadian economy following the hostilities in that country and the serious deterioration of the economy of Equatorial Guinea, seem to have outweighed the relatively satisfactory records of Angola, the Congo, Gabon and the United Republic of Cameroon, which all benefited from the rise in oil prices. The latter two countries were also able to palliate the effect of external factors on their economies thanks to rigorously applied demand control measures and streamlined economic management.

In Eastern Africa the deterioration in farm output because of drought and adverse terms of trade, the scarcity of foreign exchange and the decline in mining activities were the most important explanatory factors for the modest growth of this region, which was nevertheless better than the sluggish growth of 1979. Moreover, the forceful growth of Kenya and Malawi seems to have levelled off. The foreign exchange constraint is emerging as the most important impediment to the future growth of the region. The scarcity of foreign exchange is reflected in the reduced volume of imports, which affects both export-oriented and domestic production, spilling over to affect other sectors, especially transport.

### 3. Utilization of resources

On the expenditure side, developing Africa as a whole is making noteworthy progress towards reducing its over-all marginal propensity to consume (MPC), an achievement attributable exclusively to the major oil exporters, which succeeded in lowering their MPC from 1.07 in the first half of the 1970s to an average of 0.67 in the second half and only 0.37 per cent in 1980. In contrast, there is a tendency for the MPC to rise in the non-oil-exporting countries, with the poorer members of this group, i.e. those with a per capita GDP of under \$US 200, dissaving or borrowing abroad to finance consumption. The MPC for this group rose sharply from 0.82 in the first half of the decade to 0.93 in 1980 (see table II.A.6). The serious implications of such trends for savings and prospects for self-sustained development hardly need any emphasis.

However, there has been a tendency for the rate of increase in consumption to slow down in the last two years or so in a number of countries, partly as a result of a deliberate policy of containing consumption as an adjustment measure and partly because the scarcity of foreign exchange has forced a reduction in imports of consumer goods.

The lowering of the MPC in the African region permitted a gradual improvement in the over-all marginal propensity to save (MPS) and the rate of savings. The MPS rose from 0.10 in the first half of the 1970s to 0.25 in the second half. As a result, the savings ratio increased from 17.8 per cent in 1970 to 18.3 per cent in 1980. Although this increase is marginal, the over-all ratio for the decade of 17.3 per cent is certainly no small achievement compared with the average of 11.9 per cent in the 1960s. Both the major oil exporters and non-oil-exporting countries contributed to this increase, although to only a small extent in the case of the latter.

After first reacting to the substantial rise in oil revenue by enormously increasing both private and government consumption, the former group became increasingly convinced of the advantage of progressively stepping up the tempo of their savings efforts to finance their ambitious investment programmes. Thus the MPS for this group jumped from a negative ratio of -0.07 in the first half of the decade to 0.33 in the second half and further to 0.63 in 1980. Notable in this regard was the performance of Algeria, Gabon and Nigeria. On the other hand, the slower growth of GDP in the non-oil-exporting countries was increasingly reflected in smaller savings ratios rather than reduced consumption, as the improvement in economic and social services required a progressively higher level of recurrent government expenditure. Consequently, the MPS fell by half during this period to 0.14, and to only 0.07 in 1980. Only 14 of the 46 non-oil-exporting countries were successful in achieving or surpassing the average savings ratio of 16.7 per cent for the whole group in 1980, <sup>5/</sup> while most of the others recorded either negative or very low ratios. Performance was more or less directly related to the level of per capita income.

The least developed countries in particular showed a very low MPS and their savings ratio. The former averaged only 0.03 in the last decade, while the latter was only 8.4 per cent of GDP in 1980. Furthermore, a large proportion of these savings remain immobilizable for productive investment for lack of adequate savings channels, especially in the rural areas. It is for this reason that, in addition to efforts to increase public sector savings - by broadening the tax base, strengthening revenue collection machinery and curbing unnecessary expenditure - Governments are also paying increased attention to the establishment of savings institutions and promotion of thrift.

Although the capacity to finance investment from domestic savings has generally improved in the African region as a whole, with the ratio rising from 69.7 per cent in 1975 to 73.5 per cent in 1980, the entire favourable swing was attributable to the major oil exporters, as the ratio for the non-oil-exporting countries **continuously** declined. The former group increased its share from 43.8 per

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<sup>5/</sup> These are: Botswana, Egypt, the Ivory Coast, Kenya, Liberia, Malawi, Mauritius, Sao Tome and Principe, Seychelles, Sierra Leone, Swaziland, the United Republic of Cameroon, Zaire and Zambia.



cent in 1975 to 61.2 per cent in 1980, while the capacity of the latter to finance investment from domestic sources shrank from 97.7 per cent to 89.8 per cent and in the majority of countries in each group failed to achieve the 50 per cent ratio. The situation was more serious for the least developed countries, whose ratio dropped to only 55.3 per cent in 1980. Table II.A.4 shows the savings/investment gap as a proportion of GDP for the various categories of countries.

Gross fixed capital formation, on the other hand, increased continuously in developing Africa during the 1970s, particularly in the second half. Investment as a proportion of GDP increased steadily from 17.4 per cent in 1970 to 25.7 per cent in 1980. Both the major oil-exporting countries and non-oil-exporting countries made remarkable progress during this period. The major oil-exporters almost doubled their investment rates following the rise in oil prices, from 18.7 per cent in 1970 to 34.5 per cent in 1980. All countries in this group have progressively raised their investment ratios: Algeria from 37 per cent in 1970 to 46 per cent in 1980, Gabon from 30 per cent to 38 per cent, the Libyan Arab Jamahiriya from 19 per cent to 32 per cent and Nigeria from 12 per cent to 38 per cent. The performance of the non-oil-exporting countries was mixed, but the over-all rate of investment remains largely a function of income level. Countries with a per capita GDP of less than \$US 100 and \$US 100 - 200 lost 0.7 of a percentage point each to record investment ratios of 16.6 per cent and 16.1 per cent respectively. Those with a per capita GDP of \$US 300 - 400 improved their investment rates by 2 per cent of GDP to 25.4 per cent. Only those in the \$US 200 - 300 group showed **significant** decline, though their investment ratio remains high at 20 per cent of GDP. As expected, the African LDCs showed the lowest ratios, with marginal growth to 15.9 per cent of GDP.

From this account it can be seen that the problem is not essentially one of underinvestment, but rather of the productivity of investment. Generally speaking the ICORs are high and rising. ICORs for developing Africa as a whole rose from 4.4 in the first half of the 1970s to 4.6 in the second half. Ironically, the major oil-exporting countries as a group showed lower average ICOR than the average for the region, at 3.8, although the ratio rose to about 4.7 in the closing years of the decade. On the other hand, the ICOR for the non-oil-exporting countries stood higher, at 5.1, throughout the decade, and, except for the \$US 200 - 300 group, which was affected by the dampening influence of Egypt, tended to increase in the second half.

Among the factors which led to the general decline in capital efficiency are the excessive use of capital-intensive techniques, disregarding the comparative advantage of cheap labour; infrastructural gaps; poor levels of organization, administration, planning, formulation of economic policy and decision-making; inappropriate technology; long gestation periods; poor utilization of manpower potential; and lack of adequate linkages, resulting in underutilization of capacities. All these are **additional** to external factors, such as an unfavourable world economic climate, drought and sometimes political instability.

Thus high capital intensity and long-lead times account for the rise in the ICOR for Algeria from 3.9 in the first half of 1970s to 8.3 in the second half, despite the shift towards agriculture and infrastructure in recent years. In the case of Nigeria, a country with a large agricultural sector and a fairly well-structured economy, the rise in the ICOR from 3.0 to 4.4 during the decade is attributable partly to the neglect of agriculture - only 8 per cent of capital spending under the Third National Development Plan for 1975-1981 was allocated to agriculture - partly to the emphasis placed on capital-intensive investment in the public sector and partly to inefficiencies in the implementation of this investment. Low international demand for copper, infrastructural gaps and scarcities of foreign exchange drastically restricting the import of basic inputs resulted in low capital efficiency in Zaire and Zambia, which despite high investment rates of 35 per cent and 24 per cent attained only marginal annual growth rates of 1.1 per cent and 2.1 per cent respectively during the decade.

At the other end of the spectrum experience in Egypt demonstrates the possibility of attaining high capital productivity (an ICOR of 3.3) and high growth (9.1 per cent a year on average) by maintaining a balanced industrial mix and utilizing trained manpower, Egypt's most abundant resource. Similarly, Rwanda, a country with a low investment effort - 10.3 per cent of GDP - attained high rates of growth of 7.1 per cent a year through the vigorous pursuit of its policy of umuganda (human investment), collective self-help and prudent financial management. Experience in the Ivory Coast, Kenya and Malawi, meanwhile, underscores the fact that dividends can be reaped through concentration on small import-substitution or raw-material-processing industries, avoiding high-cost investment projects and maintaining a relatively outward-oriented stance.

#### 4. The external sector

The significance of the external sector as a growth leader for the African economies derives mainly from its role as the main source of foreign exchange and an important contributor to domestic consumption and capital formation. However, this sector has emerged as a major constraint on the growth of many countries in the region, largely because of the decline or stagnation in exports alluded to above, which forced cut-backs in the volume of imports as a result of already fragile reserve margins and the very limited ability of these countries to borrow on world capital markets. This is reflected in the very low elasticity of exports with respect to GDP of only 0.41 during the last decade, which compares unfavourably with the ratio of 1.1 in the 1960s. At the same time the elasticity of imports with respect to GDP shrank sharply from 1.84 in the first half of the decade to only 0.54 in the second half, and to a negative ratio of -1.00 in 1980. For the most part, this decline is attributable to the contraction of imports in the major oil-exporting countries as their absorptive capacity was already stretched to the maximum and their exports levelled off. Imports fell progressively faster for the third year running, recording negative growth rates

of -0.4 per cent, -6.4 per cent and -10.7 per cent in 1978, 1979 and 1980 respectively. Exports, too, showed a declining trend, with the drop reaching 13.9 per cent in 1980.

In contrast to the major oil-exporting countries, in the non-oil exporting countries, the elasticity of imports with respect to GDP progressively increased from 0.97 in the first half of the decade to 1.26 in the second, largely as a result of the increased imports of machinery and equipment needed for capital formation. However, the large decline in exports in 1980 affected the volume of imports, and led to an abrupt decline in import elasticity from 2.51 in 1979 to a negative ratio of -0.03 in 1980.

As expected, the most seriously affected are the lower-income countries while the higher-income groups continued to maintain high import elasticities and strong export performance.

The high and growing import elasticities with respect to exports are in turn preludes to more serious balance-of-payments problems than those which have been experienced hitherto.

Table II.A.1  
Growth of real GDP in developing Africa  
(percentages per annum)

	1970-71	1974-75	1977-78	1978-79	1979-80	1970-75	1975-80	1970-80
North Africa	4.1	8.1	5.7	6.0	5.6	6.0	6.9	6.4
West Africa	10.3	2.5	9.3	8.9	4.4	5.5	7.1	6.3
Central Africa	4.0	8.4	-1.2	2.0	2.3	2.2	1.0	1.5
East Africa	7.3	-1.1	2.8	1.8	3.4	3.3	2.2	2.7
Total developing Africa	6.8	2.7	5.9	6.0	4.5	4.8	5.6	5.2
Major oil-exporting countries	9.0	6.0	8.0	9.6	5.6	7.5	8.4	7.9
Non-oil-exporting countries	5.7	0.8	4.4	3.1	3.7	5.7	3.8	3.6
GDP of less than \$US 100 per capita	5.0	2.1	3.8	2.8	3.1	3.4	2.8	3.1
GDP of \$US 100 to under \$US 200 per capita	6.0	1.1	2.8	3.2	3.5	3.4	2.8	3.1
GDP of \$US 200 to under \$US 300 per capita	4.6	-1.1	5.1	4.3	4.0	2.4	4.6	3.5
GDP of \$US 300 to under \$US 400 per capita	17.3	4.4	5.8	2.2	4.2	8.1	3.7	5.9
Least developed countries	4.9	2.8	4.6	3.1	3.2	2.8	3.5	3.1

Source: ECA secretariat.

Table II.A.2  
Gross domestic savings as a proportion of GDP  
(percentages)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Major oil-exporting countries	23.3	21.9	22.5	21.6	16.5	14.2	17.3	16.2	16.6	17.9	20.5
Non-oil-exporting countries	15.2	14.8	16.5	16.3	15.9	17.3	17.6	16.9	16.4	17.0	16.7
GDP of less than \$US 100 per capita	15.1	14.0	15.9	14.6	13.4	14.3	15.5	13.6	11.6	13.3	14.8
GDP of \$US 100 to under \$US 200 per capita	15.6	14.2	16.7	20.1	19.4	13.4	18.4	15.9	15.3	16.1	14.3
GDP of \$US 200 to under \$US 300 per capita	12.5	12.2	13.0	12.1	12.1	15.0	14.9	16.4	16.4	17.3	17.8
GDP of \$US 300 to under \$US 400 per capita	28.4	27.3	30.2	27.2	34.8	27.0	28.5	26.2	25.9	22.9	20.8
Total developing Africa	17.8	17.4	18.5	18.1	16.1	16.1	17.5	16.6	16.5	17.4	18.3
Least developed countries	10.1	9.3	11.5	10.0	7.6	8.7	9.5	6.4	5.6	8.2	8.4

Source: As for table II.A.1.

Table II.A.3  
Gross fixed capital formation as a proportion of GDP  
(percentages)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Major oil-exporting countries	17.9	18.0	22.2	22.8	27.7	32.4	36.5	36.0	35.9	33.1	33.5
Non-oil-exporting countries	15.3	15.5	15.3	14.8	16.1	17.7	17.3	17.9	17.9	17.7	18.6
GDP of less than \$US 100 per capita	22.1	23.9	24.4	23.0	25.1	23.2	22.3	21.7	21.6	22.6	22.7
GDP of \$US 100 to under \$US 200 per capita	15.2	15.5	15.4	15.8	16.3	15.8	14.7	14.4	16.5	15.7	14.9
GDP of \$US 200 to under \$US 300 per capita	13.0	12.6	11.7	11.1	13.1	17.2	18.1	19.1	18.0	17.4	19.8
GDP of \$US 300 to under \$US 400 per capita	23.1	22.9	22.6	22.4	21.1	23.2	22.2	24.8	24.6	24.5	24.2
Total developing Africa	16.2	16.4	17.6	17.6	20.3	23.1	24.7	25.0	25.1	24.1	24.9
Least developed countries	13.3	13.2	13.4	13.2	14.1	13.6	12.9	12.1	14.3	15.0	15.2

Source: As for table II.A.1

Table II.A.4  
Investment/saving gap as a percentage of GDP

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Major oil-exporting countries	-4.7	-2.5	0.6	2.5	14.3	21.6	20.7	21.7	20.4	16.2	14.0
Non-oil-exporting countries	1.6	2.2	-0.5	-0.2	2.2	1.9	1.0	2.3	2.7	1.8	2.5
GDP of less than \$US 100 per capita	2.2	4.8	3.1	4.0	6.5	3.6	1.2	2.4	4.3	3.7	1.8
GDP of \$US 100 to under \$US 200 per capita	1.3	3.1	-0.4	-1.6	0.1	-1.0	-1.3	0.9	3.1	0.04	1.8
GDP of \$US 200 to under \$US 300 per capita	2.0	1.6	-1.2	2.6	2.2	3.8	4.2	3.6	2.3	1.3	2.2
GDP of \$US 300 to under \$US 400 per capita	-5.0	-2.6	-6.2	3.9	-9.5	-1.9	-5.5	-0.7	0.4	3.0	4.6
Total developing Africa	-0.4	0.6	-0.1	0.7	6.6	9.2	8.5	9.9	9.8	7.8	7.4
Least developed countries	4.2	4.7	2.3	4.1	7.8	6.2	5.3	7.6	9.9	7.8	7.6

Source: As for table II.A.1.

Table II.A.5  
Incremental capital-output ratios for selected countries

	Average annual GDP growth, 1970-1980 (percentages)	Investment as a percentage of GDP, (1970-1980)	Incremental capital output ratios
<b>A. High growth (above 6 per cent)</b>			
Algeria	7.09	43.2	6.09
Botswana	10.80	49.9	4.62
Egypt	9.1	30.0	3.30
Gabon	10.03	47.9	4.78
Ivory Coast	6.10	26.1	4.28
Lesotho	7.89	21.7	2.75
Libyan Arab Jamahiriya	7.90	29.8	3.77
Malawi	7.26	19.9	2.74
Mauritius	6.28	21.1	3.36
Nigeria	8.23	26.8	3.26
Rwanda	7.11	10.3	1.45
Swaziland	6.91	19.9	2.88
Tunisia	8.15	24.2	2.97
<b>B. Medium growth (4-6 per cent)</b>			
Congo	4.19	16.6	3.96
Kenya	4.90	17.7	3.61
Morocco	5.07	19.8	3.91
Seychelles	5.48	41.6	7.59
United Republic of Tanzania	5.16	20.1	3.90
<b>C. Low growth (less than 2.6 per cent)</b>			
Benin	2.14	17.0	7.94
Central African Republic	1.09	14.9	13.67
Comoros	1.38	27.4	19.86
Ghana	0.07	10.8	154.29
Madagascar	1.33	14.5	10.90
Mauritania	1.19	32.3	27.14
Sierra Leone	1.82	12.8	7.03
Senegal	0.74	16.1	21.76
Upper Volta	1.25	21.5	17.20
Zaire	1.12	35.1	31.34
Zambia	2.10	24.3	11.57

Source: As for table II.A.1.



Table II.A.6  
Major economic indicators and parameters by groups of countries in  
developing Africa based on national accounts at constant prices  
(percentages unless otherwise stated)

	Period	GDP growth rate	Agriculture growth rate	Manufacturing growth rate	Capital output ratio	Share of domestic savings in GDP a/	Marginal propensity to save	Marginal propensity to consume	Export growth rate	Import growth rate	Import elasticity with respect to GDP a/	Investment as a proportion of GDP a/
Developing Africa:	1970-1975	4.9	1.3	6.1	4.4	17.8	0.10	0.90	0.5	9.0	1.84	17.4
	1975-1980	5.6	1.2	5.0	4.6	16.1	0.25	0.75	3.8	3.0	0.54	25.3
	1970-1980	5.2	1.3	5.5	4.4	18.3	0.19	0.81	2.1	5.9	1.13	25.7
	1977-1978	5.9	2.9	6.8	4.4	16.5	0.13	0.87	1.8	2.5	0.42	26.3
	1978-1979	6.0	1.5	7.5	4.2	17.4	0.33	0.67	11.2	1.9	0.32	25.2
	1979-1980	4.5	2.2	6.1	5.7	18.3	0.37	0.63	-5.8	-4.5	-1.00	25.7
Major oil exporting countries	1970-1975	7.4	1.3	11.3	3.7	23.3	-0.07	1.07	-6.0	19.9	2.69	18.7
	1975-1980	8.4	2.9	11.4	4.2	14.2	0.33	0.67	2.4	4.8	0.57	35.8
	1970-1980	7.9	1.4	10.1	3.8	20.5	0.18	0.82	-2.0	4.0	0.51	34.5
	1977-1978	8.0	1.8	13.0	4.4	16.6	0.22	0.78	-2.0	-0.4	-0.05	36.9
	1978-1979	9.6	5.2	15.1	3.6	17.9	0.32	0.68	4.5	-6.4	-0.67	34.1
	1979-1980	5.6	4.1	1.5	6.3	20.5	0.63	0.37	-13.9	-10.7	-1.91	34.5
Non Oil-exporting countries	1970-1975	3.5	1.3	4.8	5.1	15.2	0.29	0.71	3.1	3.4	0.97	16.8
	1975-1980	3.8	1.0	3.6	5.1	17.3	0.14	0.86	4.3	4.8	1.26	19.2
	1970-1980	3.6	1.2	4.2	5.1	16.7	0.20	0.80	3.7	4.1	1.14	19.2
	1977-1978	4.4	3.3	4.7	4.3	16.4	-0.01	1.01	3.1	4.9	1.11	19.2
	1978-1979	3.5	-0.1	4.7	5.4	17.0	0.35	0.65	13.5	8.8	2.51	18.8
	1979-1980	3.7	1.3	7.9	5.2	16.7	0.07	0.93	-3.3	-0.1	-0.03	19.2
Least developed countries	1970-1975	2.8	1.4	2.8	5.2	10.1	-0.01	1.01	3.6	5.3	1.89	14.3
	1975-1980	3.5	2.1	2.1	4.4	8.7	0.06	0.94	-2.0	0.7	0.20	14.9
	1970-1980	3.1	1.7	2.4	4.8	8.4	0.03	0.97	0.6	3.0	0.97	15.9

Table II.A.6 (Continued)

Major economic indicators and parameters by groups of countries in developing Africa based on national accounts at constant prices (percentages unless otherwise stated)

Period	GDP growth rate	Agriculture growth rate	Manufacturing growth rate	Capital output ratio	Share of domestic savings in GDP a/	Propensity to save	Propensity to consume	Export growth rate	Import growth rate	Import elasticity with respect to GDP a/	Investment as a proportion of GDP a/
Least developed countries	1977-1978 4.6 1978-1979 3.1 1979-1980 3.2	4.5 -0.7 2.6	4.2 5.5 -0.9	3.4 5.1 4.9	5.6 8.2 8.4	0.47 0.97 0.12	0.53 0.03 0.88	-1.4 4.5 -6.3	9.0 -5.4 -3.9	1.96 -1.74 -1.22	15.5 16.0 15.9
GDP of less than \$US 100 per capita	1970-1975 3.4 1975-1980 2.8 1970-1980 3.1	2.0 2.8 2.0	4.9 1.7 3.2	5.2 6.2 5.6	15.1 14.3 14.8	0.09 -0.19 -0.14	0.91 1.19 1.14	4.1 0.6 2.3	4.7 1.8 3.2	1.21 0.21 0.74	17.3 17.9 16.6
GDP of \$US 100 to under \$US 200 per capita	1970-1975 3.4 1975-1980 2.8 1970-1980 3.1	3.3 0.6 2.0	3.4 2.9 3.1	5.0 6.0 5.4	15.6 18.4 14.3	0.34 -0.15 0.11	0.66 1.15 0.89	4.3 -0.7 1.8	2.4 1.8 2.1	0.71 0.64 0.68	16.9 17.4 16.1
GDP of \$US 200 to under \$US 300 per capita	1970-1975 2.4 1975-1980 4.6 1970-1980 3.5	-0.5 -0.3 -0.4	4.3 4.6 4.5	8.8 4.2 5.9	12.5 15.0 17.8	0.32 0.28 0.29	0.68 0.72 0.71	2.0 9.8 5.8	3.7 7.8 5.7	1.54 1.70 1.63	23.4 18.8 20.0
GDP of \$US 300 to under \$US 400 per capita	1970-1975 6.9 1975-1980 3.7 1970-1980 5.3	5.3 2.2 3.7	10.8 5.3 8.1	3.5 6.8 4.6	28.4 27.0 26.8	0.23 -0.05 0.09	0.77 1.05 0.91	2.5 1.4 2.0	4.2 5.7 4.9	0.61 1.54 0.92	23.4 25.1 25.4

Source: As for table II.A.1.

a/ Periods referred to are 1970, 1975, 1980, 1978, 1979 and 1980.

### 3. THE INTERNATIONAL ECONOMIC SITUATION

#### 1. Over-all trends

The year 1980 was one of global recession. With the exception of oil producers, almost all the regions of the world experienced a marked slow-down in economic growth, accompanied by rising inflation and external deficits. The GWP <sup>1/</sup> growth rate fell to 2.2 per cent, according to United Nations estimates, against 3.8 per cent in 1979 and an average of 4.8 per cent during the period 1976-1978. The rate of inflation as reflected in consumer prices rose to 11.9 per cent on average in the developed market economies, against 9.2 per cent in 1979, while in oil-exporting developing countries, it climbed to 32.5 per cent in 1980 against 24.5 per cent in 1979. The rate of growth in world trade fell sharply to 2 per cent from 6.0 per cent in 1979 for export volume, and to 1.5 per cent from 5.6 per cent for import volume. The main cause of the downturn in economic activity was the rise in the price of oil, which recorded a total increase of more than 100 per cent in current prices between 1978 and 1980 because of the scarcity resulting from political turmoil in Iran and the war between Iran and Iraq. The immediate effect of this price increase was to put an end to the recovery of the world economy which was visible in 1978/79. The current account deficit of oil importers, which had been shrinking during 1978/79, rose to new highs, and in the case of developed market economies reached \$US 47.2 billion compared with a surplus of \$32.8 billion in 1973. Industrial production was deeply affected, its rate of growth falling to only 1.5 per cent world-wide in 1980 against an average of 5.6 per cent in 1976-1978. For climatic and other reasons agricultural production stagnated, and world cereal reserves fell to their lowest level for 20 years.

The sharpest reduction in the GDP growth rate occurred in the developed market economies, where it was halved from 3.7 per cent in 1979 to only 1.5 per cent in 1980. The OECD countries, which make up most of the group, achieved only 1.3 per cent growth in GDP, with growth in the United States was actually negative, while the rate of inflation went up to 12.9 per cent for the seven major OECD countries and unemployment rose to 5.6 per cent of the labour force, against 4.9 per cent in 1979. The current account deficit of the OECD countries doubled to \$77 billion compared to \$35 billion in developing countries, while the OPEC surplus increased to \$121 billion. The downturn in developed market economies was amplified by internal factors such as the continuous pressure from the labour force for higher nominal wages, which helped to worsen unemployment and reduce capital formation. At the same time, there was a marked change in government policies, which turned more and more towards controlling inflation by checking the

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<sup>1/</sup> Gross world product.

growth of money supply and reducing government deficits. The rise in interest rates, which stood at very high levels at the end of 1980, has been attributed to these policy changes, but it may be that inflation has played a much greater role. Manufacturing output which had grown at an average of 5 per cent or more since 1976, grew by only 0.4 per cent in the developed market economies, with a net decline in the OECD countries following drops in industrial production in France, the United Kingdom and the United States. In Japan, however, manufacturing production increased by 6.7 per cent. Trade contracted, the volume of imports of OECD countries decreasing by 1.25 per cent, while export growth declining from 6.5 per cent in 1979 to only 4.5 per cent.

Table II.B.1  
Growth in world output by regions  
(Per cent)

	1971-1980	1979	1980	1981 (forecasts)
Developed market economies	3.5	3.7	1.5	1.5
OECD	3.3	3.3	1.3	1.25
Developing countries	5.7	4.8	3.9	4
Oil exporters	5.8	5.5	4.0	...
Oil importers	5.6	4.3	3.9	4
Least developed countries	3.2	2.5	2.7	2.9
Centrally planned economies	5.7	3.3	3.1	3.5
Eastern Europe and the Soviet Union	5.2	2.5	2.9	3.2

Sources: World Economic Survey 1980-1981 (United Nations publication, Sales No. E.81.II.C.2); Trade and Development Report, 1981 (United Nations Publication, Sales No. E.81.II.D.9); OECD Economic Outlook, No. 29 (July 1981).

In the centrally planned economies of Eastern Europe and the Soviet Union, net material product increased by an estimated 2.9 per cent against 2.5 per cent in 1979, but growth remained very low in comparison with the historical record of these countries. The growth rate of the Eastern European economies has in fact been continuously falling since the middle of the 1970s. A process of diminishing returns on investment appears to be at work in addition to other factors such as slower growth in the labour force and raw material shortages. The slump in the developed market economies diminished export prospects and, with worsening terms of trade, Eastern European economies reduced their borrowing in financial markets in order to control their external deficits. All these elements have led to a significant reduction in the growth of investment, and official plans now indicate growth rates well below the average level of the first half of the 1970s (a little more than 3 per cent in 1981 against 6.3 per cent in 1971-1975).

For developing countries, economic performance in 1980 was more favourable than expected, in particular for oil importers, despite the serious energy and balance-of-payments imbalances which appeared. Though oil production decreased in oil-exporting developing countries, and especially in the OPEC countries (12.6 per cent down in 1980), because of reduced consumption in developed market economies as well as deliberate reductions of output aimed at boosting prices, and though GDP growth was consequently only 0.8 per cent in capital-surplus oil exporters, the improvement in the terms of trade resulting from the oil price increase was considerable. This was reflected in the increase of the current account surplus of capital-surplus oil exporters to \$10.5 billion in 1980, after more than tripling in 1979 to \$70.4 billion from \$20.4 billion in 1978. The other oil exporters saw their deficit, which had reached \$22.1 billion in 1978, fall only to \$1.5 billion in 1980. Moreover, they were able to maintain a GDP growth rate of 6.1 per cent in 1980, well above the average for the 1970s and only slightly lower than the 6.5 per cent achieved in 1979.

In the oil-importing developing countries, despite the widening of their current account deficit, which rose to \$72 billion in 1980 (4.8 per cent of GDP) from \$48.2 billion in 1979, and despite the acceleration of inflation, the fall in the rate of growth was limited and GDP grew by 3.9 per cent against 4.3 per cent in 1979 and an average of 5.4 per cent in 1976-1979. This relatively good performance resulted from the efforts made by these countries to maintain and increase their rate of investment and expand their exports. Though demand for imports fell sharply in the developed market economies, exports from the oil-importing developing countries nevertheless grew by 5 per cent, more than twice as fast as total world exports. The financing of investment necessitated heavy borrowing, evidenced in the rising current account deficit which doubled relative to GDP (4.4 per cent in 1980 against 2.3 per cent in 1978, according to the World Bank), but at the same time, the saving effort was remarkable since the rate of savings in 1980 increased in real terms relative to 1978. If the oil-importing developing countries can be said to have adjusted to the situation created by the increase in energy prices, this adjustment has been made at the cost of high current account deficit which are not sustainable in the long run. In fact, all oil-importing developing countries did not perform equally well, and the largest gains were recorded mainly in South Asia and Latin America. While in Latin America growth continued unimpeded at 5.4 per cent in 1980 against 5.5 per cent in 1979, and while in South Asia GDP increased by a remarkable 7.4 per cent (though this figure contains an element of recovery from the bad crop of 1979), in sub-Saharan Africa economic growth fell short of population growth, and the least developed countries, most of which are African, fell further behind other developing countries.

## 2. Energy

For the first time since 1975, both world production and consumption of energy fell in 1980. For primary energy, there was an estimated net fall in output of 2 per cent in 1980, and a lesser decrease for consumption. The decline was due almost entirely to a relatively large drop of 4.3 per cent in oil production, while consumption dropped by 2.9 per cent. The huge increase in oil prices, which rose by almost 80 per cent in real terms from

late 1978 to early 1980, was of course the main determinant of the trend, but the efforts made by developed market economy countries to cut down oil consumption also began to be felt. While oil consumption continued to grow, if at a lower rate, in developing countries and centrally planned economies, in the developed market economies there was a fall of 6.9 per cent in total consumption. This resulted from the impact of higher prices, the modifications in equipment made since 1970 in response to higher energy costs, and other conservation efforts, which in many countries took the form of co-ordinated planning. Some countries - France, for example - even managed to reduce the share of oil in their energy balance as a result of a systematic policy of substituting nuclear power for oil-based energy as far as possible. In this way, according to the World Bank, energy intensity in developed market economies fell from 5 barrels of oil per 1,000 dollars of GDP to 4.4 in 1980.

During 1980 itself the rise in oil prices was moderate, amounting to 16.7 per cent from January to December, the big increase in prices having occurred mainly between late 1978 and late 1979. Despite the new shortages created by the conflict between Iraq and Iran, the fall in consumption in the developed market economies and the fact that other producers made up the deficit acted to maintain balance in the market and prevent large price increases. By the end of 1981 a relative surplus on oil markets had developed as consumption in developed market economies continued to fall. Not only has no price increase been recorded, but producers have been forced to bring down prices somewhat in the face of falling demand.

For oil-importing developing countries, however, the situation is serious. Their pattern of development requires them to move into energy-intensive industries, and therefore increase energy consumption relative to GDP. In fact the World Bank projects an increase in energy intensity in oil-importing developing countries from now to 1990. With the oil price increase of 1978-1980, the oil import bill of the oil-importing developing countries has doubled in current terms to 5.3 per cent of GDP, while in some countries oil imports absorb more than 50 per cent of export earnings (75 per cent in India, 51.4 per cent in Brazil). For the least developing countries, the cost of oil imports plus food imports may amount to around 70 per cent of exports. Such a situation is clearly not sustainable, and in the event of further oil price increases many oil-importing developing countries may be forced to lower their growth rates in order to balance their external accounts.

### 3. Trade and financial flows

The world economic recession in 1980 caused a sharp drop in the growth of world trade from around 6.5 per cent in 1979 to only 1.8 per cent in 1980, according to United Nations estimates, which are in agreement with other estimates, from IMF, the World Bank, UNCTAD and OECD.

The main reason for this drop was the economic slow-down in the developed market economies, which account for more than 60 per cent of world trade. Their exports increased by only 3.25 per cent against 6.5 per cent in 1979, while their imports stagnated, and in the case of the OECD countries actually fell by 1.25 per cent. Most of the increase in exports from the developed market economies went to OPEC countries to pay for the more expensive petroleum.

There was little change in exports to non-OPEC developing countries but growth in imports to OECD countries fell to 2.25 per cent against 7.75 per cent in 1979. Imports from OPEC countries also declined in volume terms, the figure for OECD being 17.5 per cent lower, because of lower oil consumption, but this does not take into account the improvement in the terms of trade of the OPEC countries.

As has already been pointed out, despite the contraction of demand from developed market economies, developing oil importers were able to keep the growth of their exports at a relatively high level given the depressed state of the world economy. However, their export growth fell sharply to 5 per cent in 1980 from the 8.3 per cent recorded in 1979.

Moreover, the export performance was far from uniform among oil-importing developing countries, and it was mainly the countries the World Bank calls "semi-industrial" which recorded notable successes. These countries were able to improve their exports relative to 1979 through increased trade and exchanges with oil-exporting countries, but other oil-importing developing countries performed much less favourably. UNCTAD indicates in its 1981 report 2/ that for the countries most seriously affected by economic crisis (LDC countries) for example, exports declined in volume in 1980 relative to 1979, while for the least developed there was a drastic fall in the growth of exports from 14.6 per cent in 1979 to only 3.3 per cent. The poor over-all growth in exports from oil-importing countries precluded large rises in imports, and with the import restriction policies followed by most countries, import growth in oil-importing developing countries fell to only 1 per cent.

Only the oil exporters increased their import volume, at rates exceeding 12 per cent. In 1979 the capital-surplus countries increased their import volumes by only 2.4 per cent, while there was a decrease of 3.3 per cent for the other oil exporters. This of course reflected the huge improvement in the terms of trade flowing from the increase in oil prices. The improvement is estimated at 46.75 per cent in 1980 for capital-surplus oil exporters and 31.5 per cent for other oil exporters. Meanwhile the developed market economies recorded a drop of 7 per cent, and the oil-importing developing countries a similar drop of 7.5 per cent.

The price of oil was more than 100 per cent higher in current terms in 1980 than in 1978, and increased by a further 15.7 per cent during 1980. Prices of exports from the developed market economies increased by 20.25 per cent, while the prices of non-oil primary commodities as a whole increased on average by only 14.8 per cent from 1978 to 1980, and declined during 1980 by 1.4 per cent, the strongest decline being recorded for tropical beverages, whose prices fell by 21.7 per cent. There were strong gains of 33.6 per cent for food, but this benefited mainly developed market economies, and in particular Canada and the United States.

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2/ Trade and Development Report, 1981, op.cit.

Table II.B.2

World trade and financial flows

	1978	1979	1980	1981 (forecasts)
Export volume (rate of growth)	5.1	5.0	2	1.75
Developed market economies	5.1	6.5	3.25	2
Developing countries	2.1	4.5	-2.25	1
Oil importers	7.6	8.3	5	4
Import volume (rate of growth)	5.0	5.6	1.5	1.25
Developed market economies	5.4	7.3	-	0.75
Developing countries				
Oil exporters				
Oil importers	2.9	3.3	1	1
Current account balances (billions of US dollars)				
Developed market economies	32.8	-7.4	-47.2	39.5
Oil exporters	-1.7	63.6	107.0	121
Developing oil importers	-23.3	-48.2	-72.0	-83.5
Official development assistance (billions of US dollars)				
DAC countries	20.0	22.3	26.6	...
Other	5.6	7.9	8.8	...

Sources: World Economic Survey 1980-1981, op.cit., World Bank Annual Report 1981 (Washington, World Bank, 1981).

The improvement in the terms of trade of the oil exporters was translated into a large increase in their current account surplus, and a corresponding increase in the deficit of the oil importers. The rise in the deficit was particularly large in the developed market economies (from 1.0 to 1.6 per cent of GDP), as already remarked upon, and in the oil-importing developing countries the absolute level reached in 1980 was three times the 1978 level, and was equivalent to 5 per cent of GDP. The deficit of the oil-importing developing countries was financed in far less favourable conditions in 1980 than in previous years, and particularly in comparison with the period following the first "oil shock" in 1973-1975. In the first place, though official development assistance (ODA) flows increased by around 17 per cent in current terms, they fell in real terms, while direct investment flows and commercial loans stagnated or fell, so that the oil-importing developing countries had to rely to a considerable extent on short-term borrowing on financial markets, and on drawing down their reserves. The fall in ODA flows in real terms is disturbing, since these flows are particularly important for low-income developing countries which cannot otherwise finance their current account deficits. According to the World Bank, ODA flows represented a total of \$5.7 billion for these countries in



1980, against a current account deficit of \$9.1 billion. ODA at around 0.4 per cent of GNP from the OECD countries, in 1980, has remained practically unchanged as a proportion of GNP since 1975. The OPEC countries improved their contribution to 20 per cent of their GDP in 1980 against 18 per cent in 1979, but this figure was still well below the 27 per cent achieved in 1975. As for the socialist industrial countries, their contribution was negligible and amounted to only 0.12 per cent of GNP in 1980. The fall in direct investment and commercial loans is a result of the very large increase in developing countries' debt since 1970 - a debt which for the oil importers doubled in real terms to reach \$201.3 billion in 1980. This has been a factor in the cooler attitude of private banks towards further expansion of medium-term and long-term lending to developing countries. At the same time, the rise of interest rates has produced a marked hardening of terms, so that developing countries, and especially those in the low-income group have been deterred from increasing their debt to any appreciable extent.

#### 4. Policy issues

The two main short-term policy issues in 1980 were the acceleration of inflation, which has spread world-wide, affecting even the centrally planned economies, and the financing of the deficit of the oil-importing developing countries. In the developed market economies, inflation had been declining since the period 1973-1975, when it reached a peak of 11.0 per cent on average for consumer prices, and declined to 7.2 per cent in 1978. But the rise in oil prices starting at the end of 1978, increases in the prices of food in north America and the pressure on supply exercised by the economic recovery in 1978 ended the decline in the rate of inflation, and a new high of 11.9 per cent was reached in 1980.

At the same time, pressure for large wage settlements was continuing and even increasing in some cases, and helped to maintain inflation at a high level. Unemployment continued to rise, and became a major social problem in some countries. Governments in the vast majority of developed market economies gave highest priority to the containment of inflation by means of monetary restraint. Fiscal policy was more restrictive, and the size of budget deficits in relation to GNP did not increase markedly, and in some cases even declined: in the United Kingdom, for example, the budget deficit dropped to 2.5 per cent of GNP in 1980 against 5.5 per cent in 1979. These policies are considered to have had a high cost in terms of rising interest rates and growing unemployment, but the contribution of the rapid rise in nominal wages in worsening the employment situation as well as fueling inflation must be also taken into account. In the oil-importing developing countries, the external deficit constraint has been dealt with through import restraint, short-term borrowing, the drawing down of reserves and in some cases expansion of exports. But as has already been stated the level of their present deficit is not tenable, and a long-term solution must be found if oil-importing developing countries are to avoid the painful fall of their growth rate which would be necessary to balance their external accounts.

In the longer perspective of the decade as a whole, economic issues appear to be basically the same as those at present facing the developed market economies. It will be essential to continue the process of substituting new sources of energy for oil, pull back inflation to manageable levels and reduce unemployment, while ensuring a return to steady economic growth. This requires a higher level of investment, and the continuous adjustment of production structures to energy prices and to the new patterns of industrial specialization among countries created by the emergence of newly industrialized countries. However, the problem is not a purely economic one, and some kind of social consensus must be arrived at to avoid the destructive competitive bidding for higher revenues from various social groups which is the biggest hindrance to the process of adjustment in the developed market economies. In developing oil-exporting countries, the crucial issue is the development of the non-oil sector, particularly for those countries with high population in relation to their oil revenues, while in some OPDC countries with sparse populations and comparative poor prospects for internal agricultural and industrial development the issue is more the optimal management of oil resources.

In oil-importing developing countries, it is evident from current trends and from all the forecasts and projections which are being made that financing of the current account deficit will be a major economic issue during the 1980s and will play a major role in determining the pace of economic growth. As the oil-importing developing countries shift into energy-intensive activities, their consumption of energy and especially oil is bound to rise, perhaps faster than total output. With the present level of energy prices this means an increasing external deficit. Moreover, not only will they have to supply increasing amounts of commercial energy to their economies, but many of them face a serious crisis in terms of the traditional forms of energy used by households like wood and charcoal, because of the deforestation of large areas. In their internal development policies, oil-importing countries like all developing countries will have to give high priority to the agricultural sector in order to supply food to their rising populations. In the 1970s in some regions, particularly some parts of Africa, food production failed to grow as fast as demand; this situation cannot be allowed to continue. The record of the 1970s shows that developing countries are very dependent on changes in the developed countries, not only in terms of investment finance but also through the repercussions of the economic cycle in developed countries. One way of reducing this dependence is to promote co-operation between developing countries in trade and in technology. This can be done through a variety of channels, such as the creation of free trade areas and customs unions and the exchange of experts. There are, however, obstacles to such co-operation - witness the difficulties encountered during the 1970s in a number of subregional co-operation schemes - and removing them and expanding co-operation beyond regional boundaries to cover all developing areas is one of the key issues of the decade now beginning.

The International Development Strategy which has been adopted by the United Nations for the 1980s has taken up all the issues concerning the development of developing countries in the framework of the establishment of a new international economic order in which international economic relations will favour the developing regions. The strategy restates the key objectives of the preceding strategy for the 1970s, under the broad

objective of the acceleration of development in developing countries. Although each country has responsibility for fixing its own targets, the Strategy sets an over-all target of 7 per cent for the GDP growth rate during the 1980s, with the developing countries' trade growing by 7.5 to 8 per cent a year in volume terms, while investment should grow to 29 per cent of GDP by the year 1990 and gross domestic savings to 24 per cent. Attainment of the over-all GDP growth target of 7 per cent a year will require substantially greater flows of financial resources in real terms to the developing countries; the Strategy lays down a minimum of 0.7 per cent of the GNP of developed countries for these flows. This target should be reached no later than 1985, and the target of 1 per cent of GNP should be reached as soon as possible thereafter. This question of resource transfers to developing countries in the 1980s is at the centre of North-South consultations, and was the main item on the agenda of the Cancun meeting of leaders from both developed and developing countries, which was held at the end of October 1981 in Mexico. The position of the OECD countries, which provide the bulk of ODA and private resource flows to developing countries, has shifted considerably in the last two years as a result of their persistent economic difficulties and the decisions of a growing number of them to introduce anti-inflation and fiscal restraint policies. The United States is arguing that large increases in resource flows to developing countries are not possible in the present circumstances, and that the emphasis should be moved from public flows to private capital investment. At the same time, it considers that developing countries should revise their internal policies in order to give more scope to private initiative and to market forces. It is clear that most developing countries do not share the positions put forward by the OECD group, and it is equally clear that attainment of the goal of accelerated development for developing countries, which is decisive for reducing the present disparities between them and the developed countries, is dependent on substantial resource flows from outside. In the case of sub-Saharan Africa, the requirements have been estimated recently at double the average level of the 1970s. For the least developed countries, most of them in Africa, on whose behalf the International Development Strategy calls for special efforts during the 1980s, the United Nations Conference on Least Developed Countries held in Paris in September 1981 called for the doubling of aid flows during the 1980s in order to implement the Substantial New Programme of Action for Least Developed Countries during the decade.

##### 5. Forecasts and prospects

In 1981, the world economic situation is still dominated by the effects of the "oil shock" of 1973-1980. In the OECD region, even though the recession has been less severe and profound than that which followed the first "oil shock" in 1974-1975, forecasts indicate a growth rate of no more than 1.25 per cent for 1981 and only 2 per cent for 1982. Unemployment has continued to increase, reaching 7.5 per cent of the labour force in OECD as a whole (more than 10 per cent in the United Kingdom) and affecting 25 million people. There is however some uncertainty on developments beyond 1981 because of the policies introduced by the new United States administration, combining a sharp reduction in income and other taxes, cuts in government expenditure and strict monetary control. Interest rates rose

rapidly until the beginning of the last quarter of 1981, apparently because of the expected United States budget deficit, dampening the prospects of an early recovery in the developed market economies, but it is clearly too soon to pass a definitive judgement.

In Eastern Europe and the USSR, there has been no change relative to 1980, and the economies have continued to grow at rates significantly below the rates achieved in the 1970s. Forecasts indicate a growth rate of 3.2 per cent in net material product in 1981, compared with 6.3 per cent a year in 1971-1975 and 4.2 per cent a year in 1976-1980.

For the oil-importing developing countries, forecasts from all sources indicate a far better performance than in the industrial countries. IMF gives figures of around 5 per cent for both 1981 and 1982, UNCTAD 4.5 per cent in 1981 and 4.8 per cent in 1982, and the United Nations Secretariat 4 per cent in 1981. All these forecasts show a maintenance of the growth momentum or even a slight improvement over 1980. For some countries, for example those classified by UNCTAD as exporters of manufactures, growth will even slightly exceed 5 per cent in both 1981 and 1982. However, these growth rates will not be uniform throughout the group, and the situation of some of these countries, especially those in Africa, is critical. Moreover, current evidence and the forecasts themselves show that growth in the oil-importing developing countries has depended up to now on an increasing current account deficit, and increasing debt.

Beyond 1982, there are the IMF's medium-term forecasts and the projections made for the 1980s by the World Bank and UNCTAD. IMF envisaged two scenarios for 1983-1988: in case A, where there is no increase in oil prices and counter-inflationary policies are maintained by industrial countries, GDP growth will be 3.25 per cent in the industrial countries, with no improvement in the level of unemployment but a significant slowing of inflation. In case B, where oil prices increase by 5 per cent a year, growth will fall to 2.25 per cent in industrial countries, and employment will be higher by 1988, though inflation will remain stable. For the oil-importing developing countries, in case A, GDP will grow by 5 per cent a year, while in case B, the growth rate will fall to 4 per cent, with exporters of manufactures increasing their GNP per head by 2 per cent a year. In all the hypotheses the oil-importing developing countries will face increasing deficits which will entail growing indebtedness, while development aid will be at best sluggish.

The World Bank projections for economic development during the 1980s are based on two scenarios, and depend on the success of adjustment policies in the major regions of the world. For the industrialized market economies, mainly the OECD countries, much will depend on whether the countries are able to control inflation, conserve energy and substitute for oil and restructure their industrial base in order to take into account the increasing competition from newly industrialized developing countries. In the "high" case, where adjustment policies succeed, the Bank project average growth of 3.9 per cent in the 1980s, only slightly higher than the average for the 1970s, while in the "low" case, growth falls to 2.8 per cent. World trade will be directly influenced by economic growth in the industrialized

Table II.B.3  
Projections for the 1980s

Group of countries	IMF scenarios (1980-1985)		World Bank (1980-1990)		United Nations Secretariat 1980-1990
	A	B	A	B	
Developed market economies					
GDP growth (per cent)	2.4	1.9	3.5	2.3	2.4
Current balance (billions of US dollars)	...	...	55 <sup>a/</sup>	55 <sup>a/</sup>	...
Centrally planned economies					
GDP growth (per cent)	...	...	3.9	3.7	3.5
Current balance (billions of US dollars)			-4	-3	...
Developing oil exporters					
GDP growth (per cent)	...	...	5.4	4.1	...
Current balance (billions of US dollars)	...	...	21	4	...
Developing oil importers					
GDP growth (per cent)	4.7	4.2	5.5	5.4	4.2 <sup>b/</sup>
Current balance (billions of US dollars)	...	...	-50	-43	...

Sources: Trade and Development Report, 1981, op.cit.; World Development Report 1981, op.cit.; Annual Report 1981 (Washington, International Monetary Fund, 1981).

a/ Very uncertain figures.

b/ All developing countries.

countries, as lower growth in these countries would mean lesser demand for developing countries' exports, despite the fact that trade between developing countries, and particularly trade with the oil producers, is bound to increase. Also, lower growth in the industrialized countries will, stimulate protectionism, which will hurt developing countries and further depress the economies of the industrialized countries themselves. Likewise capital flows to developing countries will depend on growth in the developed economies, and the World Bank presents two scenarios both indicating a large fall in the rate of growth of financial flows during the 1980s. In the best case flows will increase by only 3.2 per cent a year in real terms, against 7.0 per cent in the 1970s, while in the worst case there would be a net decline of 0.2 per cent a year. Of course, the performance of developing countries

will also depend on their own internal efforts to raise investment, increase exports and reduce dependence on imported oil. On the best hypothesis, the World Bank projects a growth rate of 5.7 per cent a year for all developing countries; this rate would fall to only 4.5 per cent in the worst case. Developing countries will thus perform far better than developed countries, but there will be very large disparities between regions and between oil importers and exporters. While East Asia, Latin America and the oil exporters will experience rapid growth, sub-Saharan Africa will lag behind, growing at best at 3.1 per cent a year and at worst at the low rate of 2.0 per cent a year, barely enough to prevent a fall in living standards. In the event of lower growth in OECD or lower capital flows, or both, developing countries will see significant decline in their growth prospects; a rise in oil prices of more than 3 per cent in real terms would have a further adverse effect. Faster growth than projected will require higher capital inflows, and the OECD countries ODA coefficient should rise to 0.50 per cent of GNP if lower-income countries are to grow by 4.1 per cent instead of the 3.0 per cent of the "low" scenario.

The UNCTAD projections for the 1980s are similar to those prepared by the World Bank, but somewhat less optimistic. For the developed countries taking into account the shrinkage in the labour force which is expected in the 1980s, especially in Western Europe and, probably, the European Soviet Union, and in view of the dependence of the developed market economies on imported raw materials, particularly oil, UNCTAD indicates a growth rate of no more than 2.4 per cent for these countries in the 1980s, and 3.5 per cent for the Eastern European socialist countries. On this basis, and considering the likely impact of slower growth in the developed countries, the growth rate for developing countries as a whole during the 1980s will be only 4.2 per cent a year on average, a rate which would imply a considerable increase in unemployment because of the rapid growth of the labour force, which is expected to exceed population growth by 1990. UNCTAD therefore considers it necessary to envisage a different development scenario for developing countries which is less dependent on trends in the developed countries. In this new scenario of accelerated growth in the developing countries, their rate of growth increases gradually to reach 7 per cent in 1990 after an average of 6.4 per cent during the 1980s. Though income disparities remain large between developed and developing countries, there is a marked change in the distribution of world output between regions, and in the longer term (around the year 2000) UNCTAD sees the share of developing countries growing to 26 per cent. However, in the medium term the scenario indicates a very large increase in the goods-and-services deficit of the developing countries, which would grow to 2.0 per cent of the developed countries GDP in 1990 against 0.3 per cent in 1975. This would require a large transfer of resources, perhaps beyond the debt repayment capacity of the developing countries.

It is remarkable that neither the World Bank nor UNCTAD takes the target in the International Development Strategy of 7 per cent growth in GDP in developing nations in the 1980s as a starting point or even as an alternative scenario. In fact, in present world conditions it is difficult to envisage that the necessary transfer of resources will occur to enable the developing countries to reach the target. However, it may be that internal factors have not been given sufficient importance in the projections made to date, and that even with smaller flows of foreign resources developing countries will still be able to accelerate their growth. This is quite clearly the approach taken by the Lagos Plan of Action adopted by the member States of ECA and OAU, which aims at more fully mobilizing human resources and exploiting the considerable store of land, water, energy and mineral resources in Africa.

## C. EXTERNAL TRADE

1. Introduction

The Lagos Plan of Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa places particular emphasis on the role of foreign trade in fostering the socio-economic development of Africa, and recommends the progressive reduction and eventual elimination of barriers to intra-African trade. Specifically it recommends that "studies should be undertaken by the OAU, ECA and other competent organizations as soon as possible on the demand and supply of major intra-African trade commodities". 1/ The Plan also calls for measures to diversify Africa's present trade pattern both geographically and structurally, including the systematic exploitation and exploration of trade with other developing countries and regions and the promotion and expansion of trade and economic co-operation with the developed centrally planned economies.

2. Exports

As can be seen from table II.C.1, exports from developing Africa almost doubled between 1978 and 1980, rising from \$47.1 billion in 1978 to \$67.2 billion in 1979 and \$91.9 billion in 1980.

Indexes of export unit values have been growing continuously. Estimates are shown in table II.C.2.

Table II.C.1

Value of exports  
(Billions of US dollars)

	1970	1975	1978	1979	1980	1981
Oil-exporting Africa <u>a/</u>	5.1	13.5	26.4	41.3	61.8	49.2
Non-oil-exporting developing Africa	8.1	16.1	20.7	25.9	30.1	29.9
Developing Africa	13.2	34.6	47.1	67.2	91.9	79.1

Sources: ECA secretariat calculations based on data from International Financial Statistics, vol. XXXIV, No. 12 (December 1981) and Yearbook 1981; for 1981, ECA secretariat estimates based on data from International Financial Statistics, vol. XXXIII, No.9 (September 1980) and vol. XXXIV, Nos. 1, 3, 11 and 12 (January, March, November and December 1981).

a/ Algeria, Libyan Arab Jamahiriya and Nigeria.

1/ The Lagos Plan of Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa (A/S-11/14, annex I), chapter VII.



Table II.C.2Index of export unit values  
(1975 = 100)

	1970	1975	1978	1979	1980	1981
Oil-exporting Africa <u>a/</u>	18	100	118	178	303	339
Non-oil-exporting developing Africa	54	100	118	139	195	205
Developing Africa	31	100	118	158	257	271

Source: ECA secretariat estimates based on data from International Financial Statistics, Yearbook 1981 and various issues.

a/ Algeria, Libyan Arab Jamahiriya and Nigeria.

ECA estimates show that in 1980 the indexes for developing Africa, oil-exporting Africa and non-oil-exporting Africa were significantly higher than the corresponding indexes for all developing countries, oil-exporting developing countries and non-oil-exporting developing countries, for which the figures (1975 = 100) were 233, 284 and 160 respectively.

Exports from developing Africa in real terms have been very disappointing in recent years. For oil-exporting Africa the total in 1981 was about half the figure for 1970 while exports from non-oil-exporting Africa were at about the same level in 1980 as 10 years previously. The detailed figures can be seen in tables II.C.3 and II.C.4. The 1981 export performance of developing Africa was the worst since 1970.

Table II.C.3Index of export volume  
(1975 = 100)

	1970	1975	1978	1979	1980	1981
Oil-exporting Africa <u>a/</u>	151	100	122	125	110	78
Non-oil-exporting developing Africa	93	100	109	115	95	90
Developing Africa	124	100	116	120	103	84

Source: As for table II.C.2.

a/ Algeria, Libyan Arab Jamahiriya and Nigeria.

Table II.C.4Changes in the volume of exports  
(Percentages)

	Average 1970-1978 <sup>a/</sup>	Change from preceding year	1979	1980	1981
Oil-exporting Africa <sup>b/</sup>	-2.6	2.2	-11.7	-29.1	
Non-oil-exporting developing Africa	1.9	5.7	-17.3	-4.6	
Developing Africa	-0.8	3.7	-14.2	-18.5	

Source: As for table II.C.2.

a/ Compound annual rates of change.

b/ Algeria, Libyan Arab Jamahiriya and Nigeria.

Estimates of the purchasing power of exports appear in table II.C.5. The figures show that the exports of non-oil-exporting developing Africa in 1980 had about the same purchasing power as in 1970. In the meantime the purchasing power of the exports of the three main African oil exporters had more than trebled. Preliminary estimates for 1981 indicate a serious deterioration in purchasing power.

Table II.C.5Purchasing power of exports  
(1975 = 100)

	1970	1975	1978	1979	1980	1980
Oil-exporting Africa <sup>a/</sup>	51	100	118	144	188	135
Non-oil-exporting developing Africa	109	100	110	117	108	97
Developing Africa	79	100	114	135	152	118

Source: ECA secretariat calculations based on the data in tables II.C.1 and II.C.13.

a/ Algeria, Libyan Arab Jamahiriya and Nigeria.

The export performance of 20 African countries is presented in table II.C.6. These countries account for about 89-90 per cent of the total exports of developing Africa in the 1970s. Their share reached a peak or more than 92 per cent in 1980.

Table II.C.7 shows the predominant position of oil in the exports of developing Africa since 1973. Its share in total exports was a third in 1970 and two thirds in 1979, reaching a peak of about three quarters in 1980. Provisional estimates indicate that its share fell to around 72 per cent in 1981.

