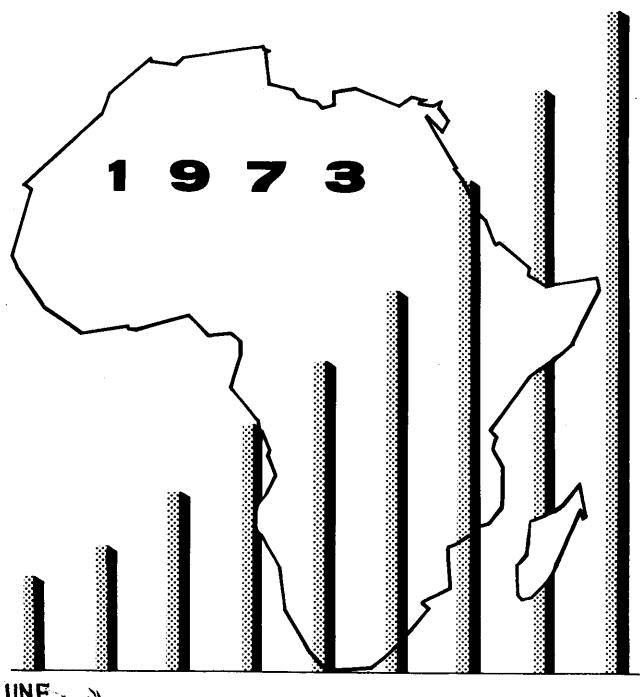
AFRICAN ECONOMIC INDICATORS



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ECONOMIC COMMISSION FOR AFRICA

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INTRODUCTION

The purpose of the following charts is to convey at a glance many of the salient features of the African economy; and some of these features are elaborated upon in the accompanying text.

The general information and supporting subregional and country detail should help provide UN and other experts with limited geographical interests with a quick indication of the main characteristics and comparative standing of the countries with which they are concerned. The charts and text should also serve as a useful introduction to African economic problems, as they are identified and measured to politicians, government officials and persons wishing to learn the basic facts of the economies of African countries.

Statistics relating to the African economy are at present incomplete and of something less than full validity. There is some danger, in a situation in which much desirable information is just not available, that what data there are will be taken altogether too seriously, and that spurious precision will be given to figures which in many cases should properly be regarded as indicating rough orders of magnitude. To guard against this danger, it may be useful to offer some comment on the statistical foundations on which subsequent pages are based. It should, however, be made clear in advance that the ensuing qualifications do not destroy the usefulness of the charts and text; and that these provide a reasonable account of those aspects of the African economy which they cover.

Much of the discussion of production and economic structure is ordered around national income accounting aggregates and it is suggested that the adoption of national income accounting makes good sense in a situation in which economic development is an almost universal and most important policy objective.

In the present context, much use is made of the gross domestic product. GDP is basically an attempt to evaluate the final flow of goods and services produced in a country over some specified period of time. Since this requires the aggregation of all goods and services, the main problem which arises is that of valuing these goods and services in such a way as to make them commensurable. This problem is normally solved by valuing the goods and services at market prices. In countries with well-developed and efficiently functioning markets, this procedure produces broadly acceptable results. In many African countries, however, much economic activity takes place outside the market; as a consequence, the problems of imputation — i.e., of assigning a market value to goods and services which are held to contribute to total production but which do not give rise to market transactions — loom large in national income accounting of developing countries in Africa.

Estimates of the GDP of a single country for a single year would be of limited interest; and one of the attractions of national income accounting is that it makes intertemporal and international comparisons possible. Such comparisons, however, are never completely unambiguous, and the problems associated with making them are particularly sharp when developing countries are involved. As far as intertemporal comparisons

are concerned, a major problem is that of ensuring that the comparisons are not make spurious by changes in the value of money. The normal procedure basically requires the deflation of time series of major components of total product by appropriate price index numbers and the aggregation of the deflated series in order to obtain estimates at constant prices. At the present stage in the development of African statistics, the possibilities for such measurement are at once crude and limited; and it should be made explicit that figures in the following pages pertaining to the GDP at constant prices are subject to a wide margin of error, both because the number of price series available is very much smaller than would be desirable, and because the price series that are available are themselves only approximate.

As far as international comparisons are concerned, a major difficulty is that the use of official exchange rates to provide comparability among two or more domestic products (which are, of course, normally measured in national currencies) probably biases such comparisons. This is because exchange rates reflect the relative prices of goods and services entering into international trade and might, therefore, give very different results from those which would be obtained by a more comprehensive comparison in terms of all the goods and services which enter into the domestic products of the countries which are comprised in the comparison. It is widely believed that the use of official exchange rates exaggerates the gap between lower and higher income countries; and that this exaggeration can be considerable in comparisons of developed and developing countries. There the comparisons apply only to countries - such as those of Developing Africa 1/ - with much in common in their economic practises and structures, the utility of the comparisons is presumably increased. It is necessary, however, to realize that precise comparisons in this area are not possible.

Population statistics are normally based on periodic censuses and inter-censal estimates of population change are based on registrations of births and deaths and on information relating to migration. In many African countries, population counts still leave much room for improvement and registration is neither complete nor reliable. It follows, therefore, that the population figures used in this document are subject to considerable margins of error. The estimates are thought to be sufficiently realistic, however, to sustain the conclusions drawn from them. The data shown for educational enrolments include many estimates but here again they provide a reasonably accurate guide to individual country performance.