Table II.C.6

Exports from some countries of developing Africa  
(Billions of US dollars)

	1970	1975	1978	1979	1980	1981a/
Algeria	1.009	4.691	6.347	8.198	12.410	11.560
Angola	0.423	1.079	a/ 0.995a/	1.121a/	1.757a/	...
Egypt	0.762	1.402	1.737	1.840	3.046	4.091
Ethiopia	0.122	0.231	0.298	0.418	0.425	0.349
Ghana	0.458	0.809	1.093	0.730a/	0.788a/	...
Ivory Coast	0.469	1.181	2.322	2.515	2.598a/	...
Kenya	0.305	0.647	1.023	1.105	1.384	1.162
Libyan Arab Jamahiriya	2.837	6.042	9.503	15.236	22.579	17.336
Madagascar	0.145	0.301	0.387	0.394	0.466a/	...
Morocco	0.488	1.543	1.508	1.873	2.466	2.148
Mozambique	0.156	0.198	0.128a/	0.137a/	0.208a/	...
Nigeria	1.240	7.776	10.538	17.873	26.854	20.302
Sudan	0.298	0.438	0.536	0.535	0.543	0.766
Tunisia	0.183	0.856	1.126	1.791	2.198	2.658
Uganda	0.282	0.257	0.350	0.427	0.403a/	...
United Republic of Cameroon	0.232	0.449	0.802	1.132	1.383	...
United Republic of Tanzania	0.252	0.370	0.478	0.544	0.508	...
Zaire	0.781	0.687	0.925	1.323	1.632	0.664
Zambia	1.001	0.810	0.844	1.377	1.437	...
Zimbabwe	0.370	0.927	0.900	1.053	1.415	1.423b/
Total	11.813	30.694	44.840	59.622	84.500	62.459c/
Share of these countries in the total exports of developing Africa (per cent)	89.6	88.5	88.8	88.8	92.2	79.0

Source : International Financial Statistics, Yearbook 1981.

a/ As for table II.C.2.

b/ ECA secretariat estimate based on information obtained in Zimbabwe.

c/ Total for 11 countries only.

Table II.C.7

African exports of crude and refined petroleum  
(Billions of dollars)

	1970	1975	1978	1979	1980	1981a/
Crude petroleum	4.304	20.165	27.609	44.361	67.352	55.4
Refined petroleum	0.062	0.436	0.577	0.643	1.092	1.2
Total	4.366	20.601	28.186	45.004	68.444	56.6
Total exports of developing Africa	13.185	34.628	47.130	67.162	91.674	79.1
Share of petroleum (per cent)	33.1	59.5	59.8	67.0	74.7	71.6

Source: ECA secretariat estimates largely based on data from International Financial Statistics, vol. XXXIV, No. 12 (December 1981) and Yearbook 1981.

a/ Rough estimates.

The most important agricultural exports, including wood are listed in table II.C.8. The value of exports of coffee, cotton and tea decreased in 1980. Ground-nut exports in 1980 stood at less than half the 1979 value. The stagnation in demand for cotton in 1975-1980 is remarkable.

The seven commodities listed in table II.C.8 represent about 28-30 per cent of the total non-oil exports of developing Africa. Large cocoa exports pushed this share up to 35 per cent in 1978.

Table II.C.8

Exports of some agricultural commodities from developing Africa  
(Billions of US dollars)

	1970	1975	1978	1979	1980
Coffee	0.666	1.020	2.362	2.804	2.542
Cocoa	0.660	1.135	2.291	1.383	1.506
Cotton	0.654	0.857	0.820	0.913	0.840
Ground-nuts	0.117	0.306	0.173	0.273	0.134
Tea	0.064	0.108	0.217	0.219	0.206
Sugar	0.080	0.384	0.301	0.361	0.568
Wood	0.187	0.348	0.461	0.492	0.691
Total	2.428	4.158	6.625	5.445	6.487
Share of the above 7 commodities in the total exports of developing Africa (per cent)	18.4	12.0	14.1	9.6	7.1
Share of the above 7 commodities in the total non-oil exports of developing Africa (per cent)	27.5	29.6	35.0	29.1	27.9

Source: ECA secretariat estimates based on data in International Financial Statistics, Yearbook 1981 and information obtained from African developing countries.

Table II.C.9 gives the value of exports of five minerals which are of importance among the exports of developing Africa. The table clearly shows that the importance of non-oil minerals is decreasing in both total and non-oil exports, mainly because of low demand for copper.

Table II.C.10 gives details of the price movements of some important export commodities. The price of oil and phosphates rose in 1981 by about 12 and 10 per cent respectively. The prices of coffee, cocoa and tea declined in 1981 by 30, 21 and 9 per cent respectively. The prices of copper and iron ore also went down in 1981, by 20 and 5 per cent respectively. The price movements of minerals in 1981 were very unfavourable compared with 1980.

Table II.C.9

Exports of some minerals from developing Africa  
(Billions of US dollars)

	1970	1975	1978	1979	1980
Copper	1.473	1.165	1.122	1.632	1.927
Phosphates	0.139	1.032	0.643	0.720	0.865
Diamonds	0.150	0.199	0.372	0.501	0.517
Iron ore	0.253	0.468	0.372	0.425	0.461
Cobalt	0.047	0.097	0.216	0.617	0.344
Total	2.062	2.961	2.725	3.895	4.114
Share of the above 5 minerals in total exports of developing Africa (per cent)	15.6	8.6	5.8	5.8	4.5
Share of the above 5 minerals in the total non-oil exports of developing Africa (per cent)	23.4	21.1	14.4	17.6	17.7

Source: As for table II.C.8.

Table II.C.10

Wholesale price indexes of selected export commodities

(1975 = 100)

	1976	1977	1978	1979	1980	1981
Crude petroleum, Libyan Arab Jamahiriya (Es Sidra)	106.2	119.7	118.3	181.7	309.5	348.1
Coffee, Uganda (New York)	209.1	366.6	241.6	271.0	241.2	167.8
Cocoa, Ghana (London)	160.7	309.4	244.4	229.4	183.7	145.4
Cotton, Egypt (Liverpool)	105.5	115.3	107.1	118.1	118.6	121.2
Ground-nuts, Nigeria (London)	97.7	126.3	145.7	130.0	112.1	156.8
Tea, average auction (London)	112.0	194.0	159.1	157.0	162.5	147.7
Sugar, EEC import price	57.5	48.3	58.6	70.3	86.5	80.1
Wood (logs), Philippines (Tokyo)	136.3	133.0	136.0	237.2	285.8	222.6
Copper, United Kingdom (London)	113.9	106.4	110.6	161.0	177.6	142.9
Phosphates, Morocco (Casablanca)	53.3	45.7	43.2	49.1	66.9	73.7
Diamonds <u>a/</u>	116.0	127.0	...	...	...	...
Iron ore, Brazil (North Sea ports)	96.9	94.7	85.0	102.8	117.1	111.1
Cobalt <u>a/</u>	150.0	145.0	...	...	...	...

Source: International Financial Statistics, vol. XXXIV, No. 13 (December 1981), pp. 51 and 53. The 1981 price indexes are based on 10 months, except for cocoa, ground-nuts and tea (9 months only) and wood (6 months only).

a/ Average realized price of exports. Source: "Survey of economic and social conditions in Africa, 1979-1980" (E/CN.14/802), Part I, p. 84.

The share of African exports in total exports from the developing world decreased between 1970 and 1981. The same was true for both oil-exporting and non-oil-exporting developing countries (see table II.C.11).

Table II.C.11

Share of developing Africa in the exports of the developing world  
(Percentages)

	1970	1975	1978	1979	1980	1981
Oil-exporting Africa <u>a/</u>	29.5	16.9	18.6	19.9	21.0	18.3
Non-oil-exporting developing Africa <u>b/</u>	18.2	14.3	11.6	11.2	10.4	10.1
Developing Africa	20.9	15.2	14.2	14.8	15.2	14.0

Source: As for table II.C.7.

a/ Total for Algeria, the Libyan Arab Jamahiriya and Nigeria as a percentage of the total for all oil-exporting countries.

b/ Non-oil-exporting developing Africa's share in the total for all non-oil-exporting developing countries.

### 3. Imports

As can be seen from table II.C.12, imports to developing Africa increased significantly between 1979 and 1981, rising from \$59.4 billion in 1978 to \$77.5 billion in 1980 and \$88.8 billion in 1981.

Table II.C.12

Value of imports  
(Billions of US dollars)

	1970	1975	1978	1979	1980	1981
Oil-exporting Africa a/	2.9	15.6	26.1	26.9	37.0	42.7
Non-oil-exporting developing Africa	8.2	22.9	31.6	32.5	40.5	46.1
Developing Africa	11.1	38.5	57.7	59.4	77.5	88.8

Source: As for table II.C.1.

a/ Algeria, Libyan Arab Jamahiriya and Nigeria.

Indexes of import unit values are shown in table II.C.13. Rough estimates prepared by the ECA secretariat show that the index for oil exporters grew more rapidly than for non exporters between 1975 and 1980.

Table II.C.13

Index of import unit values  
(1975=100)

	1970	1975	1978	1979	1980	1981
Oil-exporting Africa a/	53	100	121	155	178	197
Non-oil-exporting developing Africa b/	46	100	117	137	172	191
Developing Africa	48	100	119	144	175	194

Source: As for table II.C.2.

a/ It is assumed that the index for oil-exporting Africa (Algeria, Libyan Arab Jamahiriya and Nigeria) is the same as the index for all oil-exporting developing countries, as estimated by the ECA secretariat.

b/ It is assumed that the index for non-oil-exporting Africa for 1970-1980 is the same as that for non-oil-exporting developing countries published in IMF International Financial Statistics, vol. XXXIV, No. 10 (October 1981) and Yearbook 1981).

Imports to developing Africa in real terms grew rapidly in 1970-1978 by almost 10 per cent a year. The level fell by 15 per cent in 1979, and increased again in 1980 and 1981. Imports to non-oil-exporting developing Africa were only 3 per cent higher in 1979 and 1980 than in 1975. Detailed estimates can be seen in tables II.C.14 and II.C.15.

The import performance of 20 African countries is presented in table II.C.16. These countries account for about 85-88 per cent of the total imports of developing Africa in the 1970s.

The ECA secretariat has estimated the share of oil import in total imports for a group of countries (Burundi, Ethiopia, the Gambia, the Ivory Coast, Madagascar, Malawi, Mauritania, Mauritius, Morocco, Rwanda, Senegal, Sierra Leone, the Sudan, Togo, the United Republic of Tanzania, the Upper Volta and Zambia), using data from International Financial Statistics, Yearbook 1981. It was found that the share was 10.3 per cent

Table II.C.14

Index of import volume  
(1975=100)

	1970	1975	1978	1979	1980	1981
Oil-exporting Africa a/	34	100	139	111	133	139
Non-oil-exporting developing Africa	78	100	118	103	103	105
Developing Africa	60	100	126	107	115	119

Source: As for table II.C.2.

a/ Algeria, Libyan Arab Jamahiriya and Nigeria.

Table II.C.15

Changes in the volume of imports  
(Percentages)

	Average 1970-1978 a/	Change from preceding year 1979 1980 1981
Oil-exporting Africa b/	19.3	-20.1 19.8 4.5
Non-oil-exporting developing Africa	5.3	-12.7 0.0 1.9
Developing Africa	9.7	-15.0 7.5 3.5

Source: As for table II.C.2.

a/ Compound annual rates of change.

b/ Algeria, Libyan Arab Jamahiriya and Nigeria.



in 1975 and 1978, increasing in 1979 and 1980 to 14.4 and 15.8 per cent respectively. These figures demonstrate the burden of oil imports for various non-oil-exporting developing countries in Africa.

The share of imports to developing Africa in the total imports of the developing world is decreasing. Among the oil exporters Africa's share dropped from 30 per cent in 1970 to about 27 per cent in 1980. Among the non-oil-exporting countries, Africa's share was 14 per cent in 1970 and 10.7 per cent in 1980. The drop is smaller than in the case of exports, where the differences were about 8.9 percentage points.

Table II.C.16

Imports to some African developing countries  
(Billions of US dollars)

	1970	1975	1978	1979	1980	1981a/
Algeria	1.257	6.008	8.682	8.511	10.560	11.110
Angola	0.368	0.651 <sup>a/</sup>	0.761 <sup>a/</sup>	0.854 <sup>a/</sup>	1.001 <sup>a/</sup>	...
Egypt	0.787	3.934	6.727	3.837	4.860	7.047
Ethiopia	0.172	0.296	0.516	0.567	0.722	...
Ghana	0.411	0.791	0.989	0.505 <sup>a/</sup>	0.727 <sup>a/</sup>	...
Ivory Coast	0.388	1.127	2.326	2.491	2.648 <sup>a/</sup>	...
Kenya	0.442	0.987	1.711	1.660	2.333	1.771
Libyan Arab Jamahiriya	0.555	3.542	4.603	8.214	9.779	11.858
Madagascar	0.170	0.366	0.443	0.641	0.717 <sup>a/</sup>	...
Morocco	0.684	2.567	2.970	3.678	4.261	4.324
Mozambique	0.324	0.411	0.378 <sup>a/</sup>	0.387 <sup>a/</sup>	0.479 <sup>a/</sup>	...
Nigeria	1.059	6.041	12.844	10.210	16.688	19.762
Sudan	0.288	1.033	1.194	1.110	1.576	1.556
Tunisia	0.306	1.424	2.138	2.849	3.540	3.814
Uganda	0.172	0.200	0.255	0.213	0.525	...
United Republic of Cameroon	0.242	0.599	1.056	1.275	1.599	...
United Republic of Tanzania	0.318	0.774	1.148	1.100	1.258	...
Zaire	0.536	0.905	0.589	0.597	0.835	0.706
Zambia	0.559	1.138	0.730	0.753	1.000 <sup>a/</sup>	...
Zimbabwe	0.378	0.927	0.685	0.929	1.448	...
Total	9.416	33.721	50.745	50.381	66.556	61.948 <sup>b/</sup>
Share of these countries in the total imports of developing Africa (per cent)	84.8	87.6	87.9	84.8	85.9	69.8

Source: International Financial Statistics, vol. XXXIV, No. 12. (December 1981) and Yearbook 1981.

a/ Source: As for table II.C.2.

b/ Total for 9 countries only.

#### 4. Balance of trade

The balance of trade of developing Africa has been fluctuating in recent years. From the record deficit of \$10.6 billion in 1978 it increases to a surplus of \$7.8 billion in 1979 and further to about \$14.4 billion in 1980. In 1981 the balance showed a deficit of \$9.7 billion. Figures on the balance of trade for developing Africa appear in table II.C.17.

Table II.C.17

Balance of trade  
(Billions of US dollars)

	1970	1975	1978	1979	1980	1981
Oil-exporting Africa a/	2.2	2.9	0.3	14.4	24.8	6.5
Non-oil-exporting developing						
Africa	-0.1	-6.8	-10.9	-6.6	-10.4	-16.2
Developing Africa	2.1	-3.9	-10.6	7.8	14.4	-9.7

Source: As for table II.C.1.

a/ Algeria, Libyan Arab Jamahiriya and Nigeria.

#### 5. Terms of trade

The terms of trade of non-oil-exporting developing Africa stagnated in 1978 and 1979. In 1980 they improved by 12 per cent, but even with this gain the 1980 level was lower than in 1970. The main cause of the rise in 1980 was the increase in oil prices. Paradoxically, the share of oil in the exports of non-oil-exporting developing Africa in 1980 was about 28 per cent. Detailed estimates appear in table II.C.18.

Table II.C.18

Terms of trade  
(1975=100)

	1970	1975	1978	1979	1980	1981
Oil-exporting Africa a/	34	100	98	115	170	172
Non-oil-exporting developing						
Africa	117	100	101	101	113	107
Developing Africa	65	100	99	110	147	140

Source: ECA secretariat calculations based on the data in tables II.C.2 and II.C.13.

a/ Algeria, Libyan Arab Jamahiriya and Nigeria.

## 6. Intra-African trade

The share of intra-African trade in the continent's total trade not only remained small, but also has continued to decline in recent years. Table II.C.19 shows that while the value of Africa's total exports increased by \$23,634 million between 1979 and 1980, the value of intra-African exports increased by only \$1,302 million.

Table II.C.19

### Exports of developing Africa, 1970-1980

	Total exports (Billions of US dollars)	Intra-African exports	Share of intra-African exports in total exports (percentages)
1970	12.164	0.814	6.7
1975	33.960	1.925	5.7
1978	44.763	1.606	3.6
1979	66.576	2.900	4.4
1980	90.209	4.202	4.7

Source: Monthly Bulletin of Statistics, vol. XXXV, No.7  
(July 1981).

The reasons for this poor performance included limited production capacity, inadequate transport and communications systems, unsatisfactory payments arrangements and credit facilities, old-established trade links with the developed countries, tariff and non-tariff barriers and inadequate trade information and promotion facilities. To alleviate this situation, in accordance with the Lagos Plan of Action, efforts continued to be made to expand intra-African trade through the promotion of arrangements for subregional and regional economic co-operation.

In the Eastern and Southern African subregion, the negotiations (which commenced in 1978) on a Treaty for the establishment of a Preferential Trade Area for Eastern and Southern African States were concluded. A number of meetings of Experts and Ministers were held and outstanding issues were resolved at an extraordinary meeting of ministers of trade and planning held in October 1981. A summit meeting of Heads of State and Government was held on 21 December 1981 for the purpose of signing the Treaty.

In the Central African subregion negotiations and consultations were carried out among member States and culminated in a Summit Conference of Heads of State held in Libreville from December 17 to December 19, 1981.

which adopted a common declaration in which the principle of establishing an economic community of the Central African States was adopted and measures taken to study the means to implement that principle. The core issue is the enlargement of the UDEAC which includes presently only 5 countries, to the other countries of the subregion. This implies complex monetary, and fiscal issues as the UDEAC is a member of the zone franc area but the results of the summit conference are already a very important step forward towards promoting co-operation in the subregion and consequently trade.

#### 7. Africa's trade with developing countries in other regions

In 1980, Africa's trade with the other developing regions continued along its previous trend, characterized by the export of raw materials and the import of a growing volume of manufactured and capital goods.

The important aspect is the continuing deficit sustained by the African region in its trade with the other developing regions, as shown in table II.C.20. The deficit decreased by 51.4 per cent in 1980, from \$2,514 million in 1979 to \$1,222 million in 1980. Africa's exports to other developing regions increased by 70.5 per cent from 1979 to 1980, and imports by 39.2 per cent.

Africa's trade with Asia showed a large deficit, which grew by 24.8 per cent in 1980, reaching \$4,673 million compared to \$3,745 million in 1979. The main components were oil imports from the Middle East and imports of consumer, intermediate and capital goods from elsewhere in Asia.

Trade with developing America, on the other hand, showed a fairly large positive balance, which as in previous years is explained by substantial exports of mineral fuels, mainly to the Caribbean countries.

In 1980 the trade surplus with Latin America increased by 180.5 per cent from \$1,130 million in 1979 to \$3,450 million in 1980. The 1979 deficit of \$248 million in trade with the LAFTA countries was turned into a surplus of \$92 million in 1980. This trade involves only a small number of countries: Africa exports raw materials, mainly from Algeria, Angola, Nigeria and Zaire, and imports consumer goods and capital equipment from Argentina, Brazil, Mexico and Venezuela.

#### 8. Trade relations between African countries and the socialist countries of eastern Europe

The poor economic performance of Africa in the recent past and the bleak prospects for the future if past policies and trends continue have been a cause for great concern to African leaders. If the region is to secure an equitable share of the benefits of the international division of labour, it has become increasingly evident that the continuance of the North-South link between African countries and the former metropolitan Powers will not suffice: new directions in trade and economic relations will have to be pursued. This is why in recent years emphasis has been placed on evolving a new trade and development strategy for the continent.

Table II.C.20

Africa's trade with developing countries  
(Millions of US dollars)

	African exports				African imports			
	1975	1978	1979	1980	1975	1978	1979	1980
All developing countries	4 964	4 611	7 283	12 417	6 089	7 342	9 797	13 639
Developing Asia	806	1 144	1 510	2 771	3 165	4 219	5 255	7 444
Middle East	450	724	900	2 003	1 741	1 762	2 464	3 519
Other Asia	356	420	610	768	1 424	2 457	2 781	3 925
Developing America:	2 227	1 860	2 872	5 443	1 000	1 517	1 642	1 993
LAFTA	567	590	788	1 348	631	988	1 036	1 256
Other Latin America	1 660	1 270	2 084	4 095	369	529	606	737
Developing Oceania	6	2	1	1	0	0	0	0
Intra-African trade	1 925	1 606	2 900	4 202	1 925	1 606	2 900	4 202

Source: As for table II.C.19.

The mainstay of the strategy is self-reliance and the expansion of intra-African trade and economic co-operation. However, trade and economic co-operation with the socialist countries of eastern Europe will also be of major significance, and it is hoped that economic co-operation with these countries will be built on the principle of equitable sharing of the benefits of the international division of labour.

Since it is recent in origin, trade between African countries and the socialist countries of eastern Europe is still at a relatively low level. The relative insignificance of these countries in Africa's external trade is evident in table II.C.21, which gives a breakdown of trade in 1979. Of total exports (f.o.b.) from developing Africa worth \$63,178 million in that year, only \$1,494 million worth (2.4 per cent) were destined for the markets of the socialist countries of Eastern Europe. In contrast, the developed market economy countries accounted for \$53,415 million or 85 per cent, the share of the members of the European Economic Community alone being 41.6 per cent.

The developed market economy countries also constitute the dominant source of imports to Africa, with \$49,988 million worth (79.6 per cent of the region's total imports) originating from them in 1979. At 4.7 per cent,

the proportion of Africa's imports coming from the socialist countries of eastern Europe was insignificant, although higher than the area's 2.4 per cent share of Africa's exports in that year.

It should be noted, however, that the trade between developing Africa and the socialist countries of eastern Europe, although still at a relatively low level, has been growing rapidly in recent years (see table II.C.22). Between 1958 and 1979, the value of African exports to those countries increased at an average annual rate of 9.4 per cent, while imports grew at an average annual rate of 12.8 per cent.

Table II.C.21

Geographical distribution of developing Africa's external trade, 1979

	Exports f.o.b		Imports f.o.b	
	Millions of US dollars	percent- ages	Millions of US dollars	Percent- ages
Developed market economies	53 415	84.5	49 988	79.6
Socialist countries of eastern Europe	1 494	2.4	2 944	4.7
Developing countries:	7 868	12.5	8 658	13.8
Africa	2 365	3.7	2 365	3.8
Latin America	4 213	6.7	1 593	2.5
Asia and Middle East	1 287	2.0	4 700	7.5
Other developing countries	3	0.0	-	-
Others	213	0.3	1 203	1.9
World	63 178 <u>a/</u>	100.0 <u>a/</u>	62 793	100.0

Source: Monthly Bulletin of Statistics, vol. XXXIV, No. 7 (July 1980)

a/ Discrepancies in totals are due to exports whose destinations could not be determined.

Table II.C.22 shows that growth in this trade since 1958 has not been uniform. Indeed, one important feature of the trade relations between the two groups of countries is their relative instability trade in both directions is subject to considerable short-run fluctuations. Of the years covered by table II.C.22, only the period 1968-1975 saw a fairly steady upward trend. In the last few years, the absolute values of African exports tended to fall, while the growth rate of its imports also declined.

Although the share of the socialist countries of eastern Europe in the total trade of developing Africa is relatively small, it has been much bigger than the share of the latter in the total trade of the former. In 1979, for example, developing Africa accounted for just 2.2 per cent of the total exports of these countries and 1.2 per cent of their total imports. Developing Africa's share in total trade appears to have been highest for Romania, 6.6 per cent of whose exports were destined for developing Africa in 1977 while 2.5 per cent of its imports originates from Africa. The shares of developing Africa in the total exports of Bulgaria, Czechoslovakia, the German Democratic Republic, 2/ Hungary, Poland and the USSR in 1977 were 5.1, 1.9, 1.5, 2.7, 2.6 and 1.9 per cent respectively, while its shares in their total imports stood at 1.3, 1.5, 0.9, 1.8, 0.9 and 2.3 per cent respectively. Africa is more important as a market for exports than as a source of imports for most of socialist countries of eastern Europe.

Table II.C.22

Trade between developing Africa and the socialist countries of eastern Europe, 1958-1979

	Exports (f.o.b.)		Imports (f.o.b.)		Balance of trade
	Value (Millions of US dollars)	Share in total African exports (Percentages)	Value (Millions of US dollars)	Share in total African imports (Percentages)	(Millions of US dollars)
1958	225	4.8	235	3.9	-10
1959	255	5.3	220	3.7	35
1960	300	5.6	240	3.7	60
1961	285	5.3	335	5.1	-50
1962	260	4.6	335	5.3	-75
1963	345	5.6	410	6.1	-65
1964	360	4.9	440	6.0	-80
1965	455	5.9	610	7.5	-155
1966	480	5.8	590	7.2	-110
1967	460	5.5	710	8.5	-250
1968	530	5.4	630	7.1	-100
1969	660	5.8	730	7.3	-70
1970	779	6.4	997	8.3	-218
1971	837	6.7	1 011	7.5	-174
1972	968	6.5	1 080	7.3	-112
1973	1 134	5.5	1 284	6.3	-150
1974	1 688	4.4	1 906	5.9	-218
1975	2 034	6.0	1 957	4.8	77
1976	1 689	4.1	1 891	4.4	-202
1977	1 608	3.4	2 508	4.8	-900
1978	1 416	3.2	2 913	5.1	-1 497
1979	1 494	2.4	2 944	4.7	-1 450

Source: Yearbook of International Trade Statistics 1969 (United Nations publication, Sales No.: E.71.XVII.5) p. 21-27 and 1979 Yearbook of International Trade Statistics (United Nations publication, Sales No. E/F.80.XVII.5, Vol. I) pp. 1077-1079.

The major African trading partners of the socialist countries of eastern Europe are Algeria, Egypt, the Libyan Arab Jamahiriya, Morocco, the Sudan and Tunisia in North Africa; Ghana, Guinea, the Ivory Coast and Nigeria in West Africa; the United Republic of Cameroon in Central Africa; and Ethiopia, Somalia and the United Republic of Tanzania in Eastern Africa. Many of these countries have established regular trade links with most if not all of the socialist countries of eastern Europe. Jointly, these 14 African countries accounted for 95.9, 98.1, 96.7 and 93.3 per cent of developing Africa's exports to eastern Europe in 1965, 1970, 1975 and 1978 respectively, while their share in African imports from these countries was 97.2, 97.1, 96.4 and 91.5 per cent respectively. The North African subregion accounts for the bulk of Africa's trade with the socialist countries of eastern Europe; the share of North Africa was 68 per cent of African exports and 73.8 per cent of African imports in 1978. For the majority of developing African countries, trade relations with the socialist countries of eastern Europe are still relatively undeveloped, sporadic and quantitatively insignificant.

(a) The structure of trade between African countries and the socialist countries of eastern Europe

The trade between developing Africa and the socialist countries of eastern Europe is based largely on the export of primary products in exchange for industrial products.

The predominance of primary commodities in Africa's exports to the socialist countries of eastern Europe is evidenced by the heavy concentration in SITC groups 0-4 viz. food, beverages and tobacco; crude materials, mineral fuels and animal and vegetable oils and fats. The share of these commodity groups in Africa's exports to these countries is roughly 80 per cent. In other words, exports of manufactured goods have been relatively negligible. In 1978, for example, chemicals, manufactured goods, and machinery and transport equipment accounted for 3.5, 18.5 and 0 per cent respectively of African exports to eastern Europe.

The major African primary exports to the socialist countries of eastern Europe include agricultural commodities such as cocoa, coffee, cotton lint, tropical timber, fresh fruit, spices and oil seeds, and mineral products such as petroleum, phosphates, copper and bauxite. Exports of manufactures consist largely of such goods as textiles, foot-wear and leather goods.

Over the years there have been some significant changes in the structure of Africa's exports to the socialist countries of eastern Europe. The share of food, beverages and tobacco has grown rapidly, and the share of crude materials has declined sharply. Between 1960 and 1978, the proportion of food, beverages and tobacco in African exports to that area rose from 16.5 to 44.3 per cent, while that of crude materials declined from 72.6 to 22.8 per cent. Other notable changes include the rise in the share of mineral fuels, from 0.7 per cent in 1965 to 10.9 per cent in 1978 while the share of chemicals rose from 0.3 per cent in 1960 to 18.5 per cent in 1978.



There have been also some important changes in the structure of Africa's imports from the socialist countries of eastern Europe. These include the steady rise in the share of food, beverages and tobacco and the decline in the share of mineral fuels and manufactured goods. Between 1960 and 1978 the share of food, beverages and tobacco increased from 6.5 to 16.4 per cent, while the proportion of mineral fuels and manufactured goods in African imports fell from 12.6 to 5.5 per cent and from 32 to 20.3 per cent respectively. The share of machinery and transport equipment, after rising sharply up to the mid-1960s, has since been declining or stagnant.

The commodity breakdown of Africa's imports from the socialist countries of eastern Europe shows in general the same pattern as its total imports. However, food, beverages and tobacco and crude materials loom larger in Africa's imports from the socialist countries than in its over-all imports. While the share of food, beverages and tobacco in total African imports has been falling since the mid-1960s, their share in imports from the socialist countries has been marked by a steady increase. On the other hand, the proportion of machinery and transport equipment in Africa's imports from the socialist countries of eastern Europe has been declining or stagnating since the mid-1960s, while the share of this commodity group in the region's over-all imports has increased steadily. This is to some extent a reflection of the relatively weak competitive position of machinery and transport equipment from the socialist countries of eastern Europe in African markets.

African imports from the socialist countries of eastern Europe consist largely of high-priority investment goods such as machinery and transport equipment, and intermediate goods like base metals, chemicals, fertilizers, and petroleum products. Except for the increasing share of foodstuffs, which is attributable to the poor performance of agriculture in many African countries, the pattern of imports from the socialist countries of eastern Europe is largely in keeping with Africa's need for and aspirations towards rapid industrialization and economic development.

#### (b) The balance of trade

Africa has a persistent deficit in its trade with the socialist countries of Eastern Europe. Table II.C.22 shows that developing Africa had a surplus in only three of the 22 years between 1958 and 1979. The cumulative deficit sustained by the region was \$5,714 million, the average ratio of import coverage by African exports to the socialist countries was 76.2 per cent. In recent years, the size of the deficit has tended to increase, and despite the relatively small share of the socialist countries or eastern Europe in developing Africa's trade, contributes disproportionately to the region's over-all trade deficit. In 1978, for example, it stood at \$1,497 million and constituted 11.1 per cent of Africa's total deficit of \$13,496 million.

Persistent disequilibrium in the trade between developing Africa and the socialist countries of eastern Europe, whatever its causes, is certainly not conducive to the expansion of such trade. The capacity of African countries to sustain their imports from the socialist countries depends ultimately on their being able to expand their exports to those countries given the difficulties they face in the markets of the developed market economy countries. Increased aid from the socialist countries might perhaps be considered as an alternative to the expansion of exports. However, the desire of African countries to build their economic relations with the socialist countries of eastern Europe on the basis of equality and mutual respect indicates a preference for trade rather than aid. There is therefore an urgent need for the two areas to intensify their search for new forms of trade and economic co-operation and new opportunities that will enable them to eliminate this persistent imbalance.

## D. THE BALANCE OF PAYMENTS

1. General evaluation

The balance on current account of developing Africa as a whole improved from a deficit of \$15 billion in 1978 to a deficit of \$3.9 billion in 1979. The balance improved further in 1980, recording a surplus of \$4.2 billion, the first since 1974, when the positive balance was about \$3 billion. After the good year of 1980 the balance slumped to a deficit of \$16.5 billion in 1981. As a consequence the fall in reserves was about \$5.6 billion in 1981, the highest ever.

Within this over-all picture, of course, the evolution in the oil exporters differed from that in non-oil exporting Africa. Tables II.D.1, II.D.2 and II.D.3 give some estimates of the balance of payments for developing Africa as a whole and divided into oil-exporting and non-oil-exporting countries.

Table II.D.1  
Balance of payments of developing Africa  
(Billions of US dollars)

	1970	1975	1978	1979	1980	1981
Exports (f.o.b.)	12.3	34.9	48.0	68.2	92.8	81.5
Imports (f.o.b.)	-10.3	-35.8	-51.2	-58.0	-72.7	-80.1
Trade balance (f.o.b.)	2.0	-0.9	-3.2	10.2	20.1	1.4
Net services and private transfers	-3.4	-8.5	-11.8	-14.1	-15.9	-17.9
Balance on current account	-1.4	-9.4	-15.0	-3.9	4.2	-16.5
Official transfers (net)	1.2	2.5	2.6	2.7	2.4	2.7
Capital (net)	2.2	6.1	10.4	11.5	8.8	9.9
Net errors and omissions	-0.7	-1.5	-0.8	-3.3	-2.2	-1.7
Total change in reserves <u>a/</u>	-1.3	2.3	2.8	-7.0	-13.2	5.6

Sources: ECA secretariat estimates based on (a) International Financial Statistics, vol. XXXIV, Nos. 11 (November 1981) and 12 (December 1981), and Yearbook 1981; (b) World Economic Outlook, Occasional Paper No. 4 (Washington, IMF, 1981); (c) information obtained from African developing countries.

a/ A minus sign indicates an increase in reserves.

As can be seen from table II.D.1, exports fell by 12 per cent in 1981. This drop was accompanied by a decline in capital flows to the developing countries of Africa, while the nominal value of official transfers remained unchanged (both compared to 1979). These are the main reasons for the unprecedented reduction in the reserves of developing Africa.

The three major oil-exporting African countries had a current account surplus of \$15.9 billion in 1980 and a deficit of \$2.7 billion in 1981. In 1981 these countries experienced a record decline of 20 per cent in the value of exports, the highest since 1970. (The previous record, in 1975, was about 10 per cent). This was the principal cause of extraordinary drop in the reserves in 1981 of about \$3.6 billion. It is probable that slightly increasing demand for oil and some improvements in import policies will lead to improvements in 1982.

Table II.D.2  
Balance of payments of major oil exporters a/  
(Billions of US dollars)

	1970	1975	1978	1979	1980	1981
Exports (f.o.b.)	4.7	19.2	26.7	42.1	61.3	49.3
Imports (f.o.b.)	-2.7	-15.4	-24.4	-25.8	-34.8	-39.7
Trade balance (f.o.b.)	2.0	3.8	2.3	16.3	26.5	9.6
Net services and private transfers	-1.8	-5.0	-7.4	-9.3	-10.6	-12.3
Balance on current account	0.2	-1.2	-5.1	7.0	15.9	-2.7
Official transfers (net)	0.0	-0.2	-0.1	-0.2	-0.4	-0.3
Capital (net) b/	0.6	0.4	3.4	3.5	0.1	1.8
Net errors and omissions	-0.1	-0.7	-0.9	-3.6	-3.1	-2.4
Total change in reserves c/	-0.7	1.7	2.7	-6.7	-12.5	3.6

Sources: ECA secretariat calculations based on data from International Financial Statistics, Yearbook 1981. Figures for 1980 and 1981 are ECA secretariat estimates based on data from International Financial Statistics, various issues, and information obtained from African developing countries.

a/ Algeria, Libyan Arab Jamahiriya and Nigeria.

b/ Including counterpart items and liabilities constituting foreign authorities' reserves.

c/ A minus sign indicates an increase in reserves.

The non-oil exporting developing countries of Africa registered a large current account deficit in all the years covered in table II.D.3. The deficit in 1981 was about \$13.8 billion, up from \$11.7 billion in 1980 and \$10.9 billion in 1979. In 1981 the deficit was partly covered by a net inflow of official transfers and grants of \$3 billion and a net capital inflow of \$8.1 billion. The fall in reserves of \$2 billion was the highest ever. It is assumed that the heavy dependence of these countries on official transfers and grants and on high net capital inflows will continue in 1982. However, there are grounds for hoping that the trend reflected in the table will improve marginally in 1982. Firstly, exports should increase as a result of some expected growth in the economies of the industrialized countries in 1982. Secondly, the price of oil may not increase; if it does not, there will be no additional burden on the import bill. Thirdly, interest rates on the international capital

markets should be lower in 1982, so that interest payments will be smaller. Finally, the output of the 21 least developed African countries should grow, improving the trade balance a little.

Table II.D.3  
Balance of payments of non-oil-exporting developing Africa  
(Billions of US dollars)

	1970	1975	1978	1979	1980	1981
Exports (f.o.b.)	7.6	15.7	21.3	26.1	31.5	32.2
Imports (f.o.b.)	-7.6	-20.4	-26.8	-32.2	-37.9	-40.4
Trade balance (f.o.b.)	0.0	-4.7	-5.5	-6.1	-6.4	-8.2
Net services and private transfers	-1.6	-3.5	-4.4	-4.8	-5.3	-5.6
Balance on current account	-1.6	-8.2	-9.9	-10.9	-11.7	-13.8
Official transfers (net)	1.2	2.7	2.7	2.9	2.8	3.0
Capital (net)	1.6	5.7	7.0	8.0	8.7	8.1
Net errors and omissions	-0.6	-0.8	0.1	0.3	0.9	0.7
Total change in reserves a/	-0.6	0.6	0.1	-0.3	-0.7	2.0

Source: ECA secretariat estimates based on data from International Financial Statistics, vol. XXXIV, No. 11 (November 1981) and Yearbook 1981, and World Economic Outlook, Occasional Paper No. 4 (Washington, IMF, 1981).

a/ A minus sign indicates an increase in reserves.

## 2. Causes of the current account deficit

There were three main causes of the current account deficit in Africa. The first was the deterioration in the terms of trade of several countries. Falling coffee prices in both 1980 and 1981 caused problems for the Ivory Coast, Kenya and Uganda. The Ivory Coast also suffered from the drop in cocoa prices in both years. Moreover, the price of Kenyan tea was also falling in 1978-1980.

Another factor in the deterioration of the terms of trade was the increase in the price of manufactured goods, and especially machinery and equipment.

The second cause of difficulties in the African balance of payments was the recession in the industrialized countries, which hit both the volume and the prices of their exports.

Another important factor was the debt servicing obligations of the countries of the region. The high interest rates in 1980 and 1981 were very unfavourable for them.

### 3. Financing the current account deficit

The African countries lack both the resources and the financial machinery to finance their deficits themselves. They have no choice but to borrow from the international capital market or IMF, or have recourse to capital originating from the members of OPEC and the Development Assistance Committee (DAC) of OECD.

The developing countries of Africa borrowed \$10.4 billion net in 1978 for balance of payments financing. This figure rose to \$11.5 billion in 1979. The amount of net capital was \$8.8 billion in 1980 and \$9.9 billion in 1981 (see table II.D.1). The disturbing fact is that the capital available for non-oil-exporting developing Africa in 1981 was about \$8 billion, approximately the same as in 1979. In the meantime the current account deficit has increased by about \$3 billion for non-oil-exporting developing Africa (see table II.D.3).

Capital inflows from the DAC and OPEC countries and from multilateral agencies are indicated in table II.D.4.

Table II.D.4  
Total net financial flows from DAC and OPEC member countries and from  
multilateral agencies to developing countries of Africa, 1975-1979  
(Billions of US dollars)

	Concessional	Non-concessional	Total
1975	6.861	6.166	13.027
1976	6.113	5.654	11.767
1977	7.440	7.852	15.292
1978	8.562	11.034	19.596
1979	8.695	7.828	16.523

Source: Handbook of International Trade and Development Statistics, Supplement 1980 (United Nations publication, Sales No. E/F.80.II.D.10), pp.276-277.

In 1979 net payments from the DAC and OPEC countries and from multilateral agencies to developing countries of Africa totalled about \$16.5 billion, about 16 per cent less than in 1978. Some 53 per cent of the total is made up of concessional flows and about 47 per cent of non-concessional flows.

Total financial flows from all sources to the developing countries of Africa are shown in table II.D.5.

Total bilateral flows from DAC member countries to the developing countries of Africa amounted to about \$7.6 billion in 1975 and about \$12.7 billion in 1979, showing an average increase of 13.6 per cent a year. Private flows outstripped official flows in 1975-1978. In 1979 official

Table II.D.5  
Total financial flows to developing Africa, 1975-1979  
 (Billions of US dollars)

	1975	1976	1977	1978	1979
<u>Total net bilateral flows from DAC countries</u>					
Official development assistance	2.930	3.138	3.686	4.830	5.759
Other official flows	0.240	0.491	0.623	1.023	0.688
Total official flows	3.170	3.629	4.309	5.853	6.447
Private flows	4.432	4.107	6.535	9.161	6.206
Total	7.602	7.736	10.844	15.014	12.653
Official and private export credits	2.919	2.909	4.703	4.972	...
<u>Total net bilateral financial flows from OPEC countries</u>					
Concessional	2.698	1.536	1.437	0.967	0.641
Non-concessional	1.002	0.517	0.154	0.210	0.375
Total	3.700	2.053	1.591	1.177	1.016
<u>Total net financial flows from multilateral agencies largely financed by DAC countries</u>					
Concessional	1.086	1.057	1.202	1.912	2.145
Non-concessional	0.448	0.456	0.527	0.602	0.709
Total	1.534	1.513	1.729	2.514	2.854
<u>Total net financial flows from multilateral agencies largely financed by OPEC countries</u>					
	0.114 <sup>a/</sup>	0.465	1.128	0.890	...

Source: Handbook of International Trade and Development Statistics, Supplement 1980 (United Nations publication, Sales No. E/F 80.II.D.10), pp. 284-285, 292-293, 300, 304-305 and 312.

a/ 1974.

flows were slightly higher than private flows. Official development assistance, at about \$5.8 billion in 1979, accounted for about 89.3 per cent of official flows. Official and private credits totalled about \$5 billion in 1978. Total bilateral flows from OPEC member countries fell from \$1.2 billion in 1978 to \$1 billion in 1979.

#### 4. Financial support from IMF<sup>1/</sup>

Financial assistance from the International Monetary Fund to African countries has increased steadily in recent years. In 1979 and 1980 Fund resources outstanding under different arrangements increased at an average annual rate of 25 per cent, to SDR 1.8 billion at the end of 1980, and African countries' use of these resources is likely to increase further in 1981 and beyond. In the first four months of 1981 six African countries received a total of SDR 1.5 billion, and assistance worth as much again was negotiated with other African countries before the end of the year.

Tables II.D.6 and II.D.7 show the rapid rise in IMF assistance to African countries in recent years. This increase has taken place in three separate phases.

The first phase followed the increase in world oil prices in late 1973, which led to a sudden, sharp deterioration in the payments position of the oil-importing countries. The second phase was chiefly associated with loans from the Trust Fund, which was set up in 1976 to benefit developing countries using the profits realized from the sale of a part of the IMF's gold.

The third phase began in 1979, when there was a rapid rise in Fund support to African countries under stand-by arrangements in the upper credit tranches and in extended arrangements. Of particular interest is the

Table II.D.6  
Commitments of IMF resources to African countries  
(Millions of SDRs)

	1970-1973 <sup>a/</sup>	1974-1977 <sup>a/</sup>	1978	1979	1980
Outright purchases	2	26	13	16	40
Stand-by arrangements					
First credit tranche	10	22	25	26	17
Upper credit tranches					
One-year arrangements	27	35	15	74	52
Multi-year arrangements	-	-	25	355	630
Extended fund facility	-	17	-	200	1 029
Compensatory financing facility	17	110	152	216	113
Oil facility	-	116	-	-	-
Trust Fund <sup>b/</sup>	-	13	297	265	327
SDR allocations	95	-	-	164	164
Total <sup>c/</sup>	151	339	527	1 316	2 370

Source: "Use of Fund resources by African countries likely to increase further in period ahead", IMF Survey, vol. 10, No. 9 (4 May 1981), pp. 137-138.

<sup>a/</sup> Annual averages.

<sup>b/</sup> The figures shown are for disbursements.

<sup>c/</sup> Slight discrepancies in totals are due to rounding.

<sup>1/</sup> This section is substantially based on "Use of Fund resources by African countries likely to increase further in period ahead", IMF Survey, vol. 10, No.9 (4 May 1981), pp. 137-138.



sharp increase in multi-year arrangements augmented by resources under the supplementary financing facility. The share of African countries in the total amount of IMF assistance offered under stand-by and extended arrangements in 1979 and 1980 rose to 38 per cent from only 1 per cent between 1970 and 1978. Africa's share in the total number of stand-by and extended approved rose from an annual average of 20 per cent between 1970 and 1978 to 53 per cent in 1979 and 1980.

Table II. D.7  
Commitments of IMF resources by country (April 1981)  
(Millions of SDRs)

	Amount agreed	Amount purchased	Undrawn balance
Central African Republic	10.4	-	10.4
Equatorial Guinea	5.5	3.0	2.5
Gabon	34.0	-	34.0
Ivory Coast	484.5	44.2	440.3
Kenya	241.5	90.0	151.5
Liberia	65.0	32.0	33.0
Madagascar	76.7	21.5	55.2
Malawi	49.9	22.0	27.9
Mauritania	29.7	8.9	20.8
Mauritius	35.0	22.0	13.0
Morocco	817.1	68.3	748.8
Senegal	184.8	41.1	143.7
Sierra Leone	163.7	-	163.7
Togo	47.5	7.3	40.2
United Republic of Tanzania	179.6	25.0	154.6
Zimbabwe	37.5	37.5	-
Total	2 462.4	422.8	2 039.6

Source: As for table II.D.6.

This third and continuing phase in the recent development of IMF assistance to African countries primarily reflects two factors: the continued and marked deterioration in the economic and financial position of many African countries, and the progressive evolution, in response to changing circumstances, of IMF policies applied to the use of its resources and to the scale of IMF assistance available to members.

In the light of the worsening world economic situation, the IMF Executive Board has broadly agreed that IMF should play a larger role in the adjustment process and in financing payments imbalances.

## E. AID AND DEBT

### 1. Resource flows to developing countries

Total resource flows to developing countries in 1980 amounted to \$US 88.9 billion, comprised of: \$US 33.4 billion or 38 per cent, in ODA from all sources; \$US 45.8 billion, or 51 per cent, in non-concessional lending; and \$US 9.7 billion, or 11 per cent, in direct investment. Comparison of 1980 nominal flows with those of 1979 shows that 1980 over-all flows increased by 6 per cent, of which ODA accounted for 3 per cent and non-concessional lending for 1 per cent, while direct investment decreased by 4 per cent. However, when the total flows in the two years are compared in 1979 prices, the 1980 flows amounted to \$US 81.4 billion, which is 3 per cent less than the \$US 83.9 billion of 1979.

The over-all performance seen in the light of the Second United Nations Development Decade's targeted flow of 1 per cent of donor countries' GNP has OPEC in the lead, with contributions amounting to 1.35 per cent of member countries' GNP. The contribution of Arab States members of OPEC was 2.34 per cent of their GNP, while that of non-Arab States members of OPEC amounted to 0.08 per cent. Total resource flow from DAC countries was 1.04 per cent of their GNP, made up of 0.37 per cent in ODA, 0.07 per cent in other flows and 0.56 per cent in private flows. DAC contribution to ODA was slightly higher than 50 per cent of the ODA commitment of 0.7 per cent of GNP. CMEA countries contributions totalled 0.2 of their GNP, of which flows from the USSR were 0.14 per cent, with the remaining 0.06 per cent from Eastern European countries.

### 2. Resource flows to Africa

Total resource flows to developing Africa (excluding direct investment) in nominal terms amounted to \$US 18.9 billion in 1980, an increase of 4 per cent over the 1979 level of \$US 18.1 billion. In real terms, using the same deflector as for all developing countries, resource flows to Africa declined by 5 per cent. Of the total inflow in 1980, 53 per cent (\$US 10 billion) was ODA, with 36 per cent (\$US 6.8 billion) from DAC sources and the remaining 17 per cent (\$US 3.2 billion) being other ODA. The balance of 47 per cent (\$US 8.9 billion) was generated on a non-concessional basis. Comparison with the flow in 1979 from these different sources shows that ODA increased by 6 per cent, of which DAC bilateral assistance increased by 18 per cent while other ODA decreased by 12 per cent. With respect to non-concessional flows, the 1980 volume was higher than the 1979 level by 2 per cent.

Table II.E.1

Total net resource receipts of developing countries from all sources<sup>a/</sup> (net disbursement in billion of \$US)

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	1975			1978			1979			1980		
	Amount	Share (%)	Amount	Share (%)	Change (%)	Amount	Share (%)	Change (%)	Amount	Share (%)	Change (%)	
I. Official development assistance	19.2	36	23.8	30	-15	28.9	35	21	33.4	38	16	
A. Bilateral	15.4	29	17.8	22	17	22.7	27	28	25.7	29	13	
1. DAC countries	9.8	18	13.1	16	30	15.9	19	21	17.6	20	11	
2. OPEC "	4.9	10	3.3	4	18	4.9	6	49	6.1	7	25	
3. CMEA "	0.7	1	1.3	2	18	1.8	2	39	1.8	2	—	
4. Other "	—	—	0.1	—	—	0.1	—	—	0.2	—	100	
B. Multilateral	3.8	7	6.0	8	20	6.2	8	3	7.7	9	24	
II. Non-concessional flows	34.3	64	56.2	70	30	55.0	66	-2	55.5	62	1	
A. Bilateral	31.7	59	53.1	66	22	50.8	61	-4	50.7	57	—	
1. Direct investment	11.5	22	11.8	14	23	13.6	16	15	9.7	11	-29	
2. Bank sector	12.0	22	22.9	29	48	19.7	-24	-14	18.0	19	-9	
3. Bond lending	0.4	-1	2.7	3	-16	1.1	1	-59	2.0	2	82	
4. Private export credit	4.4	8	10.2	13	11	9.5	11	-7	12.2	14	28	
5. Official "	1.2	2	2.2	3	47	1.7	2	-33	2.5	3	47	
6. DAC other official	0.6	1	1.3	2	160	1.0	1	-23	2.2	3	120	
7. OPEC countries	1.5	3	(1.0)	1	11	(1.0)	1	—	1.0	1	—	
8. Other "	—	—	0.9	1	-800	3.2	4	256	3.1	4	-3	
9. CMEA "	0.1	—	0.1	—	—	—	—	—	—	—	—	
B. Multilateral	2.6	5	3.1	4	15	4.2	5	36	4.8	5	14	
III. Total receipts	53.5	100	80.0	100	39	83.9	100	5	88.9	100	6	

Source: OECD, Development Assistance Committee, Development Co-operation Review, 1981 Statistical Annex.

<sup>a/</sup> Amount (current prices); Share is each source as a percentage of total; Change is percentage of change over previous year.

Table II.E.2

Volume and share of resource flows to Africa, 1979 and 1980  
(Million of \$US)

	1979			1980		
	Volume	as % of flow to Africa	Africa's share %	Volume	as % of flows to Africa	Africa's share %
ODA, of which	9.4	52	35	10.0	53	34
DAC	5.8	32	37	6.8	36	39
Other ODA	3.6	20	32	3.2	17	26
Non-ODA	8.7	48	17	8.9	47	18
Total	18.1	100	23	18.9	100	24

Source: Based on information from OECD, Development Assistance Committee, Development Co-operation Review, 1981 Statistical Annex.

Excluding direct investment amounting to \$US 9.7 billion, developing Africa's share of the total resource flows to developing countries amounted to 24 per cent, compared with 23 per cent in 1979. Of the different categories of resource flows, developing Africa absorbed 39 per cent of ODA from DAC and 26 per cent of other ODA. Its share of the total ODA flows amounted to 34 per cent. Of the non-ODA flows to developing countries, 18 per cent went to Africa. While developing Africa's share of total ODA flows decreased from 35 per cent in 1979 to 34 per cent in 1980, largely because of other ODA flows which decreased from 32 per cent in 1979 to 26 per cent in 1980 (see table above), non-ODA flows increased from 16 per cent in 1979 to 18 per cent in 1980, giving developing Africa an over-all share of 24 per cent of total resource flows to developing countries.

The major beneficiaries of the foreign resource inflows in 1980 were Algeria, Egypt, the Ivory Coast, the Libyan Arab Jamahiriya, Morocco and Nigeria, who among them shared 43 per cent of all resource flows to Africa and 10 per cent of all resource flows to developing countries. The main sources of foreign resources to these countries were the international capital markets

Table II.E.3

Resource flows to individual African countries, 1980 (Million of \$US)

	Bilateral ODA from DAC	ODA other ODA	Total ODA	Non-ODA	Total resource flows
Algeria	117.6	60.5	178.1	1 367.8	1 545.9
Angola	35.8	11.3	47.1	147.3	194.4
Benin	35.6	41.1	76.7	299.7	376.4
Botswana	83.4	15.4	98.8	-52.1	46.7
Burundi	59.6	45.2	104.3	0.3	105.1
Central African Republic	75.1	24.3	99.4	18.4	117.8
Chad	20.1	6.1	26.2	-0.7	25.5
Congo	55.3	29.5	84.8	-6.4	78.4
Egypt	1 186.9	167.2	1 354.1	954.6	2 308.7
Ethiopia	91.3	86.2	177.5	-1.4	176.1
Gabon	49.0	3.3	52.3	-82.5	-30.2
Gambia	16.4	28.5	44.9	27.5	72.4
Ghana	107.1	75.8	182.9	28.7	211.6
Guinea	32.5	35.8	68.3	46.0	114.3
Ivory Coast	151.8	47.0	198.8	704.1	902.9
Kenya	276.6	103.4	380.0	127.6	507.6
Lesotho	59.6	25.5	85.1	-0.1	85.0
Liberia	60.0	33.4	93.4	311.0	404.4
Libyan Arab Jamahiriya	9.9	6.7	16.6	1 019.7	1 036.3
Madagascar	90.7	89.8	180.5	194.0	374.5
Malawi	75.6	47.1	122.7	29.7	152.4
Mali	131.3	79.1	210.4	1.9	212.3
Mauritania	53.5	98.3	151.3	-10.7	141.1
Mozambique	114.7	32.8	147.5	172.6	320.1
Morocco	187.7	451.0	638.7	413.3	1 052.0
Niger	104.9	56.0	160.9	83.2	244.1
Nigeria	17.3	16.9	34.2	1 047.6	1 081.8
Rwanda	96.5	37.2	133.7	0.3	134.0
Senegal	181.8	54.7	236.5	187.3	423.8
Sierra Leone	56.7	23.2	79.9	4.3	84.2
Somalia	139.4	199.1	338.5	106.5	445.0
Sudan	271.5	338.3	609.8	85.3	695.1
Swaziland	32.5	8.5	41.0	11.6	52.6
Togo	52.1	31.2	83.3	77.5	160.8
Tunisia	157.7	74.4	232.1	121.4	353.5
Uganda	42.2	49.0	91.2	19.6	110.8
United Republic of Cameroon	171.3	72.1	243.4	461.9	705.3
United Republic of Tanzania	523.0	102.4	625.4	180.3	805.7
Upper Volta	151.1	50.6	201.7	15.7	217.4
Zaire	316.8	98.0	414.8	327.8	742.6
Zambia	233.7	38.6	272.3	19.8	292.1
Zimbabwe	110.4	17.3	127.7	1.2	128.9
Others	978.3	219.7	1 198.0	522.7	1 720.7
Total Africa	6 814.3	3 131.5	9 945.8	8 934.3	18 930.1
Share of the different flows	36	17	53	47	100

Non-concessional flows to other countries in developing Africa were more or less equal except for seven countries where the inflow was negative. In Botswana, non-ODA or non-concessional flow was \$US 52.1 million as a result of the country's decision to repay its past debt commitments; this was made possible by its strong 1980 balance-of-payments position. For Mauritania, Chad, the Congo, Ethiopia and Lesotho, non-concessional inflow was negative, with outflows of \$US 10.7, \$0.7, \$6.4, \$1.4 and \$0.1 million respectively. However, in all these countries ODA inflows were greater than non-ODA outflows and hence all registered a positive capital inflow.

In the case of Gabon, however, the ODA receipt of \$US 52.3 million was less than the total non-ODA outflow of \$US 82.5 million, making it the only country in Africa where the total outflow was more than the total inflow, by \$US 30.2 million in 1980. But this is explained by Gabon's policy of early debt repayment initiated under the recovery program started in 1980. Moreover, Gabon, an oil-exporter, has relatively large export revenues.

The ODA resource inflow was distributed in developing Africa with less disparity than non-ODA, e.g., non-concessional flows, except in Egypt (14 per cent), Morocco (6 per cent), the United Republic of Tanzania (6 per cent) and Zaire (4 per cent), whose share was higher than the average flow to other countries.

### 3. External debt of developing Africa

In 1980 the total outstanding debt of developing Africa reached \$US 47.8 billion, which is 13 per cent of non-oil developing countries' long-term external debt and 11 per cent of the total debt outstanding of all developing countries. As such, Africa is the least indebted of the debtor continents. Compared with the developing countries' 15 per cent increase in total indebtedness from 1979 to 1980, the 11 per cent rate of growth of developing Africa's total debt outstanding over the same period is well below the average rate. Furthermore, the 11 per cent increase in 1980 over the 1979 level for developing Africa is the lowest rate at which its debt has increased since 1973. In fact, African indebtedness has continuously posted a declining rate of annual increment since 1977, when its debt position increased by 31 per cent over the previous year.

While developing Africa's has grown by smaller increments each year, this is indicative of the availability of credit to Africa rather than the decreasing need of the continent for foreign resources. The high interest rate coupled with the inflationary recession afflicting the OECD countries has had a negative effect on the flow of resources to developing Africa. While the recessionary

inflation limited the capacity of the DAC countries and related sources to extend credit on a concessionary basis, the high interest rates of the capital market have placed this source beyond the reach of most African countries.

#### 4. Debt and debt-service ratios

Preliminary figures show that in 1980 developing Africa paid \$US 5.8 billion to service its debts. This amounts to 12 per cent of its total debt outstanding and 14 per cent of its exports of goods and services. Its debt-service ratio of 14 per cent, although manageable, has at the same time undergone violent fluctuation over the years. This has two important implications. With increasing debt servicing over time as new debts are incurred and old debts mature, the up-and-down movement of the debt-service ratio reflects the violent fluctuations in export earnings, with the result that developing African cannot plan the optimal use of its foreign exchange earnings. Furthermore, its increasing debt service will claim an increasing amount of developing Africa's foreign exchange earnings and unless exports of goods and services increase at a faster rate, the probability of default will also increase, making greater inflow difficult. If developing Africa is to avoid these problems, it must include, with appropriate weight, its debt service variable in planning the utilization of its resources.

#### 5. Terms and conditions

While the flow of resources has increased in nominal terms, the terms and conditions under which these resources were made available have unfortunately grown more difficult for developing Africa. As an example, table 4 shows that for sub-Saharan Africa, interest rates increased on the average from 7.9 per cent in 1979 to 8.5 per cent in 1980, an increase of 8 per cent. At the same time the maturity period decreased from 16.7 years in 1979 to 15.7 years in 1980. The grace period declined from 4.7 years to 4.6 years also decreased, from 16.7 per cent in 1979 to 15.8 per cent in 1980. For developing Africa north of the Sahara, conditions are no better and may in fact be worse as a result of those countries' heavy reliance on private sources, whose interest rates averaged 13.6 per cent in 1980 and were slated to increase in 1981.

#### 6. Prospects

In the years ahead, the external resource needs of the developing countries in general and those of developing Africa in particular are bound to increase if their ambition of posting a satisfactory rate of growth is to be realized. The extent of this need will depend on a host of external and internal variables. If their domestic economic performance, as measured by their GNP growth rate, recovers, the needs will be smaller, provided the external variables are favourable.

The external factors which might affect their supplementary resource requirement are the prices of their imports and exports. If the price of developing Africa's exports increases while the price of its imports remains constant or increases at a slower rate than the price of its exports, then the amount of foreign resources needed to supplement their own resources will be smaller. If this situation does not occur, developing Africa will need more external resources to provide for essentials and mitigate the impact of adverse economic activity.

Table II.E.4  
Average terms of borrowing for sub-Saharan Africa

Total debt	Average terms of new commitments <sup>1/</sup>						
	1974	1975	1976	1977	1978	1979	1980 <sup>1/</sup>
Interest rate (percentage)	5.2	5.7	5.3	5.5	6.3	7.9	8.5
Maturity (year)	20.0	20.3	19.2	19.1	17.6	16.7	15.7
Grace period (years)	5.9	5.2	5.2	4.7	4.9	4.7	4.6
Grant element	33.8	29.9	31.2	30.1	25.4	16.7	15.8
<u>Total official debt</u>							
Interest rate (percentage)	3.3	4.1	3.5	4.0	3.6	4.1	5.3
Maturity (years)	25.8	27.2	27.4	26.0	26.0	24.9	22.9
Grace period (years)	7.6	6.7	6.9	6.3	6.8	6.3	6.2
Grant element (percentage)	50.0	44.0	49.1	44.2	47.0	42.3	39.8
<u>Bilateral debt</u>							
Interest rate (percentage)	3.1	3.1	3.4	3.9	3.9	4.8	6.0
Maturity (years)	22.4	24.3	22.7	22.3	24.2	20.7	19.7
Grace period (years)	7.6	6.6	6.5	5.7	6.6	5.7	5.4
Grant element (percentage)	49.4	49.0	46.6	42.5	45.0	35.3	34.6
<u>Multilateral debt</u>							
Interest rate (percentage)	3.7	5.2	3.6	4.1	3.3	3.4	6.6
Maturity (years)	32.6	30.2	33.4	30.3	28.4	28.8	28.5
Grace period (years)	7.7	6.9	7.4	6.9	7.0	6.8	6.2
Grant element (percentage)	51.2	39.1	52.4	46.3	49.7	48.9	49.0
<u>Total private debt</u>							
Interest rate (percentage)	8.8	8.4	7.8	7.7	9.3	11.4	13.6
Maturity (years)	9.4	8.5	8.6	8.7	8.6	9.0	9.4
Grace period (years)	2.9	2.5	2.9	2.4	2.9	3.2	2.9
Grant element (percentage)	4.3	6.0	7.9	8.8	2.0	-7.0	1.0

Sources: For 1974-1979, World Bank, Accelerated Development in Sub-Saharan Africa, 1981 Statistical Annex.

<sup>1/</sup> 1980 projection based on past trends.



The needs of developing Africa must be weighed against the availability of foreign resources and the terms and conditions under which they are forthcoming. If the economic performance of the OECD countries improves, the nominal flow is likely to increase under terms and conditions no better than those in effect at present. However, what would happen to the real flow would depend on the price movement in the donor countries. Over all, the prospect of an immediate and strong recovery is unlikely in the OECD countries, which means that the volume and the cost of credit are not likely to be very encouraging.

As for resources from OPEC and CMEA countries, the prospect of increased flow does not seem to be very bright. With demand for oil hypothesized to rise at a decreasing rate, the price of oil is expected to remain constant in nominal terms and decline in real terms. This would definitely decrease the amount of resources developing Africa would need to commit to import oil, but at the same time it would also decrease the amount of resources that OPEC might be willing to commit to developing countries. With respect to the CMEA countries, a significant increase would seem unlikely on the basis of historical performance.

This scenario gives developing Africa one course of action and that is to rely more on its own resources and increase its productivity as the major source of economic growth and an improved standard of living for its people.

## F. THE FINANCIAL SITUATION

In view of the fact that African countries were subjected to considerable pressures, during 1980 their performance is not on the whole unfavourable. To stimulate domestic spending and mitigate the effect of the external shock Governments increased expenditures. But this was offset by increased revenue, so that fiscal imbalances were kept within limits. Despite an increase in domestic credit, the money supply increased at a slower rate than in 1979 and although prices (as measured by the consumer price index) increased, the rate of increase was the lowest since 1974.

### 1. Monetary development

For developing Africa, money supply (defined as currency outside banks plus net demand deposits) increased at an average rate of 16 per cent in 1980 over the 1979 level. Growth in the volume of money (money supply plus time and savings deposits) was 22 per cent during the same period.

While this rate of increase (compiled for 27 countries for which 1980 data was available) indicates a general upsurge for developing Africa as a whole, individual countries had different experiences. In 1980, of the 27 countries, money supply decreased in three (Burundi, Ethiopia and Zambia), increased at decreasing rates in 10 and increased at an increasing rate in 14 countries as compared with 1979 rates. In the 24 countries in which money supply increased, the rate ranged from a low of 2 per cent (Kenya) to a high of 76 per cent (Zaire), with 14 countries experiencing a growth of between 5 and 20 per cent.

The volume of money, or broad money, declined in 2 countries (Burundi and Ethiopia) while increasing in the remaining 25 countries, in which the rate of growth varied between a low of 5 per cent (Kenya, Swaziland and Mali) and a high of 55 per cent (Zaire).

Identifiable factors affecting money supply are changes in time and savings deposits, net foreign assets and domestic credit. With respect to volume of money, the major determinants are changes in net foreign assets and domestic credit.

In 1980, foreign assets increased by 5 per cent and domestic credit jumped 20 per cent over 1979 levels. At the same time, other items (net) increased by 19 per cent and time and savings deposits increased by 31 per cent.

These changes in factors affecting money supply resulted in the 20 per cent over-all increase.

Table II.F.1  
Frequency distribution of countries according to the rates of  
growth of money supply ( $M_1$ ) and volume of Money ( $M_2$ ), 1980

Rate of growth (percentage)	Number of countries	
	Money supply ( $M_1$ )	Volume of money ( $M_2$ )
Less than 0	2	2
0 - 5	1	3
5 - 10	7	1
10 - 20	7	3
20 - 30	2	5
30 - 40	5	5
40 - 50	1	1
50 - 60	0	1
60 - 70	0	1
70 - 80	<u>1</u>	<u>0</u>
Total	27	27

Source: Calculated from the International Monetary Fund, International Financial Statistics, Yearbook, 1981.

Table II.F.2  
Rate of growth of money supply ( $M_1$ ) and volume of money ( $M_2$ ) and the causes of growth with percentage contribution, 1980

	% change in money supply	Due to percentage changes in: $\frac{a}{Q}$ $\frac{a}{F}$ $\frac{a}{C_p}$ $\frac{a}{C_t}$ $\frac{a}{O}$	% change in volume of money	Due to change in F $C_p$ $C_c$ $C_t$ $O$				
Algeria	16	-3	17	5	11	9	20	-9
Benin	37	-29	54	-3	56	4	60	-3
Botswana	10	-36	19	21	6	-7	-1	-
Burundi	-8	-1	-7	-7	5	2	7	-7
Cameroun	14	-17	22	-6	36	-5	30	-2
Central African Republic	33	-4	36	12	29	7	35	-12
Congo	38	-5	37	27	23	3	26	-16
Egypt	12	-38	32	7	21	13	34	-9
Ethiopia	-7	-7	-1	-16	13	6	21	-6
Gabon	12	-25	26	19	16	-1	15	-8
Gambia	7	-9	11	-30	19	25	44	-3
Ghana	30	-13	34	-3	5	33	39	-2
Kenya	2	-15	5	-9	9	6	15	-1
Malawi	7	-16	13	-	9	11	19	-6
Mali	5	-	5	-5	10	-2	8	2
Mauritania	9	-4	10	19	12	4	16	-25
Mauritius	20	-31	23	6	5	30	35	-19
Nigeria	43	-26	42	25	13	3	16	1
Rwanda	8	-4	12	15	20	-16	4	-7
Seychelles	27	-34	29	22	7	3	10	-3
Sierra Leone	20	-17	22	-46	9	38	47	21
Senalia	19	-5	20	-6	-1	34	33	-7
Sudan	36	-3	33	-4	15	20	35	2
Swaziland	3	-9	5	8	8	-9	-1	-2
Tunisia	21	-3	19	2	19	-	19	-2
Zaire	76	-5	65	-1	24	25	49	18
Zambia	-1	-15	9	-30	3	28	31	8
Africa	13	-14	22	-	15	10	25	-3

Source: Based on information in IMF, International Financial Statistics, Yearbook 1981.

a/ Q is quasi-money in time and savings, deposits in commercial banks; F represents net foreign assets;  
 $C_p$ ,  $C_c$  and  $C_t$  are credit to the private and public sectors and total credit, and O other items.

Table II.F.3. Causes of and extent of contribution to increase in money supply and volume of money in developing Africa, 1980

	Money supply (percentage)	Volume of money (percentage)
Increase	18	22
Resulting from:		
1. Changes in quasi-money	-14	-
2. Changes in net foreign assets	2	-
3. Changes in domestic credit, of which	35	25
(a) Change in private credit	21	15
(b) Change in public credit	14	10
Change in other items (net)	-5	-3
Change in money supply and volume of money	18	22

Source: Based on information contained in IFF, International Financial Statistics, Yearbook, 1981.

Changes in foreign assets increased money supply by 2 per cent but had an insignificant effect on the volume of money. The increase in time and savings deposit (quasi-money) had a 14 per cent contractionary effect on money supply.

The most important parameter affecting domestic money supply in developing Africa is the change in domestic credit. The 1980 domestic credit increase of 20 per cent increased the supply of money by 35 per cent and the volume of money by 25 per cent through the money multiplier. The 20 per cent increase in domestic credit was due to increases in private and public credit by 18 and 19 per cent respectively.

Country experience reveals that the major determinants of money supply are net foreign assets and domestic credit; in many countries these factors tend to have opposite effects on money supply.

The decrease in money supply in Burundi, Ethiopia and Zambia is due mainly to decreased net foreign assets. In Burundi, net foreign assets decreased by 9 per cent while domestic credit increased by 6 per cent; this together with changes in other items (net) and an increase in time and savings deposits resulted in an 3 per cent decrease in the money supply, a significant achievement when compared with the 14 per cent increase in 1979. In the case of Ethiopia, money supply decreased by 7 per cent despite the 17 per cent increase in domestic credit because of the 81 per cent decrease in net foreign assets. In Zambia, the 1 per cent decrease in money supply came in the wake of a 60 per cent decrease in net foreign assets and a 15 per cent increase in domestic credit. Despite the decrease in net foreign assets of all three

countries in both 1979 and 1980, the accompanying decrease in money supply in general can be attributed to tighter domestic monetary policies which resulted in a slower rate of growth for domestic credit.

The increase in money supply experienced by some countries is attributable to the excessive expansion in domestic credit despite the decrease in net foreign assets; exception is made for countries such as Algeria, Nigeria, the Congo, Gabon, Seychelles and Botswana, where the increase in net foreign assets contributed to an increase in money supply. The very high rate of growth of money supply in Benin, Ghana, Sierra Leone, the Sudan and Zaire is a purely domestic phenomenon due to the higher rate of increase in domestic credit compared to the negative impact of the decreasing net foreign assets.

## 2. Fiscal development

The major impetus for the growth in domestic credit is the increasing government borrowing requirements triggered by the expanding gap between revenues and expenditure. While government revenue increased by 18 per cent in 1980, expenditure increased by 28 per cent over the previous year; and although it increased, revenue could on the average finance only 72 per cent of expenditures, resulting in a resource gap of 28 per cent.

Table II.F.4. Selected fiscal indicators for developing Africa, 1980

Indicators	Per cent
Increase in revenue	18
Increase in expenditure, of which	28
Increase in development expenditure	12
Increase in recurrent expenditure	16
Revenue as % of expenditure	72
Resource gap - government borrowing requirements	28

Source: Based on information from ECA Socio-Economic Research and Planning Division, Country Reports.

The 28 per cent government resource gap was covered by a combination of domestic and external borrowing and grants supplemented by the use of cash balances. Of the 19 per cent increase in government domestic credit, 56 per cent went to cover (governments' domestic borrowing requirements, which covered 19 per cent of the deficit; the remaining 9 per cent was financed by external borrowing grants and the use of cash balances. Since the predominant source of credit to Governments are the central banks which in all

covered 98 per cent of the government borrowing, the result was a 14 per cent contribution to the increase in money supply.

The increase in government expenditure was due to an increase in both recurrent and development (capital) outlays. The increase in recurrent expenditures was due mainly to increases in wages and salaries (for example, in Egypt, Liberia and Mali) subsidies in the face of increasing prices (as in Egypt and Zimbabwe), the transfer of completed development projects from development to recurrent budget as well as general price increases. Development expenditures also increased in nominal terms because of inflation and because of new projects in all countries in developing Africa except Liberia, Sierra Leone and the United Republic of Tanzania, where development expenditure decreased by 30 per cent, 12 per cent and 8 per cent respectively. The fall in development expenditure in Liberia was due to a change in Government and its priorities; in Sierra Leone it was due to a drastic cut-back in development expenditure after the OAU Summit. In the United Republic of Tanzania development expenditure fell because of shortage of building materials and foreign exchange.

In the face of increased government expenditures, most countries in developing Africa have implemented stabilization measures designed to bring about fiscal equilibrium. While efforts to hold down expenditures were met with qualified success in countries such as Burundi, for example, the major focus of the stabilization policies was directed at increasing revenue. The heavy reliance of most countries on revenue from external sources, including taxes on international trade, grants and borrowing, was disappointing for many countries relative to budgetary expectations. Because of the unsatisfactory performance of many countries' exports and imports, revenue from international trade was not as high as planned, nor was the flow of foreign resources as good as expected. These developments forced many countries in developing Africa to shift their emphasis to domestic resources. Here again the problem was that in many countries the tax base, limited to begin with, was further constrained by decreased income. The solution to this dilemma was to increase taxes on income and profit as well as taxes on commodities, thus mitigating the gap between government revenue and expenditure.

While the fiscal picture for developing Africa as a whole was grim, these nevertheless were successful experiences. In the oil-exporting countries of developing Africa (Nigeria, the Congo, Gabon, Algeria, the Libyan Arab Jamahiriya), revenue more than covered recurrent expenditures, thereby enabling these countries to increase their development expenditures. Furthermore, because of their oil assets, these countries had little problem in raising funds from external sources; whatever financial problems these countries encountered were met without exerting undue pressure on domestic resources. As a result, their economies maintained the high degree of buoyance that had begun in the 1970s.

Non-oil-developing countries that posted success were the Southern African States of Botswana and Swaziland. In Botswana, the internationally escalating price of diamonds, which are among the country's most important export items, helped increase government revenue to the extent that the State became

a net lender to the banking sector in 1980. In the case of Swaziland, the favourable change in the international price of sugar boosted government revenue; thus as in Botswana, the State was in a position to repay its debt to the banking industry.

In the remaining countries in developing Africa, the race was between revenue and recurrent expenditures. In Ethiopia, Liberia and Ghana, for example, total revenue could barely cover recurrent expenditures, so that ambitious capital outlays had to be covered by borrowing.

The fiscal disequilibrium of developing Africa is a structural problem whose resolution would require long term adjustment. With fluctuations in export earnings, affecting similar movements on imports, stable revenues from international trade are difficult to imagine. At the same time the domestic tax base has been exhausted to the extent that new sources are non-existent. On the other hand, trends in government expenditure are increasing. Developing Africa would do best to minimize the revenue-expenditure gap while implementing policies to increase output and energize domestic economic activity, which is the main source of revenue and the main cause of increased expenditure.

### 3. Price developments

The increase in government expenditures, along with the 23 per cent increase in private consumption expenditures and the 5 per cent increase in private domestic investment, boosted demand for goods and services. Unfortunately, because of the relatively slight growth of domestic output and the limited import capacity of many of these countries, the increased demand put pressure on prices, which in developing Africa increased by 15.4 per cent over the 1979 level as measured by the consumer price index.

Although increasing demand in the face of limited supply could be blamed for the price increases, other domestic and external factors also contributed. On the domestic front, the increase in taxes on goods designed to mitigate the fiscal imbalances of Governments contributed to increased prices. In addition to this domestic phenomenon, developing Africa was also subjected to imported inflation. Given the fixed exchange rate of developing African countries, the price of imported consumer goods, directly transmitted the inflation of the exporting countries. Secondly, the prices of imports such as oil, raw materials and intermediate goods resulted in caused the prices of home-produced goods to rise by virtue of their effect on the production costs.

Although this 15.4 per cent price increase could be considered high, it is mild as compared with the 37.5 per cent increase for the non-oil-producing developing countries as a whole and much better than the rates of price increases for developing countries in Europe, the Middle East and the western hemisphere, where in 1980 the consumer price index increased by 50.2 per cent, 52.4 per cent and 56.1 per cent respectively over 1979.



The experience of individual countries in developing Africa suggests an over-all improvement compared to 1979. The range of price increases in 1980 ran from a low of 2 per cent (Burundi) to a high of 50 per cent in Ghana, compared with a low of -3 per cent (Mali) and a high of 98 per cent (Zaire) in 1979. Table 5 categorizes the countries in developing Africa by price growth rate.

The experience of the price stabilization policies of developing Africa in 1980 can be examined in terms of their relative success. In nine countries the rate of growth of prices decreased: Burundi (down from 35.6 per cent in 1979 to 2.3 per cent in 1980), Ethiopia (down from 16.7 per cent in 1979 to 4.5 per cent in 1980), Rwanda (down from 16 per cent in 1979 to 7.2 per cent in 1980) and Sierra Leone (down from 21 per cent in 1979 to 11 per cent

Table II.F.5

Price increases in developing Africa 1979 and 1980

Range	Number of countries	
	1979	1980
Less than 5 per cent	1	2
More than 5 per cent but less than 10%	12	3
More than 10 per cent but less than 15%	9	12
More than 15 per cent but less than 20%	5	3
More than 20 per cent but less than 30%	2	3
More than 30 per cent but less than 40%	2	2
More than 40 per cent	2	3
Total	33	33

Source: ECA secretariat

in 1980) can be singled out as the countries with the best performance. In the other five countries (Congo, the Ivory Coast, Nigeria, Senegal and the Upper Volta), the rate of increase showed a slight improvement in 1980 over 1979. In 21 countries, the rate of increase was higher in 1980 than in 1979; increases in Egypt (up from 9.9 per cent to 21 per cent), Mali (up from -3.9 to 22 per cent), Mauritius (up from 15 per cent to 43 per cent), Somalia (up from 24 per cent to 59 per cent) and the United Republic of Tanzania (up from 14 per cent to 30 per cent) were very high. In the 16 other countries where prices increased the rate of increase was much smaller than in 1979.

In three other countries, the rate of price increase decelerated in 1980 as compared with 1979 but the rate was still very high. These are Zaire (down from 98 per cent in 1979 to 37 per cent in 1980), the Sudan (down from 31 per cent in 1979 to 25 per cent in 1980) and Ghana (down from 54 per cent in 1979 to 50 per cent in 1980).

The movement of prices in developing Africa is symptomatic of the behaviour in supply (both imported and domestic) and expenditure, and the successes and failures of the stabilization policies must be examined with reference to this behaviour. In countries where prices increased at a

decreasing rate, GNP growth was high, while fiscal and monetary policy operators decreased aggregate demand. This was the case in Ethiopia, where domestic credit increased by 17 per cent, down from the 20 per cent of the previous year. At the same time structural problems in transport and distribution were improved considerably to facilitate the flow of goods. In Burundi and Rwanda, domestic monetary restraints and impressive growth, coupled with improved transport conditions between these countries and the external world resulting from the improved security condition in Uganda, increased aggregate supply and contributed to the lower rate of increase in prices.

On the other hand, in countries where prices increased at a much faster rate than in 1979, expenditure increased much faster than the supply growth rate. This happened in the United Republic of Tanzania, where shortages in foreign exchange made it very difficult to import additional goods from outside the country to stabilize prices. As for Egypt, the increase in the rate of growth was more than offset by an increase in aggregate demand resulting from an increase in wages and government consumption. The 21 per cent increase in prices would have been much higher were it not for government subsidies, which at the same time drain a large part of the Government's revenue. In Mauritius, the causes of price increases, disastrous cyclones and floods and the high price of imports, were beyond the control of any stabilization policy.

In the Sudan, Zaire and Ghana, the rates of price increases was less in 1980 than in 1979 but were in the highest brackets for developing Africa. In the Sudan, where the high rate is attributable to sluggish growth in real output, stabilization policies are aimed at increasing output through increased investment. Subsidies have been reduced and taxes on imports have been increased. The country may continue to experience high rates of price increases, but if the policy of increased investment succeeds in increasing output and productivity, it will minimize the pressure on prices and thus bring about a lasting solution. In Zaire, a policy of stabilization was combined with policy of expansion. While government expenditure, which decreased its rate of growth of credit from 30 per cent in 1979 to 11 per cent in 1980, was restrained, interest rates on borrowing and savings in the financial institutions increased and demonitization occurred, the minimum wage rate also increased. This, coupled with devaluation of the currency in 1979 by about 50 per cent and shortages of goods despite (or perhaps because of) price control, caused prices to increase by 37 per cent in 1980. However, when compared with the 98 per cent increase in 1979 and the more than 100 per cent increase in earlier years, this increase must be considered a success, but one that will require increased official focus. In the case of Ghana, increased prices should be viewed as a consequence of the stabilization policy as well as an excessive increase in expenditure. Wages and salaries increased, which contributed to an increased government deficit. At the same time price controls were abolished at the retail level to discourage the flow of goods to neighbouring countries, where prices were higher. As a result, the rate of price increase marginally declined from the 54 per cent of the previous year to 50 per cent in 1980. One measure related to the lifting of price controls is to expand it beyond the retail level to include the producer. This would trigger an increase in output, if the producers are given the appropriate incentive.

#### 4. Major domestic adjustment policies

The deterioration in the fiscal and monetary positions of many of the countries of developing Africa and the concomitant sluggish growth in production and exports intensified inflationary pressures, worsened the already acute domestic and external disequilibria, and led to considerable distortions in resource allocation in these countries. Often, a new price structure emerged, militating against set development objectives and targets. The impact was felt with particular severity on export volumes and their domestic and international competitiveness and thereby on government finance, owing to the central role of foreign trade taxes as a source of revenue. As noted earlier in Section II.A., the seriousness of the situation forced most countries to adopt, mostly with IMF and World Bank support, corrective measures, which amounted in some cases to a complete restructuring or reorientation of the economies concerned. More often than not the adopted policy packages included measures directed towards both the monetary and non-monetary sectors with staged time-horizons for their implementation.

Of the eight countries which qualified for World Bank structural adjustment lending, initiated in 1980 to assist Government in formulating and implementing reforms to enable their economies to resume growth and stability, five were African countries, namely: the Ivory Coast, Kenya, Malawi, Mauritius and Senegal. With the exception of Senegal, all had until recently shown impressive growth performance. To qualify for this type of support, a country must be willing to make pertinent changes in its programmes, policies and institutions. Within this framework, the current Senegalese economic recovery programme, which reinforces the previous one embarked upon late in 1979, is based on the active pursuit of an austere budgetary policy, more realistic pricing policies, reforming and improving the financial position of the public sector enterprises, implementing restrictive and selective credit policies and improving the competitiveness of the economy. During 1981, the prices of many commodities, including oil and fertilizers, were raised and employment and pay raises in the public sector were restricted.

In the Ivory Coast the public sector investment programme was cut back substantially and reoriented. The immediate goals include: increasing the efficiency of tax collection, restraining expenditure, strengthening the financial position of the corporations and re-establishing systematic investment planning procedures. In the medium term new sources of revenue will be sought and further improvement will be made to the tax structure, public budgeting procedures and expenditure controls. The budget deficit is thus projected to shrink from 15 per cent of GDP in 1980/81 to 6 per cent by 1982/83.

Programmes for Kenya, Malawi and Mauritius were intended to maintain and consolidate their outwardness, the major factor which helped propel their growth in the past.

Another group, typified by countries like the Sudan, Zaire and Uganda, which suffer acute internal and external imbalances, has adopted, with IMF support, a wide spectrum of policy measures for the immediate, medium- and long-term periods, including exchange rate adjustment. In the Sudan, the main objectives of the adjustment programme are to raise the rate of economic growth, lower the rate of inflation and improve the fiscal performance of the public sector and the external position considerably. To achieve these objectives, the Sudanese Government embarked on an economic recovery plan in 1978 which redefined investment priorities in the completion of ongoing projects, rehabilitation of existing schemes and the consolidation of infrastructure, especially transport and power generation. Producer and input prices were raised, budget austerity measures were introduced, the policy towards parastatals became more selective, credit ceilings were fixed and the exchange and trade systems were reformed. The Sudanese pound has been devalued three times in the last four years, to about 39 per cent of its official value in 1978. In Zaire, the stabilization programme encompasses an interrelated set of policies geared toward stimulating and expanding supply (particularly in the export and import sub-sectors), keeping the growth of domestic demand within appropriate limits and improving foreign exchange and debt management. The measures include selective raising of tax rates, the introduction of new taxes, employment and wage freezes, exchange restrictions and devaluation of the Zairian currency in four stages between November 1978 and January 1979 by a cumulative amount of 50 per cent. The currency was further devalued by 34 per cent in January 1981 and again by 25 per cent in August of the same year. Further, 5- and 10-Zaire notes were demonetized and only partially replaced by new notes. Recently, interest rates on time deposits were raised to discourage hoarding. In Uganda, Government efforts are directed towards rehabilitating the floundering economy and re-establishing confidence in the country's currency following many years of neglect and political unrest. In addition to demand-management measures, interest rates were raised with a view to increasing domestic savings, checking excess liquidity and bringing local rates in line with the prevailing world interest rate structure. The Ugandan shilling was allowed to float against foreign currencies as of June 1981. As the currency was already seriously overvalued, the decline in its value has been considerable. It is currently worth only about 9 per cent of its official value prior to June 1981.

The major oil exporters have their own set of problems, notwithstanding their high revenues from oil exports. The Nigerian Government, feeling the pinch of reduced oil exports and growing budget deficits, decided to reduce expenditures by about 8 per cent. Much of the reduction is expected to accrue through the rationalization and streamlining of government spending, elimination of wasteful spending in government operations, freezing of public service appointments and restriction of foreign travel by civil servants. In Gabon, increased oil revenues were accompanied by high rates of inflation. Since the beginning of 1978, the Government has been successfully pursuing stabilization policies which have helped to reduce price increases from 15 per cent in 1976/77 to an average of 10 per cent in 1979/80 and have considerably improved the country's financial situation. In the Libyan Arab Jamahiriya, the major concern of the Government in this regard is the encouragement of banking

habits. Worried by the large increase in currency in circulation, amounting to 52 per cent of the money supply, and its possible inflationary consequences and to develop the proper banking habits in a society which prefers cash to cheque settlements, the Government in May 1978 restricted the amounts and frequencies of cash drawings by the public. In April 1980, the rate of interest on deposits was raised from 4 to 5 per cent and the rates on time deposits were similarly raised to 5-5.5 per cent for short-term deposits and to 6-9 per cent for medium-term deposits. To consolidate these measures, the 5- and 19-dinar notes were withdrawn in 1980. The combined measures resulted in a 36 per cent reduction of the currency in circulation in 1980 and a 121.1 per cent increase in demand deposits by November 1980.

Another group of countries, such as Botswana, the Gambia and Seychelles, seems more concerned about imported inflation. Thus, these three countries have revalued their currencies in the course of the last two years.

The Southern African countries of Botswana, Lesotho and Swaziland face problems of a different nature, as they are all members of a customs union with South Africa, which, as the dominant economic partner, overshadows independent policy formulation. The main concern of these three countries is the absorption of the excessive banking liquidity in viable development projects. Hence increased attention is being given to the identification of such projects. Likewise, there is little room for independent monetary and interest-rate policy in French-speaking African countries belonging to the Central African and West African Monetary Unions. These countries are obligated to maintain fixed exchange rate parities vis-à-vis the French franc and therefore have to use import tariffs and or export subsidies in the place of exchange rate adjustment.

In Sierra Leone, the cumulative impact of the depressed world market for the country's major export commodities and the underlying structural weakness of the economy have continued to intensify the pressures on government financial resources and to compound balance-of-payments problems. Severe and persistent shortages of foreign exchange has forced the Government to abandon its policy of open general licences for imports which, in turn, has led to critical shortages of essential imports for industry. Stabilization programmes introduced by the Government have included the rationalization of agricultural production and export prices, containment the over-all budgetary deficit within prescribed domestic ceilings, implementation of a phased reform of the tax system, and a rescheduling of the country's internal and external debt obligations.

In order to correct the various financial imbalances in the Liberian economy, the Government of that country, under the aegis of IMF, adopted a two-year stabilization programme in July 1980 under which a number of measures, including new taxes such as surcharge on imports, new rates for income taxes, increased consular fees and a savings bond scheme, were introduced to increase government revenue. In addition to these new revenue measures, lighter controls were placed on budgetary transfers. It was further announced that all civil servants and armed forces personnel as well as the staff of public agencies were to contribute to a national savings scheme at the rate of one month's salary for low-paid employees and two months' salary for senior officials. A freeze was also imposed on equipment purchase for the rest of the year.

As far as monetary policy in Zimbabwe is concerned, the Government took measures in February 1981 to curb monetary growth and maintain the growth momentum in the face of rising consumer demand by increasing the bank rate from 4.5 to 6 per cent; the rate was raised again, to 9 per cent, in September 1981. The prime lending rate of commercial banks was also increased. The Government also used a wide range of instruments, including the equitable distribution of credit to priority areas of economic and social development, greater domestic participation and control in banking and financial institutions. In order to strengthen the revenue base, steps were taken to increase the surcharge on income tax, raise excise duties, abolish investment allowance and impose capital gains tax and duty on petrol.

In Egypt, the Government used an "open-door policy" to reactivate its financial institutions and to provide the credit to cover the excessive growth in the country's imports. This policy was later rationalized through the devaluation of the Egyptian pound, regulation of foreign bank operations, and the requiring of cash deposits in foreign currencies as proof that money had been legally imported.

These policies have met with some success in many countries but progress towards full recovery remains painstakingly slow. This is due essentially to the structural limitations of these countries including, the limited monetization and the thin spread of financial institutions in most of them. With growth in the African countries generally led by the external sector, the recent foreign exchange squeeze, felt with increased intensity in the poorer countries of the region, has far-reaching implications for the already sluggish export growth, government revenue and general level of economic activity in these countries. Thus, countries have increasingly relied on external borrowing to finance development projects and meet part of necessary consumption, in spite of the higher costs of borrowing and future debt obligations. (See section II.F.).

As has often been said, a significant change can be realized only through tapping more of the region's enormous endowments, increasing productivity, and developing prudent policies and successfully implementing them.

### III. SECTORAL TRENDS

#### A. AGRICULTURE

##### 1. Production trends, 1980-1981

For agriculture the year 1980 was better than average, with the ECA index of agricultural output based on value added recording an increase of 2.2 per cent for the region as a whole, compared with a mere 1.5 per cent in 1979 (see table III.A.1). <sup>1/</sup> The upturn was due primarily to better weather in most parts of Africa, except in the Sahel, where rainfall was again below normal; Senegal in particular was hit by a catastrophic drought for the second year in a row.

The best results were obtained in North and Eastern Africa, where the primary sector grew by 2.7 and 2.4 per cent respectively, while in West Africa and Central Africa the rates were only 1.8 per cent and 2 per cent. For both these latter areas, the situation in 1980 showed a definite improvement over the 1970s, when primary production is reported to have grown on average by only 0.9 per cent a year in West Africa and to have declined by around 0.1 per cent a year in Central Africa. In West Africa, the repeated droughts in the Sahel account for the low rate of growth, but Central Africa is a rain forest area with a stable climate where agriculture is based on the cultivation of cassava, for which traditional methods give very high yields.

With very few exceptions, African countries do not have a reliable system of agricultural statistics, the figures supplied being based on visual estimates of areas multiplied by notional yields. The deficiencies of agricultural statistics are especially marked where roots and tubers are concerned, because of their lower quality as food and the fact that cassava, for example, can be stored in the ground for long periods and harvested as needs dictate. Consequently the figures supplied from official and other sources have to be interpreted with great care, and the 1971-1980 rate of growth for primary production of only 1.3 per cent a year must be seen more as indicative of a tendency than as an exact measurement. The fact that imports have increased during the period means that during the 1970s agricultural production did not keep pace with population, particularly in the Sahel and Eastern Africa, which suffered droughts and food deficits.

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<sup>1/</sup> According to FAO, agricultural production in Africa increased by 3.5 per cent in 1980 against 0.8 per cent in 1979. ECA estimates are based on value added calculated at constant factor cost using general single price (not sectoral) deflators, while the FAO index refers to gross output, including output of crops, vegetables, rubber, meat and so on, but excluding output of hides and skins and fishery, hunting and forestry products. Thus the differences between the ECA and FAO estimates arise from the different methodologies, coverage and deflators used.

Table III.A.1  
Growth of agricultural output in Africa  
 (annual percentage rates)

	1975- 1976	1976- 1977	1977- 1978	1978- 1979	1979- 1980	1971- 1980
North Africa	-1.50	-3.75	8.63	-0.20	2.73	2.24
West Africa	-0.38	-0.14	1.76	2.92	1.79	0.90
Central Africa	-5.65	1.82	0.36	1.78	1.95	-0.09
Eastern Africa	2.96	2.62	0.35	0.72	2.35	1.84
Total developing Africa	-0.34	-0.16	2.87	1.50	2.17	1.30
Major oil-exporting countries	-4.20	1.45	1.79	5.24	4.13	0.60
Non-oil-exporting countries	1.35	-0.84	3.33	-0.01	1.32	1.00
Countries with a GDP of less than \$US 100 per capita	5.96	-0.40	2.97	2.45	3.07	1.80
Countries with a GDP of between \$US 100 and \$US 200 per capita	-0.30	-4.30	4.40	0.22	-1.30	-5.00
Countries with a GDP of between \$US 300 and \$US 400 per capita	4.00	-3.60	4.47	1.60	4.60	3.10

Source: ECA secretariat.

An examination of the 1979 and 1980 growth rates for individual countries set out in table III.A.2 shows wide disparities in performance.

Table III.A.2  
Frequency distribution of African countries by growth rates of  
agricultural production measured in terms of value added to GDP,  
1979 and 1980

	Percentage growth rates					
	Negative	Nil to below 1	1 to below 2	2 to below 3	3 to below 5	5 and above
1979						
North Africa	2	0	1	1	0	2
West Africa	5	1	2	2	3	3
Central Africa	2	2	4	1	2	0
Eastern Africa	6	2	2	1	2	4
Developing Africa	15	5	9	5	7	9
1980						
North Africa	0	3	0	0	0	3
West Africa	6	0	3	0	4	3
Central Africa	2	0	2	6	1	0
Eastern Africa	5	1	3	2	1	5
Developing Africa	13	4	8	8	6	11

Source: ECA secretariat.



## 2. Food production

According to data provided by FAO, food production in developing Africa rose by 3.04 per cent in 1980 compared to 1.8 per cent in 1979 (see table III.A.3). Cereals production showed a marked improvement, growing by 4.2 per cent, with wheat and maize production rising by 7 and 5.3 per cent respectively. The surge in food production is ascribed partly to improved weather after two years of drought, and partly to the expansion of the area under cultivation. In Morocco, for example, cereal production increased by 10 per cent to 4.4 million tons, while in the Sudan durra production rose to 2.1 million tons from 1.7 million tons in 1979/80. In Senegal cereal production improved markedly, while in Mali it fell by around 10 per cent. In Ethiopia, the forecast for the 1980/81 crop was 5.3 million quintals against 4.6 million quintals in 1979/80. Results obtained in Zimbabwe were excellent, and even exceptional, while in Zambia the maize crop reached 4.2 million bags in 1980 against 3.2 million bags in 1979.

Had it not been for the incidence of pests and diseases, food production in developing Africa could have fared even better in 1980. The spread of the African migratory locust in mid-1980 presented a grave threat to major cropping areas from Nigeria to the Sudan. Furthermore, there were sporadic outbreaks of rinderpest in 1980 in Benin, Mali, Mauritania, the Niger, Senegal and the Upper Volta. A fresh outbreak of foot-and-mouth disease occurred in February 1980, and the whole of eastern Botswana came under quarantine. Consequently, beef exports to the lucrative EEC market were suspended.

The outlook for food production in developing Africa in 1981 is not encouraging, and a fall in the growth rate to 1.7 per cent is forecast. According to reports received through FAO's Global Information and Early Warning System on Food and Agriculture, 22 countries were affected by abnormal food shortages in early 1981. The main factors responsible for this deterioration have been the unfavourable growing conditions for food crops in Eastern Africa and continued drought in some countries in the Sahel. The effects of the drought of the last two years in large areas of Ethiopia, Kenya, Somalia and the United Republic of Tanzania continue to be felt, and the food supply remains precarious. The problem of food shortages is being further compounded by a large influx of refugees in Djibouti, Ethiopia, Somalia and the Sudan, with the consequent need for emergency assistance. In Somalia, for example, above and beyond its indigenous population of 4.2 million, the Government has to support 1.3 million refugees, whose cereal needs are estimated at 190,000 tons in 1981. The country now faces a renewed drought, and the cereal deficit (including the needs of the refugees) is over half a million tons.

Production of ground-nuts fell by 7.3 per cent in 1980/81. This is largely due to a drop of 236,000 tons in Mali, the Niger and Senegal. In Nigeria, which used to be the largest producer of ground-nuts in Africa, production slumped - to an all-time low of 600,000 tons in 1980/81 compared with 1.8 million tons in 1969-1971. In the Gambia, the crucial ground-nut sector slumped to the lowest level in 30 years after prolonged dry spells during the period of germination and growth and unseasonal rainfall at harvest time. In Senegal, ground-nut production recovered appreciably in 1981/82.

The production estimates for root crops are rather shaky because of the absence of reliable data. What can be said with certainty is that in areas where these crops are the major food staples (mainly on the shores of the Gulf of Guinea and the Central African Region) production will increase more or less with the rural population. The supply for urban areas will very much depend upon price differentials, transport possibilities and the evolution of tastes in favour of wheat and rice. In other areas, root production will vary with cereal production, roots being substituted for cereals when cereals are in short supply.

Sugar-cane production has continued to grow, but the rate in 1980/81 was a mere 1.1 per cent, compared to more than 4 per cent in 1979/80. However, prospects are very good with the coming on stream of various huge projects, especially in the Sudan at Kenana and Hagarasalaya. The Kenana sugar project is one of the largest in the world, and the Sudan's sugar output, which rose to 207,600 tons in 1980/81, is expected to reach 350,000 in 1981/82. In the Ivory Coast, the sugar projects have overcome their serious difficulties and are now recovering; sugar production rose from 52,453 tons in 1979 to 102,596 tons in 1980. In Swaziland, the commissioning of a E 130.6 million sugar mill in May 1980 together with capacity expansion in one of the existing mills increased total production by 40 per cent. Approximately 25,829 hectares of sugar-cane were harvested in 1980 against 21,920 hectares in 1979, while sugar production increased from 244,397 metric tons to 308,603 metric tons. In Egypt, sugar production

Table III.A.3  
Food production in Africa excluding South Africa  
(thousands of metric tons)

Crop	1970	1977	1978	1979	1980	Percentage growth rate	
						1979-1980	1970-1980
Wheat	6 514	5 313	7 069	6 705	7 164	6.85	0.96
Paddy rice	7 373	7 961	7 845	8 367	8 426	0.71	1.34
Millet	7 389	9 467	10 386	9 986	10 152	1.66	0.78
Sorghum	8 846	9 819	9 722	9 715	9 710	-0.05	0.94
Maize	14 443	16 576	18 012	16 112	16 961	5.27	1.62
Cereals (total)	51 641	53 827	58 439	56 040	58 368	4.15	1.23
Roots and tubers (total)	68 366	77 658	78 707	80 560	83 207	3.29	1.98
Pulses (total)	4 910	4 763	4 930	5 026	4 959	-1.33	0.10
Ground-unts in shell	4 903	4 518	4 855	4 805	4 456	-7.26	-0.95
Centrifugal sugar (raw value)	3 165	3 957	4 119	4 295	4 343	1.12	3.21
Meat (total)	4 392	4 959	5 170	5 329	5 529	3.75	2.33
Cow milk (whole fresh)	6 468	7 453	7 679	7 656	7 842	2.43	1.94
Total	190 410	206 771	216 933	214 596	221 117	3.04	1.50

Sources: 1980 FAO Production Yearbook, 1970 Statistics Series, No. 34 (Rome, FAO, -1981), and data furnished by the FAO secretariat.

fell by 3 per cent in 1980/81, while in Morocco it increased by 29.2 per cent during the same period. At the largest agro-based complex in Sierra Leone, the Magbasse Sugar Factory, sugar production commenced early in 1981. The complex has a planned production capacity of 3,000 tons of sugar, about a third of the country's sugar consumption, and provides employment opportunities for about 1,000 Sierra Leoneans. The molasses produced as a by-product will be used to manufacture industrial alcohol. In Malawi, output of sugar rose by nearly 37 per cent from 107,629 metric tons in 1979 to 147,423 metric tons in 1980. Sugar production was not affected by the bad weather since it is grown under irrigation.

Perhaps the most disheartening aspect is that food production rose by no more than 1.5 per cent in the 1970s, a figure far below the rate of population growth. In fact, of 43 developing countries considered in one study, 30 recorded an actual decline in per capita food production between 1971 and 1980. Because of this disappointingly poor performance, a number of countries have had to resort to substantial food imports.

(a) Imports

Between 1970 and 1979 the value of cereal imports to developing Africa increased by over 558 per cent from \$532 million to \$3.5 billion, an average annual rate of increase of 23.4 per cent (see table III.A.4). The volume of major cereal imports increased at an average annual rate of 10.8 per cent, rising from 4.2 million tons to 10.5 million tons over the same period (see table III.A.5). A significant share of the rise in value of total food imports stemmed from increased prices (up 21.2 per cent a year) rather than increased volume (up 8.4 per cent a year) (see table III.A.6).

The strain which such massive imports of food-stuffs imposed on the balance of payments was compounded by increased ocean freight costs, particularly for the island and land-locked least developed African countries.

A major cause for concern is the fact that reliance on imports is creating a potentially very costly structural dependence on wheat and rice. The total cereal deficit for developing Africa is forecast to reach 12.3 million tons by 1990, most of it wheat and rice. However, the 1981 import gap was already about 6 to 7 million tons (including 2 million tons of food aid), and cereal requirements for developing Africa are likely to be far larger than this conservative estimate. Except in the Sudan, Ethiopia, the East African Highlands and parts of southern Africa, wheat can be grown only at prohibitive cost. Rice can be grown in a wider range of countries, but would nonetheless require large irrigation schemes to supplement rain-fed cultivation. The costs of such schemes put them well beyond the means of most African developing countries, and would pose a threat to the limited financial resources available for other productive uses.

Table III.A.4  
Value of cereal imports to developing Africa  
(millions of US dollars)

	1970	1975	1979	Growth rates 1970-1979
North Africa	211.7	1 731.1	1 943.3	27.9
West Africa	149.8	387.7	974.8	23.1
Central Africa <u>a/</u>	59.3	175.7	232.9	16.4
Eastern Africa <u>b/</u>	111.3	378.6	384.7	14.8
Developing Africa	532.1	2 673.1	3 535.7	23.4

Source: FAO secretariat.

a/ Excluding Equatorial Guinea.

b/ Excluding Djibouti, Lesotho and Seychelles.

Table III.A.5  
Volume of major cereal imports to developing Africa  
(Thousands of metric tons)

	1970	1975	1979	Growth rates 1970-1979
Wheat	2 872	5 221	7 302	11.00
Rice	698	586	1 706	10.50
Maize	384	856	1 048	11.80
Millet	167	136	101	-5.40
Sorghum	61	28	59	-0.40
Barley	25	173	307	32.20
Total	4 207	7 000	10 523	10.8

Source: The State of Food and Agriculture 1980 (Rome, FAO, 1981).

Table III.A.6  
Imports of food products into African developing countries:  
indices of value, volume and unit value

	1970	1975	1979	Growth rates 1970-1979
Value	99	371	501	19.80
Volume	101	128	204	8.10
Unit value	98	290	246	...

Source: As for table III.A.5.

As indicated earlier, imports of food grains have been rising in Africa at an alarming rate. This goes against the basic notion of self-reliance enunciated by the Lagos Plan of Action. An analysis therefore of the nature of imports of food grains and their major determinants are essential in order to evolve suitable policy measures.

Imports of food grains may be rising owing to several factors:

(a) Per capita food production is declining so that imports are necessary to feed the population;

(b) Per capita income may be rising, leading to a greater demand for food grains either because of rising consumption of the sections whose basic needs could not be satisfied previously owing to their income levels. Another effect of per capita income rise may be a shift of demand from inferior food grains or roots and tubers necessitating a rise in imports;

(c) Urbanization may have lead to diversion of demand from local to imported varieties of food grains;

(d) The relative exchange rate between the price of imports in dollars and the rise of local income in current prices may be such as to make it worthwhile to purchase imported food grains which are sold at overvalued official exchange rates.

A brief statistical analysis of the data was made to check these possibilities. A cross-section analysis was made first by fitting per capita income in constant price in dollars and per capita production of all types of food grains including roots and tubers for 1980, with total imports of food grains in quantity as the dependent variable. The following results were attained.

$$M = 19.761 - 30.431P + 0.014638Y$$

t values (4.43) (-2.52) (1.98)

$$R^2 = 0.1876 \text{ S.E.} = 14.748$$

where M is imports in quantity and P is production in quantities and Y per capita income in 1980.

Somewhat similar results were also obtained in logarithmic form.

While the fit of  $R^2 = .1876$  is not a good fit, the correlation co-efficient is significant against the 'null' hypothesis of zero correlation on a sample size of 51 African countries. Therefore in a qualitative sense it may be said that over-all low production is a fairly potent fact in increased imports but per capita income is also playing a role in the expansion of imports into Africa as a whole.

Coming to the more specific points, time series data were examined for Nigeria and the United Republic of Tanzania as two examples of countries where imports are rising per capita income in Nigeria is rising fast, while in the United Republic of Tanzania it is rising slowly. Similarly, percentage urbanization is moving fast in Nigeria but slowly in the United Republic of Tanzania. Both imports and per capita income were taken at current prices so that the price effect in the international market and the national market are represented. The following equations were obtained:

$$M_{\text{(Nigeria)}} = -44.517 + 27.938P + 2.45\text{Pop}_u - 0.002Y^*$$

$$M_{\text{(Tanzania)}} = 10.457 - 140.18P + 0.106\text{Pop}_u + 0.007Y$$

The following notation are used:

M is per capita imports in dollars at current price (international)

P refers to quantity per capita in metric tons.

Y refers to \$ income per capita at current price (local)

Pop<sub>u</sub> is percentage share of urban population to total

Period = 1971-1980.

Somewhat similar results were also obtained in logarithmic form.

It will be seen that in Nigeria the coefficient of urban population as a percentage of total has come out positive, but so also has per capita production. The increase in imports in Nigeria thus points towards expansion of demand specially for imported food grains rather than absolute shortage. But income has a very small negative effect at current prices. This in fact may be due to the rate of inflation rising faster in Nigeria than the international rate, so that even higher incomes at current price are rising less slowly and even with a decreased income (at Nigerian current prices) it is worthwhile to buy imported food grains released at international prices. Thus the relative exchange rate may be encouraging imports.

This kind of situation may be typical of African countries with oil and which have a high rate of inflation higher than international, along with rapid urbanization.

The case for the United Republic of Tanzania however is typical of the usual non-oil exporting countries.

In these low income countries urbanization and income have positive effects on imports, though smaller one. Production however has been moving inversely with imports. For these countries, therefore, the question of raising production to reduce food imports is of great relevance but for countries like Nigeria the position is more complex. Control of monetary inflation and rate of urbanization to moderate levels is necessary and if this is not done even with rising per capita production imports may continue to grow.

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\* An explanation has been given of the negative sign of the co-efficient relating per capita income at current prices to the value of imports at current prices. But for a more definitive conclusion a detailed examination is necessary.

One may say therefore that all the enunciated hypotheses are relevant though not uniformly applicable to Africa as a whole. Imports of food grains have quite different determinants in the low income countries which constitute the major portion of Africa.

(b) Prices

Of the reasons underlying the disappointing growth in food production, the setting of official producer prices for a number of agricultural crops at unremunerative levels is perhaps the most significant. In fact, the importance of price policy is vividly illustrated in project experience.

"A recent review of 27 agricultural projects undertaken by the World Bank noted 'the almost overriding importance of producer prices in affecting production outcome and production levels, often cutting across the quality of technical packages and extension services. Seven out of nine projects implemented under favourable prices achieved or surpassed their production objectives; 13 of the 18 under unfavourable prices failed to do so'. 2/

Apart from insufficient price incentives, imported wheat and rice have increasingly become cheaper than domestic staples because of the over-valuation of many African currencies. Policies which stimulate wheat and rice consumption and discourage production of local cereals have been reinforced by food aid, which is being maintained at consistently high levels. What is more, intent on keeping food prices for the urban populace low, many Governments have resorted to massive food imports, thereby causing sharp reductions in domestic prices. 3/

In Swaziland farmers have tended to shift from maize production to tobacco and cotton farming because of the attractive rate of return and the lucrative market for such products. In Zaire, incentives to producers were poor because of the low producer prices established by the Government. Thus, in the case of export crops, the exporter who obtained the prevailing world market price could offer greater non-price incentives (by providing transport, storage, credit, etc.) than could be offered by the wholesaler in the domestic market, facing a controlled low price.

In some African countries uniform prices are prescribed for all regions without due regard being paid to the heavy transport costs involved. In others the fact that there is no difference in the consumer prices of maize and sorghum has resulted in increased demand for maize, part of which has to be met through imports. Furthermore, the public agencies responsible for price support have limited scope for improving marketing arrangements, because they lack adequate storage facilities or sufficient official buying stations and agents.

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2/ "Accelerated development in sub-Saharan Africa: An agenda for action", World-Bank report No. 3358 (August 1981), p. 5.12.

3/ Ibid., p. 5.13.

The prospects for achieving substantial improvements in rates of growth in food output are further impeded by the small area of arable land in some countries, the limited use made of irrigation, drought and desertification, inadequate use of modern inputs (fertilizers, farm implements, credit and extension services) the low level of investment and institutional constraints.

(c) Arable land, drought and desertification

Out of a total land area of approximately 3 billion hectares in developing Africa, arable land and land under permanent crops accounted for a mere 6.1 per cent in 1980. <sup>4/</sup> The ratio of arable land to total land area is extremely low in Angola, Botswana, Chad, the Congo, Egypt, Gabon, the Libyan Arab Jamahiriya, Mali, Somalia and Zaire. In addition, arid land accounts for a significant share of the total land area in countries such as Cape Verde (80 per cent), Chad (85 per cent), Djibouti (70 per cent), Ethiopia (70 per cent), Kenya (75 per cent), Mauritania (100 per cent), the Niger (100 per cent), Senegal (95 per cent), Somalia (100 per cent) the Sudan (90 per cent) and the Upper Volta (90 per cent).

Nor is this all. According to FAO, 44 per cent of the land in Africa is subject to drought, which is twice the world average, and 55 per cent is or is likely to be affected by desertification, against only 4 per cent in Asia and 1 per cent in South America. The deserts in Africa are encroaching on useful agricultural land at the rate of 60,000-70,000 square kilometres a year, affecting the livelihood of about 60 million people. Drought conditions in Africa are spreading from the Sudano-Sahelian countries and the Ogaden to countries further south - Angola, Lesotho, Malawi and the United Republic of Tanzania.

The available evidence points to the indisputable fact that land is the scarcest factor of production in some parts of developing Africa, bearing in mind not only the limited area of fertile land but also the high cost of reclaiming new marginal land, the limited capital available and the urgent need to meet the nutritional requirements of both the human and the animal population.

It must, however, be stressed that the ratio of arable land to the total land area should not be regarded as the only viable yardstick for measuring the strength of the agricultural sector. Also of importance are the number of tractors in use, the extent of fertilizer consumption and the nature and composition of rural assets, such as the number of livestock. However, rural assets should be evaluated with great caution. For instance, the concept of "tractors in use" may merely reflect total numbers without indicating quality, age, horsepower and depreciation. Even more important is the distribution pattern of the different types of rural assets, which has a far-reaching impact on the distribution of income in rural areas.

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<sup>4/</sup> Land under permanent pastures, forest and woodland and other types of land accounted for 26, 23.6 and 44 per cent during the same period. 1980 FAO Production Yearbook, op.cit



Neither is it fair to attribute the poor performance of agriculture in some African countries solely to drought and desertification. A report prepared for a meeting of the Club du Sahel on the control of the desertification process in Africa, held in Kuwait on 16 and 17 November 1980, identified various deficiencies in the implementation of the Sahelian Development Strategy.

Some nations in the Sahel were not doing enough through their own efforts or with overseas aid to make themselves self-sufficient in food;

recourse to food imports and food aid had become a permanent need;

wheat yields in the area were dropping, indicating that the land was being over-exploited and could deteriorate further beyond repair;

the amount of land under irrigation had hardly increased, as new irrigated projects barely compensated for losses due to the deterioration of old projects; development of the fisheries potential for the benefit of the Sahel population was no further advanced than four years previously; and deforestation was continuing if not accelerating;

The drop in cereal production was not due to the drought alone, but also to the fact that farmers were not being given sufficient incentives to produce more.

Be that as it may, in view of the limited area of arable land in some parts of developing Africa most of the increase in production must come from intensification of cultivation (i.e vertical expansion of production through the use of irrigation and more intensive use of inputs), while some expansion in cultivated area will be possible elsewhere. Some African developing countries are attempting to raise the intensity of land use by cultivating two or more crops a year in place of one, by means of inter-cropping and mixed farming.

The solution of the problem of desertification is: a long-term exercise demanding an integrated approach to development. To halt the loss of the agrobiological resources of the Sahel would take one or two generations of tireless and innovative work, supported by a permanent national machinery to deal with the problems. To ignore the entrepreneurial aspects and the issues of local manpower, institutional and other capabilities tailored to the needs to be met and the problems to be solved is nothing short of courting disaster. 5/

At a meeting held in Dakar in January 1981, some of the issues involved in the development of a common approach to combat drought and desertification in Africa were raised. For instance, it was pointed out that because of the heterogeneous ecological character of the Sahel Zone, rainfed and irrigated agriculture should be pursued simultaneously. In addition, research on past climatic patterns in the region over several decades, reafforestation, human resources development, aid and trade and the population carrying capacity of land were identified as the major areas where urgent action is called for.

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5/ "The United Nations and the problems of desertification and the protection of the environment" (ECA/ECU/545).

(d) Modern inputs

Fertilizer consumption per hectare of agricultural area (nitrogenous, phosphate and potash) increased from 1.7 kg in 1969-1971 to 3 kg in 1979. Compared with other developing continents, the consumption of fertilizer in developing Africa is abysmally low. For instance, between 1969-1971 and 1979 consumption of fertilizer per hectare of agricultural area increased from 2.9 kg to 8.1 kg in Latin America and from 10.8 kg to 26.5 kg in Asia.

Table III.A.7 illustrates the disparities in fertilizer consumption between African developing countries. In 1979, only three countries consumed more than 16 kg of fertilizer per hectare of agricultural area (Egypt: 21.2 kg; Mauritius: 23.7 kg and Zimbabwe: 16.4 kg). Twelve countries consumed between 1 and 5 kg, nine between 5.1 and 11 kg and the remaining 18 less than 1 kg. The table further reveals that in countries where fertilizer consumption per hectare of agricultural area is relatively high cereal yields per hectare are also relatively high. Thus cereal yields per hectare in 1980 were 4,104 kg 2,656 kg and 1,201 kg in Egypt, Mauritius and Zimbabwe respectively. Figures on fertilizer consumption in various regions appear in table III.A.8.

Compounding the general low level of fertilizer consumption, Governments encourage the use of fertilizer for export crops first and foremost, and very little finds its way into the production of food crops. Furthermore, most inputs are imported from outside the continent, and many of the land-locked countries cannot afford the heavy transport costs involved.

Nitrogenous fertilizer production rose from 351,434 tons in 1977/78 to 405,430 tons in 1979/80. The main producing countries are Algeria (20,700 tons), Egypt (263,930 tons), the Ivory Coast (4,100 tons), Mauritius (7,100 tons), Morocco (18,600 tons), Mozambique (4,700 tons), Senegal (5,000 tons), Tunisia (8,300 tons), the United Republic of Tanzania, (7,700 tons), Zambia (8,800 tons) and Zimbabwe (56,500 tons).

Output of phosphate fertilizer has been much higher than that of nitrogenous fertilizer, though its growth rate is much lower. In 1978/79, the region produced 1,193 million tons, compared to 1,130 million tons in 1979/80. The main producing States are: Algeria (56,400 tons), Egypt (93,000 tons), Morocco (157,400 tons), Mozambique (3,000 tons), Nigeria (6,000 tons), Senegal (29,000 tons), Tunisia (297,300 tons), the United Republic of Tanzania (4,500 tons), and Zimbabwe (36,700 tons).

While it is important for African countries to create their own new fertilizer production capacities as a critical element in assuring their long-term food security, and also in order to avoid dependence on an uncertain international market, the installation of large-scale chemical fertilizer complexes at country level is an expensive undertaking. consequently, consideration should be given to joint production of fertilizers and pesticides under subregional arrangements.

Table III.A.7  
Arable and irrigated land, fertilizer use, cereal  
yields and tractors in use in developing Africa

	Arable land as a percentage of total land 1978 (1)	Irrigated land as a percent- age of arable land 1978 (2)	Fertilizer use per/ha of agri- cultural area in 100 gm 1979 (3)	Cereal yield per ha in Kg 1980 (4)	Total number of tractors 1979 (5)
<b>NORTH AFRICA</b>					
Algeria	3	4	40	554	53 500
Egypt	3	106	2 120	4 104	24 500
Libyan Arab Jamahiriya	1	6	65	387	13 000
Morocco	18	6	110	1 004	23 800
Sudan	5	14	7	637	10 500
Tunisia	28	3	80	915	33 000
<b>WEST AFRICA</b>					
Benin	5	1	13	731	100
Cape Verde	-	-	13	500	32
Gambia	26	10	75	753	74
Ghana	12	1	30	636	3 400
Guinea	17	-	5	732	130
Guinea Bissau	-	-	1	461	25
Ivory Coast	12	1	76	792	3 000
Liberia	4	-	69	1 234	290
Mali	2	5	2	619	680
Mauritania	-	4	1	257	270
Niger	2	1	2	453	160
Nigeria	26	-	19	701	8 300
Senegal	12	5	27	760	440
Sierra Leone	8	1	7	1 317	110
Togo	26	-	20	838	180
Upper Volta	21	-	9	540	65
<b>CENTRAL AFRICA</b>					
Angola	1	-	4	561	10 200
Burundi	50	-	5	1 109	50
Central African Republic	5	-	-	533	150
Chad	2	-	-	539	155
Congo	2	-	-	612	668
Equatorial Guinea	-	-	3	-	97
Gabon	2	-	1	1 559	1 200
Rwanda	38	-	2	1 270	82
Sao Tome and Principe	-	-	-	1 523	123
United Republic of Cameroon	16	-	22	921	450
Zaire	3	-	5	744	1 800

Table III.A.7 (Cont'd)

	Arable land as a percentage of total land	Irrigated land as a percent- age of arable land	Fertilizer use per/ha of agri- cultural area in 100 gm	Cereal yield per ha in kg	Total number of tractors
	1978 (1)	1978 (2)	1979 (3)	1980 (4)	1979 (5)
<b>EAST AFRICA</b>					
Botswana	2	0.1	-	228	2 050
Comoros	-	-	-	1 223	-
Djibouti	-	-	75	-	48
Ethiopia	12	-	14	868	3 900
Kenya	4	2	63	1 287	6 650
Lesotho	-	-	19	1 009	620
Madagascar	5	15	2	1 827	2 600
Malawi	24	-	51	995	1 150
Mauritius	58	14	2 365	2 656	320
Mozambique	4	2	2	499	5 700
Seychelles	-	-	-	-	32
Somalia	2	15	1	477	1 600
Swaziland	-	-	43	1 483	2 600
Uganda	28	-	-	964	2 150
United Republic of Tanzania	6	1	7	678	7 700
Zambia	7	-	15	745	4 500
Zimbabwe	6	2	164	1 201	20 000

Sources: Columns 1 and 2: The State of Food and Agriculture 1980 (Rome, FAO, 1981). Column 3: 1980 FAO Fertilizer Yearbook, FAO Statistics series, No. 36 (Rome, FAO, 1981). Columns 4 and 5: 1980 FAO, Production Yearbook, FAO Statistics Series, No. 34 (Rome, FAO, 1981).

Table III.A.8  
Consumption of fertilizers per hectare of agricultural area  
 (x 100 g)

	1969-1971	1973	1976	1979
<u>World</u>				
Nitrogenous	70	87	102	126
Phosphate	45	54	59	68
Potash	36	45	50	51
Total	151	186	211	245
<u>Africa</u>				
Nitrogenous	9	11	14	16
Phosphate	6	7	9	10
Potash	2	3	3	4
Total	17	21	26	30
<u>South America</u>				
Nitrogenous	10	14	17	23
Phosphate	12	21	28	36
Potash	7	12	15	22
Total	29	47	60	81
<u>Asia</u>				
Nitrogenous	74	96	118	185
Phosphate	22	32	37	57
Potash	12	17	17	23
Total	108	145	172	265

Source: 1980 FAO Fertilizer Yearbook, FAO Statistics Series, No. 36.  
 (Rome, FAO, 1981), pp. 48-49.

Extension workers are for the most part thinly spread, ill-paid and generally too ill-equipped to spread technological innovations among farmers. Most African developing countries spend comparatively little on agricultural training and extension services. In Zambia, for instance, one extension worker caters to 800-850 farms, but is for the most part immobile and desk-bound because of limited budgetary appropriations. In the Sahelian countries, the theoretical training of extension workers is barely adequate to ensure their credibility in the eyes of the farmers they are supposed to guide. In Lesotho, extension efforts have been unsuccessful mainly because of the nature of the rural community, most of whom are women, for whom farming provides a minor part of their income. Innovative decisions therefore often require the sanction of the absent husband. In the Sudan, there is one extension worker for approximately 15,000 families, but their mobility is restricted by the limited size of the transport fleet. In Senegal, contact between research workers and extension agents is minimal at the lower levels, with the result that research is unrelated to farmers' needs and problems.

There have been some success stories too. In Malawi, for example, programme effectiveness is monitored: under the extension programme seasonal credit is given only to groups, and the entire group is taught by demonstration methods, which are followed up with frequent visits to ensure that the advice has been acted upon. Currently, there is one extension worker for every 1,400-2,400 farmers. In Zimbabwe, one extension worker caters to every 300-600 production units, but this ratio is to be doubled within the next three years. In Togo, the task of resettling peasant farmers in the Kara Valley is being accompanied by a campaign to popularize appropriate agricultural methods. The campaign involves more intensive use of selected seeds, encouragement of a four-crop rotation system, emphasis on the use of drought tillage and popularizing the use of chemical fertilizers.

Agricultural credit has tended to by-pass the rural poor, mainly because of the stringent conditions attached. The banking system has not only concentrated on enhancing the production capabilities of consumer-based industries and the foreign trade sector, but has also tended to cluster in the urban conglomerations where facilities for their effective functioning exist. Consequently, the majority of small farmers do not have easy access to institutional credit, and are heavily dependent on village merchants and rural money-lenders. In Kenya and Lesotho, agricultural credit has been difficult to institutionalize because of the familiar problems of obtaining collateral under traditional land tenure systems. In some countries, credit goes exclusively to the large farms, with inflation often making effective interest rates minimal or even negative. The Agricultural Marketing Corporation in Ethiopia and the National Milling Corporation in the United Republic of Tanzania have appropriated a significant share of the credit extended by the commercial banks in the form of huge overdraft facilities. The repayment record of these institutions is very poor, and little is left to assist farmers of small means.

Nor is this all. Large stretches of the countryside in developing Africa continue to be without banks, and in these areas saving is frustrated because of the absence of suitable media. Consequently, a number of countries are making efforts to mobilize resources from the traditional household sector for economic development projects. In Burundi, for instance, the existing financial institutions are being decentralized and the establishment of people's banks throughout the country is under study. In Rwanda, the bond market is to be expanded and the network of savings and people's banks is being enlarged in order to siphon off any available surplus. In Uganda, a wide range of policies have been drawn up to facilitate the mobilization of internal resources. A favourable climate for investment is to be created so that individuals and firms are encouraged to save more to acquire real assets. The structure of return on financial assets will be reviewed with a view to making it worth while to acquire such assets. New financial instruments will be introduced to meet demand from various sections of the population. The existing financial intermediaries are to be structurally strengthened and their operations streamlined to improve their performance in resource mobilization.

However, it would be unwise to seek to mobilize rural savings without first removing obstacles to the operation. Policy makers in African developing countries should develop and implement suitable measures to remove these obstacles in order to activate the machinery for savings mobilization in the rural areas. These measures include reform of land tenure arrangements; the setting up of proper infrastructure in rural areas; the supply of agricultural inputs on terms that are not too onerous; the setting up of efficient marketing channels for agricultural outputs; the provision of free or subsidized extension services to small farmers; the dissemination of information on prices, marketing and other useful items to stimulate initiative; and the creation of financial machinery to collect household savings in rural areas and plough back the resources it raises into agriculture via a widespread branch network. 6/

The number of tractors in use in developing Africa (435,818) is low, and accounted for 2.1 per cent of the world total in 1979. As can be seen from table III.A.7, over a third of the tractors in use are found in North Africa.

On the question of mechanization, it is difficult to generalize for Africa as a whole. In areas where drought animals and human labour are in abundant supply, the use of tractors may not necessarily improve productivity. Furthermore, the proper use of tractors would require proper institutional back-up in the form of centres providing maintenance, repair, training and other services. The use of tractors may therefore be recommended only for areas where cultivation is difficult for specific reasons. For instance, in areas which are sparsely populated, labour is a potential constraint, and ways of substituting machines for labour must be carefully examined.

The available evidence on mechanization in Africa is rather patchy. However, a World Bank study on mechanization in the Sudan states that the total costs and returns per cropped feddan vary among crops and between private and State farms. The study finds that in areas which are less well endowed with both human resources and physical infrastructure, mechanization has contributed immensely to bringing into production nearly 4 million feddans of clay soils. Apart from its contribution in creating substantial employment opportunities and channelling savings to agriculture, mechanized farming has resulted in substantial foreign exchange savings. On the other hand, it has been blamed for exacerbating an inequitable distribution of income by enriching the already rich without making any genuine contribution to improving the lot of the rural poor. Little has been done in the Sudan in land planning and improving farm management capabilities, with the result that agricultural development has resembled land mining rather than land farming. The burden imposed on the Government budget by State farms, which are for the most part the least productive units, has also been substantial. 7/

6/ Arnaldo Mauri, "A policy to mobilize rural savings in less developed countries", Savings and Development (quarterly review of the Cassa di Risparmio delle Provincie Lombarde), No.3 (1977), p.18.

7/ "Sudan - agricultural sector survey", Vol. II, annexes 1-4, World Bank report No. 1836a-SU (May 1979), pp. 170-177.

In short, a specific analysis must be made of the system of cultivation and essential inputs before a decision is taken to mechanize agriculture in particular areas. This is all the more important as the purchase of tractors, which are mostly imported items, consumes considerable foreign exchange resources.

(e) Investment

The share of agricultural expenditure in total investment in various African countries is indicated in Table III.A.9. In some countries, agriculture has received little public investment. This is particularly true of Gabon, Nigeria and Zaire. In Zaire, for example, agricultural policies have been a matter of general indifference, particularly with regard to investment, taxation and commodity pricing. Very little investment has been made in the plantations since independence, and the Government has not embarked on any large-scale measures to improve transport and marketing facilities. Even in the recently initiated programme of public investment (1981-83), the Government gave first priority to the mining sector (34.5 per cent of public investment), the agricultural sector receiving very little direct public investment (3.8 per cent). In many cases agriculture is left to the private sector and the Government does not come to the aid of the private sector to the extent necessary in order to remove obstacles to raising productivity, particularly where agriculture is being carried out in small farms. 8/

In Nigeria, a large share of the capital funds generated from agriculture in each State in the form of Marketing Board surpluses was invested in non-agricultural activities which were concentrated in the urban areas of the country, with consequent low investment in infrastructure in the rural communities. 9/ Of late, however, agriculture has been treated as a "favoured sector" under the Government's fiscal, monetary and incentive policy. For instance, in 1978/1979 and 1979/1980, additional incentives were offered to medium-scale and large-scale farmers in the form of fiscal and credit allowances, including investment allowances of 10 per cent in respect of capital expenditure for plant and equipment, capital allowances for investment in agriculture and generous bank credit allocations.

8/ See Plan Mobutu: Programme de relance économique, 1981-1983 (Kinshasa, Commissariat Général au Plan, 1981, Vol.1, pp. 11-19. Under this Plan, the Government introduced a system of conventions de développement in order to stimulate domestic production of agricultural raw materials by private enterprises. Under these "development agreements" with government, manufacturing firms were authorized to increase the retail price of their end-products by up to 10 per cent in exchange for an undertaking to invest the proceeds in projects, designed and managed by them, for the production of the raw materials they consume and for the improvement of the economic environment affecting their activities (e.g. roads, hospitals, etc). These proceeds, called agricultural recovery funds, were state property, deposited in the central bank, but managed by the enterprises themselves.

9/ Third National Development Plan 1975-1980 (Lagos, Central Planning Office, Federal Ministry of Economic Development, 1975).



Table III.A.9  
Share of agricultural expenditure in total  
investment for selected African countries  
 (Percentages)

Country	Duration and scope of plan	Share of total investment in GDP	Share of public investment in total investment	Share of agriculture in!	
				Total investment	Public investment
Burundi	1978-1982	27.0	...	22.2	...
Gabon	1976-1980	49.0	68.0	3.5	0.5
Gambia	1975-1980	...	...	14.9	...
Ivory Coast	1976-1980	5.6	32.0	51.9	13.6
Kenya	1979-1983	20.6	...	16.0	18.7
Lesotho	1976-1980	13.5	...	...	32.6
Liberia	1976-1980	9.0	...	19.3	19.3
Madagascar	1978-1980	...	40.2	27.7	22.6
Malawi	1971-1980	23.8	36.7	8.2	19.3
Mauritius	1975-1980	28.0	...	...	...
Morocco	1978-1980	24.0	26.3	16.2	18.0
Nigeria	1975-1980	26.6	66.7	8.3	6.5
Togo	1976-1980	33.0	88.4	21.8	...
Tunisia	1977-1981	25.00	43.0	15.8	26.2
United Republic of Cameroon	1976-1981	19.5	70.7	17.3	16.6
United Republic of Tanzania	1976-1980	...	56.8	15.2	...
United Republic of Uganda	1976-1980	...	...	20.0	...
Zaire	1979-1983	...	...	...	3.8

Sources: The State of Food and Agriculture, 1980 (Rome, FAO, 1981), and development plans of various countries.

In Gabon, the minuscule share of investment accorded to agriculture under the plans for 1970-1975 and 1976-1980 (1.7 per cent and a mere 0.5 per cent respectively) suggests that the sector has remained the poor relation of the whole development exercise. In fact, the big construction sites in the railway and mining sectors offered better employment opportunities than the rural areas. Recently, the Government has raised the share of agriculture in total public investment to 10.9 per cent for the 1980-1982 plan period, and, in order to reduce under employment in agriculture without drawing the labour force completely away from the land, is trying to create agro-industrial schemes combining work in agriculture and allied agro-industrial centres, thus generating higher incomes and utilizing the available labour time more fully.

In contrast, the share of agriculture in total investment in Burundi, (22 per cent), the Ivory Coast (51 per cent), Madagascar (27.7 per cent), Togo (21.8 per cent) and Uganda (20.1 per cent) has been quite substantial.

In Malawi, a large share of investment expenditure under the development plan for 1981/1982 - 1985/1986 is to be earmarked for the development of agriculture. It is also intended to improve the institutions, both public and private, responsible for running the investment programme.

It should however be pointed out that increasing the share of investment in agriculture is not an end in itself, the more so because agriculture is being carried out in a very decentralized fashion. Proper management of the investment programme needs suitable administrative staff stationed in the rural areas to ensure that the investment is properly utilized and not frittered away.

(f) Institutional constraints

A paper on agrarian reform and rural development in Africa prepared for the tenth FAO Regional Conference for Africa identified five broad types of land ownership: (a) feudal and/or semi-feudal; (b) traditional communal; (c) individualization (market economy); (d) plantation ranch; and (e) emerging socialist. 10/

The existence of widespread rural poverty and the associated phenomenon of massive unemployment and underemployment in rural areas compels one to have a thorough look at tenure arrangements. ECA preliminary estimates on the number of persons living in absolute poverty in Africa are very unreliable. One reason for this is that notions of what constitutes absolute poverty vary from country to country, from culture to culture and from individual to individual. With this reservation, data on income distribution and average per capita income show the enormity of mass poverty in the ECA region, where about 40 per cent of the total population of African developing countries in 1975, or about 147 million persons with a yearly per capita income of about \$US125-136, are estimated to be destitute (seriously below the poverty line), and another 30 per cent or 110 million persons with a yearly per capita income of about \$US252-260 are estimated to be seriously poor or on the verge of poverty. The two groups together contain about 257 million people, or some 70 per cent of the total population of developing Africa. 11/

In some African developing countries, the low land-man ratio has been aggravated by an extremely uneven distribution of land ownership, while in others the scarcity of cultivable land has been rather artificial and the political will to embark on reform all but absent.

This is not the place to dwell at length on the different types of tenure in developing Africa, but it may be useful to indicate some of the attempts made to rectify disparities in the distribution of land ownership. In some countries, the process of land reform has been massive, drastic and rapid. In Ethiopia, for example, some of the benefits of the land reform measures adopted in 1975 will take some time before they trickle down to the rural poor. This is partly because of the size and fragmentation of holdings and the low level of capital accumulation as reflected in the backward techniques of production.

10/ FAO document ARC/78/2, para. 24.

11/ "Survey of economic and social conditions in Africa, 1978-1979", Part I (E/CN.14/743/Part I), p. 141.

In Zimbabwe, land is extremely unevenly divided along racial lines, and peasants do not have adequate access to credit, extension services and marketing facilities. <sup>12/</sup> The Government plans to introduce measures to ensure an acceptable and fair distribution of land ownership and use very shortly.

In Lesotho, traditional practices of land holding and land use have been an obstacle to rapid socio-economic transformation. In fact, the fragmentation of the land into small subsistence units and over-grazing of range lands has jeopardized preservation of the land base itself <sup>13/</sup>. The Government is making efforts to modify the old tradition by means of such measures as the Land Act of 1979, which provides for the allocation of land by lease to competent farmers with exclusive tenure and inheritance rights, but with the legal proviso that the farmers must use their land in accordance with approved standards.

In Botswana, there is uneven distribution of land holdings as well as cattle ownership. In 1980, the 45 per cent of the traditional crop farms with holdings of less than three hectares controlled only 16 per cent of the land. In the livestock sector 47 per cent of the traditional cattle farms control about 12 per cent of the total cattle population in the traditional sector. The disparity extends to manufacturing, hunting and fishing, trade and services. In fact, the Rural Income Distribution Survey (1974/1975) revealed that about 45 per cent of rural households were below the poverty datum line. <sup>14/</sup>

In Zaire, the traditional land tenure system is preventing farmers from moving outside the tribal/land holding system. In the Comoros and Burundi, efforts to change traditional land practices have met with little success because of certain traditional practices and organizational complexities, as well as resistance from farmers.

While it is a logical first step to development, land reform is no panacea. Nevertheless, the massive and drastic reform measures in Ethiopia and the recent attempts at agrarian reform in Cape Verde, Lesotho, Togo and Zimbabwe, if accompanied by a proper mix of post-reform fiscal and monetary policies, could help to alleviate the serious lag in agricultural production. At the same time,

"There are some inherent risks in granting negotiable land titles to individuals who could easily become landless by selling away their land. In a number of French-speaking West African countries, individual ownership of land was encouraged and the tribal chiefs would sell unutilised communally-owned forest land to Europeans. This process of individualization of land ownership resulted in land being concentrated in the hands of expatriates or nationals with financial resources. Suburban land around many towns in West Africa has been bought by businessmen and civil servants for weekend cottages." <sup>15/</sup>

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<sup>12/</sup> Growth with Equity: An Economic Policy Statement, Cmd, R.A.4-1981 (Salisbury, Government Printer, 1981).

<sup>13/</sup> "Agricultural development: a blueprint for action" (Kingdom of Lesotho, Ministry of Agriculture, 14 November 1980) (mimeo).

<sup>14/</sup> 1980 Country Profile (Gaborone, Central Statistics Office), p.7.

<sup>15/</sup> FAO document ARC/78/2, para. 50.

Apart from slowing down migration to the cities by providing more jobs in the rural areas, land reform should yield more employment opportunities in the urban areas too. For instance, industries which require agricultural inputs would probably be stimulated. The strain on the balance of payments could also be lessened, since simpler consumer goods require fewer imported inputs than more complex goods. In addition, the tax base could easily be expanded as the Government would no longer be dealing with landlords adept at tax avoidance. If the agricultural surplus siphoned off is productively deployed, economic development should proceed at a faster pace. 16/

(g) Irrigation

The total irrigated area in developing Africa increased from 6,022,000 hectares in 1969-1971 to 7,152,000 hectares in 1979, at an average annual rate of 1.9 per cent. The bulk of the irrigated area is in North Africa (5,666,000 hectares), followed by Eastern and Southern Africa (983,000 hectares), West Africa (480,000 hectares) and Central Africa (23,000 hectares).

Apart from cotton irrigation in Egypt and the Sudan, and sugar irrigation scattered all over the continent, irrigation schemes are by and large only for rice cultivation. Indeed, except for Egypt, Madagascar and the Sudan, the potential of irrigation schemes has not yet been fully exploited.

Mainly as a result of poor water management, insufficient training and maintenance facilities, the lack of economic incentives to farmers, soil problems and the lack of modern inputs (extension, fertilizers, credit, etc.,) the impact of irrigation on total cultivated area and yields per hectare of arable land has been minimal. While rice yields have been rather disappointing, some schemes have been able to attain yield levels comparable to those attained in other parts of the world. For instance, in paddy production, yields of more than five tons per hectare have been obtained in Mwea scheme in Kenya and the Semry scheme in Cameroon. 17/

In some parts of developing Africa, the extensive swamp areas cause considerable loss of water supplies to down stream areas. In the Sudd region of the Sudan, for example, about 42 billion cubic metres of water are lost, about half the total run-off in the Nile at Aswan. The Jonglei Canal (costing some \$195 million) is now under construction to reclaim the area and utilize its large water potential. Furthermore, in March 1980, the Government adopted a rehabilitation programme covering the period 1980/1981-1982/1983 with the aim of achieving a 7 per cent annual increase in cotton production in irrigated schemes. According to this programme, the crop pattern in the public irrigated agricultural scheme will be reoriented towards those crops for which the Sudan has a comparative advantage.

16/ William C. Thiesenhusen, "Latin America's Employment Problem", *Science*, Vol. 171 (5 March 1971), pp. 868-874.

17/ "Accelerated development in sub-Saharan Africa: An agenda for action", *op.cit.*, pp.5.36-5.42.

In Uganda, there are 225,820 acres of permanently or frequently waterlogged land. Similar swamps exist in the inland deltas of the river Niger and at the mouths of the rivers Chari and Longone where they enter Lake Chad. Floods, sometimes from rivers overflowing their banks as in the northern parts of the Central African Republic, below the Kamuzu barrage on the Shire in Malawi and along the Niger river in Mali up to Mopti, can cause damage to crops, homesteads and cattle and disrupt normal life in the rainy season. 18/

In some parts of the continent, large-scale irrigation through the development of river basins is being intensified. Mali, Mauritania and Senegal are planning to develop the Senegal valley. The Kandadji dam is expected to boost the irrigation potential of the Niger valley in the Niger. CILSS has set a target of 550,000 hectares to be irrigated by the year 2000 in the Sahel countries. There are also plans to develop the Kagera basin in the United Republic of Tanzania and the Badhera dam in Somalia. In Nigeria, the Sokoto, Rima, Hadjaj and Jamaare river systems are being developed. The potential of Lake Chad in north-east Nigeria is also being tapped. 19/

While the above-mentioned river basin development schemes in different parts of the continent seem to be well suited to ensuring food security and promoting agricultural development for resource-poor arid regions, the financial, economic social and ecological implications of river basin development schemes will have to be carefully examined. The benefits of large-scale irrigation schemes will be short-lived if they are accompanied by soil salinity arising from inadequate drainage or by the spread of malaria, bilharziasis or other insect-borne diseases resulting from improper management of water in irrigation systems.

Finally, notwithstanding some major undertakings in the field of irrigation, only a very small proportion of available water resources have as yet been put to productive use. It is indeed saddening to note that only about 2 per cent of the water wealth of Africa may be considered as being used at present for consumption purposes.

(h) Self-sufficiency in food: some reflections on the Lagos Plan of Action

An objective of the Lagos Plan of Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa, adopted at an OAU economic summit in April 1980, is the achievement of self-sufficiency in food. The priority areas where urgent attention is called for include food security, food losses and food production. With this in mind, efforts to ensure self-sufficiency in both quantitative and qualitative terms are being intensified.

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18/ "Problems of water resources development in Africa"  
(E/CN.14/NRD/WR/1/Rev.2).

19/ "Accelerated development in sub-Saharan Africa: An agenda for action", op.cit., p.5.39.

For instance, in the United Republic of Tanzania, a National Economic Survival Programme was launched in May 1981. The main objective of the programme is to increase and diversify the production of food crops. There are also plans to introduce drought resistant food crops and to initiate small and large irrigation projects. In Nigeria, the Federal and State Governments officially launched a "green revolution" programme in April 1980 designed primarily to modernize agriculture and achieve self-sufficiency in food production by 1985. Under the programme, substantial funds have been allocated to revive production of food crops, livestock and fish, and priority will be given to land-clearing schemes, farm mechanization centres, agro-services centres, river basin development schemes, the national accelerated food production programme and tractor hire services.

A Development Through Co-operation campaign was launched in Ethiopia to eliminate food shortages. State farms were expanded substantially with the aim of raising output of food crops. In 1980/1981, the area under crops in State farms was approximately 310,000 hectares, compared with 158,900 hectares in 1978/1979. The Minimum Package Programme, through which improved seeds, pesticides, fertilizers, improved farm implements and extension services are made available to peasant farmers, is being strengthened. In the Ivory Coast, a Secretariat of State was created within the Ministry of Agriculture specifically to assist in the Government's efforts to achieve self-sufficiency in food. In order to mitigate the problem of food losses, further storage facilities are being constructed. An educational campaign aimed at reorienting the pattern of consumption from cereals to pulses (legumes, peas and haricot beans) and starchy foods (cassava and potatoes) is also under way.

In the Libyan Arab Jamahiriya, the 1981-1985 Transformation Plan aims at a higher degree of self-sufficiency and self-reliance through reduction of the share of imported foodstuffs in total consumption from 38 per cent in 1980 to 36.5 per cent in 1985. In the Comoros, institutional support for efforts to achieve self-sufficiency in food and agricultural development objectives was rationalized in May 1980 with the establishment of a Centre Federal d'Appui au Developpement Rural (CEFADER) complemented by regional centres in each island. In Mali, the 1981-1985 Development Plan aims at enhancing integrated rural development, water conservation schemes and the development of irrigation, particularly in areas of drought. Rural credit institutions and the development of traditional technology using local resources and energy are other areas covered in the development strategy.

Seychelles plans to create an Agricultural Fund to encourage farmers to produce more food. In Botswana, the Government decided to start communal development programmes in each district in 1980, covering groups of villages and cattle posts where co-ordinated rural development will be intensified in order to achieve self-sufficiency in food. Among the programmes introduced in 1980 in Zambia to boost food output was "Operation Food Production", a 10-year programme emphasizing the gradual establishment of State farms and providing continued support to peasant and commercial farmers. In Swaziland, the development of Rural Development Areas (RDA) is being stepped up to improve the productivity and incomes of traditional farmers. A third of capital expenditure under the Third Development Plan (1978/1979-1982/1983) is earmarked for the development of RDA programmes.

In Kenya, the National Food Policy instituted in 1980 gives priority to public investment in agriculture, and especially subsistence food crops, as well as the improvement of national storage capacity, including the establishment of a national strategic grain reserve of four million bags (360,000 tons) of maize. In 1981, the Government of Senegal, after abolishing ONCAD (the Office Nationale de Cooperation et d'Aide au Developpement), announced a set of policy measures to benefit the agricultural sector. They include the establishment of remunerative prices for cereals, easy access to basic inputs and the provision of subsidies to farmers from the proceeds of a special tax on wages and other incomes. Consequently many farmers extended the area cultivated for food production, and this led to a substantial increase in agricultural output, particularly of ground-nuts, sorghum and maize.

In the Congo, production of food crops, meat and fish is being encouraged, mainly in State farms. The Government has commissioned a number of studies on agricultural resources, and is boosting investment in agriculture. In 1980/1981 a three-year plan to rationalize food and agricultural production was launched in Sierra Leone. In the Sudan, self-sufficiency in food has been pursued through intensive production of wheat in irrigated areas and the expansion of durra production in the rain-fed areas with mechanization. In the Gambia, producer prices have been increased, and the Government is also considering the possibility of announcing prices before planting takes place, and of establishing an agricultural development bank. Under the five-year plan for 1981/1982-1985/1986 the food strategy is an integral part of the over all agricultural development strategy, aiming at improvement of nutritional standards.

Given Malawi's high rate of population growth and the severe shortage of arable land, the Government's agricultural policy is to focus on improving yields while maintaining a strategic reserve of 180,000 tons of maize against a recurrence of poor harvests. This stockpile, which accounts for 12 per cent of national production, will be rolled over for domestic sale or export as soon as it can be replenished from a new harvest. In the Niger, increased food production and food security are being emphasized to minimize imports of food and protect the country against recurrent drought. Planned measures include prevention of soil degradation, expansion of irrigation schemes, integrated rural development programmes and the extension of agricultural credit. In the Upper Volta, measures adopted to achieve self-sufficiency in food often merge into one another, and the strategies chosen have mutual repercussions. The co-ordinated programme includes: intensified efforts to improve the productivity of rain-fed agriculture in order to produce 275,000 tons of food crops in 1985 and 411,000 tons in 1990; intensification of anti-erosion measures, to prevent loss of soil and increase yields; continuation of lowland operations and small-scale peasant projects and developments down stream from existing dams; and acceleration of studies on large areas which could yield rice, maize or irrigated sorghum even in dry years.

In Guinea, 29 per cent of investment was earmarked for agriculture as against 16 per cent for industry, with the prime objective of attaining self-sufficiency in food. Farmers are being motivated through remunerative prices, grants in the event of natural disasters, the establishment of a development bank, free phytosanitary services, the supply of inputs at cost and free pilgrimages to Mecca for the best producers. In Burundi, total investment of 18 billion Burundi francs (\$195 million) has been earmarked under the third five-year plan for expanding food production and achieving self-sufficiency in food. In Somalia, priority is to be given to increasing food production in order to achieve self-sufficiency in sorghum, maize, edible oil and vegetables and increasing banana production for export. The Strategy is based on extension of the cultivated area as well as more intensive cultivation of existing areas.

At a southern African summit held in Lusaka in April 1980, and at the second Southern African Development Co-ordination Conference held in November 1980, the nine participating States (Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, the United Republic of Tanzania, Zambia, and Zimbabwe) considered a programme of action for national food reserve policies and for the establishment of a regional food reserve and national and regional early warning systems for food shortages.

While the efforts so far made by many African developing countries to accelerate the rate of food production should be commended, it should be noted that some are lagging behind in this respect. Increasing food production alone is not enough. There are a number of other essential aspects of rural development to which due attention must be paid to make this drive really successful. They include better transport and marketing facilities ensuring basic standards of health for the rural population, encouragement of co-operatives for various types of production and marketing activities and adequate provision of extension workers who will keep the farming population in touch with the best available practices and methods for adopting them to specific given situations. Without such an all-round programmes, a drive to increase food production will only peter out eventually.

### 3. Production of industrial crops

The production of industrial crops increased by 6 per cent in 1980, compared to 3.7 per cent in 1979 (see Table III.A.10). Tobacco, sisal and olives showed significant increases, while cocoa, green coffee and tea production declined. Cotton production rose by 3.5 per cent, while rubber production increased marginally. On the average, the production of industrial crops has increased by a mere 0.25 per cent a year during the last decade.

The behaviour of industrial crops in the major producing countries has been rather mixed. In Zimbabwe, for example, the 1981 tobacco auctions proved much more successful for the tobacco growers than the 1980 auctions. The average price realized in 1981 was \$ZI 1.87 per kilogram, compared to 74.8 cents a kilogram paid in 1980. The total revenue from the 1981 crop is estimated at \$ZI 125 million. The output target for 1980/81 was cut to 70 million kilogram from 122.6 million kilograms actually produced in 1979/80. The Commercial Farmers' Union planting intentions survey points to an increase of almost 20 per cent in the area under tobacco in 1981/82.



Table III.A.10  
Industrial crop production in Africa, excluding South Africa  
 (Thousands of tons)

	1970	1978	1979	1980	Growth rate (Per cent)	
					1979-1980	1970-1980
Cocoa beans	1 115	902	1 011	927	-8.31	-1.83
Coffee, green	1 312	1 082	1 182	1 151	-2.62	-1.30
Tea	120	196	197	179	-9.14	4.08
Sisal	365	179	175	222	26.86	-4.85
Seed cotton	3 810	3 306	3 077	3 186	3.54	-1.77
Tobacco (leaves)	166	225	232	268	15.52	4.91
Rubber (natural)	324	203	202	204	0.99	-4.52
Palm oil	1 130	1 316	1 284	1 365	6.31	1.91
Olives	738	932	1 026	1 445	40.84	6.95
Pineapples	572	921	945	972	2.86	5.45
Palm kernels	725	610	710	725	2.11	0.00
Total	10 377	9 872	10 041	10 644	6.00	0.25

Source: As for Table III.A.3.

In contrast, the 1979/80 growing season was a difficult one for tobacco in Malawi. Both output and prices fell. The total volume of tobacco sold at auction showed a decline of 0.7 per cent, while the price realized dropped by 15.5 per cent from 129.4 tambala per kg. to 109.4 tambala per kg.

In the Sudan, the production of cotton fluctuated widely, and productivity plummeted from an average of 4-5 kantars/feddan in 1971/72 to only 2.1 kantars/feddan in 1980/81. Yields dropped for the third successive year. Although productivity is expected to improve to 2.9 kantars/feddan in 1981/82, this is still only 60 per cent of the 1978/79 level. Consequently, the Sudan now exports less than half of its volume of cotton exports in 1970/71.

In Egypt, cotton yield increased by 9 per cent in 1979, compared with 8.5 per cent in 1978 and 1.3 per cent in 1977. It is estimated to have grown by 6.8 per cent in 1980. Cotton production increased from 1.8 million tons in 1979 to 1.9 million tons in 1980.

In the Ivory Coast, which is the largest producer of cotton in the largest franc zone, production increased to 142,975 tons in 1980.

Coffee export prices in the Ivory Coast declined by 12.2 per cent from CFAF 780 per kilogram in 1979 to CFAF 685 per kilogram in 1980. The marketable surplus also declined, from 277,048 tons to 249,608 tons over the same period. The decline is attributed partly to the aging of plants. The Government has introduced industrial methods of coffee processing, and the length of the coffee season has been reduced from six to three months. There is also an active policy of paying premiums for renewing plants, and 102,500 hectares are scheduled to be renewed by 1985.

In Ethiopia, coffee production was 194,000 tons in 1979/80 after a declining trend in the preceding two years, mainly due to the spread of coffee berry diseases. The upturn in coffee production to some extent reflects success in controlling the spread of coffee berry diseases, and partly favourable weather.

In Angola, Uganda and Zaire, production marginally rose in 1980, while in the United Republic of Tanzania output declined from 51,000 tons in 1979 to 50,000 tons in 1980.

In Liberia, rubber production seems to have improved substantially, with a growth rate of 4 per cent compared with -7.8 per cent in 1979. With considerable overcapacity in the synthetic rubber industry, price movements for natural rubber have been dampened, leading to a recession in the industry.

In the United Republic of Tanzania, sisal production rose from 81,000 tons in 1979 to 86,000 tons in 1980. However, the 1980 sisal production was 43 per cent below the 202,000 tons attained in 1970. Sisal production stagnated in Angola in 1980, while in Kenya it increased from 36,000 tons to 48,000 tons.

In the Ivory Coast, production of cocoa rose from 318,500 tons in 1979 to 401,024 tons in 1980, an increase of 26 per cent, while prices rose from CFAF 110 per kilogram in 1973/74 to CFAF 300 in 1980. The Government provides premiums for renewal of plants and is introducing hybrid varieties. The planned output for 1985 is estimated at 450,000 tons. In Nigeria, cocoa production declined from 144,300 tons in 1979 to 113,800 tons in 1980. This production figure was 51.7 per cent below the production of 220,200 tons attained in 1975. In Ghana, cocoa production declined from 290,000 tons to 255,000 tons in 1980. Here again the 1980 production figure was 59.3 per cent below the output of 430,000 tons attained in 1970.

In Malawi, tea production was 8.2 per cent down on the previous year's level, partly because of a dry spell in the tea-growing areas and partly because of a fire that destroyed one of the tea factories. In Kenya, tea production declined from 99,000 tons in 1979 to 30,000 tons in 1980.

In Tunisia, olive production increased from 400,000 tons in 1979 to 425,000 tons in 1980, and it is estimated that output reached 725,000 tons in 1981.

#### 4. Livestock

The total number of livestock excluding poultry increased by 2.2 per cent in 1980. Between 1970 and 1980, the increase was 1.3 per cent a year. At the end of 1980, there were 157.4 million cattle, 151.9 million sheep and 141.6 million goats in Africa. <sup>20/</sup> In fact, the International Livestock Centre for Africa (ILCA) estimates that an eighth of the world's cattle are raised in the region, which provides a twentieth of the world's meat.

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<sup>20/</sup> In spite of the large size of the cattle, meat and milk productivity is poor.

Many reasons are advanced for this low level of exploitation, notably the limited number of centres for disease control, cattle treatment and the preservation of livestock products, the limited number of national and regional institutions for research and manpower development, the shortage of feed and the undeveloped production and marketing infrastructure.

Worse still has been the prevalence of trypanosomiasis and river blindness which have seriously affected not only population settlement but also livestock development in several parts of the continent. It is estimated that 21 African countries covering an area of approximately 10 million square kilometres are still menaced by the tsetse fly. In the Central African Republic, for example, the ravages of the tsetse fly have imposed a limit on the expansion of the cattle population. In certain areas, the local population groups regard their cattle as a capital asset, not as an exploitable resource, with the result that their average income is among the lowest in the country. This attitude explains to some extent why a good deal of the meat consumed in Bangui is imported.

In Chad, Mali, the Niger, Senegal and the Upper Volta the rates of exploitation are reported to range between 6 per cent and 14 per cent, - and the weight produced varies from 7 kg to 14 kg of meat. 21/

An ILCA study indicates that domestic meat production per inhabitant ranges from less than 1 kg to almost 50 kg a year. The biggest producers in developing Africa are Botswana (48.36 kg per year), Swaziland (34.56), Mauritania (20.68) and Chad (18.85), and the smallest are the Congo (0.83), Zaire (1.02), Sierra Leone (1.08), Mauritius (1.16) and the Ivory Coast (1.87). The average for Africa is 8.79 kg per capita per year. 22/

Milk production per capita varies from less than one litre per annum in Ghana, the Ivory Coast, and perhaps other countries for which no figures are given, to 110.76 litres (Botswana), 83.28 litres (Sudan), 64.79 litres (Swaziland) and 55.21 litres (Kenya). Annual milk yields in the majority of African countries range from 100 to 400 litres per cow. 23/ These data indicate the low productivity of African livestock and their minimal contribution to food production.

The above should not however be interpreted to mean that developing African countries are not devoting the required efforts to making judicious use of their livestock wealth. They are. In Botswana, for example, cattle continue to dominate agriculture, with 75 per cent of agricultural value added coming from this sector. It is believed that Botswana has the largest meat processing and marketing organization in Africa. The slaughter-house at Lobatse handles between 1,000 and 1,400 head of cattle per day. A large part of the meat is exported bonned; some is tinned at the cannery, and the skins go to the tannery next door. In 1981, the Botswana Vaccine Institute, with an initial capacity of 21 million monovalent doses per year, was commissioned.

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21/ P.L. Pugliese and J. Coulomb, "Improving the productivity of African cattle", The Courier, No. 65 (January-February 1981), p.62.

22/ Hans E. Jahnke, The Livestock Economy of Africa, Occasional Economics Paper, No. 5 (Addis Ababa, ILCA, March 1977), p. 12.

23/ Ibid: pp. 12-13.

In Cameroon, the Ivory Coast, Madagascar and Senegal elaborate animal husbandry techniques, such as selection and cross-breeding, are yielding good results. Mali and the Niger have imposed temporary bans on exports to prevent breeding stock from being lost.

The over-all strategy for developing the livestock sector in Africa should aim at rationalizing the composition of herds and raising livestock productivity without endangering the ecological balance. Among other things, this will call for the adaptation of improved technology and management systems to local conditions, price incentives for herdsman and the encouragement of commercial breeding, with the use of fattening yards and disease control centres.

### 5. Fisheries

Total fish production in developing Africa declined by 2.9 per cent from 3.6 million tons in 1978 to 3.5 million tons in 1979. The drop is attributable to the reduction in the fish catch in Angola, Ghana, Morocco and Namibia.

Trade in fishery commodities is of considerable importance to Africa. In 1978 and 1979, Africa imported 509,843 and 503,622 tons of fish valued at \$US 326.3 million and \$US 287.3 million respectively. Exports in these years were 373,051 tons and 436,848 tons valued at \$S 378.5 million and \$US 437 million respectively. Although the quantity exported was limited, the fish trade balance for Africa continued to be positive, reflecting the high value of the exported fish.

The rich resources off West Africa have attracted large fleets of long-range vessels to exploit both the pelagic resources (sardine, mackerel, etc.) and the demersal resources (lake, sea bream and cephalopods). As a result, catches by non-African countries in recent years have accounted for two thirds of the total in both the CECAF region (Straits of Gibraltar to the Congo river) and the ICSEAF region (south of the Congo). Off East Africa the total catch is very small, and except for tuna there is little fishing by non-Africans.

Reasons for the low level of involvement in the fishing sector by African developing countries include the absence of proper handling, preserving and marketing facilities, the lack of personnel trained in fishing technology, small fishing fleets, lack of capital and the high cost of energy.

Of late, however, a number of developing African countries have launched fisheries development projects whose objective is the more efficient exploitation of their fish wealth. In Cape Verde, for instance, it is planned to carry out a survey of the country's fish wealth to determine the type of fishing boat best suited to the local fisheries industry. The Government intends to give priority to non-industrial fishing. The measures envisaged are principally aimed at strengthening the sector and improving the return on the investment already made. Only once the results of the studies currently in progress are known will the integrated development of industrial fishing be considered.

In the Comoros, more efficient exploitation of the fish wealth in a 50-km zone around the archipelago is expected to help to remedy the existing protein deficiency in the population's diet. In Malawi, intensive exploration and research is being undertaken to exploit the country's fish wealth. In Burundi, incentives are to be offered to local fishermen in the form of fishing equipment and small plants for the preparation of smoked fish. In the Central African Republic, despite the country's vast fishery potential, a high proportion of the fish consumed is imported. In order to encourage the exploitation of the country's fish wealth, a network of roads is to be built to transport the fish to centres of consumption.

In the United Republic of Tanzania, current marine fish production stands at 50,000 tons, and is mostly confined to off-shore fisheries. Efforts are therefore being made to start harvesting deep-sea fish resources. In the Sudan, an integrated fishery development programme is to be started with the objective of doubling fish production by 1985. The programme includes the provision of modern equipment for both fresh water and coastal fishing and adequate marketing, storage and transport facilities. In the United Republic of Cameroon, it is planned to modernize the Douala fishing port facilities around a harbour with a 560-metre quay. In Mauritania, joint ventures are being encouraged, and there are plans to create sheltered areas for individual fishermen and provide marketing opportunities and vocational training to nationals.

Ministers from Cape Verde, the Gambia, Guinea-Bissau, Mauritania and Senegal met in Nouakchott in June 1980 to discuss the preservation, conservation and exploitation of fish resources and established seven priorities: (a) promotion of small fishing concerns; (b) encouragement of joint ventures; (c) adoption of joint policies in respect of foreign fishing operations; (d) harmonization of legislation on fishing; (e) development of subregional co-operation, with arrangements for supervision and control; (f) development of research capacities; (g) encouragement of co-operation in the marketing sector. Representatives of the Congo, Equatorial Guinea, Gabon, Sao Tome and Principe and the United Republic of Cameroon met in Libreville in March 1980 to discuss the provisional version of a study of prospects for regional action. The participants recognized that their coastal stocks, the mainstay of their developmental potential, had to be assessed before anything could be done about infrastructure.

The continent's fish resources have great potential for development, but African developing countries will need substantial technical and other assistance to enable them to grasp these opportunities and accept the concomitant responsibilities.

Moreover, the new ocean regime will make it necessary to review existing institutional arrangements for international collaboration and the necessary technical and other support. Some adjustments will probably be required in the present structure of existing regional fisheries bodies so as to ensure efficient management and development through smaller technical support units designed to reflect the specific needs of groups of countries.

6. Forestry

Total roundwood removals from the forests of developing Africa in 1979, the latest year for which data are available, stood at 359 million cubic metres, of which 89 per cent was fuel wood and a mere 5 per cent in saw veneer logs. Total roundwood production was 2.4 per cent higher than in 1978. Indeed, most countries except the Central African Republic and Morocco showed increases in their production. Wood removals exceeded 10 million cubic metres in 9 countries:

	<u>Millions of cubic metres</u>
Ethiopia	23
Ivory Coast	11
Kenya	18
Mali	28.6
Mozambique	11
Nigeria	87
Sudan	23
United Republic of Tanzania	32
Zaire	10

Production of sawlogs and veneer logs showed only a slight increase (1.7 per cent) over the 1978 figure. Significant increases were however recorded in sawnwood (5.4 per cent), panel products (3.5 per cent) and pulp and paper (15 per cent) production. Production figures are given in table III.A.11.

Table III.A.11  
Production of major forest products in developing Africa

Year	Fuel wood (millions of cubic metres)	Sawlogs and veneer logs (Millions of cubic metres)	Other roundwood (Millions of cubic metres)	Sawnwood (Thousand of cubic metres)	Panel products (Thou- sand of tons)	Pulp, paper and paper board (Thousand tons)
1977	305.3	17.7	18.7	4 653	844	391
1978	314.1	17.1	19.6	5 426	281	389
1979	322.9	17.4	19.1	5 721	913	450

Source: ECA secretariat.

Trade in forest products showed an upward trend. There was an increase of about 9 per cent in log exports over the 1978 figure, reflecting the over-all increase in roundwood production. There was a decrease of 3 per cent in sawnwood exports, while panel products showed an increase of 5 per cent over the 1978.

Of the traditional producing/exporting countries, the Congo's exports in 1979 showed an increase for logs, while exports in panel products decreased. Ghana showed a decrease in both log and sawnwood

exports. The Ivory Coast showed an increase in log and panel products, while Liberia showed increases in both sawnwood and panel products. The United Republic of Cameroon showed an over-all increase in its timber trade.

On the whole, the forestry sector showed increases in both production and the export trade, though they were rather marginal. The upward trend is expected to continue in 1980/81 with the improvement in the general world economic situation.

With increasing local and export demand for timber products due to population growth and general socio-economic development in the region, a state of disequilibrium is likely to arise with production falling short of demand. This is of particular significance in West Africa and the northern savannah zones, where the firewood supply situation has rapidly worsened. In most of the Sahelian countries a negligible proportion of the development budget is earmarked for reafforestation, and deforestation is becoming worse each year, thereby speeding up erosion, enhancing the effects of drought and causing the disappearance of useful pasture land.

In contrast, a number of countries are pursuing forest conservation policies aimed at promoting the efficient utilization of their resources, thus enhancing foreign exchange earnings and value added and increasing employment opportunities. In the Sudan, for instance, it is recognized that while forestry-related programmes are expected to contribute to the protection of the environment, they cannot by themselves check growing desertification. Consequently, taking into account the need for an interdisciplinary and intersectoral approach, the Government intends to be guided by environmental and ecological considerations in development programmes related to agriculture, soil and water conservation, range management and animal husbandry.

In Uganda, the main objectives of forestry development are to ensure adequate supplies of raw materials for use by the wood processing industries; to expand employment opportunities in rural areas; to recoup the cost of the planning and development of afforestation; to restock the exploited natural forest; and to educate the public on the role that forests can play in their lives and in the economic development of the country. In Guinea, the Government intends to develop an annual reforestation capacity of 10,000 hectares. The annual growth rates for forestry are forecast to reach 3 per cent in 1981-1985 and 5 per cent by 1986-1980. The strategies to be pursued include mass participation in tree planting, rationalization of forestry operations for domestic purposes, improvement and development of charcoal production methods and organization of marketing.

In Gabon, the forestry policy involves launching reforestation schemes, campaigning for the active involvement of Gabonese nationals in the exploitation and processing of wood and rationalizing the management of the 22 million hectares of forest, which means increasing knowledge about the forest and better exploitation, marketing and production techniques to the attainment of improved living standards for their populations.

Efforts to achieve this objective must, however, take into account the role of forest in protecting the soil, improving agricultural productivity and generally enhancing the quality of the environment. Perhaps even more important, African developing countries should adopt policies of regional co-operation in the production and effective utilization of, and trade in, forest products.



## B. MINING (EXCLUDING FUELS)

1. Minerals in the African economy

The export of minerals other than oil plays a very important role in African countries, some of which are mining economies where the bulk of foreign exchange is generated by the export of a few ores. Examples are Liberia, where in 1980 iron ore accounted for 52 per cent of total exports, Zaire, (copper, cobalt and diamonds - 68.5 per cent) and Zambia (copper - 82.5 per cent). Africa's mineral resources are abundant and varied, and Africa is the world's largest producer of cobalt, diamonds and chrome, which are of strategic importance for modern industry. However, with the low level of development, local utilization of these resources is negligible, except for iron ore in some countries, and exploitation is in many cases still in its initial stages.

After the increase in oil prices in the 1970s the mining industry in Africa was directly affected by the world recession, and particularly by falling demand for minerals in the industrialized countries. Iron ore extraction was the most seriously hit because of the crisis of the steel industry, and in Liberia, one of the biggest African producers of iron ore, the average level of exports in volume terms was 17.9 per cent lower in 1975-1979 than in 1970-1974. During 1980, prices of mineral ores generally improved on the international markets; the UNCTAD index of wholesale prices of metals rose by 10.6 per cent, <sup>1/</sup> and the United Nations export price index for minerals by as much as 68.3 per cent. <sup>2/</sup> But developing African production did not improve, and may have fallen by as much as 7.2 per cent relative to 1979. The evolution of the situation commodity by commodity is outlined below.

2. Trends in the main commodities(a) Gold

The price of gold was in decline for most of 1980, in a range between \$US 845.02 and \$US 450.02. There was also a fall in production in countries with established gold mining operations, and lower-grade ores were mined. Total gold production in market economy countries in 1980 was 943 tons. Africa produced 704.7 tons, or about 75 per cent of market economy production in 1980 (see table III.B.1).

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<sup>1/</sup> International Financial Statistics, vol. XXXIV, No. 12 (December 1981), p. 51.

<sup>2/</sup> Monthly Bulletin of Statistics, vol. XXXV, No. 10 (October 1981), p. xiii.

Table III.B.1  
Gold production in the market economy countries  
(Tons)

	1978	1979	1980
Total	978.9	961.3	943.0
Africa	740.6	731.7	704.7
Ghana	14.2	11.5	12.8
Other Africa <u>a/</u>	20.0	16.8	16.9

Source: Mining Annual Review - 1981 (London, Mining Journal, 1981).

a/ Principally Zimbabwe.

(b) Copper

Mine copper production in the market economies in 1980 was slightly down on 1979. The drop of about 270 tons was mainly due to strikes in the United States. However, the loss was offset by increases in Canada, Mexico, and Zaire. African production in 1980 was up a little on 1979, and accounted for about 23 per cent of market economy production (see table III.B.2).

Table III.B.2  
Mine copper production  
(Thousands of tons)

	1978	1979	1980
Market economy countries	6 096	6 119	6 022
Including			
Total Africa	1 372	1 286	1 364
Developing Africa	1 163	1 083	1 149

Source: As for table III.B.1

The price of copper rose rapidly at the beginning of 1980 to a peak of £1,275 per tons in February. Thereafter it drifted downward to reach £859 per ton in June when recovery set in, mainly as a result of the strike in the United States, and the price recovered to £917 in July. From then on, with the recession steadily worsening in most areas of the world, the price fell steadily until December, when it stood at 801.

(c) Tin

The comparatively calm and orderly tin market which had characterized 1979 after the volatility of 1977 and 1978 extended into the opening months of 1980, with the monthly average of the three-month price for high-grade tin rising from £ 7,348 per ton in January to £7,492 in March, falling back to £ 7,368 in June. For the third quarter the tin market remained stable, and then progressively declined under the influence of deteriorating world economic outlook, availability of supplies from the United States and an anticipated natural surplus of tin for the year.

Table III.B.3Mine production of tin in concentrates

(in Thousands of tons)

	1978	1979	1980
World total	197.3	201.6	200.8
Africa	9.2	8.7	8.5
Nigeria	2.9	2.7	2.5
Zaire	3.4	3.3	3.2

Source: As for table III.B.1.

In the last few years, production has remained static in the major tin-mining regions of Africa, Nigeria, Rwanda and Zaire. However, a number of tin-mining countries have drawn up expansion programmes. Production figures are set out in table III.B.3.

(d) Lead and zinc

1980 was an unsatisfactory year for both lead and zinc. The price of lead continued to fall from the high levels it had reached during 1979. The price of zinc remained low throughout 1980, but began to improve at the end of the year. Consumption of both metals in the Western world declined substantially during 1980, that of lead by 340,000 million tons to 3.8 tons and that of zinc by 250,000 million tons to 4.45 tons.

World production of lead in concentrates, at 2.6 million tons in 1980, was slightly above that of 1979. After several years of steady growth, world production of refined lead declined to a total of 4 million tons in 1980, about 6.5 per cent less than in 1979. The most important development during the year was the leap in South African mine production to 132.000 tons (see table III.B.4).

Table III.B.4  
Lead production and consumption  
(Thousands of tons)

	Mine production (metal content)			metal production			Consumption (refined metal)		
	1978	1979	1980	1978	1979	1980	1978	1979	1980
Africa	178	187	302	123	140	154	83	95	105
Morocco	110	116	124	28	37	42	5	4	4
World total	2 535	2 540	2 576	4 066	4 276	4 009	4 070	4 151	3 801

Source: International Lead and Zinc Study Group.

Demand for zinc was quite strong at the beginning of 1980, but the onset of the recession resulted in steep falls in consumption for the year as a whole (see table III.B.5).

Table III.B.5  
Zinc production and consumption

	Mine production (metal content)			Metal production			Consumption (refined metal)		
	1978	1979	1980	1978	1979	1980	1978	1979	1980
Africa	269	237	270	191	179	189	148	158	164
Zaire	83	73	67	44	44	44	-	-	-
Zambia	52	44	60	42	38	33	1	1	-
World total	4 676	4 597	4 530	4 293	4 706	4 462	4 607	4 696	4 447

Source: International Lead and Zinc Study Group.

Structural changes in the industries which are the main users of lead and zinc have affected consumption of lead and zinc. The most significant changes in consumption in the 1980s are likely to stem first and foremost from requirements for construction industries; changing design and markets for motor vehicles and modifications in the design of domestic and other appliances associated with the silicon chip. Despite some hopeful signs, slower industrial growth seems inevitable

for some years to come, leading to slower growth in lead and zinc consumption than in the previous decade.

(e) Aluminium

Total world production of primary aluminium totalled 16.03 million tons in 1980, about 6 per cent more than the figure for 1979. African production of primary aluminium has steadily increased to reach 438,000 tons in 1980, 9 per cent up from 1979. However, total African production represents less than 3 per cent of world production (see table III.B.6).

Table III.B.6.

Aluminium production  
(Thousands of tons)

	1978	1979	1980
World total	14 595	15 111	16 033
Africa	392	401	438
Developing Africa	311	315	350

Source: As for table III.B.1.

In 1980 world consumption recorded its first decline for five years, to 12.2 million tons. This made it possible to boost the low stocks existing at the end of 1979 to 2.2 million tons.

The international list price for primary aluminium rose from \$US 1,600 per ton to \$US 1,750 in March 1980. World capacity is expected to rise from the present level of 14.1 million tons to 17 million tons by end of 1985, an increase of 4 per cent a year.

In the United Republic of Cameroon only 43,000 tons of aluminium were produced in 1980, against 45,000 tons in 1979. An expansion of rated capacity from 55,000 to 81,000 tons a year was completed at the year's end, and the benefits of this expansion should be reflected in output figures for 1981. In Ghana, following power difficulties in the previous year, the Volta Aluminium Company's full capacity output of 200,000 tons a year was almost achieved in 1980: actual output totalled 180,000 tons. The British Aluminium Company's small export-oriented bauxite operation continued at the same level as in previous years, that is about 300,000 tons a year. In Guinea, the capacity of Kimbo alumina plant was increased to 700,000 tons a year compared with an initial figure of 480,000 tons a year. Guinea produced about 12.5 million tons of bauxite in 1979.

(f) Iron ore

World production of iron ore declined by about 3 per cent in 1980, compared with the previous year. Production was estimated at 882 million tons, and trade at 385 million tons. African production followed the world pattern, declining from 64.8 tons in 1979 to 56.5 million tons in 1980 (see table III.B.7). The decline was due mainly to lower demand for iron and steel in the United States and Western Europe, although new markets for iron ore continued to grow in developing countries, including some in Africa. Prices of iron ore marketed in Japan and Western Europe were reported to have increased by as much as 30 per cent in 1980, but most increases were of the order of 15-20 per cent.

Table III.B.7

Iron ore production  
(Millions of tons)

	1978	1979	1980
World total	853.0	909.8	881.6
Africa	53.4	64.8	56.5
Developing Africa	24.2	31.6	26.1
Other Africa	6.3	7.1	6.4

Source: Minerals Yearbook 1981 (Washington, United States Department of the Interior).

In Africa, Liberian exports of iron ore in 1980 totalled 17.5 million tons, 12 per cent less than in 1979. Mauritanian exports of iron ore totalled 8.7 million tons in 1980. In Nigeria, an iron ore pelletizing plant and an electric steel-making furnace were reported to be near completion in 1980. Imports of ore for this project are expected to total 1.5 million tons a year. In Sierra Leone production of iron ore is expected to resume in 1982. Swaziland exported 553,000 tons in 1980.

(g) Manganese

Manganese consumption and demand are predominantly determined by conditions in the steel industry, which has been severely affected by the world recession. Demand for manganese has been further affected by the decision of most major steel works to reduce their inventories. All these factors led to a decline in production and consumption of manganese during 1980. Production in Africa declined to 6.8 million tons in 1980 from 7.7 million tons in 1979. Production figures are set out in table III.B.8.

Table III.B.8  
Manganese production  
(Thousands of tons)

	1979	1980
World total	27 000	25 300
Africa	7 713	6 800
Gabon	2 000	1 800

Source: As for table III.B.7.

Future expansion in the manganese industry depends on prospects for the world steel industry and the quantity of manganese consumed per ton of steel produced. As a result of the situation in the steel industry, there has already been a marked cut-back in the volume of manganese ore imports by most of the major steel-producing countries, and a sharp upswing in manganese alloy imports. This trend is expected to continue.

(h) Chromite

Fully 99 per cent of world chromite resources are situated in Southern Africa, including 23,000 tons in South Africa and a further 1,000 tons in Zimbabwe.

Table III.B.9  
World chromite production  
(Thousands of tons)

	1979	1980
World total	10 498	9 900
Africa	4 231	4 000
Zimbabwe	597	550

Source: As for table III.B.7.

World mine production of chromite in 1980 fell to 9.9 million tons from 10.5 tons in 1979 (see table III.B.9). South Africa remained the largest world producer in 1980, but its output was slightly lower than in the previous year. In Zimbabwe, transport difficulties continue to hamper the renewed expansion of the mining industry. However, about \$Z 20 million is to be spent to expand output of chromite and ferrochrome. At present, the country's three chrome mines are functioning on a "care and maintenance" basis.

At the end of 1980, the United States price for South African chromite was slightly lower than a year earlier, down from \$US 56 to \$US 55 per ton. In the short term, the outlook for chromite and ferrochrome production depends basically on the duration of the present recession in the world economy and on the resumed expansion of stainless steel production. Assuming that energy costs continue to rise, a continuation of the present trend towards processing ore in the producing countries and shipping ferrochrome to the industrialized countries seems likely to continue.

#### (i) Cobalt

The continuing high price of cobalt since 1978 has encouraged the recycling of cobalt-containing products, and total recovered cobalt in 1980 is estimated at about 2,500 tons. However, there is a limit to further expansion of the secondary cobalt industry.

Table III.B.10

Cobalt production in the market economy countries  
(in thousands of tons)

	1978	1979	1980
Total	21 200	24 150	25 855
Africa	15 000	16 250	17 700
Zaire	13 300	13 000	14 000
Zambia	1 700	3 250	3 700

Source: As for table III.B.1.

About 70 per cent of prime cobalt in the market economy countries is produced in Central Africa (see table III.B.10). In 1980 most consumers tried to reduce their stocks because of the high cost of financing and in expectation of a reduction in producer prices.



(j) Mercury

Mercury performed better than any other metal in 1980 despite very difficult trading conditions. The United States Bureau of Mines estimated world production of mercury in 1980 at 190,200 flasks, much the same as in 1978 and 1979. Algeria maintained its position as a major producer, with estimated production of about 30,000 flasks.

(k) Phosphates

The world phosphate rock mining industry produced a total of 136 million tons of concentrate in 1980, an increase of 7 million tons (5 per cent) over the previous year's level. Most of the major countries producing phosphate rock contributed to this increase by operating at higher levels of capacity utilization (see table III.B.11).

Table III.B.11

Phosphate rock production  
(Thousands of tons)

	1978	1979	1980
World total	124 669	128 667	135 855
Africa	31 637	33 054	32 105
Developing Africa	28 838	29 833	28 823

Source: As for table III.B.1.

The combined production of the three North African producers fell by 0.9 million tons in 1980, almost entirely as a result of reductions in Morocco. Only Tunisia increased output, by 0.5 million tons, in connexion with the expansion of its export-oriented fertilizer industry. Algerian production remained unchanged at just 1 million ton.

Morocco is carrying out a major programme of investment that involves modernizing and expanding its phosphate mining industry, while at the same time developing capacity for secondary processing into phosphoric acid and fertilizer. The long-term objective is to raise the proportion of its phosphate rock production processed locally from 12-13 per cent to 30 per cent. As Tunisia prepares to initiate its sixth development plan (1982-1986), the phosphate mining industry has outlined projects that are intended to up-grade its capacity to 10 million tons a year by the end of the decade.

The combined phosphate rock output of Togo and Senegal fell by 150,000 tons in 1980 as a result of a temporary cut-back at the mine in Senegal. In Togo the opening of a new mine will lead to a 25 per cent rise in output.

In Egypt work continues on the development of a small mine producing 350,000 tons a year, just enough to meet the requirements of the country's first phosphoric acid project which is due to commence production in 1983. The South African phosphate industry is wholly geared to the requirements of the domestic transformation industry, including the two big export-oriented phosphoric acid plants.

### (1) Diamonds

The depressed atmosphere of 1980 extended to the diamond industry. In the first quarter of 1980, sales were fairly buoyant, but demand weakened progressively as the year wore on.

Data on diamond production appear in table III.B.12. The record production in Botswana reflected mine extensions. In Lesotho the grade fell but diamond production increased marginally, to 53,714 ct. Angolan diamond output reached the highest annual level for 5 years. In Ghana only about 15 per cent of production is of gem quality. Prospecting continued on a fairly extensive scale in Africa during 1980s, but much of it appears to have been concentrated in Southern Africa. So far results are encouraging.

Table III.B.12

#### Production of natural diamonds (Millions of metric carats)

	1977	1978	1979	1980
Zaire	17.0	17.0	15.5	14.0
Botswana	2.66	2.8	4.4	5.1
Namibia	2.0	1.9	1.65	1.56
Angola	0.5	0.65	0.84	1.5
Ghana	2.24	1.5	1.5	1.1
Sierra Leone	0.75	0.8	0.85	0.6
Liberia	0.5	0.5	0.5	0.5
United Republic of Tanzania	0.4	0.35	0.34	0.35
Ivory Coast	0.1	0.1	0.1	0.1
Other countries	13.8	13.7	13.7	13.7
World total	47.85	47.3	47.98	47.21

Source: As for table III.B.1.

Western consumption of natural and synthetic diamonds, excluding tools and die-stones, probably exceeded 100 met in 1980. Synthetics today account for roughly 80 per cent of Western demand. Consumption in eastern bloc countries is extremely difficult to assess, but 30-40 met is a very rough estimate.

### 3. Main policy issues

As has already been indicated, the world recession has been acutely felt by the African mining industry. In Liberia, Mauritania, Sierra Leone, Swaziland, Zaire and Zambia the meagre demand for iron and copper and the consequent low prices for the ores depressed export receipts, while new investment in the mines was for the most part halted. Moreover, in Liberia and Swaziland the iron ore mines were almost wholly depleted during the 1970s, and will therefore have to be closed at great loss to the countries concerned. However, in countries like Botswana and the Niger the mining economy has been booming. In the Niger uranium production increased substantially, producing considerable revenue, while in Botswana diamond exports increased eightfold between 1974 and 1980 and now represent 35 per cent of GDP. However, prospects for the Niger have dimmed recently as a result of a fall in the price of uranium to a level at which the profitability of continuing operation is jeopardized.

Price problems apart, mining production is plagued by a continuous shortage of skilled labour, be it for mineral prospecting or for actual mine management and operation. Most of the skilled labour has to come from overseas, and in many cases foreign labour is necessary even at the foreman level. Falling prices and low revenues have meant a reduction in resources available for investment, and basic repair and maintenance work has been neglected in some cases. This was particularly evident in Zaire, where the industry has suffered additionally from organizational problems, especially in the giant Gécamines company. The problem of increasing costs stemmed from the depletion of the most easily mined deposits, and particularly affected diamond production. Both in Sierra Leone and in Zaire alluvial deposits of diamonds are rapidly being exhausted, and future production will have to rely on deep layers requiring heavy equipment and substantial investment.

African Governments have however endeavoured to overcome the present difficulties. New efforts have been made to expand mining exploration, with notable successes, for example in the Niger, where additional uranium deposits have been identified. The policy of extending State control has been continued, a recent example being the proposed establishment of a Minerals Marketing Corporation in Zimbabwe. This is expected to improve export earnings by putting an end to the prevalent practices of underinvoicing and transfer pricing, while ensuring that the rate of exploitation of mineral resources is consistent with national objectives. Other countries plan to revive the depressed mining sector through administrative

reforms and new investment; under the Mobutu Plan Zaïre has allocated 34.5 per cent of public investment in 1981-1983 to the mining sector, and Gécamines is to receive 1,956 million Zaires or 28.5 per cent of public investment.

#### 4. The situation in 1981

Mineral prices were unfavourable in 1981, and in the third quarter the IMF index of wholesale prices of metals was 13.8 per cent down on the corresponding period in 1980. Demand for minerals was weak throughout the year, notably in Zaïre, where exports of copper and cobalt for the two first quarters at an annual rate were half the 1980 level. In Zimbabwe difficulties arose concerning the proposed Mineral Marketing Agency: objections have been raised by foreign companies, and there are fears that the project will jeopardize investment. The Niger was another country hit by generally weak prices, and the uranium price obtaining in 1980 was 12 to 15 per cent below previous levels in real terms. This situation threatens the country's entire development strategy, as the Government is counting on uranium revenues to finance investment. In 1980 alone such receipts represented 33 per cent of government revenues. Similarly, in Botswana, a major diamond producer, exports are likely to be 36 per cent lower than in 1980. However, the longer-term perspective is not unfavourable. Although demand for minerals has been depressed by the present world recession, it is bound to increase again. A good indication of the future prospects of the mining industry may be seen in the large investment announced in Mauritania during 1980 for the development of the Guelbs iron deposits, with the support of the World Bank and the participation of Middle Eastern interests.

## C. ENERGY

### 1. Introduction

A basic feature of the energy situation in developing Africa is the low level of energy consumption. This is a direct consequence of the low level of development, and is well expressed in the estimated consumption of commercial energy at around 200 kg of coal equivalent per head in 1979, against a world average of around 2,000 kg per head. A large proportion of total energy consumption is met through non-commercial sources of energy such as firewood, animal dung and crop wastes, which are chiefly used by households. In the rural areas these products may account for 60 per cent or more of total energy requirements. In Africa the elasticity of energy consumption relative to GDP, or the ratio between the percentage increase in energy consumption and the percentage increase in GDP, is high in comparison with developed countries, reflecting the predominance in African economies of non-energy-using sectors (agriculture, which contributes 25 per cent of GDP, uses very little energy, and except in north Africa and north-eastern Africa does not even use animal traction) and the overwhelming emphasis which development plans place on the industrialization strategy.

If energy consumption is low, energy resources are abundant, and the gap between production and consumption is very wide; in 1979 commercial energy consumption amounted to only 15 per cent of primary commercial energy production. This gap has in fact increased in the 1970s with the development of the oil industry and the resulting growth of oil exports. But many African countries lack the expertise for adequate exploitation of their energy resources, and are experiencing energy problems despite considerable potentialities. The importance of developing Africa as a whole remains internationally negligible; its total commercial energy consumption in 1978 represented only about 1 per cent of the world total, and its production 5.4 per cent.

Although energy resources are abundant on the continent, their distribution is such that most African countries have to import oil. The rises in oil prices since 1973 have had a serious impact on economic performance, and especially on industrial growth, domestic inflation and the external balance. The effect of the price increase of 1979 and 1980 has been particularly acute, and a number of African countries are now facing serious difficulties in financing oil imports.

### 2. Energy consumption

There are no reliable statistics on consumption and production of non-commercial energy in Africa. However, the evidence indicates that the increase in oil prices since 1973 has led to a shift away from oil products towards traditional energy products like firewood and charcoal. But increased demand for these products has come up against a non-elastic supply of wood arising from a rapidly dwindling forest base in the region.

As a result, prices have gone up sharply, more than doubling in some countries of the Sahel and eastern Africa. This has brought severe hardship to the poorest strata of the urban population, while in the rural areas the scarcity of firewood and related products has meant more work on firewood collection, imposing a greater burden on the female population. The prevailing situation concerning firewood and related products is in some respects worse than the oil crisis, both because of the greater number of people affected and because of its implications in terms of soil erosion and future wood supplies.

Table III.C.1  
Commercial energy consumption in developing Africa  
(Millions of tons of coal equivalent)

Year	Total	Solid fuels	Liquid fuels	Natural gas	Electricity
1973	56 209	6 529	41 294	4 359	4 026
1974	59 482	6 313	44 377	4 507	4 279
1975	63 372	6 732	47 059	5 090	4 489
1976	70 412	6 701	52 104	6 755	4 853
1977	72 328	6 199	55 525	5 530	5 074
1978	80 229	6 639	59 632	8 953	4 995
1979	81 678	6 816	60 253	9 370	5 289

Source: 1979 Yearbook of World Energy Statistics (United Nations Publication, Sales No. E/F.80.XVII.7).

Liquid fuels or oil-derived fuels have an overwhelming share in the energy balance. According to data on commercial energy for 1979 they represented 73.8 per cent of total consumption, compared to 8.3 per cent for solid fuels, 11.4 per cent for natural gas and 5.8 per cent for electricity. Despite the higher cost of oil products, the predominant share of oil-derived fuels has not changed significantly since 1973, when they made up 73.5 per cent of total consumption; the share of electricity and solid fuels has fallen since 1973, when they accounted for 11.6 per cent and 7.2 per cent of total consumption respectively, while the share of natural gas has risen significantly from 7.7 per cent of total consumption in 1973.

Complete information is not available for 1980, but the trend in commercial energy consumption can be ascertained from partial information available for groups of countries and different types of fuel. Concerning oil consumption, which more or less determines the trend in over-all commercial energy consumption because of its weight in the energy balance, the evidence shows that non-oil-producing African countries encountered serious difficulties during the year in financing their oil imports because of the considerable rise in the price of oil in 1979-1980. Their oil bills in some cases have risen to as much as 30 per cent of total imports, and in many cases, they have been forced to restrain growth in consumption of oil products or even reduce their consumption, with direct consequences for economic growth. This is reflected in the evolution of exports

from oil exporters to this category of countries, which increased in value by 46.1 per cent in 1980 but fell in volume by 13 per cent. Similarly, import data from 20 non-oil-exporting African countries show a fall of 33.6 per cent in the volume of oil imports in 1980. According to information supplied by the economic weekly Marchés tropicaux et méditerranéens, petrol consumption increased by only 1.5 per cent in 1980 in non-oil-producing African countries, compared to a rate of 7.9 per cent for oil producers. In the countries belonging to the West African franc zone, growth in consumption of petroleum products fell in 1980 by around 1.2 per cent, against 6.4 per cent in 1979 and 7.2 per cent in 1980.

In individual countries the data are similar. Consumption of petroleum products in Morocco fell sharply in 1980 to 4 million tons as against 4.6 million tons in 1979 (a fall of 13 per cent). In the Sudan total crude oil consumption has remained around 1 million tons since 1977/78. In Ethiopia the value of fuel imports increased considerably by 73.4 per cent in 1979/80, reflecting the price rises, but the volume increase was in the range of 10 per cent only, and forecasts for 1980/81 indicate a fall of 21.8 per cent, meaning a sharp reduction in the volume of supplies. In Madagascar, imports of fuels increased in value by only 28 per cent in 1980, although prices have gone up by more than 60 per cent. The introduction of rationing by Ethiopia, Sudan and the United Republic of Tanzania is an additional sign of the critical petroleum supply situation.

In African oil-producing countries, particularly the OPEC members, the situation has been quite different. According to OPEC sources, oil consumption in Algeria, Gabon, the Libyan Arab Jamahiriya and Nigeria was projected to rise 10.8 per cent to 430.2 thousand barrels a day in 1980 as against 388.1 thousand in 1979. In Egypt, the largest African energy consumer and a non-OPEC producer, consumption of oil products has increased rapidly growing by 9.5 per cent to around 11.5 million tons in 1980 as against 10.5 million tons in 1979.

Consumption of other types of energy than oil has not developed favourably. Coal production, which is concentrated in a few countries only, in fact fell slightly in 1980 by 1 per cent relative to 1979, a strong indication that consumption has not increased, since exports are minimal and storage is uneconomic. For electricity, for which there is also a close correlation between production and consumption, production seems to have increased by about 6 per cent for total electricity production (hydro and thermal electricity) against 10.2 per cent in 1979. Gas consumption has increased rapidly in recent years, but all the increase has taken place in oil-producing countries, notably Algeria and the Libyan Arab Jamahiriya. Algeria alone is reported to consume a total of 2.1 billion cubic metres out of total African consumption of 4.2 billion cubic metres in 1978.

Overall, because of the preponderance of oil-producing countries in energy consumption (around 61 per cent of the total in 1979), total commercial energy consumption in Africa may have risen substantially in 1980. But for non-oil-producing African countries, commercial energy consumption is unlikely to have risen much, and its rate of growth

may have been as low as 2 to 3 per cent. Indeed, available information points to a sharp reduction in commercial energy consumption in these countries since 1975 at least. This development has serious implications for growth since the high energy intensity of African economies means that economic growth is necessarily accompanied by higher growth in energy consumption. The situation is entirely different from the case in industrialized countries, where energy intensity has fallen as oil prices have risen as a result of concentrated efforts to move away from oil-based energy and use oil more economically. African governments have pursued policies designed to limit oil consumption through rationing and by raising prices to world levels. These policies have extended to other forms of energy as well, and in some countries like the Gambia and Ethiopia strict controls have been imposed on charcoal production and wood cutting. But the scope for reducing energy consumption per unit of GDP is limited in African economies, and there seems to be no alternative to prospecting for oil deposits where oil is not at present produced and further exploitation of other sources of energy like hydropower. In the short term, however, the real prospects for non-oil-producing African countries are for reduced growth in energy consumption and therefore a reduced rate of economic growth.

### 3. Energy production

In 1979 developing Africa produced about 513 million metric tons of coal equivalent of commercial energy, which is equivalent to 5 per cent of the world total. Production of liquid fuels (oil fuels) made up about 93 per cent of the region's total production.

The 513 million tons of coal equivalent represented growth of 8.5 per cent relative to 1973. Production of liquid fuels grew by 3.8 per cent, while production of solid fuels, natural gas and electricity grew by about 3.3 per cent, 3.4 per cent and 12 per cent respectively. But between 1973 and 1979 growth in commercial energy production was low (2.3 per cent) because of cut-backs in oil production. Over the same period production of liquid fuels grew by only 2.1 per cent a year, against 11 per cent for natural gas and 8.4 per cent for electricity; production of solid fuels declined by 1.3 per cent a year.

World oil production declined by about 4 per cent in 1980. Although non-OPEC production rose, this was more than offset by the 12 per cent decline in OPEC output. The fall in production reflects both the production cuts adopted by OPEC in the second and third quarters and the dramatic reduction in Iranian and Iraqi output after the outbreak of fighting between the two countries. African production broadly followed the same pattern, largely reflecting production cut-backs by the three largest African OPEC producers, Algeria, the Libyan Arab Jamahiriya and Nigeria, and declined by 9 per cent. Sharp production increases were, however, recorded by Angola, the Congo and the United Republic of Cameroon, and the Ivory Coast emerged as a producer. In 1981 the continued fall in world demand forced further production cut-backs, and the three major African producers had to face a sharp reduction in external revenues. Production is estimated to have decreased by around 14 per cent, while prices were slightly reduced. Some marketing problems were encountered when the prices demanded by certain African producers were considered too high by some consumer countries.



Table III.C.2  
Production of commercial primary energy in the ECA region

(Millions of metric tons of coal equivalent)

Year	Total	Solid fuels	Liquid fuels	Natural gas	Electricity
1973	442 330	5 768	420 732	11 826	4 009
1974	409 303	5 226	387 928	11 937	4 242
1975	380 170	5 571	355 759	14 380	4 450
1976	354 454	5 710	425 343	13 424	4 977
1977	475 626	5 189	448 836	16 026	5 575
1978	472 812	5 144	439 716	22 112	5 836
1979	512 900	5 338	478 173	22 852	6 538

Source: As for table 1.

The ECA secretariat has estimated Africa's ultimate petroleum resources at between 22,000 and 32,000 million tons of recoverable petroleum. The encouraging results obtained in recent years have provided grounds for adopting the higher figure. Total discovered recoverable petroleum resources as of the beginning of 1980 are 11,90 million tons, or 8.4 per cent of world petroleum resources. This means that African petroleum resources yet to be discovered represent 20,100 million tons, or about 10 per cent of world unidentified resources. Petroleum reserves as of January 1980 were estimated at 8,203 million tons, or 9.36 per cent of the world total.

Table III.C.3

Oil production

(Millions of tons)

	1979	1980	Percentage change
World total	3 189.1	3 065.6	-3.9
Developing Africa	319.3	291.0	-9.0
Nigeria	113.5	101.0	-11.0
Libyan Arab Jamahiriya	98.9	85.6	-13.5
Algeria	53.2	44.9	-15.7
Egypt	26.0	30.0	15.7
Other Africa	27.7	29.5	6.4

Source: Adapted from Petroleum Economist (January 1981)

In 1980 there was an increase of about 5 per cent in total world demand for natural gas over the 1979 level. Commercial production of gas in developing Africa amounted to 20,128 billion cubic metres, or 1.6 per cent of world production, and it was estimated at the end of 1979 that Africa had reserves of over 6,000 billion cubic metres of recoverable natural gas or 2 per cent of world reserves.

Table 4 gives commercial production of natural gas in some African countries for the period 1974-1980. The data relate to natural gas actually collected and utilized as fuel or raw material, excluding gas used for re-injection, gas flared and vented and the shrinkage resulting from the removal of natural gas liquids. Production in the countries listed increased by about 55 per cent in 1978 over the 1977 level, principally as a result of production increases of 55 per cent in Algeria and 24 per cent in Tunisia together with a 24 per cent decrease in production in Nigeria, these three countries being major African producers of natural gas. In 1979 and 1980, however, the rate of growth of production fell sharply (see Tables 2 and 4). The fall was particularly marked in the case of the largest producer, Algeria, whose production potential is estimated at 100 billion cubic metres a year.

Table III.C.4

Production of natural gas in some African countries  
(Monthly averages) (Terajoules)

	1974	1975	1976	1977	1978	1979	1980
Algeria	13 503	19 209	26 390	19 050	31 702	31 996 a/	...
Gabon	2 072	350	574	570	536	...	...
Morocco	205	247	201	226	250 a/	250 a/	...
Nigeria	1 314	1 307	2 055	1 525	1 236	1 567 a/	1 800 a/
Tunisia	770	808	821	803	1 007	1 264	1 362
Total	17 964	22 501	30 129	22 363	34 821	...	...

Source: Monthly Bulletin of Statistics, vol. XXIV, No. 10 (October 1981).

a/ United Nations estimates.

Coal production in Africa excluding South Africa fell slightly in 1980 by around 1 per cent. Coal reserves and production are not important in Africa, and in 1979 developing Africa's share in world production was only 0.2 per cent. Zimbabwe is the only significant producer.

In view of their considerable potential for hydroelectric power, the rise in oil prices and the flexibility of electricity compared with other forms of energy, African countries have made significant efforts to increase electricity production. As table 5 shows, electricity production increased by 7.7 per cent a year on average from 1973 to 1978. The increase for hydroelectricity was of the order of 8.7 per cent, with a fall in the share of thermal electricity. In particular, the share of thermal electricity in total capacity, which was 52.5 per cent in 1968, fell to 43.4 per cent by 1978. Installed capacity itself grew by 22 per cent.

Results for 1980 were not favourable. According to information based on 14 countries which are among the largest producers, electricity production increased by only 5 per cent in 1980, in sharp contrast to the figure of around 11 per cent in 1979 (table 7).

Table III.C.5

Coal production in some African countries

(Monthly averages)

(Thousands of metric tons)

Country	1974	1975	1976	1977	1978	1979	1980
Morocco	48	54	59	59	60	60	57
Mozambique	36	48	31	26	10	27	33 a/
Nigeria	25	20	26	22	22	14	15 a/
Zambia	63	68	64	59	51	50	48
Zimbabwe	...	275	293	252	255	266	251
Total	...	465	479	418	398	417	414

Source: As for table 4.

a/ United Nations estimates.

Table III.C.6

Electricity production and installed capacity  
in developing African countries

	Total produc- tion (GWh)	Share of thermal production (Per cent)	Hydroelec- tric produc- tion (GWh)	Installed capacity (MW)	Share of thermal plant (Per cent)	Use of in- stalled capacity (hours)
1968	30 545	38.0	10 934	10 317	52.6	2 961
1969	33 377	33.5	22 205	12 194	50.2	2 737
1970	36 338	32.1	24 573	12 016	47.4	2 813
1971	39 114	32.9	26 243	13 228	46.1	2 957
1972	42 744	32.2	28 975	14 467	45.6	2 955
1973	47 433	35.1	30 772	15 643	44.4	3 032
1974	51 132	32.9	34 301	15 887	44.4	3 218
1975	55 442	34.5	36 320	16 532	43.9	3 354
1976	61 831	35.2	40 071	17 776	45.4	3 478
1977	66 801	33.1	44 671	18 910	43.8	3 533
1978	69 955	32.1	47 522	19 121	43.4	3 659

Source: "Energy resources in Africa," paper prepared by the ECA secretariat for the Joint OAU/ECA Meeting of African Experts on Energy, held in Addis Ababa from 24 to 28 March 1980, p. 216.

Production of electricity in some African countries  
(monthly averages)  
(Millions of kWh)

Country	1974	1975	1976	1977	1978	1979	1980
Algeria <u>a/</u>	218	253	310	345	400	457	458 <u>a/</u>
Ghana <u>b/</u>	343	333	352 <u>a/</u>	358 <u>a/</u>	314	392	...
Ivory Coast <u>a/</u>	71	80	93	104	118	126	153
Kenya <u>b/</u>	72	81	93	93	93	125	...
Malawi <u>a/</u>	10	22	23	25	26	30	32
Mauritius <u>b/</u>	25	27	32	26	28	30	30
Morocco <u>a/</u>	217	235	257	287	299	342	371
Nigeria <u>b/</u>	236	253	329	342	404	433 <u>a/</u>	...
Tunisia <u>a/</u>	91	100	112	127	149	173	203
Uganda <u>a/</u>	65	61	50	60 <u>a/</u>	56 <u>a/</u>	54 <u>a/</u>	54 <u>a/</u>
United Republic of Cameroon <u>b/</u>	99	110	111	112	109	112	112 <u>a/</u>
United Republic of Tanzania <u>a/</u>	44	47	55 <u>a/</u>	58 <u>a/</u>	57	61	60 <u>a/</u>
Zambia <u>b/</u>	490	515	587	724	557	731	767 <u>a/</u>
Zimbabwe <u>b/</u>	405	511	470	326	377	353	378
Total	2 482	2 654	2 831	2 987	3 037	3 419	...

Source: As for table 4.

a/ Gross production by enterprises whose main purpose is the generation of electric energy for public use.

b/ Total gross generation of electricity, including generation by industrial establishments primarily for own use.

Trends in the production of the different types of energy would suggest that commercial energy production in Africa in 1980 fell by around 8 per cent, above all because of the drop in oil production, which as already mentioned makes up more than 93 per cent of total production. In 1981 the downward trend in oil production continued; production dropped by 14.6 per cent in Algeria, 23 per cent in the Libyan Arab Jamahiriya and 14 per cent in Nigeria, and by an estimated 14 per cent overall.

For non-commercial energy production, available data on global production end in 1978. They show a declining rate of growth in the production of firewood in 1977 and 1978, an indication of supply difficulties in the face of growing demand. The reason, as has already been pointed out, is rapid deforestation in many areas.

It is clear, then, that if present trends in energy production are downward, this is due to conditions in the oil market, with reduced consumption of oil in industrialized countries compounded by deliberate reduction in output by OPEC oil producers. But the considerable energy potential of Africa is beyond doubt. The Ivory Coast, the United Republic of Cameroon and other countries have started to produce, production prospects have been considerably enhanced in the Congo, and a number of significant oil discoveries have been made recently. For electricity Africa has considerable reserves, with a third of the world's hydroelectric potential. Another promising area is natural gas most of which is unfortunately burned off and wasted in the oilfields at present, although it could make an important contribution to solving present difficulties. In Nigeria, for example, it is estimated that of total production of 24.3 billion cubic metres only 500 million (2 per cent) is used. Of total African gross production of 92.3 billion cubic metres in 1979 only 22.83 billion was used, 90.4 per cent of it (20.63 billion cubic metres) by Algeria and the Libyan Arab Jamahiriya. This means that a quantity of gas equivalent to 60 million tons of oil - more than the total consumption of Africa - was wasted. However, this must be seen in the context of the considerable investment which would be necessary to exploit the gas, as well as the fact that technical expertise is in very short supply in African countries. This also limits the scope for indigenous use of uranium deposits, which are abundant in Gabon and the Niger, and have been reported in several other countries.

Table III.C.3

Production of fuelwood and charcoal

	Fuelwood (Millions of cubic metres)			Charcoal (Millions of tons)		
	World	Africa	Percentage	World	Africa	Percentage
1973	1 120 700	269 110	24.01	3 983	67	2.17
1974	1 144 003	276 831	24.20	4 124	92	2.23
1975	1 158 726	285 327	24.62	4 599	93	1.98
1976	1 177 337	292 760	24.87	5 109	95	1.86
1977	1 182 772	297 325	25.14	4 054	97	2.39
1978	1 191 383	298 584	25.06	4 600	100	2.17

Source: "Energy resources in Africa", op.cit., p. 204.

4. External trade in sources of energy

The world market for oil, the major source of energy traded internationally, changed considerably during 1980. For the first three quarters of the year, the market was in surplus; by September it was estimated that there was a surplus of 2-3 million barrels a day. As a result, many OPEC countries announced a 10 per cent cut in production. However, when war broke out between Iraq and Iran towards the end of September, some 4 million barrels a day of crude oil exports were lost to the market and the previous surplus turned into a potential shortage.

Table 9 records the changes in prices of crude oil during 1980. The official sale prices of oil increased during 1980, but these increases were of a much more moderate nature than those of 1979; between January 1980 and late 1980 they amounted to around 15 per cent. However, the official price quotations do not reflect the premiums and surcharges sometimes added, which are market-related and often apply to additional quantities and/or certain customers. It was estimated in December 1980 that some 13 per cent of OPEC's crude oil was sold with premiums attached.

At present, more oil than ever is being sold on the spot markets, and this implies a reduction in emphasis on long-term contracts. The spot market price for OPEC crude oil in 1980 reflected supply conditions. Spot prices weakened during the first nine months of 1980, but, with the shortages caused by the war, between Iraq and Iran, increased in the last quarter of 1980.

Table III.C.2

OPEC spot crude oil prices in 1980  
(US dollars per barrel)

		Quarters				
		API	First	Second	Third	Fourth
Algeria	Saharan					
	Blend	44.1	39.75	38.50	35.03	40.95
Angola	Cabinda	31.7	37.66	35.73	33.17	39.18
Egypt	Belayim	26.0	31.08	30.21	28.52	35.94
Gabon	Gamba	31.8	37.20	36.03	33.19	39.15
Libyan Arab						
Jamahiriya	Brega	40.0	39.28	37.99	34.43	40.30
Nigeria	Bonny Light	37.4	39.39	38.25	34.47	40.75
Saudi Arabia	Light	34.0	36.69	35.96	33.15	39.95
United Republic of						
Cameroon	Kole	33.5	37.66	36.40	33.29	39.18

Source: OPEC Bulletin, vol. XII, No. 9 (September 1981), table 1 and 2

Note: All prices on 30 days' credit.

Conditions on the world oil market moved back towards surplus during 1981 as oil consumption in the industrialized countries fell by a further 4 per cent in the first quarter after falling by 7 per cent in 1980. As a result the major African oil exporters, Algeria, the Libyan Arab Jamahiriya and Nigeria, had to reduce exports and were not always able to maintain the price increases imposed in 1980. In Algeria the growth of exports slowed down considerably; the rise was only 3.5 per cent in the second quarter of 1981 relative to the second quarter of 1980, compared with 50.8 per cent from 1979 to 1980. Moreover, marketing difficulties appeared by the end of the year as some customers sought a reduction in Algerian prices. The most serious difficulties were encountered concerning the price of natural gas, a major resource whose price Algerian producers want to be

related to the price of crude oil on an energy equivalence basis; this would give a figure of around 6 dollars per million BTU. Negotiations with European and North American customers have been hard, and to date, contracts representing 27.5 billion cubic metres of gas have been suspended or abandoned. But a contract has been signed with a European customer at a price of 5 dollars per billion BTU, and a new contract has been announced with France.

In the Libyan Arab Jamahiriya, oil production fell to 650,000 barrels a day in October 1981 against 1.6 million in 1980, and price reductions of 1.1 dollars per barrel were approved by the authorities to stimulate exports. The value of exports was down by 7 per cent in the second quarter of 1981 relative to 1980. In Nigeria, oil production fell rapidly during the year before moving up in September but, overall, oil revenues may fall by about 15 per cent. This would mean a considerable reduction in the trade surplus, to 2 billion naira from 4.2 billion naira in 1980, and serious difficulties in financing development. Total African oil exports may have fallen by as much as 10 per cent in real terms in 1981, and exports from the major African oil exporters may have been as low as \$48.7 billion in 1981, after reaching \$66.8 billion in 1980. The improvement in the terms of trade in 1981 was minimal, and insufficient to offset the drop in volume suffered by oil exporters.

#### 5. The energy crisis and its impact on developing Africa

There is increasing agreement among energy experts that energy supply will be tight for the rest of the century. Most projections of world energy supply and demand reveal growing concern about bringing them into balance in the "transitional" period encompassing the next 20 to 30 years. Despite the recent low economic growth rates and despite the declining ratios between energy growth and GDP growth, demand for energy will continue to rise, at least in developing countries, and this means that there is likely to be a shortfall in energy supplies.

An over-all physical shortage of energy in the future is conceivable, though highly unlikely in view of the abundant resources of coal and nuclear fuels. The real problem for the present, however, is not one of absolute shortage, but of the high prices charged for oil, which has come to make up more than 45 per cent of current commercial energy consumption. Because of the difficulties involved in shifting rapidly to other forms of energy, the high price of oil has forced non-producers to limit their consumption, and as a result they have suffered a significant loss of national income.

One should not neglect the contribution of oil to the development of oil-exporting developing countries. Vast resources have been gained which should enable them to accelerate their growth far above the targets laid down in the International Development Strategy. Nevertheless, the circumstances of the oil exporters in the ECA region are very varied indeed. Egypt and Nigeria, one a middle-income country and one a low-income country, have large populations, and their increased oil income can be fully absorbed by the internal needs of development. Even in per capita terms the oil income of these two countries is far below the figure for the Libyan Arab Jamahiriya. Even allowing for substantial increased consumption and domestic development, a considerable proportion of the latter's oil revenues are available for investment abroad.

The oil-importing African countries, on the other hand, are facing a very difficult period of adjustment as a result of the increased cost of oil imports. In countries, like the Ethiopia, Kenya and the Sudan, oil imports now absorb over 30 per cent of total export earnings, and for most African oil-importing developing countries the oil bill weighs heavily on their trade balances. Rises in oil consumption have slowed down or even been reversed in real terms, and the present large trade deficits of these countries can hardly be sustained indefinitely.

Various measures have been adopted to lessen the impact of the energy crisis. Both physical control and policy measures have been introduced, to varying degrees, by most oil-importing countries in the region. But their room for manoeuvre in reducing oil consumption or preventing it from rising without adversely affecting the functioning of the whole economy and jeopardizing output is generally very slight. It is therefore of paramount importance for these countries to secure an adequate volume of oil imports, and this highlights the finance problems they face.

Prospects for financing the oil import bills of African countries through foreign aid flows are not encouraging, so internal solutions must be found to the problem. In the short term these would entail the expansion of exports to help pay for imports and the domestic marketing of oil products at real cost-based prices to stimulate oil savings. This pricing policy would also be a very effective tool in fostering a shift to other energy sources. In this respect attention must be drawn to the fact that most African countries have not been adequately surveyed as far as mineral resources are concerned, and the experience of the Congo, the Ivory Coast and the United Republic of Cameroon, which are about to become significant oil producers, is proof that oil exploration should be promoted to the maximum. More recently, oil discoveries have been announced in a number of countries, and there are indications that several of them may become self-sufficient in oil in the not too distant future. It now appears that vast reserves of oil are to be found along the whole West African coast, and production may reach a high level in the 1990s, transforming the economic prospects of the countries of the region. As for resources, other than oil, Africa has a vast potential in hydroelectricity, in addition to significant gas, peat and uranium deposits. However, Governments have so far not done enough to exploit existing possibilities. In some cases the exploitation of valuable resources like the methane gas of Lake Kivu, which could be used by the bordering countries, has been hampered by institutional problems, while the relatively large deposits of peat in Rwanda and Burundi have yet to be fully mined. There are other possibilities open to African countries, such as the exploitation of biomass, which is already a traditional activity in Ethiopia, and the development of geothermal energy, which provides high energy output at low cost, in addition to the less immediate possibilities in solar energy and wind power, which are now at the research stage.



It is clear that the development of African energy resources will require substantial investment. Rough projections by ECA which replace those previously published in the 1979-1980 Survey indicate that the investment required may range between \$102 billion and \$130 billion dollars at 1980 prices during the 1980s, or around \$13 billion a year. However, this sum represents only 3 per cent of developing Africa's GDP in 1980, and 2.6 per cent of the average GDP of developing Africa in the 1980s, assuming a real growth rate of 4 per cent a year. Considering that capital formation in developing Africa represented 25.4 per cent of GDP in 1980, the mobilization of such sums is not a priori impossible. The capacity to invest is not evenly distributed in Africa, and some may argue that non-producers of oil could face a shortage of funds. But even among them the capital formation ratio was estimated at 21 per cent in 1980, and even if all of \$12 billion needed each year for energy investment was entirely accounted for by non-oil-exporting countries, this would amount to only 7 per cent of their 1980 GDP. The task of easing energy difficulties during this decade is therefore not an impossible one, considering the real possibility that a significant part of the investment required in the case of exportable resources like oil and gas will originate from external sources, as it does at present.

## D. MANUFACTURING

1. General performance

As far as manufacturing industry in Africa was concerned, 1980 was generally a year of substantially slower growth. The rate of increase in manufacturing value added decelerated to only 5.1 per cent in real terms, compared to 7.5 per cent in 1979. Among the reasons for the slow expansion were soaring oil prices, poor agricultural performance in some areas, which directly affected agro-based industries, and balance-of-payments difficulties in some countries, which led to shortages of imported inputs and spare parts for industry. Poor management and poor planning of industrial enterprises also played a part; many industrial projects recorded large losses or were unable to function for lack of raw materials or other essential inputs. At all events there was considerable variation between countries, and it is difficult to generalize.

Between 1970 and 1980, the growth of manufacturing was estimated at 5.6 per cent a year in real terms, with some deceleration in 1975-1980 (5.0 per cent compared to 6.1 per cent in 1970-1975), undoubtedly as a result of the higher energy costs and recessionary conditions which have affected Africa like other regions of the world since 1975.

Table III.D.1

Growth of manufacturing output by subregion  
(percentages)

	Annual growth rates					Average annual growth rates		
	1976	1977	1978	1979	1980	1970-1975	1975-1980	1970-1980
North Africa	7.5	6.4	6.4	5.9	8.1	5.4	6.9	6.2
West Africa	2.6	1.3	10.4	12.3	6.3	3.4	4.5	6.4
Central Africa	-1.6	5.4	1.1	4.0	2.4	3.2	2.2	2.7
Eastern Africa	-4.5	2.1	4.6	6.4	2.1	6.1	2.5	4.2
Total developing Africa	3.0	4.1	6.8	7.5	6.1	6.1	5.0	5.6

Source: ECA secretariat.

Subregional growth rates appear in table III.D.1. Striking progress was made in North Africa, which considerably improved its performance in 1980 with a rate of growth in manufacturing of 8.1 per cent compared to 5.9 per cent in 1979 and an average of 6.9 per cent between 1975 and 1979, while manufacturing growth slowed considerably in all the other subregions, with growth in West Africa of 6.3 per cent, against 12.3 per cent in 1979 and 2.4 per cent and 2.1 per cent respectively in Central and Eastern Africa, against 4 per cent and 6.4 per cent in 1979.

In North Africa the performance of Egypt, which accounts for more than a fifth of the total manufacturing output of developing Africa, was remarkable, with a rate of growth of 11.9 per cent against 5.9 per cent in 1979. This was due to the programme of economic recovery under the "open door", policy, which by liberalizing import and monetary regulations permitted the import of intermediate inputs and thus the fuller utilization of existing capacities.

In West Africa, the poor agricultural harvests of 1979/80 and 1980/81 had a severe impact in the countries of the Sahel, and particularly in Senegal, where the oil mills faced drastically reduced ground-nut supplies, but on the other hand Nigerian manufacturing continued to grow, and registered an increase of 11 per cent in 1980 after 7.3 per cent in 1979 and 14.4 per cent in 1978. Instrumental in this high growth was the improvement in the supply of raw materials and spare parts and electric power, as well as higher demand. Costs of production also increased, at a higher rate than in 1979 (21.1 per cent compared to 15.9 per cent). Labour costs made a major contribution to this development, and not surprisingly employment in manufacturing increased in 1980 by only 2.2 per cent compared to 6.9 per cent in 1979. Capacity utilization was close to 100 per cent in industries such as food and beverages, but in other cases it was as low as 15 per cent. There was a marked slow-down in investment expenditure in Nigerian manufacturing: outlays increased by 2.7 per cent compared to 4.3 per cent in 1979. In the Ivory Coast the trend towards a slowing down of growth in manufacturing industry persisted in 1980: the estimate for 1980 is only 6.4 per cent, down from 8.5 per cent in 1979. Lower prices for traditional exports have resulted in a lower level of demand in the economy, with direct consequences for industry, which is largely agro-based and food-oriented. However, it is remarkable that industry provided 48 per cent of exports in 1979. The country is pursuing a vigorous policy of export promotion on West African markets.

In Central Africa, the major industrial country is Zaire. Manufacturing is reported to have recovered from the crisis of 1977-1979, and is growing by 3.0 per cent in real terms. Better availability of raw materials and spare parts under the recovery plan has been helpful, despite the adverse impact of price control procedures based on a margin of 15 per cent on ex-factory prices, and discrimination against industries processing local raw materials.

Table III.D.2

Growth of manufacturing output by per capita income groups  
(Percentages)

	Annual growth rates					Average annual growth rates		
	1976	1977	1978	1979	1980	1970-1978	1975-1980	1970-1980
Major oil-exporting countries	9.9	6.0	13.1	15.1	1.5	11.3	9.0	10.1
Non-oil-exporting countries	0.7	3.2	5.0	4.7	4.4	4.9	3.6	4.2
Countries with a per capita GDP of less than \$US 100	-0.3	1.4	5.8	3.2	-1.4	4.9	1.7	3.3
Countries with a per capita GDP between \$US 100 and \$US 200	-0.9	5.8	4.3	8.0	1.8	2.2	3.8	3.0
Countries with a per capita GDP between \$US 200 and \$US 300	1.7	4.7	3.9	3.3	9.7	4.3	4.0	4.1
Countries with a per capita GDP between \$US 300 and \$US 400	3.6	-0.4	13.2	6.3	4.5	10.8	5.3	8.0

Source: ECA secretariat.

Manufacturing in the United Republic of Tanzania registered a net decline in 1980, and the worst performance in the Eastern African subregion. The share of industry in GDP declined to 7.1 per cent in 1980 from 8.5 per cent in 1979. The output of most industries dropped, with even beer production going down by 15 per cent. The shortage of imported raw materials and spare parts due to foreign exchange difficulties, water and power cuts, low labour productivity and poor management were the major contributing factors. Several industries operated at between 40 and 60 per cent of capacity. In Zambia, on the other hand, conditions improved, and a growth rate of 4.6 per cent was recorded in 1980. The independence of Zimbabwe was the main factor, with the opening of import routes through the south, while the

liberalization of import and foreign exchange regulations was also important. Nevertheless, the foreign exchange constraint remains critical. In Zimbabwe, the growth of manufacturing has been spectacular, with a rate of 15 per cent in 1980. With independence demand surged after being repressed during the hostilities, and the more liberal foreign exchange allocation made it possible to obtain the necessary inputs, while at the same time there was a lot of excess capacity in industry. For 1981, however, prospects are less favourable, because of the cuts in foreign exchange allocations, while demand is falling because of government restrictions on consumption expenditure.

There seems to be a clear connexion between the economic group to which a country belongs, or its income level, and the performance of its manufacturing sector (see table III.D.2). While manufacturing grew by 7.2 per cent in oil-exporting countries, lower-income countries performed badly in 1980, with a negative growth rate of 1.4 per cent, the maximum growth rate being recorded in the countries with a per capita income of \$200-\$300; the rate falls in the \$300-\$400 group. Globally in non-oil-exporting countries the rate of growth of manufacturing fell slightly in 1980 to 4.4 per cent from 4.7 per cent in 1979.

## 2. The structure of manufacturing

Manufacturing industry remains very small in Africa, both in absolute terms and as regards its contribution to GDP. In 1980 the total value added in manufacturing industry, including handicrafts and traditional manufactures, amounted to \$US39.8 billion in current terms, around 0.2 per cent of total world manufacturing output and less than the manufacturing output of Brazil. The number of persons engaged was under 10 per cent of the total active population, and as low as 2-3 per cent in Africa south of the Sahara. The share of manufacturing in GDP has not changed significantly in the past decade: from 9.5 per cent in 1970 it rose to 10.1 per cent in 1975, dropping to 9.9 per cent in 1979 and 9.8 per cent in 1980, ~~because~~ the rate of growth of the sector has been no higher than the rate of growth of GDP as a whole.

Manufacturing in Africa is highly concentrated in certain areas and countries. North Africa accounted for nearly half of the total value added in 1980, with Egypt alone contributing around 20 per cent of the total. West Africa accounted for 24.8 per cent, with a dominant share going to Nigeria; Eastern Africa contributed 15.7 per cent of total manufacturing value added, and Central Africa 5.5 per cent. Three countries, Algeria, Egypt and Nigeria, accounted for more than 43 per cent of the total value added. As much as 91 per cent of total value added was accounted for by only 20 countries which contributed 1 per cent or more. In recent years, countries like Zaire which had a considerable head start at independence have been lagging behind, while the industrial sector has surged ahead in Algeria, the Ivory Coast and Nigeria, to cite a few examples.

The industrial structure in most African economies is not properly matched with the endowment of resources, and has weak linkages with the rest of the economy. The bulk of the sector is dominated by the production of non-durable consumer goods which require simple processing, and is characterized by small production units which cannot realize the full benefits of economies of scale. The consumer goods sector, which is mainly confined to the processing of primary products, consists of light industries such as textiles, foot-wear and leather products and food and beverages. The production of food, beverages and tobacco in most of the countries accounts for a large proportion of manufacturing output: 56 per cent in the Libyan Arab Jamahiriya, 50 per cent in the Central African Republic, 48 per cent in Malawi, 47 per cent in Kenya, 44 per cent in Mauritius and 42 per cent in Senegal. In some cases light industry in food processing started in the early 1930s but has gained momentum only in recent years; in some countries it is now able to meet a substantial share of local demand for food manufactures.

The development of heavy industry has not been very successful in Africa, constrained as it is by market size and the lack of technical and management expertise. Two main directions have been followed, one for petrochemicals in oil-producing countries and the other for metal-based industries in mining countries. The most notable cases are those of Egypt, where the iron and steel industry has expanded but with serious efficiency and cost problems; Algeria, where the petrochemical industry has been one of the key sectors in the country's industrial strategy; and Nigeria, where petroleum resources have provided both the base for petrochemicals and financial resources for investment in motor vehicle construction and other engineering-based industry. Algeria has encountered major problems in its heavy industry, and policies in this area have recently been revised.

Zaire's experience with several metal transformation projects is typical of the difficulties encountered by African countries: a steel plant at Maluku which was supposed to use the energy from the Inga dam, is operating at only 10 per cent of capacity, while the copper and cobalt refinery project has been abandoned.

Government participation in manufacturing has expanded in almost all the countries, whether they have opted for market-oriented or central planning strategies. This trend is attributed to the need to compensate for short-comings in local private entrepreneurship. In such countries as Algeria, the Congo, Egypt, Ethiopia, Madagascar, Malawi, Somalia, the Sudan, the United Republic of Tanzania and Zambia, the State sector is the most important participant in manufacturing, and may as in Malawi account for more than half of manufacturing output. But many of the State industries or "parastatals" have incurred heavy losses due to overmanning, underpricing of production, ineffective organization, etc. They have too often been considered not as commercial ventures which must cover their costs and produce a return on their investment but as social organizations designed to provide jobs and services.

### 3. Problems and constraints

The constraints on the development of manufacturing industry in Africa are numerous. The most serious is the smallness of domestic markets, which is usually due to the small dimensions of African economies in terms of both GDP and population. As a result, most industries are operating at low levels of capacity utilization.

Another serious problem is the undeveloped infrastructure. Inadequate infrastructure in most of the countries has considerably increased both the initial and the operational costs of projects, thereby affecting their desirability in economic terms. This has been compounded by the rise in the cost of transport due to the increase in the price of oil. Many countries, and particularly the land-locked ones, have suffered from serious limitations on their market potentials, and hence their ability to expand manufacturing output substantially.

The low level of labour productivity is one of the most serious inhibitors of the growth of manufacturing industry in Africa. For example, comparison of six African and four South American textile mills revealed that the average number of spinners per 1,000 spindle shifts and the average number of weavers per equivalent loom shift was more than twice as high in Africa. There is an acute shortage of technical and professional workers as well as managers, and many African developing countries must rely on foreign expertise which swallows a substantial proportion of local value added. Expatriate management in some countries accounts for 25-30 per cent of the wage bill and contributes to higher costs.

While labour productivity is low, wages are comparatively high, and this together with the costs of foreign management has made it very difficult for African manufacturing to compete with Asian producers, who are well known for high-quality products and low relative costs. In the Ivory Coast, the minimum wage in industry was CFAF 174.00 an hour in January 1981 (72 cents in current dollars), and the average yearly salary in industry was \$5,241 (in current dollars) in 1978/79, including social security charges. These salaries compare unfavourably with the level of earnings in the Republic of Korea, which were around \$2,667 a year in 1980. If the productivity factor is taken into account, it becomes almost impossible for African products to compete with Asian products on European or even African markets. Labour-intensive African industries are in a weak position, while on the other hand it is extremely difficult to move to highly capital-intensive industries without foreign technical expertise.

Government policies designed to help industries are proving in many cases to have effects which are the reverse of those intended. High protection has resulted in the creation of high-cost enterprises; tax exemptions for capital goods imports have tended to favour industries based on imported inputs and to discriminate against export industries. Moreover, direct government control of industries has too often resulted in the creation of unprofitable enterprises which have consumed resources instead of making a net contribution to the economy.

Another element which should not be neglected is the growing protectionist policies of the industrialized countries towards industrial imports from developing countries. The industrial exports of African countries are still too limited for this to be a major concern in Africa, but countries like Morocco and Tunisia and recently Mauritius have been facing various quantitative restrictions in EEC markets, which are their main outlets for textiles, foot-wear and other labour-intensive products.

#### 4. Strategies and policies

Virtually all the developing African countries have adopted strategies of import substitution. In their initial stages, these strategies concentrated on the substitution of imported consumer goods, but were later extended to advanced lines of production with an eye to export markets. Of course, the degree of success has varied between countries. While in some countries they have been successful in building a sizeable consumer goods industry which meets a substantial proportion of the local demand for a wide range of consumption goods, in others they have failed to achieve the desired goals. As import substitution is mostly dictated by the internal demand-supply situation, the inadequacy of effective demand in many African countries has led to the failure of the strategy. Thus, most industries operate at low levels of capacity utilization with attendant high costs, and probably generate very little in the way of profits.

Among the other factors that have adversely affected the development of the import substitution strategy are poor choice of industries, heavy reliance on imported inputs, failure to diversify properly and lack of an institutional framework capable of driving this pattern of industrialization to maturity. There have also been price imperfections, and inappropriate credit policies and marketing facilities have impeded the flow of raw materials to processing centres. Furthermore, inefficient management, erratic and irregular supplies of basic inputs such



as spare parts, lack of repair and maintenance facilities, and industrial stoppages due to water and power cuts have further compounded the difficulties of the manufacturing sector.

In the absence of locally developed techniques, industries have relied on available imported techniques, and this has led to insufficient employment and to high dependence on imported inputs. When the countries involved have found themselves unable to generate sufficient exports, the industries have been trapped in a situation of chronic shortages of imported raw materials and spare parts, not to speak of capital equipment. This situation has been characteristic of Ghana, where exports of cocoa and other traditional products affected by low producer prices have not provided the necessary finance to meet the import requirements of the industries set up in the first years of independence. These industries themselves have not been able to sell on export markets.

In view of the difficulties encountered, most African countries are now engaged in vigorous efforts to rehabilitate existing industries, while adjusting their policies to take account of experience. For example, the "rolling" three-year investment programme under the Sudan's Six-Year Plan (1976/77-1982/83) is mainly directed towards the rehabilitation and modernization of existing import substitution schemes, notably in sugar.

Many African countries have recently shifted towards an outward-looking pattern of development in order to break into external markets and derive full benefit from them. Many countries, realizing the limits of import-substitution programmes have recently made conscious efforts to seek out profitable industrial export lines, diversify their export base and streamline their product range to take advantage of favourable marketing opportunities.

In this context there is a growing tendency to focus on the development of export processing zones, which have enabled some countries to exploit their comparative advantage, an abundant labour supply and cheap domestic raw materials and energy sources. This policy has met with striking success in Mauritius. In other countries, specific incentives have been awarded to export industries. Thus in the Ivory Coast, incentives and grants have been offered to industries that were able to upgrade the degree of processing for export. In the new revised investment code premiums and subsidies have been granted to newly established enterprises on all their exports for the first year of operation, the premium being granted for subsequent years only for increases in exports. In Mauritius, the devaluation of the rupee was designed to give a competitive edge to manufactured goods from the "export processing zone" industries. The package of incentives to export enterprises has been revised to include tax holidays, in order to ensure prompt deliveries of sugar quotas to the European Economic Community. A scheme has also been devised to allow purchases of shares in newly approved enterprises to receive a tax credit of 12.5 per cent of the amount invested. In Nigeria special

encouragement was given to export industries where 40 per cent or more of the output is destined for export.

Egypt has managed to expand its export activities to advanced lines in intermediate goods and to the creation of new products to break into foreign markets. The United Republic of Cameroon, with its huge aluminium plant, has been able to export aluminium products to Chad and other neighbouring countries.

The main obstacle to the export-oriented strategy is the high cost of African products compared to Asian ones, because of low productivity and comparatively high wages. The artisan tradition in Africa is much weaker than in Asia, and the standard of living is higher in terms of basic needs like food. There are, however, some opportunities for the production of intermediate products, such as paper pulp, which has recently begun to be produced from African wood in the Ivory Coast and the United Republic of Cameroon.

In the face of the difficulties in import substitution and export-oriented industrial development programmes, many African countries are feeling the need to gear their industrialization process to the satisfaction of their basic needs and the balanced development of the whole economy, i.e., to adopt a more inward-looking strategy. In this regard, attention is directed to projects with low capital-labour ratios, lower energy use and greater mobilization of local skills and resources in an effort to expand the realm of small- and medium-sized industries. Through this policy, local technological capabilities will be developed and income and employment will be generated in the rural sector, thereby drastically reducing the existing rural-urban disparities and slowing rural-urban migration. Higher rural incomes will stimulate industrial production by increasing demand for products from a number of industries such as textiles, metal manufactures, building materials, etc.

The process of indigenization was spearheaded in many countries by policies of regionalization of industries and localization of capital. Various incentives in the form of tax holidays and premiums for a specified period have been granted to industries which establish themselves in outlying areas. The Upper Volta has successfully followed this line, and through the extension of government credit has encouraged the expansion of small- and medium-sized industries in the rural areas. Zimbabwe, in an effort to develop industry in rural growth points, has provided an investment allowance of 15 per cent and a special initial allowance of 100 per cent to industries established in rural areas. In Zambia, a credit of 10 per cent of net profit is allowed in computing taxable income for a period of five years for industries being located in rural areas.

The development of small- and medium-scale industries has been encouraged by almost all countries of the region through the creation of marketing opportunities, the provision of industrial inputs, the creation of guaranteed development funds for loans, the provision of financial assistance and other incentives such as tax relief, and the establishment of national agencies to provide advisory services, marketing information and training. Malawi has stimulated the growth of small-scale industry by the creation of the Small Industries Promotion Project in 1981, funded by the European Development Fund. The Gambia contracted a loan of D 6.0 million from the World Bank in 1980 to promote Indigenous Business Advisory Services, which caters to small-scale industries. In Ethiopia, the development of small-scale industries is given high priority, and the Handicraft and Small Industries Development Agency gives technical assistance to artisans and helps provide loans to small-scale industries. Nigeria is expanding its Enterprise Indigenization Programme.

In general, the drive among African developing countries towards import substitution seems to be stronger in the present stage of industrialization than export promotion, since import substitution products are simpler to develop and since it is usually easier to attract domestic rather than external demand, which involves severe competition. However, the appropriate industrial mix of these strategies varies between countries, depending on their human and national resources, their tempo of economic development and their stage of industrialization.

As industrialization is in its infancy in Africa, most African countries maintain a high degree of effective protection to bona fide infant industries on a selective basis. Many imposed a higher rate on light than on heavy industries to protect their import substitution programmes. When reasonable, tariff policies in some countries have led some lines of industry to maturity and led to the development of a sizeable consumer sector. In Malawi, the moderate protective tariff, which ranges from 7.5 per cent to 40 per cent, gave a boost to industrial development.

In many cases the choice is between having a small-scale, high-cost protected industry now or an optimum-scale, efficient industry in a few years' time. Import substitution programmes in particular, especially in their earlier stages, generally stimulate programmes for tariff protection against potential foreign competition. In industry protection is also justified on the ground that skilled labour, efficient technology and complementary facilities are more readily available to rival than to home industries. Similarly, export subsidies have been justified in order to enhance the competitive stance required to gain a foothold in foreign markets.

However, if not properly planned and administered, such a policy holds many dangers. In many African developing countries domestic inputs are not sufficiently developed, and hence heavy reliance is placed upon imported inputs, creating a situation which eventually cancels out the advantages of protection. Thus in Zaire industries with a high import content have been favoured over those based on local raw materials. In the Sudan and the United Republic of Tanzania, high protection

has failed to encourage domestic production, and has in fact led to the creation of white elephants. Continued Government support and the subsidization of inefficient operations for excessive periods have adversely affected industrial development in many countries of the region. What is required is a coherent integrated policy for planning tariff protection based on systematic specification of industrial priorities. In general, tariff policy should be biased towards industries that will become competitive in future in terms of costs and growth in productivity.

Various incentive packages have been devised to encourage foreign investment. Generous concessions have been provided to foreign investors in practically all the countries of the region. In 1981, Zambia introduced a new package of incentives to attract foreign private investment which include exemptions from income tax for five years for approved enterprises, and exemption from tax on dividends declared and distributed during the tax relief period. Moreover, capital goods imported for the development of industry are exempted from a customs surtax of 5 per cent.

Some countries have encouraged foreign capital by liberalizing their economies. For instance, the "open-door policy" recently announced by Egypt is designed to offer incentives to foreign capital. The law which has been adopted contains guarantees against nationalization, confiscation and sequestration and provisions on tax exemptions and repatriation of profits. The Sudan, in its 1980 Investment Act, offered various concessions to new investors which include complete or partial exemptions from business profits and income tax for five years from the date of initial production, carry-over of all losses from the exemption period to the last year, complete or partial exemption from customs duties relating to machinery, spare parts and raw materials not available locally, allotment of land and reductions in the price of land, electricity and government transport fares for project-related expenses.

Experience has shown that foreign capital is attracted by a favourable climate for investment, involving such factors as political stability, low risk of confiscation and a stable and predictable tax regime, rather than by the granting of unnecessarily generous concessions. Realizing the dangers of such policies in the long run, a number of African countries have standardized and co-ordinated their incentive packages to avoid revenue-losing competition. The Central African Customs and Economic Union, for example, has proposed a standard incentive law for all member countries. The Economic Community of West African States has called for co-ordination (but not standardization) of the incentive packages of its members. What is needed in African developing countries is a reform of the incentive structure for industries which will, inter alia, clearly define the amount and duration of incentives available for new investment in each sector and administer tax incentives in such a way as to grant tax benefits on the basis of substantial local value added.

However, in the final analysis, there appears to be a need for more co-operation between neighbouring countries, on a basis of complementarity, in order to provide for more specialization in a larger total market through custom unions or the integration of regional projects in joint ventures. The experience is already there. Joint ventures have been undertaken between Nigeria and Benin in a joint cement project, and between Ghana, the Ivory Coast and Togo in a cement clinker plant. The Preferential Trade Area of Eastern and Southern Africa, the Economic Community of West African States, the Central African Customs and Economic Union and the Mano River Union are cases in point which could be considerably expanded in future to cover new fields and areas.

There is a need in African countries to initiate a type of industrial development which is indigenously located and oriented towards national and collective self-reliance. In this context, the African industrial development strategy, as adopted in the Lagos Plan of Action, aims to achieve the short-term objective of a share of 1 per cent in world industrial production by 1985 and at the same time ensure self-sufficiency in food, building materials, clothing and energy, with a medium-term objective of 1.4 per cent of world industrial production by 1990 and a long-term objective of 2 per cent by the year 2000. However, from the current performance it appears that these objectives will not be reached unless more efforts are made at the national level to draw up sound, well-defined and well-articulated national industrial development plans, strengthened by the creation of promotion boards, central development agencies, ancillary specialized institutions and training centres.

## E.1 TRANSPORT

### 1. Introduction

Transport continues to constitute a major bottle-neck to the development of African countries because of the limited infrastructure and the backwardness of what exists. Since the growth of transport and the output of goods and services are closely related, the need to expand and improve the transport sector is much appreciated by all countries in developing Africa. One indication of this close interrelationship is the fact that during the period 1970-1979, GDP, at constant factor cost increased at an annual rate of 5.3 per cent, while transport increased at 8.4 per cent annually; thus, a 1 per cent increase in GDP, required a 1.6 per cent expansion in transport expansion.

While the 8.4 per cent annual growth during the 1970s may be impressive by any standard, means developing Africa must nevertheless continue to intensify its efforts to expand and improve its transport infrastructure if its goal of improving the standard of living of the people through an increased mobilization of resources is to be realized.

The effect of constraints on transport is not limited to individual countries but has minimized inter-country movements so that trade and co-operation among the countries of developing Africa are also minimal. In order to mitigate this problem, ECA member countries have declared the period from 1978 to 1988 as the Transport and Communications Decade in Africa, whose objectives include the (a) promotion of an integrated transport and communications infrastructure; (b) minimization of the isolation of land-locked and island countries; and (c) promotion of the production of transport and communication equipment in Africa. The programme has received wide support from the international community. The concerted efforts of individual countries and the international community on behalf of the Transport and Communication Decade will no doubt improve the generally poor transport infrastructure and increase co-operation not only among the countries of developing Africa but also with other continents.

### 2. Road transport

Africa's road network, small as it is, consists mainly of gravel and earth roads, which are encumbered with physical and non-physical barriers that limit the movement of persons and goods and result in delays in traffic and high transport costs. There are very few all-weather roads permitting year-round movement of traffic within and between African countries. The infrastructure is inadequate and the general conditions of the network of both paved and unpaved

Table III.E.1  
Road networks in some African countries (Kilometers)

		Main roads	Secondary roads	Other roads	Total	Percentage paved	Density of total net- work in km per sq km
Algeria	1971	18 503	18 950	38 500	75 967	...	0.03
	1974	18 476	21 418	38 500	78 408	...	0.03
Angola	1971	18 600	28 723	25 000	72 323	8.2	0.06
	1974	18 600	28 723	2 500	72 323	10.8	0.06
Benin	1971	3 442	1 158	2 330	6 922	11.0	0.06
	1974	3 510	1 107	2 320	6 937	11.7	0.06
Central African Republic	1971	3 800	5 500	12 000	21 300	0.53	0.03
	1974	4 345	3 500	13 655	21 500	0.75	0.03
Ivory Coast	1971	6 123	6 980	22 072	35 654	0.04	0.11
	1975	12 780	21 210	11 180	45 170	4.4	0.14
Kenya	1971	5 351	16 749	22 389	44 489	7.0	0.08
	1975	5 230	18 052	26 239	49 521	7.8	0.08
Malawi	1971	3 004	2 336	5 650	10 990	8.0	0.12
	1975	3 088	2 444	5 493	11 025	14.0	0.12
Mali	1971	5 696	5 595	3 163	14 454	12.0	0.01
	1974	5 696	5 595	3 413	14 704	11.8	0.01
Sierra Leone	1971	2 866	3 881	160	6 907	15.0	0.10
	1975	3 023	3 881	160	7 064	16.7	0.10
Tunisia	1971	10 483	5 603	2 181	18 267	51.5	0.11
	1975	10 554	5 906	4 849	21 309	51.5	0.12
Upper Volta	1971	4 450	250	-	4 700	5.0	0.01
	1974	4 450	800	-	5 250	9.0	0.02

Source: Adapted from International Road Federation, World Road Statistics 1971-1975, edited 1976.

roads in most countries are unsatisfactory as a result of inadequate and irregular maintenance, which is due in part to limited financial resources and a lack of equipment and skilled technicians.

As can be seen from table III.E.1, the density of roads in Africa ranges from a low of 0.01 to a high of 0.14 km per sq km. These figures are indicative of the limited number of roads in developing Africa as compared with the developed countries, where road density is more than 0.5 km per sq km. These quantitative limitations are further compounded by qualitative factors: while most roads in developed countries are paved or asphalted, very few in developing Africa are built under similar conditions. For example, the Upper Volta in 1980 had a total road length of 15,934 km, of which only 860 km, or 5 per cent, was asphalted.

As for motor vehicles, Africa has 5.4 million passenger cars and 2.6 million commercial vehicles, which constitute 1.8 per cent and 3.2 per cent of the corresponding world totals in 1978. Although this low number of motor vehicles makes Africa the least "motorized" of the continents, the rate of growth has been high, averaging 6.5 per cent per annum for passenger vehicles and 7.9 per cent for commercial vehicles during 1965-1977, as compared with the 6.1 per cent and 6.7 per cent for the world. Because of the low income of developing Africa, only 0.07 per cent of all households own a car, a very low figure considering that 10 per cent of the world's population lives there.

In most areas of developing Africa, there is no alternative to road transport because of the very high costs of developing other types of transport. As a result, the countries of developing Africa have initiated a large and intensive programme to expand and improve their road system. However, these increased efforts are weakened by high and ever-increasing road construction costs. For example, the Upper Volta's plan to build 2,571 km of roads in the 1980s will cost CFAF 100 billion or about CFAF 38.9 million (\$US 184,000) per km. These costs have increased considerably over the last decade, exceeding the general rate of inflation. Again taking the Upper Volta as an example, the cost of building one km of road was CFAF 9.4 million (\$US 45,000) in 1970; comparison with 1980 costs shows an annual increase of 8.4 per cent in real terms. These high costs mean that countries must allocate 30 to 40 per cent of all development expenditures to road construction.

There are very few statistics on road traffic, in some countries in North Africa. However, there is evidence of growing traffic despite the incidence of higher energy costs.

However, within the over-all increase in road transport flows, some changes seem to have occurred in the structure of the flows. Personal flows have slowed down markedly while commercial flows have continued to increase at a high rate. This can be seen from statistics on petroleum products, which show that in the UMOA countries (members of the West African CFA franc zone) in 1980 while the



consumption of motor fuels slowed down to an increase of 3.8 per cent against 8.6 per cent in 1979, and an average of 6 per cent in 1977-1979, the consumption of "gas oil", which is used mainly by trucks, increased by 8.2 per cent, as compared with an average 6.2 per cent in 1977-1979. In Kenya, motor fuel consumption actually decreased in 1980 by 0.4 per cent, while the consumption of light diesel oil increased by 17 per cent. For Africa as a whole, data published by the weekly Marchés Tropicaux indicate a rise in motor fuel consumption in non-oil producing countries of only 1.5 per cent. The increase in petroleum prices at the retail level and distribution constraints are the major causes of this trend. In Kenya, premium motor fuel prices increased by 15 per cent in February 1981 after having increased by 45.4 per cent in June 1980. In some countries direct control measures were introduced to limit the personal use of cars, as in the United Republic of Tanzania, or to ration the allocation of fuel, as in Ethiopia.

### 3. Maritime transport

The African region consists of 50 independent countries, seven of which - Cape Verde, Comoros, Equatorial Guinea, Madagascar, Mauritius, Sao Tome and Principe and Seychelles - are islands, while 13 land-locked countries have no direct access to the sea.

About 95 per cent of Africa's international trade is transported by sea; up to 97.5 per cent of this is carried by foreign vessels, leaving only 2.5 per cent to African-owned vessels. Global statistics show that in 1980, Africa owned only 1.3 per cent of total world merchant fleet capacity, while in 1979 its share of world maritime trade traffic was 9.8 per cent. By 1978, Africa's ocean-going merchant fleet was about 6 million tons deadweight (dwt), involving some 298 units, out of a total world tonnage of 641 million tons dwt, or the developing countries' share of about 51 million tons dwt.

Non-African liner conferences have divided the continent up among themselves, exercising near-monopoly powers in fixing freight rates for various products and unilaterally determining transport conditions without properly consulting African shippers and countries. UNCTAD has prepared a Code of Conduct for Liner Conferences, designed to enable developing countries to carry 40 per cent each of their import and export freight by their own vessels while leaving the rest to third countries. However, this Code faces stiff opposition from the developed maritime countries, and may be difficult to implement, in view of the small capacity of the African-owned fleet. Africa and developing countries from other regions need to build up an adequate shipping capacity and qualified and experienced technical and managerial personnel to operate and manage their shipping services.

Most shipping companies in sub-Saharan Africa are relatively small, operating from one to a maximum of about five vessels. In view of their small size and limited financial resources, coupled with adverse liner conference practices, their management structure is usually very simple and in most cases devoid of shipping expertise and management skills. Thus, it is only natural that most African shipping companies incur financial losses and depend largely on national subsidies for their existence. In addition, there are only a few good facilities within the region for training technical and professional personnel in shipping management and operations, with the result that companies find it difficult to train their staff or recruit qualified and competent staff within Africa. It is now apparent that only co-operation among African fleet operators with respect to fleet purchases, training, traffic pooling and fleet scheduling will enable them to maintain and eventually improve their situation.

The African coastline contains more than 80 seaports, of which some 49 are major international ports. Only a few of these ports are efficiently managed and operated, while most suffer from serious deficiencies in one or several aspects of their operations.

Because of the poor quality of management, the productivity of African dockers is very low, in some cases reaching only one fourth of European productivity. Moreover, equipment is in many cases poor and outdated: as a result, many ports are affected by congestion, long waiting periods and poor security of goods. Concerted efforts have been made, however, to improve port operations, with positive results in Nigeria, for example, where severe difficulties were experienced in the 1970s during the oil boom. At present ports are in the process of adjusting to container technology, although external sources of investment are being restricted and technical expertise is in short supply.

Table III.E.2

African shipping fleet (thousand tons) and sea freight (million tons)

	1975	1977	1979	1980
Total merchant shipping fleet	4 198	4 210	5 305	5 543
Percentage of world fleet	1.22	1.07	1.28	1.30
Goods loaded	338	401	468	...
Of which				
Tanker cargo	230	302	377	...
Goods unloaded	84	116	185	...
Of which				
Tanker cargo	25	46	103	...

Source: United Nations Statistical Year Book and Monthly Bulletin of Statistics.

As can be seen from table III.E.2, tanker cargo constitutes the greatest share of African shipping: 80.6 per cent of goods loaded and 55.7 per cent of goods unloaded in 1979, proportions which were much higher in 1970 when the corresponding figures were 73.7 per cent and 44.4 per cent respectively. Tanker cargo traffic has increased only moderately as far as loadings are concerned, increasing by 30.4 per cent in 1970-1979, in line with the evolution of African oil exports. Unloadings, have experienced some large fluctuations, although in 1979 the traffic was over three times the 1970 figure. Tanker cargo excluded, the trend of sea shipping has been downward for loaded goods since 1975, declining from 108 million tons to 91 million tons. For goods, unloaded traffic increased to 82 million tons in 1979 against 59 million tons in 1975. African sea transport shows a highly skewed distribution among countries, and in 1979 the five countries of the North African Subregion were responsible for a total traffic of 135.6 million tons against an over-all African total of 571 million tons.

#### 4. Inland water transport

Most of the major rivers and lakes in Africa which offer potential for navigation are international in character, in that they cross or border several countries. The Niger, the Congo or Zaire, the Oubangui and the Nile are examples of such rivers.

Since any large-scale development of inland waters for any use, including transport, is likely to affect the total water volume and downstream operations, it must be based on co-operative programmes among the nations concerned. However, seasonal variations in the water volume and watercourses, together with their winding routes, sharp curves and the instability of river beds (displacement of sandbanks, alluvial deposits) are major obstacles to the development of river transport. Furthermore, natural rapids and waterfalls divide most African rivers into separate reaches, making it impossible for boats to pass from one section of a river to another.

The other critical constraint to a more effective utilization of existing waterways is the scarcity of trained manpower and the lack of training facilities in the region. The only national schools fully oriented to inland water transport are the Central Training Institute for Inland Water Transport at Cairo, the Inland Navigation school at Kinshasa and the Centre for Professional Training at Bangui. At present there are no international/subregional training facilities in Africa for inland water transport personnel.

The main African rivers are the Congo or Zaire (catchment area: 3,820,000 km<sup>2</sup>), the Nile (2,800,000 km<sup>2</sup>), the Zambezi (1,250,000 km<sup>2</sup>), the Niger (1,100,000 km<sup>2</sup>) the Voltas (390 000 km<sup>2</sup>) and the Senegal (338,000 km<sup>2</sup>). Two other important rivers, the Orange River (640,000 km<sup>2</sup>) and the Limpopo (358,000 km<sup>2</sup>) are of concern mainly to South Africa and will not be taken into account here.

The principal lakes used for navigation are Lakes Tanganyika, Victoria and Malawi.

All these waterways are operated in their natural state without much difficulty and can handle practically unlimited traffic provided that channel markings are properly located and that equipment suited to the specific navigation conditions is used.

Four factors are essential for development of inland water transport in Africa:

- (a) Construction of suitable river ports (landing stages);
- (b) Adaptation of vessels to the navigational conditions of the various waterways;
- (c) Availability of qualified technical and professional personnel for assistance and operation of river crafts and port facilities;
- (d) Provision of technical assistance to the existing and newly established international commissions for promoting international co-operation, and co-ordination of national activities concerning international rivers and lakes, and of the administration, organization, managements and operation of inland water transport.

## 5. Air transport

In 1977, African air transport services accounted only for 5 per cent and 3.3 per cent of world international air passenger and freight traffic. The main cause of this situation is the low level of development, but the protectionist policies adopted by most African countries and reflected in their reluctance, if not outright refusal, to grant commercial traffic rights even to other African airlines have also played a part. This practice, although designed to benefit the respective African national airlines, is inimical to the rational development and growth of air transport in Africa in that it intensifies competition and reduces profits on the most profitable north-south routes and discourages development of the east-west routes, which have the greatest potential for the development of intra-African air transport services.

At present, the distribution of air routes in Africa is very skewed in that, while most African countries are linked daily to Europe, Asia, the Middle East and North America, there are very few and irregular links between most African countries. Those land-locked African countries that have no national airlines of their own suffer most from the irregularity of air connections among African countries. Air transport in the region is also handicapped by the lack of basic equipment and facilities; for instance, less than 50 per cent of the air navigational and other basic equipment required under ICAO international regulations has been installed in the region.

The total volume of air traffic in Africa is very small, not a surprising fact in view of the low level of income. In 1977 the number of passenger-kilometres in Africa represented only 3 per cent of the world total. Traffic itself is highly concentrated in a few countries, the North African region generating most of the traffic because of its relatively higher income and because of the tourist trade. Despite its small volume, however, air traffic grew rapidly, at a rate of more than 12 per cent, during the period from 1965 to 1977. Since the increase of fuel costs it appears that growth has been irregular and many airlines have met with considerable financial difficulties.

When the growth of air traffic accelerated between 1965 and 1975, rising from 11 per cent in 1965-1970 to 14.9 per cent in 1970-1975; it slowed down markedly, to 7.7 per cent in 1975-1977. Passenger traffic increased at a rate of 13 per cent between 1975-1979, but this was due largely to the inclusion of countries such as Nigeria and Egypt, for whom the oil constraint was not severe in the 1970s. Total traffic of African countries belonging to ASECNA grew by 10 per cent annually between 1972 and 1978, but only by 7.9 per cent in 1979 and by 6.2 per cent in 1980.

The market for air transport is understandably limited to the upper income brackets of the population and to foreign travellers particularly tourists; consequently the effect of higher fares has not as yet been very large. However, since the increases in oil prices in 1978-1979, there has been a marked reduction in the demand for air transport, which has been reflected in lower numbers of tourists. Countries like Morocco, Tunisia, Kenya, and Seychelles, where tourism represents a high percentage of foreign receipts, have been particularly affected.

#### 6. Railway transport

All but 11 African countries (Burundi, the Central African Republic, Chad, Equatorial Guinea, the Gambia, Guinea-Bissau, Lesotho, the Libyan Arab Jamahiriya, the Niger, Rwanda and Somalia) have railways; however, most of them were designed a very long time ago to serve specific enclaves.

The African railway network density is very low: for a total land area of approximately 29 million km<sup>2</sup> there is only 80,706 km of track, or an average density of roughly 2.78 km per 1,000 km<sup>2</sup>. The railway network is made up of several short, independent national systems of various gauges and different technical specifications, and as a result only few of them are interconnected.

There are a total of nine gauges in the African railway network, but only three are widespread: the normal European gauge (1.43 m), covering 11,743 km or 14.5 per cent of the network; the standard African gauge (1,067 m), covering 49,473 km, or 61.3 per cent; and the metric gauge (1.000 m), covering 15,473 km or 19.2 per cent. The normal European track gauge is used in North Africa (Morocco and Egypt), while the standard Union of African Railways (UAR) track gauge is in use in most parts of Africa (Ghana, Nigeria, the Sudan, the United Republic of Tanzania, Zaire and Zambia) and the metric gauge is used in most of the West African railways (the United Republic of Cameroon, Senegal, the Ivory Coast, Mali, the Upper Volta, Guinea) as well as in three East African countries (Kenya, Uganda and the United Republic of Tanzania).

From a technical standpoint, the adoption of the 1,067 m standard gauge for the entire African network would facilitate the interconnection of the system. At present, only the Southern African system (1,067 m) is well linked up but, given the fact that the Tazara line has the same gauge, interconnection with the East African system is feasible and would bring Malawi, Mozambique, Swaziland, Zambia and Zimbabwe into one system.

Some 23 of the 38 networks have not adopted the standard 1,067 m gauge and those with different gauges, including the enclave or mining railways, are widely dispersed throughout the region. In view of the slight variation in gauges, however, most railways south of the Sahara can be interlinked without major technical problems.

Two main braking systems which are employed on the African railway network are the vacuum brake, used on the North African network, and the compressed air system, used in the West, Central and East African railways. Except for the Congo-Ocean line, all networks can use the UAR standard gauge (1,067 m) rolling stock.

Only 6,500 km of the 80,706 of the African railway network, or 8 per cent, is electrified and this is limited to urban and suburban high-traffic density sectors of only five networks, including those of Algeria, Egypt, Morocco, and Zaire. Speeds on most African railways, except in North Africa, are very low, averaging 40 and 30 km per hour for passengers and goods trains respectively, with a resultant low utilization of rolling stock and low profit margins. The low permissible axle loads and speed are determined by the poor vertical and horizontal alignments of most African railways, rather than by inadequate motive power alone.

The costs involved in railway construction are very high in Africa and explain why, despite the rise in the oil prices, railways have not been able to compete efficiently with road transport. For example, in order to realign the Congo-Ocean railway which links Brazzaville to the port of Pointe Noire in the Congo, a total expenditure of CFAF 75 billion (\$US 355 million) has been planned for a railway which measures roughly 500 km. Moreover, the cost has been increasing over the years, more than doubling since the estimate of CFAF 33 billion was made in 1975.

For the period 1970-1979, railway traffic in Africa as measured by goods carried increased at the rate of 3.1 per cent a year, although strong fluctuations were registered from year to year. More recently the performance has not been much better; as seen from table III.E.3, with the exception of Algeria, Botswana and the United Republic of Cameroon, the listed countries have experienced a very modest or even negative growth of railway traffic since 1980. One case is the Congo-Ocean railway

Table III.E.3

Railway traffic in some African Countries

(Monthly average in millions of ton-kilometres (T-K) and passenger-kilometres (P-K))

Country	Unit	1974	1975	1976	1977	1978	1979	1980
Algeria	T-K	158	145	144	162	168	(207)	(206)
	P-K	88	94	114	126	121	(156)	(172)
Botswana	T-K	83	91	100	88	87	124	142
Cameroon	T-K	34	33	36	40	44	46	48
	P-K	16	23	22	21	19	20	20
Congo	T-K	46	38	42	42	41	39	45
	P-K	18	19	21	22	25	24	28
Ivory Coast	T-K	44	37	47	46	44	43	54
	P-K	77	79	87	98	106	104	157
Kenya	T-K	-	-	-	-	166	166	198
	P-K	-	-	-	-	131	153	196
Madagascar	T-K	18	17	17	18	18	17	18
	P-K	21	21	24	23	25	25	23
Malawi	T-K	19	21	18	17	17	19	20
	P-K	6	7	5	5	6	7	7
Mali	T-K	14	13	12	12	13	12	11
	P-K	8	8	10	11	11	13	(13)
Morocco	T-K	300	241	262	290	315	321	324
	P-K	63	70	69	70	73	67	77
Senegal	T-K	33	31	28	26	30	26	26
Tunisia	T-K	107	107	106	112	114	123	143
	P-K	45	49	53	59	59	61	72
Zimbabwe	T-K	476	433	421	430	333	440	-
OCEAN a/	T-K	...	11	10	11	13	12	-

Source: United Nations Statistical Office, Monthly Bulletin of Statistics, vol. XXXV. No. 10, October 1981.

a/ Benin-Niger railway.

where goods traffic in 1980 was equivalent to the 1974 traffic, although the railway is a major outlet for the land-locked countries of equatorial Africa. In Zimbabwe, despite the construction of the Tazara railway to the port of Dar-es-Salaam in the United Republic of Tanzania, traffic does not seem to have been stimulated; in 1979, the monthly average was 440 million ton-kilometres against 476 million ton-kilometres in 1974. However, the poor performance of African railways is due mostly to the limited network available and the costs involved in extending and renewing it. Provided that the necessary investments are made, the demand for railway services will undoubtedly grow rapidly.

## 7. Pipeline transport

The use of pipelines as a mode of transport is not widespread in Africa, although there are pipelines in Algeria, Egypt, Kenya, the Libyan Arab Jamahiriya, Morocco, Tunisia and Zaire. Compared with other modes of transport, pipelines provide a cheap and efficient means of transport for very large volumes of liquids, slurry and gas over long land distances.

In view of the already high and ever-rising cost of petroleum fuels and the major efforts now being made in petroleum exploration and production in Africa, the prospects for pipeline transport are very good and should be actively encouraged.

## 8. Telecommunications, broadcasting and postal services

The main deficiencies of national communication services, particularly in the sub-Saharan countries of the region, are inadequate physical facilities, shortage of skilled manpower and the absence of equipment-manufacturing capabilities. In 1977, for example, there were only 14.2 million telephones in use in Africa, or 1 telephone for 102 people, against a world average of 1 telephone per 10 people.

The main constraints to adequate growth of the national communication systems, apart from unskilled management, are limited resources and the inadequate funding which results from the usual assigning of relatively low-priority national planning agencies to communications network development, especially in the areas of broadcasting and postal services. The estimated average national investment as a percentage of GDP required to generate rapid growth (assuming availability of adequate trained manpower, including skilled managers) up to levels within the average range of international norms is of the order of 1 or 2 per cent, as compared with the present average of less than one twentieth of 1 per cent.

Currently a substantial number of countries in the region are involved in the construction of a network of trunk circuits, including those forming part of the Pan-African Telecommunications Network (PANAFTEL). Efforts are also being made to improve and expand existing local network and switching systems, which



should improve the present unsatisfactory distribution of telephones from the present range of 0.1-6.5 per cent of the population, as compared with the world average of 14.5 per cent.

## 9. Prospects

This survey shows Africa's underequipment in transport means (1.87 per cent of world passenger cars, 3.17 per cent of commercial vehicles, 1.3 per cent of total world merchant fleet capacity, etc.) and its low share of world traffic (3.2 per cent of world air freight, 5 per cent of air passenger traffic, etc.). African strategies and development plans have three fundamental aspects:

(a) The satisfaction of basic needs, mainly for food, self-sufficiency and employment for the **largest** number of people possible;

(b) The exploitation of national resources;

(c) The promotion of exports and import substitution to maintain a healthy balance of payment.

### (a) At the national level

The main characteristics of policies are the decentralization of infrastructures in favour of disadvantaged rural areas and the decentralization of responsibilities by transfers to local authorities to reduce expenditure. This appears mainly in road transport policies: about 30 per cent of the investments planned in 1980/1983 are for rural roads. Thus in the Gambia, Kenya and Guinea, these investments are for "Area Councils", "Special Purpose Roads" and "Inter P.R.L. roads" respectively. In Kenya and Guinea, 14,000 km and 16,000 km of rural roads will be built by the end of 1982. This decentralization will have two benefits for the population:

(a) The promotion of rural development by all-weather practicable roads and improvement in conveying agricultural products (mainly foodstuffs) from producing centres to consuming centres;

(b) The promotion of rural employment by using labour-intensive technologies.

In 1980-1983, road and road transport projects will represent approximately \$US 1.78 billion with 86 per cent being used to build national networks.

African railways suffer from the obsolete and insufficient equipment and the lack of standardization. In the meantime, all the countries having railway project should plan to make railways the main goods carrier if distances to be covered exceed 100 km. The magnitude of the investments in infrastructures and equipment will absorb 36.5 per cent of 1980-1983 investments (about \$US 1.6 billion). Thus in Kenya, with an investment of 1 billion Kenya Shillings, railways will transport most maize, coffee and tea and ease road congestion. In the Gambia, railways are intended to sustain diversification efforts (namely through an extension of forestry industries) while in Ethiopia the rehabilitation of the Addis/Djibouti line is planned.

The bottle-necks for maritime and inland water transport are the lack of co-operative structures between the countries crossed by the same rivers or between land-locked countries and the countries whose ports they use. The policies are aimed at:

- (a) Implementing the UNCTAD liner conference code;
- (b) Increasing the share of freight conveyed by inland water transport service, it is the least expensive mode;
- (c) Extending the system of containerization in maritime ports, which will require 25 per cent (about \$US 1.2 billion) of the total investment;
- (d) Harmonizing projects to prevent situations such as the blocking up of other projects on the Niger River by the Jebba Dam which is due to be built by Nigeria;
- (e) Co-ordinating rail, road, sea and river transport programmes at the national level by apportioning traffic among the various modes.

National projects in 1980-1983 represent 24 per cent of the total anticipated investment in transport and communications infrastructures, of which 48 per cent, or \$US 752.6 million, is allocated for transport and 22 per cent, or \$US 208 billion for communications.

(b) At the subregional level

Emphasis is placed on the linking of intra-African networks with the envisaged completion of 21,016 km of roads costing \$US 3.9 billion by 1988. The second major investment (\$US 788 million) is in maritime transport. Road and maritime investments together will absorb 70 per cent of the anticipated investment during the Transport Decade.

(c) At the regional level

Plans call for a concentration on manpower training and the expansion of the Pan-African Telecommunication Network and the trans-African highways such as the trans-Sahara, Mombassa-Lagos, Dakar-N'Djamena, Lagos-Nouakchott and Gaborone-Cairo networks.

The programmes of the Transport Decade will no doubt require resources beyond the capacity of developing Africa, and it is here that the international community is crucial, since it is expected to contribute sufficient amounts of resources to implement the goals of the "Transport and Communications Decade in Africa".

#### IV. PROSPECTS FOR THE AFRICAN REGION, 1981-1982

##### A. The international setting, 1981-1982

The major external factors which had an important effect on the growth of developing countries in 1981 include the continued repercussions of the 1978-1980 oil-prices hikes, the glut on the oil market, the relatively low expansion in the volume of world trade and the restrictive monetary policies pursued by many developed countries, which resulted in record high interest rates in 1981. All these factors point to a dampening in the recovery of the world economy in 1981. In the OECD area, after modest growth in the first half of the year, there was no real growth afterwards and the United States economy, which had been growing fast in the first two quarters of 1981, entered into a recession in the last quarter. OECD projections show the rate of growth of the OECD countries at  $1\frac{1}{4}$  per cent, only marginally different from the 1.2 per cent achieved in 1980.

For the African region, the 1981 international situation had some serious implications for growth prospects in that year. Firstly, for the major oil-exporting African countries, the 1981 international economic problems resulted in a continuous reduction in export earnings, as the volume of oil exports was curtailed and the prices of the reduced oil exports were cut from the 1980 level. Thus, the terms of trade and the purchasing power of the exports of these countries registered a marked decline in 1981. The African non-oil-exporting countries, for their part, continued to suffer from the pressures of large balance-of-payments deficits and heavy debt-servicing commitments. Many of them in fact had to call on IMF to help with economic stabilization programmes.

In 1982, however, the international economic situation is forecast to be much better on the expectation that the policies adopted in developed countries to solve domestic problems of unemployment, depressed investments, inflation, etc. will bring about an upswing in economic activity and stimulate effective demand. Similarly, the African region is expected to make a clear recovery in 1982, although it should be emphasized that most of the upturn in economic activity in the African region is forecast to result from the region's own economic process, especially for the major oil exporters, since it is assumed that the most critical economic adjustments (e.g., adjustment to lower world oil demand) will have been completed. This points to the importance that is attached in 1982, to the region's co-operation effort (joint ventures, intra-regional trade, etc.) and to enhancing self-reliance and self-sustainment within individual African countries. It must be noted, however, that the situation at the beginning of 1982 is not very bright in the world at large. The recession

seems to have worsened in industrialized economies and unemployment has reached new heights while interest rates have increased again. Projections for the United States economy are most pessimistic and range between only -0.6 per cent and 0.2 per cent. OECD for its part, forecast a rate of growth of  $1\frac{1}{4}$  per cent in 1982 for the whole group of OECD countries, but with a strong recovery in the last two quarters, when growth is expected to rise to more than 3 per cent on an annual basis.

B. Growth forecasts in 1981-1982: the African region as a whole

Forecasts made for the African region for the period 1981-1982 are based on historical parameters of growth experienced by the various African countries and subgroups of countries during the 1970s and the growth experience in 1979-1980. The results for developing Africa as a whole are summarized in the table below. Over-all, GDP growth for developing Africa as a whole is forecast to be 4.1 per cent in 1981, implying a deceleration compared to the 1980 performance. This 1981 growth rate is far below both those growth rates achieved in the last years of the past decade and the average growth in the 1970-1979 period, implying that the recovery of the African region from the 1980 slump is likely to be slow. Actually, the acceleration in growth is forecast to start only in 1982, when total GDP growth for the African region as a whole is forecast to reach around 4.7 per cent. One of the most important factors for the low growth in 1981 is the poor over-all performance of the major oil-exporting countries in that year, which is estimated to have averaged only 4.3 per cent as compared with 5.6 per cent in 1980.

Table IV.1  
Forecasts for developing Africa as a whole, 1981-1982, (Percentage)

	1981		1982
	Growth	Share	Growth
Gross domestic product	4.1	100.0	4.7
Agriculture	2.3	25.1	2.5
Industry <sup>a/</sup>	4.6	36.7	5.6
Services	4.8	38.2	5.2
Consumption	4.6	81.6	-
Investment	4.5	21.0	6.0
Imports	2.8	37.4	2.9
Exports	0.0	21.0	2.5

Source: ECA secretariat, January 1982.

<sup>a/</sup> Includes the transport sector.

Sectorally, the most important feature to emerge from the forecasts is the continued improvement in the performance of the agricultural sector for the region as a whole. This upturn in the growth of agricultural output is an encouraging sign for Africa's over-all development in the 1980s and augurs well for the attainment of the objectives of food self-sufficiency as laid down in the Lagos Plan of Action.

Total agricultural value added for developing Africa is forecast to increase in 1981 and 1982 by 2.3 per cent and 2.5 per cent respectively, as compared with an estimated expansion of 2.2 per cent in 1980. The bases of the forecast are the assumptions that (a) the weather conditions in 1981 and 1982 will be favourable, a factor which is assessed to have contributed significantly to the good performance of African agriculture in 1980; (b) there will be some fair increase in the acreage of arable land and/or improvements in productivity rates; and (c) the over-all increased attention that many African Governments have given to the agriculture sector is starting and will continue to bear fruit.

Given these assumptions, forecasts clearly imply that African countries should continue their efforts to minimize the dependence of agricultural expansion on the vagaries of nature, especially in the West, Eastern and Southern African and Sahelian subregions, to increase the cultivated land area through incentive schemes which will encourage farmers to expand their agricultural output and improve agricultural support services with a view to increasing productivity rates in agriculture.

The forecasts for the industrial sector involve an array of assumptions concerning: (a) the trends of the components that are grouped under the industrial output variable (i.e., manufacturing, mining, energy, construction and transport) <sup>1/</sup>; (b) the varied performance for the subgroups of African countries from which the over-all picture of developing Africa is derived. In this respect, it is pertinent to point out that in making the forecasts for 1981 and 1982, it was broadly assumed that:

- (i) The rate of growth of investments in the major oil-exporting African countries had slowed down appreciably in 1981 but would pick-up in 1982;
- (ii) No further drastic cutbacks in oil production would be necessary in 1982 and that in any case new oil exploitation in countries like Angola, the Congo, the United Republic of Cameroon, Egypt and the Ivory Coast would bring about an appreciable increase in developing Africa's total oil production;

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<sup>1/</sup> Because the models used to produce the forecasts for some subgroups of countries had only one variable defined which included all industrial sectors and transport, it was not possible to give forecasts for these sectors individually for Africa as a whole.

- (iii) Expansion in mineral ores production would in general be low, in view of the relatively slow recovery forecast for the developed economies;
- (iv) Non-oil-exporting African countries would be able to boost their manufacturing growth significantly through fuller capacity utilization and more efficient management of their industrial units;
- (v) The construction, energy and transport sectors would be able to maintain their historical growth rate.

Under the above conditions, it is forecast that industrial output for developing Africa as a whole could register increases in real terms within the range of 4 to 5 per cent in 1981 and approximately 5.6 per cent in 1982. Nevertheless, this forecast performance would be poorer than that achieved in 1979, when the major oil-exporting countries recorded very high growth in manufacturing and construction and non-oil-exporting countries maintained a fair level of expansion in manufacturing and energy. The slow-down is mainly a result of slower investments and construction activities forecast in 1981. In view of the moderate performance of manufacturing in 1980, the forecast improvement in industrial growth in 1982 has major implications for the policies of African countries during that period and beyond. Firstly, in view of losses in foreign earnings by the major oil-exporting countries, it will be of particular importance and urgency to conserve external resources so as to be able to service the heavy investments that were undertaken in the 1970s and to maintain a respectable rate of new investment. This will imply policies aimed at further reductions in the import of consumer goods and, in some cases, further diversification of the export base. Further capacity utilization may also be as important in these countries as it is for the non-oil-exporting countries, which also have to continue to find ways of minimizing the import of consumer goods, especially food and oil. The mineral-led economies of countries like Botswana, Zaire, the Niger and Zambia will also need particular resilience in case the world recovery is not swift enough to create adequate demand to fuel the prices of these countries' products or to support increased production.

On the expenditure side, one of the healthy trends observed in the last years of the 1970s, namely slow expansion of consumption, is forecast to continue in 1981 and 1982.

Under the assumption that the reduced rates of marginal propensities to consume experienced in the past few years will prevail in 1981 and 1982 and that few reductions in consumer imports will affect total consumption, especially for the major oil-exporting countries, total consumption for developing Africa

as a whole is forecast to stand at around 81.6 per cent of GDP at market prices in the 1981-1982 period, as compared with the 1980 level of 81.7 per cent of GDP, implying a very slight gain of 0.1 per cent in the savings rate.

In addition, it should be emphasized that in the recent past any gains in the savings rate for developing Africa as a whole have resulted from a reduction in consumption rates in the oil-exporting countries, which, after reaching very high consumption levels in the latter part of the 1970s, started a slow-down of consumption expansion. The non-oil-exporting countries as a group are showing a trend of decreasing savings rates: rates dropped from 17 per cent of GDP in 1979 to 16.7 per cent in 1980 and are forecast to stabilize at around 16.3 per cent of GDP in 1981 and 1982. This seems to be a result mainly of the declines in savings rates in the African least developed countries.

Capital formation for the African region as a whole is forecast to drop in 1981 as a percentage of GDP to around 24.0 per cent, as compared with a share of 25.7 per cent in 1980. This forecast decline in the share of GDP in 1981 may be explained by the relative decline in 1981 in foreign exchange earnings and the slow-down in investments, especially in the major oil-exporting countries. The investment rate, however, is expected to improve in 1982.

In 1981, the external sector performance is forecast to have continued to worsen, as most African countries faced higher prices for their imports, lower prices for their exports and lower expansions in the volume of exports because of the combined effects of sluggish world trade expansion and structural domestic production bottle-necks in some developing African countries. Due to a forecast sharp drop in the export earnings of the major oil-exporting African countries in 1981 (constituting more than 61 per cent of the total export value of developing Africa in 1979 and more than 67 per cent in 1980), total export earnings of developing Africa in that year are forecast to have plummeted from the high value attained in 1980 as a result of the impressive gains from the oil price increases. Thus, although imports for developing Africa as a whole did not increase significantly in 1981, the drop in Africa's total exports earnings implies that there was a considerable increase in balance-of-payments deficits and a tighter position in the reserves of the region as a whole.

Prospects for 1982 with regard to the external sector for developing Africa will depend very largely on the performance of the world economy during that period, as this will determine both the movement of commodity prices and the physical demand for these commodities. According to UNCTAD forecasts, the terms of trade of most primary commodities vis-à-vis manufactured goods are likely to decline in 1982; it is thus unlikely that the balance-of-payments situation will improve drastically during 1982, even though it is expected that many African countries will continue to curtail imports during this period and to pursue vigorous export promotion policies.

### C. Growth prospects for some groups in 1981-1982

The picture outlined above for the African region as a whole, although indicative of what is likely to happen in 1981-1982, needs to be supplemented by the likely disparate performance of the various subgroupings of African countries, namely: (a) the four major oil-exporting African countries; (b) the 21 African least developed countries; and (c) the 25 non-oil-exporting non-least developed African countries. For the four major oil-exporting countries, most of the forecast trends have been discussed in the previous section. However, it is important to recapitulate here the major elements of the forecast growth for this group of countries for 1981-1982, which are summarized in table 2.

Table IV.2  
Growth prospects for some groups in 1981-1982

	1981		1982
	Growth	Share	Growth
Gross domestic product	4.3	100.0	5.7
Agriculture	2.3	16.7	2.5
Industry <sup>a/</sup>	4.6	46.7	6.9
Manufacturing	10.8	10.0	11.0
Mining	-11.0	12.5	3.0
Services	6.7	36.7	5.8
Consumption	2.2	78.8	6.0 <sup>+</sup>
Investment	3.0	33.9	6.0
Imports	5.1	31.8	7.3
Exports	-8.6	14.9	2.5

Source: ECA secretariat.

a/ Including transport.

Over-all, the performance of the major oil-exporting countries in 1981 is forecast to have been very poor. It is estimated that total GDP of these countries grew by only 4.3 per cent. This significant slow-down in growth is linked mainly to the problems of oil on the world market resulting in declines in the quantities of oil produced and a drop in the prices of exported oil. These problems resulted not only in a loss of large amounts of export earnings but also in decreased government revenues; these resulted in a slow-down in investments and construction activities.

However, it is forecast that in 1982 the economies of these countries will have made some concrete adjustments to the world market situation which, it is to be hoped will have improved. Thus, in 1982, total GDP is forecast to



grow by 5.7 per cent, with manufacturing accounting for the largest part of the expansion. Mining trends, which declined in 1981, are forecast to reverse and settle at a low growth rate of around 3 per cent. This reversal in mining growth is not likely to result from increases in oil production (which is forecast to remain stagnant) but rather from other mining activities. Investment performance is also forecast to pick up in 1982, growing by 6 per cent, and exports are also forecast to increase marginally, by about 2.5 per cent.

As can be seen from table 3, which summarizes the forecasts for the African least developed countries as a group, the prospects for these countries in 1981 and 1982 show a possible improvement in growth. GDP is forecast to increase by about 3.4 per cent during this period, as compared with an average annual growth of 3.1 per cent during 1980. Most of the forecast expansion in the African LDCs is a result of the forecast improvement of the agricultural sector, which is estimated to grow by 3.0 per cent, as compared to a historical average rate of 2.1 per cent between 1970 and 1980 and the rate of 2.6 per cent achieved in 1980. It should be emphasized, however, that the forecast agricultural growth will depend largely on: (a) improvements in the weather conditions which in 1980 adversely affected many African least developed countries such as Malawi, the Gambia and the United Republic of Tanzania; (b) the continuation of concerted agricultural expansion efforts by the Governments of the LDCs, as was experienced in countries such as Ethiopia and the Niger.

Table IV.3  
Forecasts for African LDCs, 1981-1982 (in percentage)

	1981		1982
	Growth	Share	Growth
Gross domestic product	3.4	100.0	3.4
Agriculture	3.0	42.7	3.1
Industry <u>a/</u>	4.4	24.9	4.4
Services	3.1	32.4	3.2
Consumption	4.1	89.5	4.2
Investment	4.6	13.8	4.6
Imports	4.5	22.6	4.6
Exports	3.3	19.3	3.5

Source: ECA secretariat.

a/ Includes transport.

Industry is forecast to expand only very slowly, at about 4.4 per cent, mainly because of foreign exchange scarcities, which are likely to throttle efforts by many of the African least developed countries to rehabilitate their industrial base. In some cases the foreign exchange scarcity is even likely to result in an inability to import essential industrial inputs, thus implying a high degree of idle capacity. However, if international assistance (as requested by these countries in the immediate action component of the Substantial New Programme of Action adopted in Paris) is forthcoming, then a faster rate of industrial growth may occur in 1982, especially through the improvement of under-capacity utilization resulting from their inability to import essential spare parts and other inputs. Further, without an adequate infusion of external resources, investment expansion, is forecast to be low, remaining stagnant as a percentage of GDP in the two-year period.

Forecasts for the non-oil-exporting countries other than least developed countries point to varied performance among the various countries classified by per capita income 2/. As would perhaps be expected, subgroups 1 and 2 are forecast to perform relatively well in 1982, while subgroup 3 shows a poor performance during the period. However, it was apparent during the estimation and simulation of the models used in making the forecasts that subgroup 3 was not yielding very reliable estimates, mainly because of the disparate characteristics of the countries included in the group; therefore, the results of the forecasts for this group may not be very close to what is likely to happen in such a heterogeneous grouping. The forecast growth rates for the macro-economic variables for each subgroup are summarized in the table below.

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2/ For the forecasts of the various subgroups aggregate models were used with the following groupings based on per capita GDP in 1970:

- Subgroup 1: (per capita GDP of less than \$US 200) Mauritania, Senegal, Sierra Leone, Togo, the United Republic of Cameroon, Zaire, Madagascar, Kenya;
- Subgroup 2: (per capita GDP of between \$US 200 and \$US 300) Morocco, Tunisia, Egypt, the Ivory Coast, Ghana, the Congo, Equatorial Guinea, Sao Tome and Principe, Angola, Swaziland, Zimbabwe, Mozambique, Mauritius;
- Subgroup 3: (per capita GDP of above \$US 300) Liberia, Zambia, Seychelles, Djibouti.

Table IV.4

Forecasts growth rates for non-oil-exporting countries, 1981-1982 (in percentage)

Group	GDP	Agri- culture	Indu- stry	Services	Consump- tion	Invest- ment	Imports	Exports
<u>All non-oil including LDCs</u>								
1981	4.0	2.4	4.6	4.8	4.0	6.8	5.4	3.8
1982	4.1	2.6	4.4	4.8	4.0	6.7	5.4	3.9
<u>Non-oil excluding LDCs</u>								
1981	4.2	2.3	4.6	5.2	3.9	8.3	5.6	3.7
1982	4.3	2.4	4.4	5.2	4.0	7.1	5.6	3.8
<u>Subgroup 1</u>								
1981	4.5	2.1	4.4	5.9	2.4	5.6	3.3	4.8
1982	4.5	2.1	4.5	5.3	2.5	5.6	3.4	4.8
<u>Subgroup 2</u>								
1981	4.4	2.4	4.5	5.2	4.4	8.4	7.0	3.5
1982	4.5	2.4	4.7	5.3	4.5	8.2	6.9	3.6
<u>Subgroup 3</u>								
1981	1.3	3.4	0.1	0.9	1.9	0.0	1.9	0.5
1982	1.4	3.4	0.0	1.0	2.0	0.0	2.0	0.5

Source: ECA secretariat.

V. THE SUBSTANTIAL NEW PROGRAMME OF ACTION FOR THE 1980s  
FOR THE LEAST DEVELOPED COUNTRIES: AN EVALUATION

INTRODUCTION

The object of this study is to evaluate the Substantial New Programme of Action for the 1980s for the Least Developed Countries (hereafter referred to as the SNPA) adopted by the United Nations Conference on the Least Developed Countries which was held in Paris from 1 to 14 September 1981. <sup>1/</sup> The Programme outlines domestic and international measures designed to assist these least developed countries to break out of their stagnation. It also includes arrangements for implementation, follow-up and monitoring. Since 21 of the 31 least developed countries in the world are situated in Africa, forming 40 per cent of the membership of ECA and accounting for some 30 per cent of the total population of developing Africa, the evaluation of the SNPA has been undertaken with particular reference to the African least developed countries (LDCs).

The present study is divided into five major parts. The first reviews the preparations for the Conference and their outcome. The second part analyses the national objectives, targets and measures emphasized in the SNPA. The third discusses the international support measures in the SNPA, while the fourth assesses the arrangements for implementation, follow-up and monitoring. The fifth section, which is based on a set of projections by the ECA secretariat which forecast feasible growth rates and likely trade gaps, suggests policy measures which arise from the SNPA. The final section gives a brief summary of the principal conclusions of this study.

A. THE PREPARATIONS FOR THE UNITED NATIONS CONFERENCE

1. Introduction

The preparations for the Conference were truly without precedent in their depth and coverage, involving as they did detailed inputs from the individual LDCs themselves.

To ensure the success of the Conference, the Preparatory Committee at its first session invited the least developed countries to prepare detailed presentations of their development plans and programmes, and requested them to consult with their aid partners to review their proposed development programmes and aid arrangements. A few days before the second session of the Preparatory Committee a seminar for senior planners in LDCs was convened to draft guidelines for the preparation of the country presentations.

<sup>1/</sup> "Report of the United Nations Conference on the Least Developed Countries" (A/CONF.104/22), Part One.

Four clusters of review meetings were convened early in 1981; three of them were for African least developed countries.

An attempt is made below to analyse the macro-economic picture in the country presentations. This is followed by a short evaluation of the review meetings.

## 2. Analysis of the macro-economic picture in the country presentations

Although general guidelines for the preparation of country presentations were prepared during the seminar for senior planners referred to above, many countries did not adhere to them strictly. Only a small number of countries attempted macro-economic projections or forecasts for the 1980s, and those that did understandably confined themselves to the first half of the decade.

However, the ECA secretariat endeavoured to fill the gaps by making some rough estimates which it believed reflected the targets and parameters for the 1980s underlying the country presentations. The presentations displayed broad uniformity as far as objectives and priorities were concerned. This is not surprising when the Lagos Plan of Action is borne in mind as a background.

The over-all objectives and targets included a rise in real GDP between 1980 and 1990 of 90 per cent for all LDCs and 80 per cent for African LDCs, self-sufficiency in food, the meeting of basic needs, including those relating to social services, transformation of the structure of production by raising the share of manufacturing output, exploration and exploitation of natural resources and minerals, including energy and water, expansion of employment opportunities and provision of infrastructural facilities, including transport and communications and rural infrastructure.

Table V.1 compares past performance (in 1970-1979) with targets for 1980-1990.

Table V.1

Average annual growth rates of the major macro indicators

GDP	Per Capita income	Agri- culture	Indus- try	Exports	Imports	Con- sump- tion	Domestic savings as a percent- age of GDP	Investment as a per- centage of GDP
All LDCs								
1970-1979	3.1	0.5	1.3	5.7	-2.0	1.3	3.8	...
1980-1990 (targets)	6.7	4.0	5.3	12.0	9.3	7.4	n.a.	...
African LDCs								
1970-1979	3.2	0.5	1.4	4.1	3.7	5.6	3.6	6.0 (1979)
1980-1990 (targets)	6.0	3.1	4.1	8.8	8.7	10.5	5.5	17.8 (1990)

Source: UNCTAD and ECA secretariats.

When the targets set for the 1980s are compared with performance during the 1970s, it can be seen that achievement of the targets would represent a real break-through. These targets are consistent with the objective of achieving the transformation envisaged in the SNPA.

The implications of the targets for domestic and international efforts and policies should not be underestimated. For example, if the share of domestic savings in GDP in African LDCs is to be raised from some 6.0 per cent in 1979 to 17.8 per cent in 1990, then for every \$US 100 increase in income \$US 33 will have to be saved. (Data for other LDCs are not available.) This calls for tremendous efforts in mobilizing private and public savings.

In order to achieve substantial reductions in the incremental capital-output ratios from the average of 3.8 obtained during the 1970s in African LDCs to 3.3 in the 1980s, it will be necessary for these countries to improve their capacity for project formulation and implementation in particular, and economic management in general.

According to the projection of the rate of growth of imports in real terms during the 1980s, the implicit elasticity of imports with respect to GDP will remain at the level of 1.75 recorded during the 1970s for African LDCs, and will rise sharply from 0.42 to 1.10 for all LDCs. However, in view of the fact that the import content of fixed capital formation is much larger than the import content of GDP as a whole, it seems unlikely that the implicit elasticity of imports with respect to GDP will evolve in line with the projection. Fixed capital formation at constant prices for African LDCs is projected to increase at an average annual rate of 12 per cent during the period 1979-1990, and its share in GDP is projected to rise from 15.0 per cent in 1979 to over 26.8 per cent in 1990. This could mean a rise of imports faster than projected, and the undermining of the foreign position of the African LDC's.

Indeed, the foreign trade targets in the country presentations are extremely vulnerable to external factors beyond the control of their Governments. The export growth rates are much larger than can be justified on the basis of projected real growth rates in the OECD area, which is the main export outlet for the least developed countries. All these facts should be kept in mind, of course, as and when the long-term plans are translated into annual or biennial plans for implementation, and discussed in future review meetings with development partners. This will be all the more necessary in view of the decision of the major donors to increase aid in real terms by no more than 50 per cent. The assumption in the country presentations was that aid would be doubled on an average annual basis for the 1980s as compared with the yearly average during the years 1975-1979.

The total planned development expenditure in the country presentations of all the least developed countries for the 1980s amounts to \$US 197 billion, of which the aid requirement is \$US 116 billion, with the remaining \$US 81 billion to be financed through domestic savings. For African LDCs the total is \$US 133 billion - \$US 80 billion (60 per cent) required in the form of foreign aid and \$US 53 billion (40 per cent) to be financed from domestic savings.

### 3. Evaluation of the review meetings

Unfortunately, only two sessions were provided for each country in the group meetings arranged. This, together with the nature of the country presentations, the very preliminary type of project profiles and the short time available for development partners to study in depth the many voluminous country presentations, made it impossible to engage in thorough discussions, particularly in the case of the large number of projects proposed for financing. It was not surprising that the discussions centred mainly on the broad objectives and priorities and the macro pictures, rather than the micro-analysis of major projects which is a prerequisite for concrete commitments.

The reaction of the development partners was guarded and regrettably unspecific. The pre-Paris meetings can hardly be considered as a step forward; surprisingly, even a reference to the observations made by the individual donors on certain projects in the pipeline was deleted from the final report at their request. If the observations and the problems encountered had already been discussed and solved between the country concerned and its development partners, those at the post-Paris round of review meetings could have concentrated on commitments and on procedures for implementation.

Pre-feasibility and feasibility studies for hundreds of projects are very expensive; besides, in a world of high inflation they can be rendered obsolete very rapidly. Hence, it is essential that development partners should first identify in full consultation and collaboration with the LDC concerned, the projects of interest to them for financing before the feasibility studies are made. It is to be hoped that this shortcoming, which was noted in the pre-Paris round of review meetings, will be avoided in the post-Paris round scheduled for 1982 and 1983.

It is heartening to note that world-wide agreement emerged concerning the development objectives and priorities for which consensus had already been established among African LDCs in the shape of the Lagos Plan of Action and the African development strategy for the 1980s. These include emphasis on agriculture to achieve self-sufficiency in food production during the 1980s, efforts to promote exports, encouragement of agro-based industries, development of transport and communications and maximum mobilization of domestic resources, both human and financial.

On the whole the development partners indicated their willingness to continue their development assistance at levels no lower than those of the past. Ideologically and politically contentious issues were avoided.

The fact that the donors were generally overcautious and reluctant to make commitments for future negotiations was understandable but regrettable. Their general feeling was that the LDCs were seeking more than they could absorb: many of the programmes were described as ambitious and unrealistic in terms of the external assistance required, particularly in view of the bleak economic situation of the OECD member countries and the consequent poor prospects that aid would be forthcoming in the volume required.

In conclusion, as the ECA Executive Secretary observed, "in light of the magnitude of the aid demanded, it is natural for donors to react. They need to be reassured that the LDCs will first mobilize their own resources. I have no doubt that even the most sceptical among them would then respond favourably." 2/

The country review meetings represented a break-through in the structure of United Nations conferences. Thanks to the country-by-country approach inputs from individual countries highlighting their special needs were taken into consideration in the over-all process.

Suggestions were made for better-integrated domestic economic policy to help the LDCs achieve self-sufficiency. Some donors selected specific countries as recipients of aid, but that approach was tending to be replaced by participation in international measures.

Naturally, as the ECA Executive Secretary pointed out, there was a "world of difference" in the perceptions of member States. He urged LDCs to clarify their programmes "to avoid distortions (so that) priorities at the end of decade will (not) emerge as completely different from priorities set at the beginning." 3/

### 3. PRESENT SITUATION IN SPECIFIC SECTORS, AND NATIONAL MEASURES EMPHASIZED IN THE SNPA

The objective of the SNPA is to enable each LDC to increase its GDP substantially by 1990, in some cases even doubling it as compared to the level reached in the late 1970s. In agriculture the LDCs must aim to progress towards, and if possible surpass, the 4 per cent annual target set out in the International Development Strategy for the 1980s, while manufacturing should grow by 9 per cent or more each year. LDCs are called upon to take measures designed to maximize their domestic saving efforts.

Taken together, the foreign and domestic resources required for the near-doubling of GDP during the 1980s, as recorded in the country presentations, correspond to the volume estimated from the macro-economic projections undertaken by UNCTAD and ECA. Given the dominant trade gap and the compartmental type of production in the LDCs, any shortfall in aid inflows would result in real GDP growth rates lower than those envisaged in the country presentations or suggested in UNCTAD resolution 122 (7).

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2/ Ibid., p.7.

3/ Ibid.



Export promotion and import substitution to cover the trade gap require enormous investment resources currently beyond the reach of the least developed countries.

A dilemma thus arises in analysing the situation in each sector and the national measures set out in the SNPA. It is only in the light of the quantity and quality of the international support measures agreed upon that domestic policy measures can be evaluated. The frustration of domestic efforts due to a lack of foreign exchange is a feature of the LDCs, whose export capabilities are severely limited.

Surprisingly, donors at the Paris Conference were of the opinion that no automatic and general increase in aid should be recommended in the SNPA, and that no rigid formula or fixed targets should be proposed. Instead, they felt that some development partners should be called upon to increase their aid and others to spread it more equitably, raising the share of the LDCs in total transfers.

While one can understand the difficulties faced by donor countries in entering into commitments before parliamentary approval is obtained, the close association between economic variables such as foreign aid, domestic savings and GDP growth should not be ignored. Unless the aid inflow is linked to the development plans of the least developed countries in a regular and predictable way, with greater flexibility to cope with unforeseen circumstances, the implementation of the plans will be disrupted. This is a conclusion which the international community should have drawn from experience in development planning in the LDCs over the past three decades. For these countries resources to cope with basic and urgent needs are extremely limited, and they have little leeway for dealing with emergencies.

The aid committed at the Paris Conference amounted to no more than 60 per cent of that needed on the basis of the technical coefficients and the studies carried out. Obviously this has implications for consistency among the macro-economic variables in the country presentations and for the feasibility of most targets and priorities. This important observation should be borne in mind in the analysis that follows.

#### 1. Food and agriculture

Agriculture, which supplies most basic needs, is assigned top priority in the SNPA. With over 80 per cent of the economically active population in the African LDCs depending directly or indirectly on agriculture, whose share in total GDP is around 40 per cent, it is evident that per capita income in this sector is extremely low, being less than half the national average.

In addition, data on income distribution and levels of per capita income show that mass poverty in the least developed African countries

is more widespread than in other developing African countries. 4/ The destitutes and the seriously poor together form about 70 per cent of the total population, with their share in the African LDCs being much higher than the average for all developing African countries. The urgent measures needed for the eradication of mass poverty must be concentrated in the agricultural sector, where most of the poor live. The widespread mass poverty in these countries stems from the low level of per capita income rather than from large differentials in income distribution.

The performance of the agriculture sector has been well-nigh calamitous, with growth in real output limited to 1.4 per cent a year on the average during the 1970s, or only about half the rate of population growth.

Many reasons are advanced for the serious lag in agricultural output: poor transport and communications, prolonged drought and desertification, lack of food security, indiscriminate and unscientific use of land, inadequate allocation of development funds, lack of appropriate high-yield technology packages (i.e., fertilizers, pesticides, rural implements, credit, research and extension services, etc.), weak institutions, poor marketing infrastructure, insufficient storage facilities, low levels of skill, unfavourable internal terms of trade for rural producers, difficult terrain, soil degradation, scarcity of cultivable land, very limited irrigation facilities, and archaic land tenure systems which hinder intensive farming.

The SINPA naturally attempts to find solutions for most of these problems. Among the policies suggested to achieve the target set for the 1980s are: expansion of acreage; solving the structural problems of land tenure; raising productivity through soil conservation, provision of irrigation and drainage, and the use of appropriate tools, fertilizers and improved varieties of seeds; development of indigenous farming techniques; strengthening of national research and dissemination of findings; training; development of physical infrastructure such as rural roads and communications and storage facilities; reduction of post-harvest losses; strengthening of rural credit; expansion of agricultural inputs; strengthening of marketing and extension services; application of appropriate pricing policies as an incentive to production; and adoption of comprehensive and integrated rural development policies. The implementation of all those policies requires substantial resources, not only for fixed capital formation such as irrigation works but also for current purposes, including application of fertilizers and new seeds.

Although land/man ratios in African LDCs are higher than in other developing African countries, for irrigated areas the ratio is much lower. This is also true for consumption of fertilizers and other inputs.

While intensive efforts are required to raise yields per hectare, expansion of acreage under cultivation seems essential in most LDCs which suffer from drought.

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4/ "Survey of Economic and Social Conditions in Africa, 1978-1979", Part I (E/CN.14/743/Part I), Sect. 3., Chapt. IV.

At present only some 44 per cent of the arable land is actually being cultivated. Unfortunately, it is probable that the remaining arable land is either of low quality or more difficult and expensive to develop than areas already under cultivation.

Given the enormous volume of resources required to expand agricultural production, in the form of either fixed capital formation or current consumption, limiting the inflow of external assistance to 60 per cent of the level envisaged in the country presentations would make the target of a 4 per cent annual increase in agricultural production extremely difficult to achieve. An increase of some 3 per cent in real terms, which is equal to the rate of population growth, is the best projection in the circumstances. This would undoubtedly constitute a marked improvement on the past two decades, but would not allow for the satisfaction of basic food needs and the alleviation of mass poverty in the agricultural sector, considering the substantial backlog from the past.

## 2. Human resources and social development

The SNPA emphasizes the mobilization of human resources through education and training in required planning, production and management techniques. Increased opportunities for productive employment, with a view to reducing and eliminating the present massive unemployment and underemployment, are of central importance in the SNPA, and so is the enhanced role of women in the development process. Efforts are also contemplated to ensure more rapid progress towards universal primary enrolment and universal literacy. Vocational training will also be developed so as to respond to the quantitative and qualitative requirements of the economy for skills of all kinds.

The SNPA also gives high priority to improving health and nutrition, food security, and the provision by 1990 of safe drinking water to all the population and adequate sanitation and immunization of all children against major infectious diseases. Population policies are to be integrated in over-all development policies, with appropriate measures for family planning and population control.

Capital expenditure on housing, particularly in urban areas, is to be increased substantially. The interrelationship between people, resources, environment and development should be taken as a basic concern in the development of human settlements and other development projects.

The enormity of these objectives and the resources needed can perhaps be better appreciated by reference to the levels so far achieved. In 1980, of 17 least developed African countries for which information was readily available, only 7, or 40 per cent, had literacy ratios of 30 per cent or over. On the other hand, 5 countries (some 30 per cent) had literacy ratios ranging between 15 and 20 per cent, while the remaining 5 (30 per cent) had ratios below 10 per cent.

The school enrolment ratios for children aged 5 to 11 for these 17 African LDCs show that only 4 countries (24 per cent) had primary enrolment ratios of over 50 per cent, while the remaining 13 countries (76 per cent) had ratios far below 50 per cent. With regard to vocational training, in 4 of these countries only 20 per cent of the student population was found in such fields as science, engineering and technology; the remainder were in the liberal arts. In many countries, provision for training indigenous scientists and technologists is grossly inadequate. Only one country among the 17 has facilities for agricultural engineering and food processing technology, three for civil engineering, one for electrical engineering, three for mechanical and production engineering, two for energy and power production and none for water resources engineering, mining, geological and metallurgical engineering. 5/

A recent ECA study also shows that none of the least developed African countries has the institutions or the capability to turn out technicians of high and middle categories, with the result that their stock of local technicians is very small. 6/

In recent decades, expenditure on education in African LDCs has been absorbing a large and rising share of total government expenditure. The cost of building and running schools has risen substantially, and this is particularly true for teaching materials, equipment, teachers' salaries, etc.

More attention is being given to providing educational services to women, and adapting school curricula to fit the socio-economic environment and available employment opportunities. Yet in spite of these welcome developments, the integration of manpower planning into national socio-economic development planning is seriously hampered by the lack of an assured and predictable supply of resources.

The same observation regarding ambitious targets applies to the objective of reducing the massive unemployment and underemployment. As a result of the poor growth performance in their economies, demand for labour in the modern sector in the least developed African countries has been growing at only modest rates. But at the same time the rate of growth in the number of entrants into the labour force has accelerated substantially as a result of the decline in infant and child mortality during the past three decades or so. Meanwhile the expansion in educational facilities has led to a substantial change in the structure of the group of entrants into the labour force. Educated young people now form a growing proportion of the unemployed. 7/

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5/ "African Network of Institutions Engaged in Scientific and Technological Research", UNDP Intercountry Programme Project, (Nairobi, UNESCO, December 1976), annex I.

6/ "Feasibility study mission report on the establishment of an African Institute for Higher Technical Training and Research" (internal ECA document).

7/ E/CN.14/743/Part I, p. 15.

According to ECA the number of unemployed and underemployed in all African developing countries is currently estimated at some 45 per cent of the total labour force, <sup>8/</sup> and with the substantial rise in the number of entrants into the labour force, the number of unemployed and underemployed is likely to increase substantially by 1990 if past trends and policies continue. The modest feasible GDP growth rates implicit in the SNPA would certainly accentuate this problem and render the objective of reducing massive unemployment and underemployment unrealistic.

The same observations apply to the objective of providing safe drinking water to all the population by the year 1990, universal primary enrolment and universal literacy. These objectives are not based on detailed socio-economic analyses and forecasts of available resources and future population growth and structure.

### 3. Natural resources and energy

In this LDCs the level of exploitation and development of natural resources, including energy, is extremely low because geological knowledge, financial resources and skills are lacking. The use of existing water supplies for drinking, irrigation and electricity generation is extremely limited, while mineral deposits and energy resources (including the potential of solar, wind, hydroelectric and other renewable energy resources) remain seriously underutilized or unexplored. In their development plans for the 1980s the LDCs stress the exploration and exploitation of their natural resources, particularly minerals, energy and water.

The SNPA provides that where potentials for natural resources development are identified during the 1980s, programmes for their exploitation on a commercial or other viable basis should be initiated and supported by the international community through substantial financial and technical assistance.

The SNPA recognizes that the energy problems of the LDCs have assumed serious dimensions, and that those problems, together with higher prices of manufactured imports, high rates of inflation and unfavourable terms of trade, impose serious constraints on their balance of payments.

The SNPA urges all developed countries, developing countries in a position to do so, multilateral institutions and other sources to provide financial and technical assistance for research, exploration and development of energy resources in the LDCs. Demands for assistance in the interim period in the form of balance-of-payments support or an expanded oil facility, which were among the major elements of the African LDCs' requests for assistance, have been turned down by the donors. Yet without such assistance it is difficult to see how in the next 5 or 10 years, with oil import bills absorbing over 40 per cent of total export proceeds, the least developed African countries can proceed with the implementation of their development plans.

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<sup>8/</sup> Ibid.

#### 4. Manufacturing industry

With the current share of manufacturing in GDP in the LDCs being about 9 per cent, and an average annual growth rate of only 4.0 per cent recorded during the 1970s, the annual contribution of the manufacturing sector to the GDP growth rate was a mere 0.33 of one percentage point. It is for this reason that the SNPA states that the least developed countries should aim at accelerating the growth rate in this sector to an over-all average annual rate of 9 per cent or more. Even if this target is achieved, its contribution to the over-all growth of GDP, at a mere 0.31 of one percentage point, will still be too small to foster the structural changes needed. According to the SNPA, industrial programmes should aim at developing agro-base and agro-support industries, medium and light industries, on-the-spot processing of raw materials, the improvement of productivity in small-scale and cottage industries, the application of appropriate technology and the establishment of basic industries with indigenous resources, where practicable.

The target seems feasible given the small share of manufacturing in GDP, especially if efforts are made during the next two years to utilize the existing excess capacities in this sector. But ultimately the achievement of this target will hinge on the inflow of foreign assistance required to implement the "immediate action" component of the SNPA.

#### 5. Physical and institutional infrastructure

The SNPA rightly emphasizes the development of the basic physical infrastructure needed to support the productive sectors, including transport and communications, ports and airports, water, irrigation, electric power development, storage and distribution facilities, hospital and school buildings, housing, etc., which are crucial to the structural transformation needed in the LDCs.

The required investment in physical infrastructure is indeed enormous. Because the gestation periods are usually rather long, the capital-output ratios are very high. As has already been indicated, with the commodity-producing sectors, agriculture and industry, projected to grow at an average annual rate of no more than 4.2 per cent (equivalent to a contribution of some 2.3 percentage points to the real growth of GDP, taking into account their joint share in GDP in 1979 of some 55.0 per cent), it is difficult to imagine that the transport and communications sector will grow faster than 4.0 per cent a year. With a share in GDP of about 3.3 per cent, its contribution to the over-all growth of GDP would be a mere 0.4 of one percentage point.

Of course, physical infrastructure covers more than transport and communications, and if the share in GDP is assumed to represent roughly 15 per cent, then its contribution to over-all growth in GDP could be about 0.6 of one percentage point.

If this is added to the contribution of agriculture and industry (i.e., 2.8 percentage points), then the projected over-all growth of GDP based on sectoral analysis would be perhaps some 3.5 per cent a year. Assuming that other sectors not covered in the above analysis - forming some 25 per cent of GDP - grow at the same average rate, total GDP could hardly increase in real terms by more than 3.5 to 4.0 per cent a year, a rate slightly higher than that achieved during the 1960s and 1970s.

#### 6. Environment

Desertification, deforestation and soil and water degradation, which assumed serious proportions in the 1970s, severely hamper development efforts. The SNPA emphasizes that health, nutrition and general well-being depend upon the integrity and productivity of the environment and resources. For this reason, it recommends an integrated approach to development, keeping in mind the interrelationship between people, resources, environment and development. Measures to preserve the environment are of course costly, and would contribute substantially to the soaring cost of investment, which least developed countries cannot afford at these early stages of their development.

#### 7. Transformation investment

The SNPA recognizes that large-scale investment, beyond the means of the LDCs themselves, can help in transforming their economies from a low level of operation to a substantially higher level. Such large investment projects, though they are very costly and have long gestation periods, can be very useful, particularly if they are undertaken at the subregional level. Suitable areas should be identified with the help of multilateral organizations and, in the words of the SNPA, "where the findings of adequate feasibility and related studies highlight the advisability of transformational investments at the economic and social level, they should be made promptly as an effective means of promoting sustained growth and the welfare of the population". <sup>9/</sup> There is scope for such projects in comprehensive agricultural development, irrigation, river basins, transport and communications and exploration and development of energy resources.

However, in this field of large and transformational investment, the donor countries appear to be extremely reluctant to commit themselves, insisting on adequate feasibility studies to highlight the advisability of such investment. It must be realized that these requirements are difficult to apply in practice, even in the advanced countries themselves.

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<sup>9/</sup> A/CONF.104/22, Part One, Para, 54.

### 8. Land-locked and island LDCs

Regarding the 15 land-locked countries among the 31 LDCs which suffer from serious geographical handicaps, the SNPA states that immediate and intensive efforts are needed to simplify transit procedure and improve transit-transport, storage and port facilities. For the five LDCs which are islands, a programme for the development of their feeder transport services is recommended.

### 9. Foreign trade

In the field of foreign trade, the SNPA is vague and obscure, merely calling on the LDCs to undertake studies and market research to explore export potentials.

In the context of market expansion LDCs are urged to undertake comprehensive efforts ranging from planning to production and marketing, based on supply and demand analyses at the national, regional and global levels; to prepare national export development plans; to identify new export production and marketing possibilities; to establish national infrastructure for marketing and trade promotion; to formulate import procurement policies; to monitor and evaluate trading prospects; to elaborate and analyse their position in multilateral trade negotiations; to undertake supply and demand studies to identify the scope for trade expansion at the national, regional, interregional and global levels; to establish training programmes in the field of foreign trade; and to take national action to achieve greater efficiency in the organization and operation of the carriage of foreign trade and cost reductions in all links in the transport chain.

Such tasks are beyond the capabilities of the LDCs. Furthermore, no attempt is made in the SNPA to outline the corresponding action needed from the major importing countries. At the same time the country presentations of the LDCs for the 1980s envisage an export growth rate at constant prices of some 9.0 per cent a year in spite of the continued world recession. It would seem that the international community takes lightly the solutions necessary to overcome the fundamental constraint facing the least developed countries, which happens to be in their own external sector.

### 10. Disaster assistance

The LDCs are susceptible to many misfortune, including major natural disasters in the form of drought, desertification, floods, cyclones and earthquakes, as well as man-made disasters, which cause sudden disruption of production and distribution. With their extremely limited resource base they have no flexibility in dealing with natural calamities. In this context the SNPA provides that the fullest use should be made of existing arrangements for the provision of emergency assistance, and that new or improved arrangements should also be considered.



In conclusion it seems that the targets, priorities and objective enumerated in SNPA chapter on "General situation and national measures" are sound, for the most part they are in line with the Lagos Plan of Action, the African development strategy for the 1980s and the International Development Strategy for the Third United Nations Development Decade. They aim in the right direction considering the necessity for structural changes envisaged in the SNPA and the urgent need for measures to eradicate mass poverty. Obviously these targets and objectives are ambitious in the light of the limited financial resources and trained manpower available to these countries. They are nevertheless essential.

The LDCs are facing serious budgetary and balance-of-payments constraints. They suffer from accelerated inflation and deteriorating terms of trade, and face serious adjustment problems. The question that arises is how such an ambitious yet essential programme can be implemented, and what should be the starting-point for reform and for implementation.

### C. INTERNATIONAL SUPPORT MEASURES

The extremely weak and vulnerable foreign trade sector of the LDCs is the most disturbing feature of their economies. During the 1960s the purchasing power of their exports rose at an average annual rate of barely 3.5 per cent; in the 1970s it actually registered a decline of 2.6 per cent a year. In absolute terms the per capita purchasing power of their exports fell to \$US 21.40 in 1979, two thirds of the \$US 33.10 recorded in 1970. The level of per capita exports in 1979 was only one fifth the average for all developing countries excluding the major oil exporters. Per capita concessional assistance flow rose from \$US 13.30 in 1970 to \$US 18.90 in 1971; this increase of only \$US 5.60 compensated for less than half the decline of \$US 11.70 in the purchasing power of exports.

Consequently, LDCs faced extreme shortages of imports during the 1970s, with per capita imports in 1979 standing at \$US 40.20, only one third the level available for developing countries as a whole excluding the major oil exporters. For the least developed countries, which are usually subject to natural disasters five or six times a decade, the foreign exchange shortages imposed severe constraints on imports, fixed capital formation, domestic savings and economic development as a whole.

The SNPA stresses that, while LDCs must adopt vigorous measures for mobilization of their domestic resources, a substantial transfer of resources from the international community, and particularly from the developed countries, will be required to implement the Programme, including its "immediate action" component. It notes that financing requirements for LDC country programmes in the first half of the 1980s would be \$US 12.3 billion a year, or 85 per cent more in real terms than the average volume of aid received each year during the years 1975-1979, which amounted to \$US 6.6 billion. Total concessional assistance flows at 1980 prices should rise to \$US 24 billion by 1990.

The SNPA recognizes that only a substantial and urgent increase in official development assistance in real terms during the 1980s will enable the LDCs to achieve the objectives set out in their country programmes. In this regard all donor countries reaffirmed their commitment to the target of 0.7 per cent of GNP for total official development assistance. Aid flows will increasingly be directed towards LDCs, and in coming years most donors will earmark 0.15 per cent of their gross national product for the LDCs. Others will double their official development assistance to the LDCs in the same period.

On the basis of current assistance levels given by each donor to the LDCs, and assuming a modest growth rate of real GDP, it has been estimated that the amount of assistance that would be made available to the LDCs would increase by 60 per cent, or by 4.5 per cent a year on average during the 1980s. If it is assumed that this doubling of assistance would occur over a period of only five years (and the SNPA is far from clear on this point) this would imply a yearly growth rate of 3.9 per cent. If the growth of assistance continues at the same rate during the 1980s assistance would increase by a 250 per cent at constant prices by 1990. Thus, the statement in the SNPA that "... taken together, these efforts are likely to achieve, by 1985, a doubling of official development assistance to the least developed countries, compared to the transfer to them during the last five years" <sup>10/</sup> obviously implies that the expansion of aid would be measured at current prices.

Again as regards improved aid modalities no precise conclusions were reached. All that was agreed upon was that donor countries and institutions should make their best efforts to reach decisions at the earliest opportunity concerning proposals to improve the quality and effectiveness of official development assistance, particularly with regard to grants, the impact of inflation on project/programme costs, commodity aid, balance-of-payments support, budgetary support, support for local developments banks and financing institutions, investment in social infrastructure, temporary financing pending reimbursement for expenditure already incurred, recurrent cost planning and selection and design of projects and their budgetary impact.

UNCTAD resolution 122 (V) on the Comprehensive New Programme of Action contains provision for an immediate action programme for 1979-1981 to meet the critical situation of the LDCs through greatly expanded assistance to support their projects for the satisfaction of the most pressing social needs, and thus pave the way for longer-term development efforts during the 1980s. The immediate action programme was intended as a stabilization programme to enhance the supply of inputs required to overcome bottlenecks and to ensure better use of existing capacities before the long-term programme was launched.

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<sup>10/</sup> Ibid., para. 63

In spite of the urgency of the programme and its importance in stabilizing the stagnant economies of the LDCs and curbing inflationary tendencies, progress in its implementation was painfully slow.

When the SNPA itself was discussed at the Paris Conference, the inclusion of a section relating to immediate action was regarded by the African least developed countries as a sine qua non for long-term progress. However, all that was achieved was the inclusion at the last moment of a single section entitled "immediate action component", directing the attention of the international community to the urgent needs of the LDCs and the need for substantial resources to relieve the acute shortage of critical commodities, particularly food and energy, debt burdens, balance-of-payments deficits, the effects of natural and man-made disasters and the serious bottle-necks faced in management, maintenance, repair and physical facilities, as well as for the identification of projects, the undertaking of feasibility studies, the development of agriculture and rural areas, the supply of inputs for agricultural and rural development, the initiation of labour-intensive rural public works projects and the provision of an adequate, assured and predictable supply of resources to complement the activities of LDCs themselves.

Thus the "immediate action" component of the SNPA degenerated from the original idea of stabilization programmes in the proper meaning of the word into the usual vague appeal for all types of assistance.

In the field of transport and communications, where the LDCs face severe difficulties and bottle-necks due to the absence of adequate infrastructure, international support measures are envisaged for the development of ports, roads, rural tracks and railways and other internal and external transport facilities, including shipping. Specific reference is also made to land-locked, coastal and island LDCs and the need for improvements in their transit-transport facilities and the development of national shipping services.

The fundamental role of the transfer and development of technology in socio-economic development is also recognized. The object here is to fill the gaps resulting from the complete lack of domestic research and development capabilities. Unfortunately the SNPA recommends that the LDCs should be given the freest and fullest possible access to technologies only where the transfer of technology is not subject to private decisions.

#### D. ARRANGEMENTS FOR IMPLEMENTATION, FOLLOW-UP AND MONITORING

The SNPA involves not only 31 least developed countries but also a large number of development partners in the industrial world and the developing world which are in a position to assist the LDCs. The machinery for implementation should therefore be highly co-ordinated at all levels, country, regional and global, with feedbacks between them. It should also be sufficiently flexible to cope with the emergencies which often strike LDCs. Domestic and international economic circumstances change over time and appropriate policies must be adopted to deal with them. Some of these policies are already well known, while further work is needed on many others.

Attempts were made in Paris to play down the need for effective and flexible arrangements for implementation on the grounds of avoiding duplication and the creation of new machinery involving additional expenses. There were also attempts to deny UNCTAD the leading role of global co-ordinating agency.

For the implementation of the SNPA the establishment of machinery at the country level for regular discussions and consultations with donors development partners as well as the co-ordination of domestic efforts seems essential. If the annual pledging or review meeting is to be successful, it has to be preceded by proper preparation at the country level of the studies and other documentation needed, including prefeasibility and feasibility studies. The preparation of such costly studies is beyond the ability of the least developed countries without technical and financial assistance from the donors.

The results of such review meetings and details of arrangements decided upon at the country level should be submitted yearly for discussion at a regional forum, if the least developed countries are to exchange experience among themselves and find solutions for common problems encountered.

One such regional forum exists thanks to the initiative of the Economic Commission for Africa in establishing an annual Conference of Ministers of Least Developed African Countries. This Conference has proved to be extremely useful not only in the exchange of experience but also in harmonizing African positions for global conferences.

Equally important is a regular global conference, and here again the machinery already exists in the shape of the UNCTAD Intergovernmental Group on the Least Developed Countries which, as the body responsible for preparing for the Paris Conference, played a valuable role in the work which led to the drafting of the SNPA.

Thus the essential machinery needed at the country, regional and global levels already exists, and has proved its usefulness.

The SNPA recommends that each least developed country should establish a focal point for continuing contact and co-ordination with its development partners both bilateral and multilateral, and suggests that a working party with members drawn from appropriate ministries should be set up for that purpose. LDC Governments are also invited to establish aid consultative groups or similar arrangements. It should be open to the least developed country concerned to invite actual and potential donors and trade partners and United Nations organs, organizations and bodies as appropriate to join in establishing suitable consultative arrangements. UNCTAD should be invited, as necessary, to be represented at the review meetings at the country level.

The provision that the reviews should take place at appropriate intervals is rather vague. The review and pledging meetings should be convened each year to discuss in advance the annual development plans and measures needed for raising external and domestic resources.

The SNPA suggests that these meetings should be devoted to a review of the country's economic situation and external assistance, an assessment of progress in the implementation of the SNPA, consideration of a detailed annual or mid-term plan, requirements in terms of external resources, the securing of assistance for the implementation of plans and programmes for the period under consideration, a review of aid terms and conditions and consideration of ways and means of assisting the LDC concerned to expand its trade. These terms of reference are well formulated, but the problem remains of their timing and periodicity and the degree of commitment expected from donor countries.

In spite of the seriously deteriorating economic conditions in the LDCs and the urgent need to implement the "immediate action" component of the SNPA, attempts have been made to postpone the first round of country reviews to 1983, which in practice would mean a four-year delay in the implementation of the "immediate action" component, from 1979-1981 to 1983. The compromise reached in Paris was that the first round of reviews should take place as soon as possible, and preferably by 1983. Bearing in mind that the convening of such review meetings requires prior consultations with the development partners about the dates and venues, it is obvious that they have the upper hand in that respect.

As has already been mentioned, each LDC prepared a detailed country presentation delineating its development objectives, priorities, plans and projects in 1981 before the Paris Conference. It is discouraging to note that two years after the pre-Paris rounds of review meetings, each country is being requested to prepare a further study providing an assessment of the current economic situation and the immediate and long-term requirements for assistance in the light of its own priorities and programmes.

This whole process amounts in practice to studies after studies, with estimates of the immediate and long-term aid requirements, without any agreed guidelines or commitment as to the volume of external assistance that may be expected. If such norms are not agreed upon in advance, the estimates will be subject to serious reservations regarding the evolution of the macro-economic variables. In addition, no specific resources were committed for the technical assistance needed, particularly for the preparation of the prefeasibility and feasibility studies for the projects identified in the development plans. So there is the possibility of wide difference between the least developed country concerned and its development partners during the post-Paris first round of consultative group meetings. This is particularly so owing to the vague formulation in the SNPA of the targets for foreign assistance.

In these circumstances the African LDCs would be well advised, when preparing their documentation for the first round of reviews, to prepare their development plans on the basis of at least three scenarios, for high, medium and low growth, in order to be able to cope with developments as regards international support measures.

As regards follow-up and monitoring at the regional and global levels, the SNPA rightly emphasizes the crucial importance of continuing interaction between specific implementation activity focussed at the country and regional level and the global monitoring of progress. UNCTAD is to play the focal role in drawing up detailed arrangements at the global level. The SNPA further stresses that it is essential that progress in the implementation of the SNPA should be reviewed and monitored regularly at the national and regional, as well as the global, level. The national reviews will be fundamental for the execution of the Programme in the least developed countries, while the regional and global reviews will be crucial in ensuring the international support for it. This process is intended to ensure that every least developed country receives at least a minimum flow of assistance and demonstrates at least a minimum standard of performance in economic development.

Unfortunately, only a single medium-term global review of progress towards the implementation of the SNPA was agreed upon. This review is to take place in 1985 and will readjust the SNPA for the second half of the decade as appropriate in order to ensure its full implementation.

The Paris Conference recommended to the General Assembly that the UNCTAD Intergovernmental Group on the LDCs should meet at high level in order to carry out the mid-term review, and that the Assembly should consider the possibility of holding a global review at the end of the decade, which might take the form of a United Nations Conference on LDCs.

The global monitoring arrangements will provide an opportunity to review progress at the country level as well as progress in the implementation of the international support measures, particularly in official development assistance.

The Director-General for Development and International Economic Co-operation, in close collaboration with the Secretary-General of UNCTAD, the executive secretaries of the regional commissions and the lead agencies for the aid groups, will ensure at the Secretariat level the full mobilization and co-ordination of all organs, organizations and bodies in the United Nations system for the implementation and follow-up of the SNPA. A similar role will be played by the resident co-ordinator for the United Nations in each LDC, who will continue mobilizing the efforts of all parts of the United Nations system.

The regional commissions are requested to contribute to the follow-up process and offer an opportunity for the LDCs in each region to exchange experience and seek solutions to common problems at the national, regional and global levels.

Unfortunately the resources needed to enable UNCTAD, the regional commissions and other United Nations agencies to provide the assistance needed to LDCs and assist them in understanding the feasibility studies have not been agreed upon, and the matter was left for consideration in other forums. This is likely to lead to considerable delays and severely limit the ability of UNCTAD, ECA and other bodies in the United Nations system to extend a helping hand to the least developed countries, especially in review of the zero real growth rates imposed on the United Nations budget.

## E. FEASIBLE GROWTH RATES AND LIKELY TRADE GAPS, AND SUGGESTED POLICY MEASURES

Five sets of projections and scenarios are attempted in this section. The first (table V.2) is based on the country presentations as they stand. Unfortunately the country presentations show a trade gap much larger than the savings gap. Ex ante, the two gaps can be different, but ex post they should be equal. Ex ante the difference between the two gaps reflects the adjusters ignored in the country presentations.

The second scenario (table V.3) is also based on the country presentations but attempts to balance the trade and savings gaps using domestic consumption as the adjuster. Scenarios 1 and 2 are both based on the assumption that the inflow of foreign resources will amount to \$US 83 billion (at 1979 prices).

The third scenario (table V.4) gives projections based on the assumption that past policies and growth trends remain unaltered. This course would be disastrous, since the GDP growth rate would decelerate to a mere 2.9 per cent a year with an inflow of foreign aid of \$US 57 billion, which is even larger than the inflow of \$US 50 billion expected under the SNPA.

The fourth and fifth scenarios (tables V.5 and V.6) are based on the assumption of a reduction in foreign assistance to about \$US 50 billion (at 1979 prices), as envisaged under the SNPA in the form in which it was finally adopted at the Paris Conference. The fourth set of projections assumes a reduction in the planned growth rates, while the fifth set assumes that the target set out in the country presentations are achieved and accordingly examines the implications of greater efforts in the direction of self-reliance.

Table V.2 shows that African LDCs are planning to achieve a relatively high growth rate of GDP at factor cost of about 6 per cent a year in the 1980s. This corresponds to a near-doubling of GDP at market prices by 1990, and would require an inflow of foreign resources of about \$US 83 billion at 1979 prices for the period 1981-1990 in order to meet an import growth rate of about 10.5 per cent a year in the 1980s, which is much higher than the historical rate of 6 per cent. The African LDCs are also planning to promote their exports to grow at an average annual rate of about 8.7 per cent, as compared to a low historical performance of only 3.8 per cent a year between 1975 and 1979. Similarly, an ambitious target has been set for domestic savings, whose share in GDP is to reach about 14 per cent and 18 per cent in 1985 and 1990 respectively, compared with less than 6 per cent in 1979.

With the relatively high import rate sustained by a substantial inflow of foreign resources, African LDCs have planned for a high investment growth rate of around 12 per cent a year in the 1980s, bringing the share of investment in total GDP to about 27 per cent in 1990. Most of the investment would be channelled to such priority sectors as agriculture, economic infrastructure and manufacturing. In this way agriculture and industry (including manufacturing, mining, construction, transport and

Table V.2  
Projections of macro-economic aggregates for the African least developed  
countries on the basis of country presentations  
(base scenario)

	Values (Billions of US dollars at 1973 prices)				Shares in total GDP (Percentages)		Average annual growth rates (Percentages)			
	1979	1985	1990	1979	1985	1990	1979-1985	1985-1990	1979-1990	
GDP at factor cost	36.43	52.69	76.53	100.0	100.0	100.0	5.4	5.5	5.5	6.0
Agriculture	20.01	25.03	31.19	52.1	47.5	43.0	3.0	4.5	4.1	4.1
Industry	15.40	20.81	24.19	44.0	39.7	37.4	3.5	10.0	8.0	8.0
Services	13.02	16.85	21.15	33.9	35.8	37.4	6.4	7.6	6.9	6.9
GDP at market prices	42.21	59.54	83.12	100.0	100.0	100.0	5.9	6.9	6.3	6.3
Consumption	39.82	51.31	66.34	94.3	86.2	83.2	5.2	5.9	5.5	5.5
Domestic saving	2.39	6.23	14.76	5.7	13.6	17.8	22.9	12.4	15.9	15.9
Capital formation	6.32	11.07	22.25	15.0	18.6	26.8	9.3	15.9	12.1	12.1
Saving gap	8.93	2.84	7.40	9.3	4.3	9.0	-10.4	15.3	6.9	6.9
Imports	8.92	15.72	26.73	21.1	26.4	32.2	9.9	11.2	10.5	10.5
Exports	4.99	7.74	12.45	11.8	13.0	15.0	7.6	10.0	8.7	8.7
Trade gap	3.93	7.98	14.27	9.3	13.4	17.2	6.3	5.1	5.7	5.7

Source: ECA secretariat calculations based on country presentations.



Table V.3

Projections of macro-economic aggregates for the African least developed countries based on country presentations with adjustment to balance the trade and savings gaps

	Values (Billions of US dollars at 1979 prices)			Shares in total GDP (Percentages)		Average annual growth rates (Percentages)		
	1979	1985	1990	1979	1985	1990	1979-1985	1985-1990
GDP at factor cost	36.43	52.69	72.53	100.0	100.0	100.0	5.4	6.5
Agriculture	20.01	25.06	31.19	52.1	47.5	43.0	3.8	4.5
Industry	5.40	6.81	14.13	14.0	16.7	19.6	3.5	10.0
Service	13.02	18.35	27.15	33.9	35.0	37.4	6.4	7.6
GDP at market prices	42.21	59.54	83.12	100.0	100.0	100.0	5.9	6.9
Consumption	39.82	56.45	75.13	94.3	94.0	90.4	6.0	5.9
Domestic saving	2.39	3.09	7.93	5.7	5.2	9.5	4.4	20.3
Capital formation	6.32	11.07	22.26	15.0	18.6	25.3	3.3	15.0
Saving gap	3.93	7.98	14.27	9.3	13.4	17.2	6.3	5.1
Imports	6.92	15.72	26.73	21.1	26.4	32.2	9.9	11.2
Exports	4.99	7.74	12.46	11.8	13.0	15.0	7.5	10.0
Trade gap	3.93	7.98	14.27	9.3	13.4	17.2	6.3	5.1

Source: ECA secretariat calculations.

Note: Growth rates of GDP at factor cost, GDP at market prices, sectoral values added, capital formation, imports and exports are derived from the country presentations.

Table 7.4

Projections of macro-economic aggregates for the African least developed countries

(Trend scenario)

	Values (Billions of US dollars at 1979 prices)				Shares in total GDP (Percentages)		Average annual growth rates (Percentages)			
	1979	1985	1990	1979	1985	1990	1979-1985	1985-1990	1979-1990	
GDP at factor cost	35.43	45.52	52.89	100.0	100.0	100.0	2.9	3.0	2.94	
Agriculture	20.01	22.27	24.35	56.1	48.8	46.0	1.3	1.3	1.3	
Industry	5.40	6.99	8.71	14.0	15.3	16.50	4.4	4.5	4.44	
Services	10.02	16.26	19.83	28.9	35.9	37.50	3.9	3.9	3.9	
GDP at market prices	42.21	54.08	69.52	100.0	100.0	100.0	4.2	4.5	4.4	
Consumption	39.82	50.97	63.52	94.3	94.3	93.9	4.2	4.5	4.3	
Domestic saving	2.99	3.05	4.12	5.7	5.7	6.1	4.1	6.2	5.9	
Capital formation	6.32	8.32	10.57	15.0	15.4	15.6	4.7	4.9	4.8	
Saving gap	3.93	5.27	6.45	9.3	9.7	9.5	5.0	4.1	4.6	
Imports	8.92	11.63	14.84	21.1	21.6	21.9	4.6	4.9	4.7	
Exports	4.99	6.31	7.66	11.8	11.7	11.4	4.0	4.0	4.0	
Trade gap	3.93	5.37	7.16	9.3	9.9	10.5	5.3	5.9	5.6	

Source: ECA secretariat.

Table 7.5  
Projections of macro-economic aggregates of African least developed countries based  
on the availability of foreign assistance as assumed in the SNPA

	Values (Billions of US dollars at 1979 prices)				Shares in total GDP (Percentages)		Average annual growth rates (Percentages)			
	1979	1985	1990	1990	1979-1985	1985-1990	1979-1985	1985-1990	1979-1990	1979-1990
GDP at factor cost	38.43	51.21	65.94	100.0	100.0	100.0	4.9	4.9	4.9	4.9
Agriculture	20.01	23.89	29.07	52.1	45.7	44.7	3.0	4.0	4.0	3.4
Industry	5.40	8.57	12.59	14.0	16.7	15.4	8.0	8.0	8.0	8.0
Services	13.02	18.75	23.30	33.9	35.6	35.9	6.3	4.5	4.5	5.5
GDP at market prices	42.21	56.56	72.88	100.0	100.0	100.0	5.0	5.2	5.2	5.1
Consumption	39.83	50.36	61.60	94.3	82.0	95.7	4.0	4.1	4.1	4.0
Domestic saving	2.39	6.18	11.28	5.7	11.0	15.6	17.2	12.8	12.8	15.1
Capital formation	6.32	11.01	17.50	15.0	19.6	24.2	9.7	9.7	9.7	9.7
Saving gap	3.93	4.83	6.22	9.3	8.6	8.6	3.5	5.2	5.2	4.3
Imports	8.92	12.53	17.23	21.1	22.3	23.9	5.8	6.6	6.6	6.2
Exports	4.99	7.70	11.06	11.8	13.7	15.3	7.5	7.5	7.5	7.5
Trade gap	3.93	4.83	6.22	9.3	8.6	8.6	3.5	5.2	5.2	4.3

Source: ECA secretariat.

Table 7.6

Projections of macro-economic aggregates of African least developed countries based on the availability of foreign assistance as assumed in the SNPA along with the GDP growth rates envisaged in the country presentations

	Values (Billions of US Dollars at 1979 prices)					Shares in total GDP (Percentages)		Average annual growth rates (Percentages)		
	1979	1985	1990	1979	1985	1990	1979-1985	1985-1990	1979-1990	
GDP at factor cost	30.43	52.69	72.53	100.0	100.0	100.0	5.4	5.5	5.0	
Agriculture	20.01	25.00	31.19	52.1	47.5	43.0	3.6	4.5	4.1	
Industry	5.40	8.31	14.19	14.0	15.7	19.6	5.5	10.0	6.8	
Services	13.02	10.85	27.15	33.9	35.8	37.4	6.4	7.5	6.9	
GDP at market prices	42.21	59.54	83.12	100.0	100.0	100.0	5.9	6.9	6.3	
Consumption	39.82	53.23	67.59	94.3	87.4	81.2	5.0	4.9	4.9	
Domestic saving	2.39	6.31	15.61	5.7	12.6	18.8	17.6	19.9	18.6	
Capital formation	5.32	11.07	22.25	15.0	18.6	26.3	9.2	15.0	12.1	
Saving gap	3.93	4.76	6.65	9.3	8.0	8.0	3.2	6.9	4.9	
Imports	8.92	12.50	19.11	21.1	21.1	23.0	5.8	8.9	7.2	
Exports	4.29	7.74	12.46	11.8	13.0	15.0	7.6	10.0	8.7	
Trade gap	3.93	4.76	6.65	9.3	8.0	8.0	3.2	6.0	4.9	

Source: ECA secretariat projections.

Note: Growth rates of GDP at factor cost, GDP at market prices, sectoral values added, capital formation and exports are derived from the country presentations.

communications and energy) are scheduled to grow at average annual rates of 4.1 per cent and 3.3 per cent respectively, bringing about marked changes in the production structure, with the share of the industrial sector rising from 14 per cent in 1979 to nearly 20 per cent by 1990. African LDCs are also planning to achieve greater efficiency in the use of capital to accompany the high investment rate indicated earlier, reducing the incremental capital-output ratio from its historical level of 4 to around 3.5 in the 1990s.

The first scenario showed that, because of the high rate of growth of imports resulting from an ambitious investment plan, and also because of the ambitious saving target, the trade deficit will be much larger than the deficit of domestic savings, indicating that a considerable proportion of the extra savings will not be tradable externally. Consequently a second scenario was attempted in which it was assumed that the elasticity of consumption with respect to GDP would not fall as sharply as indicated in the country presentations (i.e. from about 1.2 for the period 1975-1979 to only 0.93 in the 1980s). Consumption was projected to grow at an average annual rate of about 5.9 per cent, thus making the saving and trade gaps equal by 1990. It should be noted that such an expansion in consumption will be met solely from domestic output.

The third scenario (table 7.4) shows a simple projection of the past trends and policies. It shows the balance-of-payments deficit would rise to \$US 57 billions, while the GDP growth rate would decline to 2.94 per cent yearly during the period 1979-1990.

As indicated earlier, a fourth scenario was attempted (table 7.5) on the assumption of an inflow of foreign assistance of about \$US 50 billion for the 1980s as a whole (50 per cent of the total amount required by African LDCs on the basis of their country presentations), the amount that would be available during the 1980s under the CNPA. Analysis of this scenario shows that as a result of a fall in foreign resource inflows during the decade, the African LDCs will experience lower growth and will be unable to achieve the target of doubling GDP by 1990, a target which requires a GDP growth rate of slightly over 6 per cent a year.

Under this scenario the African LDCs will be obliged to accept a much slower rate of growth in imports. Assuming that they are able to achieve export expansion of around 7.5 per cent a year for the entire decade, which is a very ambitious target in a world recession, an inflow of foreign assistance of around \$US 50 billion would merely enable them to maintain an average import growth rate of about 6.0 per cent a year - though given the present high import content of most of the investment under the LDCs' programmes, a reduction in their capacity to import would necessarily have a direct bearing on the rate of investment and consequently on the over-all growth rate. However, if they are able to reduce their import elasticity to around 1.2 as compared to the 1.7 which is implicit in the country presentations, then the rate of growth of imports would fall to about 7.5 per cent a year during 1981-1990. Under this scenario the feasible GDP growth rate in real terms would be some 4.9 per cent a year in spite of the substantial cut in imports.

Investment growth would decline from the 12.5 per cent a year projected in the first scenario to around 9.7 per cent a year for the 1981-1990 period. However, since GDP would be growing at a slower rate, the saving effort involved would still be enormous. The savings rate would have to exceed 15 per cent of GDP by 1990, compared to the 5.7 per cent recorded in 1979. Such an effort would have important effects on the level of consumption of the poor masses. In order to achieve the rate required, the African LDCs would have to hold the growth of consumption at about the historical level of 4.1 per cent a year. More significantly, they would have to reduce drastically their consumption elasticity and marginal propensities. The elasticity to consume would have to drop from the 1.1 of 1975-1979 to around 0.80 by 1981-1990.

Sectorally, the growth rates in agriculture and industry would be significantly affected by the substantial reduction in assistance from the requirements set out in the country presentations and due to the consequent reduction in the level of investment. It appears from the analysis of the African LDCs' country presentations that the expansion of agricultural output would result mainly from increased investment in agriculture, including large irrigation projects. With reduced investment, therefore, it would not be feasible to attain the target of 4 per cent set for the growth of agricultural production. Assuming that a large part of the assistance could still be channelled to the agricultural sector - so as to ensure the amelioration of food supplies and the expansion of agricultural exports - the projections show that agriculture would be growing by about 3.5 per cent in the period 1981-1990, with the greatest expansion taking part in the latter half of the 1980s, when investment in agriculture starts to be productive.

For industry it is assumed that with a well-co-ordinated programme in that sector, a large and immediate rise in output can be secured attempting as much as possible to utilize the present high excess capacity. Thus with immediate rehabilitation and stabilization programmes and the provision of basic inputs, the industrial sector of African LDCs could witness fast growth in the decade averaging about 8 per cent a year.

The fifth scenario (table 7.6) which is based on the assumption that doubling GDP by 1990 is a remedy for African LDCs delineates the policy measures to be pursued to achieve that target in spite of the availability of only \$US 50 billion in aid. Investment and exports should be maintained at the levels of the first two scenarios, while consumption and imports are projected to grow during the 1980s at average annual rates of 4.9 per cent and 7.2 per cent respectively. In other words, consumption elasticity would have to be maintained at the low level of about 0.8 in order to bring the saving rate to about 19 per cent of GDP by 1990. However, consumption would grow much faster than in the period 1975-1979, and it is to be hoped that the increase will be directed to the consumption levels of the lower income groups.

The reduction in the rate of growth of imports implies a sharp drop in import elasticity with respect to GDP to about 1.14 from the historical 1.7. Since investment will have to grow at its planned rate of about 12 per cent a year, and given the low projected growth in consumption indicated above, African LDCs will have to adopt new patterns of consumption and investment characterized by low import content. In other words, both consumption and investment should be more oriented to the use of domestic products and domestic resources (human, material and financial). More specifically, this scenario, based on greater self-reliance, implies the adoption of more labour-intensive investment projects and the promotion of local agricultural and manufactured products through adequate incentives, including protection measures.

If insufficient foreign aid is available, as seems likely, the development strategy will have to be more inward-looking. This would mean that plans should aim at maintaining progress with a suitable mix of low and high levels of technology, and perhaps making do with processes that are less efficient and (by world standards) costlier in terms of labour and material inputs. What is more, the finished product may not be as good as might be produced as a result of the wholesale adoption of the most advanced technology on the market. But rather than waiting indefinitely for foreign assistance to arrive in the required volume, it would be prudent to make do with what is available at home. This is true of both consumer goods and capital goods. Too often, in trying to get onto the bandwagon of advanced Western technology, developing countries ignore the inferior technology available at home. There is a wide range of technology from everyday consumer goods like textiles, soap, matches, foot-wear and safety razors to a whole host of manufactures needed in both urban and rural areas and whenever foreign exchange constraints operate the market for indigenous production must be carefully nurtured and protected from competing foreign goods. Needless to say this will prove an unpleasant task, and will clash both with many vested interests in the import-export business and with the tying of foreign aid by the developed donors.

The same applies to many capital formation activities like construction, hydropower, pumps and generators, etc. In many of these areas a broad range of technology exists, and countries short of foreign exchange must undertake careful investigation to see which technological solution calls for a minimum of foreign exchange.

Again with regard to markets, it is most important to popularize local products by encouraging their use, particularly by the educated sectors of society and government organizations in order to set an example.

Attempts must be made to cultivate the expertise of the most advanced type inside the country through research and development institutions, so that gradual transformation of technology is possible with indigenous efforts. In the final analysis this is the only way to self-reliant growth, however painful it might be.

Finally, efforts must be made to develop closer market links within Africa, so that the fullest possible advantage can be taken of economies of scale. All these vital initiatives are spelled out in great detail in the Lagos Plan of Action and related documents.

#### F. SUMMARY OF MAJOR CONCLUSIONS

The preparations for the United Nations Conference on the Least Developed Countries, held in Paris from 1 to 14 September 1981, were truly without precedent, involving detailed inputs from the individual least developed countries. All the LDCs prepared detailed presentations of their development plans and programmes for the 1980s, and held individual country consultations with their aid partners prior to the Conference in order to review plans and aid arrangements.

The country presentations displayed broad uniformity as regards objectives and priorities, in line with the Lagos Plan of Action, emphasizing self-sufficiency in food, the meeting of basic needs, transformation of the structure of output, exploration and exploitations of natural resources and minerals, including energy and water, provision of infrastructure, including transport and communications, and wider employment opportunities.

The average annual growth rate of GDP at constant prices underlying the country presentations for the 1980s is about 6 per cent a year: 4 per cent for agriculture, 9 per cent for industry, 8.7 per cent for exports and 10.5 per cent for imports (i.e., and elasticity of 1.75 with respect to GDP growth). Consumption is expected to expand at 5.5 per cent a year and domestic savings to increase from 6 per cent of GDP in 1979 to 17.8 per cent in 1990 (implying a marginal propensity to save of 0.33). Investment should expand from 15 per cent of GDP to 26.8 per cent.

Total planned development expenditure for the African least developed countries for the 1980s amounts to \$US 133 billion, \$US 80 billion (60 per cent) in the form of foreign aid and the remaining \$US 53 billion (40 per cent) financed from domestic savings.

The macro-economic variables were consistent with each other and the quality of the country presentations was of a high order by past standards.

Unfortunately, in the review meetings the reaction of the development partners (i.e., donors) was guarded and unspecific, and no commitments were made. However, agreement emerged concerning development objectives and priorities, including emphasis on agriculture to achieve self-sufficiency in food production during the 1980s, efforts to promote exports, encouragement of agro-based industries, the development of transport and communications and maximum utilization of domestic resources.

The SNPA adopted at the Paris Conference attempts to find solutions for most of the problems facing LDCs in the fields of food and agriculture, human resources and social development, natural resources and energy, manufacturing industry, physical and institutional infrastructure, environment, transformational investment, foreign trade and disaster assistance.



The targets, priorities and objectives set out in the SNPA under the heading "General situation and national measures" are sound and mostly in line with the Lagos Plan of Action. They are in the right direction considering the necessity for structural changes and measures to eradicate mass poverty. Unfortunately, these targets and objectives look extremely ambitious in the light of the limited foreign assistance agreed upon at the Conference. External assistance to LDCs is projected to increase by only 60 per cent or 4.9 per cent a year on average during the 1980s, which is far short of what is needed to implement the SNPA. Moreover, in the field of improved aid modalities no precise agreements were reached, and the arrangements for implementation, follow-up and monitoring suffer from a number of problems relating to timing, periodicity and the commitments expected from donor countries.

In spite of the seriously deteriorating economic conditions in the LDCs and the urgent need for immediate action to assist these countries, no agreement was reached on practical measures for the implementation and programme of immediate action, which African LDCs regard as a programme for survival.

Though the SNPA recognizes that the energy problems of the LDCs have assumed serious dimensions, and that these problems, together with higher prices of manufactured imports, high inflation and unfavourable terms of trade, impose serious constraints on their balance of payments, requests for sufficient assistance in the interim period in the form of balance-of-payments support or an expanded oil facility have been turned down by the development partners.

With the little progress achieved as regards international support measures, a dichotomy emerged in the SNPA between the sections dealing with them and those relating to national measures.

The question that arises is how the ambitious yet essential provisions of the SNPA can be implemented, and what should be the starting-point for reform and implementation. To assist in the search for solutions a number of development scenarios have been drawn up. They are outlined in Section E of this study.

The main conclusion arising from the five sets of scenarios is that, if foreign aid is inadequate, the development strategy must be more inward-looking, aiming at maintaining progress with a suitable mix of simple and advanced technologies, nurturing indigenous production and carefully protecting it from competing foreign goods, developing domestic expertise, forging closer market links between African countries, adopting more labour-intensive investment and curbing domestic consumption. All of these avenues to be pursued are spelled out in the Lagos Plan of Action.

The least developed African countries would be well advised, when preparing for the meetings, to review the implementation of the SNPA, to draw up plans based on three scenarios, for modest, medium and ambitious but realistic growth so as to be able to cope with future developments as regards external assistance. In addition, they should stress the immediate assistance needed to reactivate their economies in order to build up momentum for the implementation of the long-term measures.

## ANNEX 1

Basic indicators, 1980

	Population (million)	GDP (current million \$US)	Per capita GDP (current \$US)	Growth of real GDP <sup>1/</sup> (percentages)	Rate of inflation (percentages)
<b>NORTH AFRICA</b>	107.5	134 754	1 254	6.1	14.2
Algeria	18.3	42 476	2 325	6.5	9.5
Egypt	41.6	20 723	498	8.8	20.6
Libyan Arab Jamahiriya	3.0	37 591	12 721	5.0	...
Morocco	20.0	16 559	828	2.3	9.4
Sudan	18.3	9 238	505	3.2	25.4
Tunisia	6.3	8 167	1 306	7.0	10.0
<b>WEST AFRICA</b>	140.8	155 194	1 102	4.4	13.9
Benin	3.5	1 017	288	0.9	...
Cape Verde	0.3	109	329	6.9	...
Gambia	0.6	249	414	-3.5	6.7
Ghana	12.3	13 458	1 096	-4.3	50.1
Guinea	5.0	1 927	385	5.6	...
Guinea Bissau	0.6	154	270	-4.2	...
Ivory Coast	8.0	11 315	1 411	3.4	14.6
Liberia	1.8	1 455	792	-1.6	13.8
Mali	6.6	1 202	182	-2.0	...
Mauritania	1.5	691	467	3.9	10.8
Niger	5.3	2 331	437	5.1	10.3
Nigeria	77.0	115 049	1 494	6.2	10.4
Senegal	5.6	2 528	448	-5.6	8.8
Sierra Leone	3.4	1 385	402	1.4	11.1
Togo	2.5	1 148	452	2.1	12.4
Upper Volta	6.8	1 175	172	2.0	12.3
<b>CENTRAL AFRICA</b>	62.3	22 848	367	2.4	19.6
Angola	6.7	3 817	570	5.6	...
Burundi	4.3	789	184	4.2	4.2
Central African Republic	2.2	732	328	-2.9	17.4
Chad	4.5	1 011	225	-7.4	...
Congo	1.5	1 539	1 000	4.4	7.3
Equatorial Guinea	0.4	69	192	-9.2	...
Gabon	0.5	3 958	7 210	5.2	12.3
Rwanda	4.8	1 147	239	3.9	7.2
Sao Tome and Principe	0.1	46	553	2.5	...
United Republic of Cameroon	8.5	6 736	790	3.2	9.3
Zaire	28.8	3 003	104	0.7	41.6
<b>EAST AFRICA</b>	126.0	56 231	446	2.7	17.2
Botswana	0.8	897	1 144	14.1	13.9
Comoros	0.6	116	207	4.3	...
Djibouti	0.3	329	1 003	3.5	...
Ethiopia	31.8	4 399	138	6.1	4.5
Kenya	16.4	7 083	432	2.2	13.8
Lesotho	1.3	372	279	-2.0	15.7
Madagascar	8.5	3 409	399	-1.4	18.3
Malawi	6.0	1 555	257	1.5	18.9
Mauritius	1.0	916	958	-5.9	42.7
Mozambique	10.2	2 842	280	2.5	...
Seychelles	0.1	125	1 800	5.2	13.5
Somalia	3.7	1 373	376	-0.7	58.8
Swaziland	0.5	458	849	7.0	18.7
Uganda	13.6	17 377	1 274	-2.0	...
United Republic of Tanzania	17.9	6 068	339	4.0	30.2
Zambia	5.8	3 854	661	-0.6	11.7
Zimbabwe	7.5	5 057	675	8.0	4.8
Oil-exporting countries	98.8	199 075	2 015	6.0	10.2
Non-oil exporting countries	339.7	174 887	515	3.6	18.9
Least developed countries	138.5	53 085	383	2.9	39.2
<b>DEVELOPING AFRICA</b>	438.1	373 962	854	4.6	15.1

Sources: ECA secretariat and International Financial Statistics, Supplement on Price Statistics, No. 2, 1981.

N.B.: Developing Africa and Non-oil-exporting developing Africa include Namibia and Réunion.

<sup>1/</sup> GDP at market prices.

## ANNEX 2

## Structure of Production

	Real GDP in million \$US <sup>1/</sup>		Percentage share in GDP							
			Agriculture		All industry		Manufacturing		Services	
	1970	1980	1970	1980	1970	1980	1970	1980	1970	1980
<b>NORTH AFRICA</b>	19 767	36 759	21.2	14.2	35.9	32.5	12.6	12.3	42.9	53.4
Algeria	3 623	7 140	13.3	9.2	35.7	40.8	11.2	11.1	51.0	50.0
Egypt	6 042	11 182	29.4	18.6	28.3	28.4	19.6	17.7	42.3	53.0
Libyan Arab Jamahiriya	3 607	7 614	2.6	2.9	72.3	42.4	1.8	5.6	25.1	54.7
Morocco	3 355	5 479	22.8	15.1	25.8	27.8	15.9	15.5	51.4	57.1
Sudan	1 890	2 634	44.5	35.8	16.6	14.7	10.2	7.1	38.9	49.5
Tunisia	1 250	2 710	19.3	17.4	24.9	26.6	9.2	11.2	55.8	56.0
<b>WEST AFRICA</b>	18 831	34 511	43.9	25.9	17.5	22.8	6.5	7.3	38.6	51.4
Benin	224	273	45.9	50.3	12.5	10.7	8.4	6.3	41.6	39.0
Cape Verde	25	27	20.3	22.7	28.5	27.4	5.3	5.9	51.2	49.9
Gambia	55	67	30.7	24.6	9.6	15.6	5.1	2.6	59.7	59.8
Ghana	2 082	2 053	49.5	41.6	19.4	20.9	12.2	12.5	31.1	37.5
Guinea	612	768	66.7	55.5	7.7	9.8	2.9	3.0	25.6	34.7
Guinea Bissau	59	63	62.5	58.9	2.9	3.9	1.1	1.1	34.6	37.2
Ivory Coast	1 192	2 146	35.2	25.4	20.5	27.1	11.4	13.5	44.3	47.5
Liberia	380	483	24.8	29.7	40.7	30.5	4.0	5.6	34.5	39.8
Mali	255	319	48.2	41.9	16.2	16.4	10.5	10.8	35.6	41.7
Mauritania	192	212	29.3	20.3	38.5	32.5	4.9	6.3	32.2	47.2
Niger	382	536	60.4	53.8	9.9	16.0	6.0	5.7	29.7	30.2
Nigeria	11 700	25 668	44.3	22.4	15.9	23.1	4.4	5.2	38.8	54.5
Senegal	766	806	27.2	25.3	22.8	27.9	15.9	18.2	50.0	46.8
Sierra Leone	380	454	29.9	32.8	28.8	20.1	6.5	7.3	41.3	47.1
Togo	240	310	39.8	23.6	20.8	19.1	10.2	6.2	39.4	57.3
Upper Volta	290	326	47.5	36.7	16.6	21.9	10.9	14.6	35.9	41.4
<b>CENTRAL AFRICA</b>	5 550	6 475	37.2	31.4	21.2	24.8	6.9	7.8	41.6	43.8
Angola	1 537	896	44.6	37.9	15.2	27.1	5.2	4.9	40.2	35.0
Burundi	227	303	68.2	63.2	9.4	13.9	6.8	7.8	22.4	22.9
Central African Republic	181	201	34.7	38.9	23.3	21.9	13.1	13.9	42.0	39.2
Chad	298	316	53.2	47.3	7.3	9.2	5.5	5.2	39.5	43.5
Congo	237	353	43.8	34.7	14.6	16.3	6.6	5.2	41.6	49.0
Equatorial Guinea	74	20	66.2	47.1	9.5	8.9	3.8	4.2	24.3	44.0
Gabon	280	652	17.3	8.3	45.4	48.6	4.1	10.2	37.3	43.1
Rwanda	205	399	68.6	51.9	8.5	18.2	3.5	12.2	22.9	29.9
Sao Tome and Principe	13	12	39.9	39.2	10.4	10.2	4.8	5.4	49.7	50.6
United Republic of Cameroon	1 028	1 694	33.8	33.0	16.1	17.3	10.0	9.1	50.1	49.7
Zaire	1 470	1 628	21.1	19.6	34.3	30.9	7.6	6.5	44.6	49.5
<b>EAST AFRICA</b>	11 989	15 661	36.7	33.7	23.4	23.9	10.3	11.9	39.9	42.5
Botswana	73	196	42.1	20.2	20.9	37.5	7.8	10.3	37.0	42.3
Comoros	26	29	44.6	50.0	22.6	13.7	6.7	4.7	32.8	36.3
Djibouti	65	77	5.1	4.7	13.8	18.6	6.1	8.5	81.1	74.7
Ethiopia	1 760	2 308	54.7	48.4	15.3	15.5	9.6	9.7	30.0	33.1
Kenya	1 435	2 310	34.9	31.3	20.1	24.1	12.1	16.1	45.0	44.6
Lesotho	59	121	40.9	18.2	7.5	23.9	2.7	5.0	51.6	57.9
Madagascar	783	892	34.1	34.1	17.1	18.4	11.5	11.9	48.8	47.5
Malawi	296	599	47.4	37.6	22.2	23.9	15.4	16.1	30.4	38.5
Mauritius	154	296	24.3	14.2	24.6	33.9	16.0	21.3	51.1	51.8
Mozambique	1 464	1 590	43.5	42.9	11.9	12.2	5.9	6.1	44.6	44.9
Seychelles	20	34	15.1	16.9	17.2	16.6	1.5	4.2	67.7	72.5
Somalia	216	302	37.7	31.2	18.2	20.5	6.5	8.3	44.1	48.3
Swaziland	103	201	22.7	28.6	23.2	30.4	12.4	18.3	39.1	41.0
Uganda	1 195	1 210	55.5	59.0	12.0	7.3	7.5	4.8	32.5	33.7
United Republic of Tanzania	1 150	1 901	41.2	39.3	17.3	12.8	10.1	7.8	41.5	47.9
Zambia	1 502	1 812	12.3	12.9	55.3	51.3	6.5	10.0	32.4	35.8
Zimbabwe	1 373	1 784	15.6	14.3	37.4	39.2	21.3	23.3	47.0	46.5
Major oil-exporting countries	19 209	32 879	30.2	16.3	30.7	30.1	5.2	6.4	39.1	53.6
Non-oil exporting countries	37 731	61 854	35.1	27.7	23.2	21.4	11.7	12.0	41.7	41.3
Least Developed Countries	9 421	12 834	50.6	44.2	14.5	14.9	8.7	8.1	34.8	40.9
<b>DEVELOPING AFRICA</b>	56 940	94 733	33.4	22.8	25.7	27.0	9.5	10.0	40.8	50.2

Source: ECA secretariat.

<sup>1/</sup> GDP at factor cost, 1970 prices.

## ANNEX 3

Growth of production 1970-1980, 1970 prices (in percentages)

	Real GDP <sup>1/</sup>	Agriculture	Industry	Manufacturing	Services
	1970-1980	1970-1980	1970-1980	1970-1980	1970-1980
<b>NORTH AFRICA</b>	6.4	2.2	5.3	6.4	8.8
Algeria	6.8	3.2	8.5	7.0	6.8
Egypt	6.4	1.5	6.4	5.2	8.8
Libyan Arab Jamahiriya	7.5	8.9	5.1	20.8	16.4
Morocco	5.0	0.8	5.8	4.8	6.1
Sudan	3.4	1.1	2.1	-0.3	5.9
Tunisia	8.1	6.9	8.8	10.2	8.1
<b>WEST AFRICA</b>	6.3	0.8	9.1	7.4	9.3
Benin	2.0	2.9	0.5	0.8	1.3
Cape Verde	0.5	1.7	0.1	1.7	0.2
Gambia	2.0	-0.3	7.0	-4.5	2.0
Ghana	-0.2	-1.9	0.6	0.2	1.8
Guinea	2.3	0.4	4.9	2.7	5.5
Guinea Bissau	0.7	0.1	3.5	1.3	1.4
Ivory Coast	6.1	2.7	9.1	7.1	6.1
Liberia	2.5	4.3	-1.0	5.8	4.0
Mali	2.3	0.9	2.4	2.6	3.9
Mauritania	1.0	-2.6	-0.6	3.4	5.0
Niger	3.5	2.3	8.5	2.9	3.6
Nigeria	7.9	1.0	12.2	10.0	11.7
Senegal	0.5	-0.3	2.5	1.9	-0.2
Sierra Leone	1.8	2.8	-1.8	3.1	3.1
Togo	2.6	-2.6	1.7	-2.5	6.5
Upper Volta	1.2	-1.4	4.0	4.2	2.6
<b>CENTRAL AFRICA</b>	1.7	-0.1	3.1	2.7	2.0
Angola	-5.3	-6.8	0.3	-5.7	-6.5
Burundi	2.9	2.1	7.0	4.4	3.5
Central African Republic	1.1	2.2	0.5	1.7	0.3
Chad	0.6	-0.5	2.8	0.1	1.6
Congo	4.1	1.7	5.2	1.7	5.8
Equatorial Guinea	-11.3	-15.3	-12.8	-11.3	-6.9
Gabon	8.5	1.2	9.5	19.1	10.4
Rwanda	6.9	4.0	15.2	21.3	9.8
Sao Tome and Principe	-1.1	-1.3	-1.2	0.2	-1.0
United Republic of Cameroon	5.1	4.9	5.8	4.1	5.6
Zaire	1.1	0.3	-0.1	-0.6	2.1
<b>EAST AFRICA</b>	2.7	1.8	2.9	4.1	3.4
Botswana	10.4	2.6	17.0	13.5	11.9
Comoros	0.9	2.1	-4.0	-2.6	1.9
Djibouti	1.6	0.8	4.6	5.1	-0.1
Ethiopia	2.8	1.5	2.9	3.0	4.6
Kenya	5.4	3.7	6.8	7.8	4.8
Lesotho	7.4	-2.0	20.6	14.2	8.6
Madagascar	1.3	1.3	2.0	1.7	1.1
Malawi	7.2	4.7	8.0	7.7	9.7
Mauritius	6.1	0.5	9.6	9.1	6.2
Mozambique	-1.0	-1.2	-0.8	-0.6	-1.0
Seychelles	5.4	2.1	5.0	16.3	6.1
Somalia	3.4	1.5	4.7	5.9	4.0
Swaziland	7.0	5.5	7.8	11.2	7.4
Uganda	0.1	0.8	-4.8	-4.2	0.4
United Republic of Tanzania	5.2	5.2	2.0	2.4	6.7
Zambia	1.9	2.3	1.2	6.3	2.6
Zimbabwe	-2.6	1.7	3.1	4.2	2.5
Major-oil exporting countries	5.6	1.4	7.7	10.2	11.3
Non-oil exporting countries	5.1	1.2	4.2	4.2	6.8
Least developed countries	3.2	1.7	3.8	2.4	5.4
<b>DEVELOPING AFRICA</b>	5.2	1.3	5.7	5.6	7.4

Source: ECA secretariat.

<sup>1/</sup> GDP at factor costs.

## ANNEX 4

## Structure of Demand: Percentage share of total GDP

	GDP at 1/ market prices		Percentage share of total GDP							
			Public consumption		Private consumption		Capital formation		Net exports	
	1970	1980	1970	1980	1970	1980	1970	1980	1970	1980
NORTH AFRICA	22 738	43 208	19.2	24.9	59.4	58.9	19.8	29.7	1.6	-13.5
Algeria	4 512	9 768	18.1	17.9	53.6	60.2	37.1	45.7	-8.8	-23.7
Egypt	7 035	12 838	24.7	20.5	65.7	58.0	14.0	23.3	-4.4	-1.8
Libyan Arab Jamahiriya	3 722	7 967	16.6	45.7	29.7	48.2	18.5	32.1	35.1	-25.9
Morocco	3 840	6 428	12.5	24.9	74.8	61.3	15.9	20.9	-3.2	-7.1
Sudan	2 186	3 013	21.0	19.1	69.3	74.6	11.8	19.4	-2.1	-13.0
Tunisia	1 444	3 194	17.3	17.9	67.0	65.9	20.3	28.3	-4.5	-12.0
WEST AFRICA	20 091	36 794	8.7	14.2	78.3	64.6	13.5	27.9	-0.5	-6.7
Benin	251	299	13.9	7.5	77.6	88.1	17.0	14.5	-7.5	-10.0
Cape Verde	28	29	10.1	10.9	128.7	109.3	18.4	19.1	-57.1	-39.3
Gambia	60	72	22.4	39.7	75.2	82.6	14.2	39.7	-11.8	-62.0
Ghana	2 214	2 508	12.8	15.4	73.7	69.8	14.2	12.7	-0.7	2.1
Guinea	698	890	13.1	17.5	80.2	67.1	14.8	13.4	-8.1	2.0
Guinea Bissau	63	70	19.4	18.9	105.2	106.8	13.6	9.3	-38.2	-35.0
Ivory Coast	1 494	2 858	15.7	18.7	59.3	60.8	22.0	31.7	3.0	-11.2
Liberia	408	502	11.1	10.9	50.6	55.3	21.7	23.7	16.7	10.1
Mali	275	339	15.8	18.7	70.5	77.0	17.6	13.0	-3.8	-8.6
Mauritania	204	242	16.4	28.0	52.9	65.9	22.6	25.1	8.1	-19.0
Niger	400	616	12.2	14.6	85.5	77.8	9.5	13.1	-7.2	-5.5
Nigeria	12 174	26 220	5.7	13.4	82.5	62.7	11.6	30.9	0.2	-7.0
Senegal	865	922	14.9	14.9	73.8	76.7	15.7	15.2	-4.4	-6.7
Sierra Leone	418	499	9.0	8.9	76.8	71.8	15.3	10.9	-1.1	8.5
Togo	263	355	10.1	19.3	76.6	75.5	14.5	41.3	-1.1	-36.1
Upper Volta	315	374	9.3	12.5	92.2	84.5	11.1	22.3	-12.6	-21.2
CENTRAL AFRICA	6 402	7 567	18.3	19.1	62.2	61.4	18.5	19.6	-1.0	0.1
Angola	1 644	1 093	14.1	28.5	67.5	64.7	13.1	12.8	5.4	-5.9
Burundi	245	344	9.7	13.0	86.8	84.0	4.5	12.3	-0.9	-9.3
Central African Republic	205	222	19.1	21.3	69.6	74.7	18.1	15.1	-6.8	-11.1
Chad	326	340	16.0	22.6	80.4	73.9	10.6	7.1	-7.0	-3.5
Congo	274	413	20.5	18.0	88.9	89.4	24.9	13.1	-6.3	20.5
Equatorial Guinea	76	22	16.6	38.9	60.0	94.5	8.9	8.4	14.5	-41.8
Gabon	335	777	18.9	22.4	40.2	44.7	29.7	38.1	11.3	-5.2
Rwanda	220	431	8.7	14.5	88.0	71.5	7.1	12.7	-3.7	1.3
Sao Tome and Principe	15	14	24.0	36.6	50.0	46.1	20.3	22.5	5.6	-5.2
United Republic of Cameroon	1 157	1 886	12.9	9.7	72.7	73.5	17.7	18.8	-3.3	-1.9
Zaire	1 904	2 026	27.4	22.5	45.5	39.5	25.6	23.5	1.5	14.5
EAST AFRICA	13 207	16 924	13.9	16.7	67.2	68.4	18.6	13.9	0.3	1.0
Botswana	84	245	18.6	19.4	76.4	54.0	36.5	35.6	-33.5	-1.1
Comoros	29	31	13.4	21.4	73.0	67.6	26.7	43.1	-13.2	3.1
Djibouti	71	90	15.5	19.8	40.6	44.0	27.1	14.2	-2.0	22.0
Ethiopia	1 880	2 378	22.9	36.1	64.6	64.6	14.1	13.9	-1.5	-14.5
Kenya	1 610	2 519	9.8	14.7	80.2	73.0	11.8	12.3	-1.8	0.1
Lesotho	72	141	16.4	19.8	63.4	52.6	21.9	12.6	-1.7	15.1
Madagascar	899	998	12.2	21.9	114.5	130.2	9.8	21.7	-36.5	-73.9
Malawi	321	635	20.1	19.2	67.9	65.5	15.6	14.5	-3.6	0.8
Mauritius	189	359	15.4	10.4	71.3	70.9	26.1	22.0	-12.7	-3.3
Mozambique	1 827	1 659	15.8	12.0	70.0	48.6	13.8	23.6	0.3	15.8
Seychelles	23	40	14.0	13.6	75.6	75.9	13.2	8.8	-2.8	1.7
Somalia	221	323	14.2	29.4	83.8	48.4	37.0	33.2	-34.9	-11.0
Swaziland	113	231	18.8	27.6	73.3	63.5	15.4	23.4	-7.5	-14.4
Uganda	1 324	1 320	13.2	15.8	68.7	73.5	22.5	17.2	-4.4	-6.5
United Republic of Tanzania	1 204	2 092	13.5	10.6	54.3	52.0	22.8	20.3	9.4	17.2
Zambia	1 791	1 895	10.4	13.9	71.2	83.6	13.3	8.4	3.1	-5.9
Zimbabwe	1 467	1 967	12.0	16.7	65.7	67.2	21.2	11.0	1.1	5.1
Major oil-exporting countries	20 743	44 732	10.6	20.3	66.1	59.2	18.7	34.5	4.7	-14.0
Non-oil-exporting countries	42 691	61 408	16.6	18.7	68.3	64.7	16.8	19.2	-1.6	-2.5
Least developed countries	10 385	14 133	14.1	16.3	75.8	75.3	14.3	15.9	-4.2	-7.6
DEVELOPING AFRICA	63 434	106 140	14.6	17.3	67.6	62.4	17.4	25.7	0.5	-7.4

Source: ECA secretariat.

1/ At 1970 prices.

## ANNEX 5

Structure of demand: Growth rates (1970-1980), per cent, 1970 prices

	GDP at market prices	Public consumption	Private consumption	Gross capital formation
<b>NORTH AFRICA</b>	6.6	9.4	6.6	11.5
Algeria	8.1	7.8	9.3	10.2
Egypt	6.2	4.2	4.9	13.9
Libyan Arab Jamahiriya	7.9	19.4	13.3	14.1
Morocco	5.3	12.8	3.2	8.4
Sudan	3.2	2.3	4.0	8.5
Tunisia	8.3	8.6	8.1	11.7
<b>WEST AFRICA</b>	6.3	11.5	4.2	14.8
Benin	1.8	-3.7	3.1	-0.2
Cape Verde	0.3	1.0	-1.3	0.5
Gambia	2.1	2.9	2.8	12.9
Ghana	1.3	3.1	0.7	1.8
Guinea	3.1	6.1	1.3	2.0
Guinea Bissau	1.1	0.6	1.1	-2.9
Ivory Coast	6.7	8.6	7.0	11.3
Liberia	2.1	2.0	3.0	4.0
Mali	2.1	3.8	3.0	1.2
Mauritania	1.7	7.4	4.0	0.3
Niger	4.4	6.3	3.4	10.9
Nigeria	8.0	17.6	5.0	19.1
Senegal	0.6	0.6	1.0	0.6
Sierra Leone	1.8	1.5	1.1	-0.4
Togo	3.0	9.9	2.9	15.4
Upper Volta	1.7	4.8	1.1	11.1
<b>CENTRAL AFRICA</b>	1.7	2.1	1.5	2.6
Angola	-4.2	3.0	-4.6	-4.4
Burundi	3.5	6.6	3.1	15.6
Central African Republic	0.8	1.9	1.5	0.9
Chad	0.4	2.9	-0.4	-3.1
Congo	4.2	2.8	8.6	-2.9
Equatorial Guinea	-13.2	-3.7	-7.9	-13.6
Gabon	8.8	10.6	9.9	10.3
Rwanda	6.9	12.6	4.8	10.8
Sao Tome and Principe	-0.7	3.3	-1.8	-7.5
United Republic of Cameroon	5.1	2.0	5.1	6.3
Zaire	0.6	-1.3	-0.8	1.1
<b>EAST AFRICA</b>	2.5	4.4	2.3	-0.6
Botswana	11.3	11.7	7.5	5.5
Comoros	0.6	5.7	0.1	-0.5
Djibouti	2.4	7.1	2.4	1.8
Ethiopia	2.4	6.6	1.4	2.8
Kenya	4.6	5.8	2.6	0.1
Lesotho	6.9	13.5	8.4	15.8
Madagascar	1.1	0.5	0.7	0.8
Malawi	7.0	3.0	7.0	4.4
Mauritius	6.6	3.8	2.9	12.5
Mozambique	-1.0	-1.3	-0.9	-5.2
Seychelles	5.6	13.4	-0.2	4.2
Somalia	3.9	7.9	2.4	8.3
Swaziland	7.4	4.8	6.9	7.6
Uganda	-0.1	2.9	1.3	-7.0
United Republic of Tanzania	5.0	6.9	5.7	3.1
Zambia	0.5	3.0	1.3	-8.3
Zimbabwe	3.0	6.4	2.9	-5.6
Major oil-exporting countries	8.0	15.3	6.8	14.9
Non-oil exporting countries	3.7	4.9	3.1	5.7
Least developed countries	3.1	4.6	3.1	4.5
<b>DEVELOPING AFRICA</b>	5.3	8.3	4.4	9.9

Source: ECA secretariat.

## ANNEX 6

## Food Production

	Growth of food production 1970-1980	Per capita production in kg			Sheep and goats (in millions) 1980	Per capita cereal imports (kg) 1980
		Cereals	Root and tubers	Cattle (in millions)		
		1980	1980	1980		
NORTH AFRICA	2.2	180.0	25.6	25.6	84.7	118
Algeria	0.6	120.7	27.4	1.4	15.4	160
Egypt	1.7	195.2	31.6	2.0	3.4	145
Libyan Arab Jamahiriya	8.3	72.8	34.9	0.2	7.5 F	276
Morocco	1.7	223.9	19.5	3.7*	22.2 F	91
Sudan	2.6	160.2	16.5	18.4	30.4	19
Tunisia	6.9	191.3	19.2	0.9	5.9	124
WEST AFRICA	1.7	127.8	287.7	32.0	84.7	27
Benin	2.4	107.9	395.5	0.8	1.9	20
Cape Verde	-	15.1	54.2	-	-	147
Gambia	-0.8	101.5	11.6	0.3	0.3 F	77
Ghana	1.0	46.7	356.5	1.0	3.8 F	19
Guinea	0.7	142.6	136.2	1.8	0.8 F	33
Guinea Bissau	-0.4	61.4	70.2	0.2	0.2 F	28
Ivory Coast	5.0	114.2	404.6	0.7	2.5 F	52
Liberia	2.7	132.3	195.4	-	0.4 F	55
Mali	0.9	162.9	16.9	4.4	11.9 F	8
Mauritania	-0.4	19.6	5.4	1.2 F	7.8 F	109
Niger	2.8	336.6	47.4	3.2	9.9 F	11
Nigeria	1.6	121.5	373.8	12.3 F	35.7 F	23
Senegal	1.9	146.3	22.3	2.8 F	2.8 F	75
Sierra Leone	1.7	174.0	36.5	0.3 F	0.4 F	24
Togo	0.2	105.1	361.0	0.3 F	1.6 F	19
Upper Volta	1.7	168.8	20.7	2.8*	4.7	14
CENTRAL AFRICA	1.7	96.4	384.9	14.3	17.3	16
Angola	0.1	59.7	309.0	3.2	1.2	45
Burundi	2.3	80.3	512.8	0.8	1.0	4
Central African Republic	2.4	47.1	549.8	1.0	1.0 F	9
Chad	1.2	146.4	83.3	4.0	4.6 F	4
Congo	0.1	12.3	385.3	-	0.2 F	45
Equatorial Guinea	-	-	238.2	-	-	7
Gabon	0.4	16.4	500.9	-	0.2 F	59
Rwanda	3.9	53.4	340.1	0.6 F	1.2 F	3
Sao Tome and Principe	-	-	-	-	-	111
United Republic of Cameroon	3.0	109.7	284.6	3.2	4.5	16
Zaire	1.4	27.3	455.4	1.4	3.5	14
EAST AFRICA	1.4	139.6	124.8	81.6	99.2	26
Botswana	3.7	56.1	8.9	2.9	1.9	67
Comoros	-	37.4	180.0	-	-	24
Djibouti	-	-	-	-	0.8	84
Ethiopia	0.4	138.5	44.5	26.0*	40.4	13
Kenya	2.2	157.9	81.4	11.0	8.8	24
Lesotho	2.0	157.4	4.5	0.6	1.9 F	64
Madagascar	1.5	287.2	244.0	8.8	2.2 F	19
Malawi	3.7	210.1	33.9	0.8	0.7	156
Mauritius	-0.5	2.3	11.5	-	-	148
Mozambique	-0.6	47.0	286.3	1.4 F	0.4 F	41
Seychelles	-	-	-	-	-	118
Somalia	0.5	59.4	9.6	3.9 F	26.5 F	86
Swaziland	4.2	190.7	29.6	0.7 F	0.3 F	50
Uganda	1.9	104.5	168.7	5.5	3.2 F	4
United Republic of Tanzania	1.6	80.0	280.9	12.7	9.5*	22
Zambia	2.9	155.2	34.3	2.2	0.4*	86
Zimbabwe	2.4	272.1	11.0	5.0	1.9 F	15
Major oil exporting countries	1.6	119.3	300.3	13.9	58.7	56
Non-oil exporting countries	1.8	138.0	158.4	140.4	227.2	45
Least developed countries	1.7	133.7	126.0	90.8	152.1	18
DEVELOPING AFRICA	1.9	133.7	190.5	154.3	252.1	48

Source: FAO Production Yearbook, vol. 34, 1980.

Note: F = FAO estimates

\* = Unofficial figures.

## ANNEX 7

The external sector

	Exports in million \$US 1980	Imports in million \$US 1980	Trade balance	Trade deficit as % of GDP	Debt service as % of exports 1979	Real growth rates (1970 prices)	
						Exports	Imports
<b>NORTH AFRICA</b>	41 497	28 344	13 153	-10	18	4	11
Algeria	11 530	9 146	2 384	-6	26	-	10
Egypt	2 405	4 266	-1 861	9	16	16	12
Libyan Arab Jamahiriya	22 736	5 850	16 886	-45	-	-4	14
Morocco	2 321	4 167	-1 846	11	22	5	8
Sudan	528	1 730	-1 202	13	33	-1	7
Tunisia	1 977	3 184	-1 207	15	12	9	12
<b>WEST AFRICA</b>	33 473	18 074	15 399	-8	16	5	5
Benin	46	328	-282	28	5	3	4
Cape Verde	2	56	-54	50	N.A.	-7	-4
Gambia	31	162	-131	53	N.A.	7	9
Ghana	827	469	350	-3	4	7	4
Guinea	355	225	30	-2	22	12	3
Guinea Bissau	12	70	-58	38	59	9	1
Ivory Coast	2 376	2 365	11	-	15	3	8
Liberia	608	669	-61	4	14	-	1
Mali	169	259	-90	-8	9	3	5
Mauritania	159	282	-123	18	32	1	10
Niger	236	353	-117	5	4	10	6
Nigeria	27 356	10 281	17 075	-11	2	2	13
Senegal	606	1 256	-650	26	14	3	3
Sierra Leone	205	362	-157	11	22	1	-3
Togo	425	590	-165	14	24	6	13
Upper Volta	59	246	-187	16	4	2	6
<b>CENTRAL AFRICA</b>	6 788	4 841	1 947	-9	7	2	4
Angola	1 480	1 213	267	-7	N.A.	1	5
Burundi	60	170	-110	14	3	2	8
Central African Republic	94	75	19	-3	-	-3	-
Chad	61	141	-80	8	14	1	-
Congo	205	345	-140	9	7	-2	4
Equatorial Guinea	8	20	-12	18	N.A.	-6	-
Gabon	2 241	669	1 572	-40	N.A.	8	15
Rwanda	86	192	-106	9	1	12	8
Sao Tome and Principe	17	19	-2	4	N.A.	-3	-2
United Republic of Cameroon	1 470	1 535	-65	1	10	3	2
Zaire	1 067	461	606	-20	9	5	4
<b>EAST AFRICA</b>	7 877	9 339	-1 467	3	7	1	7
Botswana	450	584	-134	15	N.A.	23	13
Comoros	19	32	-13	11	N.A.	4	15
Djibouti	10	194	-184	56	N.A.	-	3
Ethiopia	458	647	-189	4	5	3	-
Kenya	1 331	2 172	-841	12	8	8	1
Lesotho	45	411	-366	98	1	30	17
Malawi	231	437	-206	13	9	6	3
Mauritius	360	537	-177	19	N.A.	14	11
Mozambique	101	230	-129	5	N.A.	-2	-3
Seychelles	19	108	-89	3	N.A.	28	14
Somalia	145	256	-111	8	1	7	9
Swaziland	365	-	-	-	N.A.	5	1
Uganda	576	237	339	-2	7	-10	3
United Republic of Tanzania	545	1 000	-455	8	7	-3	1
Zambia	1 548	793	755	-20	20	-1	-5
Zimbabwe	1 245	1 050	195	-4	N.A.	2	2
Madagascar	429	552	-123	7	4	1	-1
Major oil-exporting countries	66 863	25 940	37 917	-16	8	2	13
Non-oil exporting countries	25 913	35 462	-9 549	6	13	5	5
Least developed countries	4 208	7 600	-3 392	6	12	5	6
<b>DEVELOPING AFRICA</b>	89 776	61 408	28 368	-6	12	4	6

Source: ECA secretariat.



## ANNEX 8

## Composition of exports 1979

	Exports (million \$US)	Food and live animals	Beverages and Tobacco	Crude materials (excluding fuels)	Minerals fuels, etc	Animal & vegetable oils, fats	Chemicals	Basic manufactures	Machines transport equipment	Miscellaneous manufactured goods	Goods not classified by kind
<b>NORTH AFRICA</b>	31 429	3.0	0.4	5.8	85.2	0.4	1.4	2.0	0.2	1.5	0.6
Algeria	8 714	0.2	0.9	0.6	97.8	0.0	0.1	0.3	0.0	-	-
Egypt	1 840	8.6	0.6	26.5	41.6	0.0	1.7	18.4	0.3	2.3	0.0
Libyan Arab Jamahiriya	16 355	...	...	...	99.5	...	0.4	...	...	...	...
Morocco	1 873	31.1	0.5	42.0	3.8	0.2	2.1	10.3	0.5	7.0	0.0
Sudan	581	16.4	0.0	78.1	2.9	2.2	0.0	0.3	-	-	0.0
Tunisia	11 766	15.9	0.6	4.2	49.3	6.4	9.9	5.3	2.6	17.2	-
<b>WEST AFRICA</b>	23 912	15.4	2.3	9.8	71.0	1.0	0.3	1.6	0.4	0.1	0.4
Benin	44	34.1	0.0	45.4	...	2.3	...	6.8	-	-	...
Cape Verde	...	100.0	...	...	...	...	...	...	...	...	...
Gambia	58	1.7	...	3.4	...	2.4	...	...	...	...	3.4
Ghana	703	82.4	...	12.9	2.0	...	...	4.3	0.14	0.14	0.11
Guinea	317	7.2	...	92.7	...	...	...	...	...	...	...
Guinea Bissau	11	...	...	...	...	...	...	...	...	...	...
Ivory Coast	2 514	65.7	0.2	18.6	4.4	2.1	0.9	4.0	2.3	0.7	0.6
Liberia	537	39.1	...	59.6	...	0.4	...	0.2	0.4	-	0.4
Mali	123	26.0	...	63.4	...	3.2	...	3.2	2.4	1.6	...
Mauritania	147	7.5	...	91.8	...	...	...	...	2.0	...	...
Niger	215	18.6	...	65.1	...	6.5	...	4.2	5.1	0.9	1.4
Nigeria	18 069	4.1	...	1.0	94.0	0.1	0.0	0.4	0.1	...	0.4
Senegal	551	29.6	-	20.9	12.0	26.9	3.4	1.4	1.3	1.1	-
Sierra Leone	205	14.6	...	22.4	1.5	3.9	...	57.6	...	...	...
Togo	362	22.4	...	65.4	...	...	8.2	3.5	0.5	...	...
Upper Volta	54	35.5	-	50.0	-	2.6	-	7.9	3.9	-	-
<b>CENTRAL AFRICA</b>	5 210	19.4	0.5	15.7	42.1	1.0	0.6	22.6	0.4	0.2	0.2
Angola	760	13.7	0.3	7.1	70.1	0.4	...	8.1	-	0.3	...
Burundi	105	90.5	...	7.6	...	...	...	1.0	...	...	...
Central African Republic	87	23.0	3.4	24.1	...	-	-	40.2	-	-	...
Chad	58	12.2	...	66.2	10.8	...	...	4.0	2.7	...	4.0
Congo	240	5.8	0.4	12.6	67.8	...	4.2	2.9	1.2	...	...
Equatorial Guinea	21	52.4	...	47.6	...	...	...	...	...	...	...
Gabon	1 362	0.2	...	20.4	78.3	...	...	1.0	...	...	...
Rwanda	114	75.0	...	25.0	...	...	...	...	...	...	...
Sao Tome and Principe	21	...	...	...	...	...	...	...	...	...	...
United Republic of Cameroon	1 129	51.3	0.8	13.0	23.6	0.4	0.6	8.6	0.8	0.8	0.9
Zaire	1 324	8.8	1.0	12.2	1.0	3.5	...	72.3	0.4	...	0.7
<b>EAST AFRICA</b>	7 003	48.0	2.9	9.8	4.8	0.2	1.6	29.8	0.8	0.9	1.1
Botswana	432	24.9	-	2.4	-	0.5	0.3	67.6	1.9	1.6	0.8
Comoros	17	...	...	100.0	...	...	...	...	...	...	...
Djibouti	11	8.3	-	-	...	...	-	4.5	-	-	83.3
Ethiopia	418	75.1	-	19.5	4.8	0.5	-	0.2	-	-	-
Kenya	1 103	55.5	0.3	10.1	20.1	0.1	4.6	7.4	0.6	1.3	0.1
Lesotho	37	18.2	...	59.1	...	...	...	22.7	...	...	...
Madagascar	395	74.4	0.2	8.0	5.7	-	1.6	4.2	1.6	0.2	-
Malawi	233	32.4	56.0	7.4	-	0.5	0.5	2.3	-	0.5	0.5
Mauritius	377	87.0	-	0.3	-	-	0.3	1.1	3.7	7.2	0.5
Mozambique	101	53.0	2.0	29.0	7.0	6.0	...	2.0	1.0	...	...
Seychelles	15	20.0	...	60.0	...	...	-	-	13.3	6.7	...
Somalia	116	96.6	...	1.7	...	...	...	...	...	...	1.7
Swaziland	229	68.8	...	18.7	...	...	...	...	0.8	...	11.7
Uganda	427	89.7	0.5	7.0	0.5	...	...	2.3	-	...	...
United Republic of Tanzania	523	55.2	5.4	26.0	4.4	0.2	1.0	6.9	0.8	0.2	...
Zambia	1 847	0.4	0.8	1.5	...	...	2.1	94.8	0.2	0.2	...
Zimbabwe	1 194	28.1	...	...	0.2	1.6	1.4	44.9	4.3	6.1	13.5
Major oil-exporting countries	44 500	...	...	...	96.2	...	...	...	...	...	...
Non-oil exporting countries	22 893	35.0	1.1	22.4	14.1	2.0	2.9	18.4	1.1	2.7	0.8
Least developed countries	3 856	44.0	4.0	37.5	1.8	1.1	0.2	9.8	0.8	0.3	0.4
<b>DEVELOPING AFRICA</b>	67 393	12.7	0.5	8.2	69.1	0.7	1.0	6.2	0.0	0.9	0.4

Source: ECA secretariat.

## ANNEX 9

## Composition of imports, 1979

	Total Imports in million \$US	Composition of imports (SITC groups %)									
		Food and live animals	Beverages and tobacco	Crude materials inedible	Mineral fuels and lubricant	Animal & vegetable oils	Chemicals	Manufac- tured goods	Machinery transport equipment	Miscella- neous ma- nufactures	Not classi- fied
NORTH AFRICA	25 010	15.5	0.9	4.1	5.8	2.3	6.8	22.9	35.9	5.3	0.1
Algeria	8 428	15.7	0.3	2.9	2.0	2.1	6.1	26.0	40.1	4.1	0.2
Egypt	3 837	19.6	2.8	6.2	0.8	3.4	8.8	20.6	33.9	3.5	0.0
Libyan Arab Jamahiriya	5 311	15.1	0.4	1.8	0.6	1.1	4.0	23.3	42.4	10.3	0.0
Morocco	3 575	13.9	1.1	7.8	19.1	3.6	8.7	18.1	24.6	2.7	0.0
Sudan	915	16.4	2.0	0.7	1.6	0.2	12.2	24.9	36.4	2.6	0.5
Tunisia	2 842	11.6	0.5	5.3	17.7	2.4	7.0	22.1	27.4	5.4	0.1
WEST AFRICA	19 023	11.0	1.8	1.6	5.9	0.7	7.5	20.5	41.3	7.3	1.0
Benin	267	9.1*	9.4	1.8*	12.0*	0.3*	8.7*	23.5*	27.2*	7.6*	0.0
Cape Verde	43	57.1*	7.0*	1.8*	1.1*	0.0	2.2*	12.0*	15.0*	3.4*	0.0
Gambia	120	13.6*	1.1*	2.7*	10.9*	0.4*	7.8*	26.5*	26.9*	7.7*	0.9*
Ghana	480	11.6*	0.9*	3.2*	15.6*	1.1*	14.7*	20.7*	27.0*	3.1*	1.7*
Guinea	261	5.3*	0.0	1.0*	10.7*	0.0*	0.0	14.7*	31.4*	0.0	36.5*
Guinea-Bissau	39	10.3*	7.3*	0.2*	10.6*	0.8*	6.4*	24.2*	25.7*	5.2*	0.0
Ivory Coast	2 390	12.9	1.8	1.0	11.4	0.2	8.9	20.8	35.0	6.2	1.4
Liberia	485	12.3*	1.9*	0.9*	17.2*	0.6*	7.2*	19.5*	32.0*	7.5*	0.6*
Mali	223	16.9*	1.8*	4.1*	12.7*	1.4*	12.3*	18.7*	27.0*	4.6*	0.0
Mauritania	261	14.0*	0.5*	1.2*	14.0*	1.0*	2.6*	13.5*	51.8*	0.9*	0.0
Niger	592	9.0*	2.0*	16.1*	12.7*	0.0	5.1*	18.8*	28.0*	3.5*	4.3*
Nigeria	12 536	10.4*	1.1*	1.0*	1.9*	0.8*	7.1*	20.7*	48.0*	8.4*	0.1*
Senegal	1 006	26.9*	1.6	1.2	15.3	1.0	8.2	15.2	23.5	5.9	0.7
Sierra Leone	344	15.1*	15.1*	2.2*	12.4*	0.5*	5.7*	21.0*	20.0*	6.5*	1.0*
Togo	524	8.7*	5.8*	2.8*	11.8*	0.4*	8.8*	30.5*	24.1*	6.2*	0.3*
Upper Volta	307	17.0	2.4	2.5	11.3	2.3	11.2	19.5	28.5	4.9	0.0
CENTRAL AFRICA	4 638	10.8	2.2	1.9	6.8	0.6	10.5	29.1	31.4	6.1	0.2
Angola	1 061	9.5*	3.6*	1.5*	5.5*	0.4*	17.9*	25.7*	29.3*	6.2*	0.0
Burundi	171	13.1*	1.4*	5.0*	6.6*	1.5*	6.5*	20.9*	36.4*	5.9*	2.2*
Central African Republic	66	12.2	3.8	1.3	2.4	0.1	14.1	17.1	41.2	7.3	0.8
Chad	367	7.3*	0.8*	1.0*	4.9*	0.2*	4.9*	69.6*	8.8*	1.8*	0.3*
Congo	252	4.7*	0.0	0.8*	6.4*	1.0*	10.3*	29.9*	40.2*	6.3*	0.0
Equatorial Guinea	58	72.8*	1.2*	2.8*	4.8*	0.3*	3.8*	3.4*	9.2*	1.2*	0.0
Gabon	802	8.4*	3.4*	0.9*	1.0*	0.6*	5.8*	32.7*	39.1*	7.6*	0.1*
Rwanda	190	11.3*	2.5*	7.6*	8.6*	3.6*	5.5*	28.8*	26.8*	5.1*	0.0
Sao Tome & Principe	...	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
United Republic of Cameroon	1 270	7.8	1.6	2.5	10.7	0.4	10.5	25.2	33.7	7.1	0.1
Zaire	596	20.4*	1.0*	1.4*	10.0*	0.1*	10.1*	20.0*	31.0*	4.9*	0.6*
EAST AFRICA	8 935	12.9	1.3	2.2	15.9	1.6	10.5	18.6	27.7	5.7	3.3
Botswana	527	13.3	2.7	1.0	9.4	0.5	4.5	21.5	26.5	9.1	10.9*
Comoros	27	31.5*	2.8*	0.0	23.6*	0.0	13.1*	13.1*	13.9*	1.5*	0.0
Djibouti	177	18.8	9.4	9.0	4.5	0.0	4.7	10.1	17.1	0.7	25.4
Ethiopia	567	5.1	1.2	2.8	19.4	0.8	15.0	16.5	34.3	3.7	0.7
Kenya	1 655	2.4	1.2	2.0	23.9	2.5	11.6	16.3	34.1	5.5	0.0
Lesotho	282	22.7*	3.6*	0.5*	7.2*	0.8*	5.8*	24.4*	12.3*	22.2*	0.0
Madagascar	568	13.5	1.3	3.3	6.9	3.4	13.3	22.0	30.5	5.2	0.2
Malawi	397	4.3	0.7	1.7	14.6	1.2	11.8	26.5	30.7	7.7	0.3
Mauritius	554	23.7*	0.8*	2.5*	9.3*	3.1*	6.3*	25.2*	22.2*	6.2*	0.2*
Mozambique	230	5.9*	1.8*	1.0*	11.2*	0.3*	5.9*	18.3*	23.2*	3.2*	28.6*
Seychelles	70	22.4*	4.1*	0.0	18.6*	0.0	5.6*	16.6*	21.4*	11.0*	0.0
Somalia	260	18.9*	1.7*	4.6*	6.8*	3.0*	7.5*	23.6*	27.2*	4.6*	1.6*
Swaziland	446	47.2*	3.1*	0.4*	7.2*	0.3*	5.7*	8.5*	14.0*	7.4*	5.5*
United Republic of Tanzania	1 026	14.6*	0.0*	2.3*	15.9*	2.0*	10.2*	21.0*	30.2*	3.4*	0.0
Uganda	371	43.1*	0.2*	0.9*	18.1*	0.2*	6.7*	10.9*	16.4*	3.1*	0.0*
Zambia	815	6.7*	0.1*	1.0*	18.1*	2.1*	14.5*	18.5*	33.8*	4.5*	0.2*
Zimbabwe	954	2.6	0.3*	3.2*	22.6*	0.0*	14.7*	16.9*	24.8*	4.9*	9.5*
Major oil-exporting countries	27 078	12.9	0.8	1.7	1.6	1.3	6.1	23.2	44.2	7.5	0.1
Non-oil-exporting countries	32 307	13.9	1.9	3.7	12.4	1.7	9.4	20.8	29.1	5.1	1.6
Least developed countries	7 058	14.3	1.8	3.2	11.0	1.0	8.7	23.4	28.2	5.1	2.9
DEVELOPING AFRICA	59 386	13.4	1.4	2.8	7.5	1.5	7.9	21.9	36.0	6.2	0.9

Source: ECA Statistics Division.

\* Estimates.

## ANNEX 10

## Communication indicators

	Road length in '000 km	Motor vehicles				Telephones Number '000		Telephones per 1000 persons		Rail track length km
		Number '000	Per 1000 persons							
	1978/79 1/	1970	1978	1970	1978	1970	1978	1970	1978	1978/79 1/
NORTH AFRICA	185.1	989.8	2 151.8	11.9	21.1	903	1 323	11	13	17 277
Algeria	78.5	224.4	450.0	16.8	26.2	174	326	13	19	3 890
Egypt	28.9	166.1	415.0	5.0	10.4	400	517	12	13	4 832
Libyan Arab Jamahiriya	8.7	145.4	467.5	76.5	173.1	42	60	21	22	-
Morocco	26.7	306.4	573.3	20.4	30.2	164	307	11	11	1 756
Sudan	19.1	43.9	56.0	3.1	3.2	43	52	3	3	4 786
Tunisia	24.2	103.6	190.0	20.7	31.7	80	161	16	27	2 013
WEST AFRICA	292.1	482.4	1 316.9	4.6	9.9	179	346.9	2.2	3.6	10 666
Benin	6.9	19.3	19.6	7.1	5.8	5	13	2	4	580
Cape Verde	1.9	2.1	3.6	7.8	11.3	1.3	1.9	5	6	-
Gambia	1.3	4.3	4.4	9.4	7.7	2.3	3.4	5	6	-
Ghana	32.2	63.6	120.0	7.4	10.6	43	79	5	7	953
Guinea	10.0	20.0	21.0	5.1	4.4	9	10.5	2	2	940
Guinea Bissau	3.3	-	-	-	-	2	2.2	4	4	-
Ivory Coast	45.2	96.5	179.2	16.9	23.9	40	105	7	14	655
Liberia	11.2	23.2	16.0	17.3	9.3	4	9	3	5	490
Mali	14.7	15.9	22.0	3.0	3.5	5	13	1	2	640
Mauritania	7.3	9.2	9.5	7.9	6.7	-	1.4	-	1 1/	652
Niger	7.7	12.6	26.4	3.1	5.3	4	10	1	2	-
Nigeria	105.0	97.0	747 1/	1.7	10.2 1/	6	14	1	2	3 524
Senegal	13.9	60.3	75.0	13.7	14.0	35	48	8	9	1 186
Sierra Leone	7.4	32.6	25.0	11.9	7.6	11	20	4	6	84
Togo	7.5	12.5	24.0	6.4	10.0	6	10	3	4	445
Upper Volta	16.6	13.3	24.2	2.4	3.7	5.4	6.5	1	1	517
CENTRAL AFRICA	339.9	253.3	558.0	5.2	6.5	96.1	150.5	2	2.6	9 789
Angola	72.3	116.4	140.0	20.8	21.5	28	32	5	5	2 315
Burundi	3.0	5.1	9.2	1.5	2.2	3.5	4	1	1	-
Central African Republic	22.0	10.2	18.2	5.7	8.7	-	4	-	2 1/	-
Chad	30.7	9.6	10.0	2.7	2.3	3.6	4	1	1	-
Congo	8.2	23.8	40.0	19.0	26.7	12	13	10	9	800
Equatorial Guinea	1.2	-	-	-	-	-	-	-	-	-
Gabon	7.1	10.5	10.7	21.0	19.9	2	3	4	6	185
Rwanda	6.6	4.9	11.5	1.4	2.6	3.6	4.5	1	1	-
Sao Tome and Principe	0.3	1.7	2.5	23.5	30.5	-	-	-	-	-
United Republic of Cameroon	43.5	67.5	134.8	9.9	16.7	-	32	-	4 1/	1 320
Zaire	145.0	3.6	151.0 1/	0.2	6.6 1/	43.4	54	2	2 1/	5 169
EAST AFRICA	306.9	814.7	1 193.2	8.6	10.1	472.1	815.3	5	7	20 185
Botswana	10.5	4.9	17.6	8.2	23.7	3.6	9.7	6	13	710
Comoros	0.6	-	-	-	-	0.8	1.4	3	4	-
Djibouti	1.6	9.5	15.0	57.2	48.5	3	4	19	12	100
Ethiopia	37.3	50.5	70.0	2.1	2.3	49	90.6	2	3	987
Kenya	51.4	113.9	185.0	9.8	12.2	81.0	151.6	7	10	2 038
Lesotho	4.0	3.7	8.0	3.5	6.2	2	5	2	4	2
Madagascar	27.5	83.2	110.0	12.2	13.6	27	33	4	4	884
Malawi	10.6	17.5	26.9	3.9	4.7	13	28	3	5	677
Mauritius	1.8	18.1	39.6	21.8	42.9	18	32	22	35	-
Mozambique	39.6	96.1	97.0	11.9	10.0	24	29	3	3	4 161
Seychelles	0.2	1.5	5.3	28.8	80.3	0.6	5.4	12	82	-
Somalia	18.8	111.4	20.0	4.1	5.7	5.6	10.4	2	3	-
Swaziland	2.5	7.5	18.8	17.9	36.2	5	10	12	19	-
Uganda	27.9	43.1	40.0	4.4	3.1	29	51	3	4	1 286
United Republic of Tanzania	33.2	67.3	95.0	5.1	5.7	39.5	84.2	3	5	3 682
Zambia	36.4	113.5	170.0	27.0	30.9	38	60	9	11	2 188
Zimbabwe	83.0	173.0	280.0	32.6	40.1	133	210	25	30	3 470
Major oil exporting countries	199.3	477.3	1 075.2	6.6	18.1	224	403	3.8	5.8	7 599
Non-oil-exporting countries	1 005.7	2 062.9	3 549.7	8.0	10.6	1 426.2	2 232.7	5.5	7.0	50 320
Least developed countries	286.7	359.6	503.6	3.4	3.8	230.2	409.3	2.2	3.1	14 807
DEVELOPING AFRICA	1 205.0	2 540.2	5 224.9	7.7	10.7	1 650.2	2 635.7	5.0	6.4	57 919

Source: ECA secretariat (Statistics Division)

1/ The world in figures - The Economist, 1981, p. 38.

## ANNEX 11

## Social indicators

	Percentage of urban popula- tion 1980	Rate of natural increase 1975-1980 in '000	Life expectancy 1975-1980 years	Population per physician 1977	School enrolment as % of the age group		Adult literacy rate 1975 %
					Primary	Secondary	
					1978	1978	
<b>NORTH AFRICA</b>	44.2	28.6	53.4	1 699	77	33	37
Algeria	60.8	33.2	55.3	5 330	99	29	35 f/
Egypt	45.4	25.6	54.8	1 050	74	47	44 f/
Libyan Arab Jamahiriya	52.4	34.6	55.4	900	123	67	50 f/
Morocco	40.6	31.8	55.4	11 040	72	20	28 f/
Sudan	24.8	27.4	44.0	8 690	50 g/	16 g/	20 g/
Tunisia	51.7	24.9	57.9	4 800	100	30	62 f/
<b>WEST AFRICA</b>	23.3	31.3	46.9	13 191	56	14	17
Benin	30.8	29.6	45.9	26 880	60 i/	12 i/	11
Cape Verde	5.8	16.9	60.1	7 210	-	-	37
Gambia	18.5	24.6	41.0	13 171	37	12	6
Ghana	35.9	31.2	48.3	9 920	71	32	30 i/
Guinea	19.1	25.4	43.5	16 630	34	16	20
Guinea Bissau	23.8	16.9	41.0	10 094	-	-	7
Ivory Coast	37.6	29.3	46.0	15 220	71	14	20 f/
Liberia	33.0	35.9	55.4	9 260	64	20	30 f/
Mali	19.9	27.2	42.1	25 150	28 g/	9 g/	10 g/
Mauritania	35.6	27.8	42.1	15 160	-	-	17
Niger	12.5	29.0	42.1	42 720	22 g/	3 g/	8 g/
Nigeria	20.4	32.0	47.5	15 740	62	13	15 g/
Senegal	25.4	25.7	42.1	15 710	41	10	10 f/
Sierra Leone	21.5	26.4	45.9	17 100 b/	-	-	7 g/
Togo	17.4	28.9	46.0	17 980	-	-	16 i/
Upper Volta	8.5	25.7	42.1	49 810	17	2 f/	5
<b>CENTRAL AFRICA</b>	30	25.5	44.2	16 752	81	15	17
Angola	21.0	24.5	41.0	15 175 d/	-	-	-
Burundi	2.3	22.4	40.9	45 020	21 g/	3 g/	25
Central African Republic	40.9	21.8	41.8	17 610	81 g/	9 f/	7 g/
Chad	17.4	20.0	39.8	41 940	35 f/	3	15 g/
Congo	37.3	25.6	46.0	7 290	156	69	16 g/
Equatorial Guinea	53.6	22.9	46.0	64 600	-	-	N.A.
Gabon	35.8	10.0	43.5	2 580	-	-	12 g/
Rwanda	4.3	30.4	45.9	38 920	64 f/	2 f/	23
Sao Tome and Principe	-	-	-	1 970	-	-	N.A.
United Republic of Cameroon	34.6	22.9	46.0	16 500	101	16	19 g/
Zaire	39.5	27.5	46.0	15 530	90	19	15 f/
<b>EAST AFRICA</b>	16.0	29.5	47.2	17 363	63	9	40
Botswana	29.5	33.2	48.3	9 583 e/	89	20	31
Comoros	11.6	28.7	46.0	14 000 g/	48 g/	7 g/	58 g/
Djibouti	-	-	-	4 700	-	-	-
Ethiopia	11.7	24.6	39.0	75 320	26 g/	8	20
Kenya	14.2	39.4	53.5	11 630	99	18	45 f/
Lesotho	4.5	23.5	50.3	18 640	105 f/	14 f/	55
Madagascar	18.4	26.0	46.0	10 240	94	12	50
Malawi	33.6	32.0	46.0	40 680	53 g/	4 g/	25 g/
Mauritius	52.2	19.5	63.9	2 418	-	-	61 g/
Mozambique	8.7	25.8	46.0	33 980	-	-	11 g/
Seychelles	-	-	-	2 760 g/	-	-	58 i/
Somalia	30.2	26.3	42.5	15 600 d/	44 g/	4 g/	60 g/
Swaziland	8.9	28.4	45.9	9 630 f/	-	-	30 i/
Uganda	11.9	30.4	52.5	27 600	50 g/	5 g/	35 g/
United Republic of Tanzania	11.8	30.5	50.5	17 550	70 f/	4 f/	66 g/
Zambia	38.0	32.0	48.3	10 190	98	16	47 i/
Zimbabwe	23.0	33.7	53.5	7 030	97	9	39 g/
<b>TOTAL AFRICA</b>	27.3	29.3	48.2	5 158	67	18	28

Source: World Population Prospects as assessed in 1980 (Printout) prepared by Dept. of Int. Economic & Social Affairs of the U.N. secretariat, 29 April 1981.  
 ECA secretariat, UNCTAD Summary Tables for LDCs, (document A/CONF. 104/PC/15, 15 May, 1981), World Bank, World Development Report, 1981  
 and Accelerated Development in Sub-Saharan Africa, 1981.

e/ 1960  
 b/ 1970  
 c/ 1971  
 d/ 1973  
 e/ 1975  
 f/ 1976  
 g/ 1977  
 h/ 1978  
 i/ 1979

Notes: Regional and subregional figures have been calculated by using the 1980 population as weights.