As far as the foreign sector is concerned, trade statistics in Africa are more readily available and are probably more accurate than most economic data pertaining to African countries. For a number of reasons, however, export and import statistics are less than wholly accurate, and

Developing Africa is used generally throughout this publication as a shortened expression for Africa excluding the Republic of South Africa, the latter being classed as developed economy.

the level of detail (particularly for imports) is not as great as it might be. Compared, however, to the other items which figure in the balance of payments, the trade statistics are good. The balance of payments statistics have improved in many African countries in recent years and the division between current account, transfer payments and capital used in the relevant chart is thought to be realistic.

The transport charts are based on reasonable statistics. The physical control of exports and imports at the ports and the railway and airway handling procedures are generally sufficient to ensure that the traffic statistics are fairly good. The figures of commercial road motor vehicles in use are probably less reliable but they serve to show the increasing level of road traffic in all African countries.

CHAPTER I - PRODUCTION AND ECONOMIC STRUCTURE

The economic problems and prospects of countries and country groupings depend to some extent on economic size; economic size can be measured roughly by the gross domestic product and this indicator is used in Chart I. The chart makes it possible to obtain some indication of the size of African economies compared to that of a number of other countries; and to obtain some impression of the range of economic size in Africa.

The basic impression of the chart is that individual African economies are generally small. This may be most graphically seen when their gross products are aggregated and compared with countries outside Africa. Thus, in 1972, the gross domestic products of the UK, France, W. Germany and Japan were some 2.1, 2.8, 3.6 and 4.1 times greater than that of all the developing countries of Africa. This contrast becomes the more striking when it is remembered that the population of the UK, France and W. Germany are each only one sixth of the population of Developing Africa and the population of Japan is about one third.

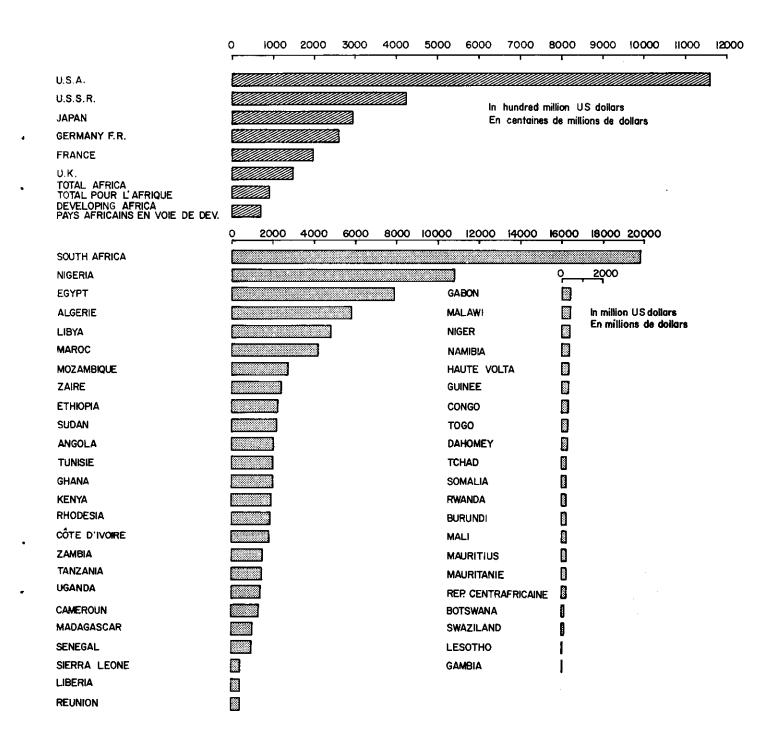
Within Africa, it is clear that the Republic of South Africa constitutes the largest single market; and in 1972 South Africa accounted for 22 per cent of the GDP of Africa as a whole. Among Developing African countries the largest economic unit is Nigeria; Nigeria in 1972 had a market equal to 7 per cent of the total market in the UK, 5 per cent of the total market in France and 4 per cent of the total market in W. Germany and yet each of these countries had smaller populations than that of Nigeria.

Even if this kind of comparison is extended to include all countries in Developing Africa with a GDP in 1972 of more than 1,000 million US dollars - that is, Algeria, Egypt, Libya, Morocco, Sudan and Tunisia in North Africa, Ghana, the Ivory Coast, Nigeria and Senegal in West Africa; Cameroon and Zaire in Central Africa; Ethiopia, Kenya, Madagascar, Tanzania, Uganda and Zambia in Bast Africa; and Angola, Mozambique and S. Rhodesia in Other Africa - then although such countries accounted for 89 per cent of the total product of Developing Africa, the aggregate market size of these 21 countries taken together was still only two-fifths of that of the United Kingdom in 1972. Moreover, it has to be remembered that 26 of the African countries covered by the chart each had a total product in 1972 which was less than one-tenth of that of Nigeria and that the product of that country was nearly 200 times greater than that of the smallest unit. Africa contains a large number of extremely small countries when measured economically and its larger countries have only small economies when compared with the Developed World.

Gross domestic product per head provides a useful, if somewhat hazardous, measure of economic welfare. Its usefulness would be improved if it could be used in conjunction with data on income distribution. In African countries income distribution is skewed in such a way that the higher income groups receive a more than proportionate share of total income; and the majority of income earners have incomes below the average which in itself may be very small

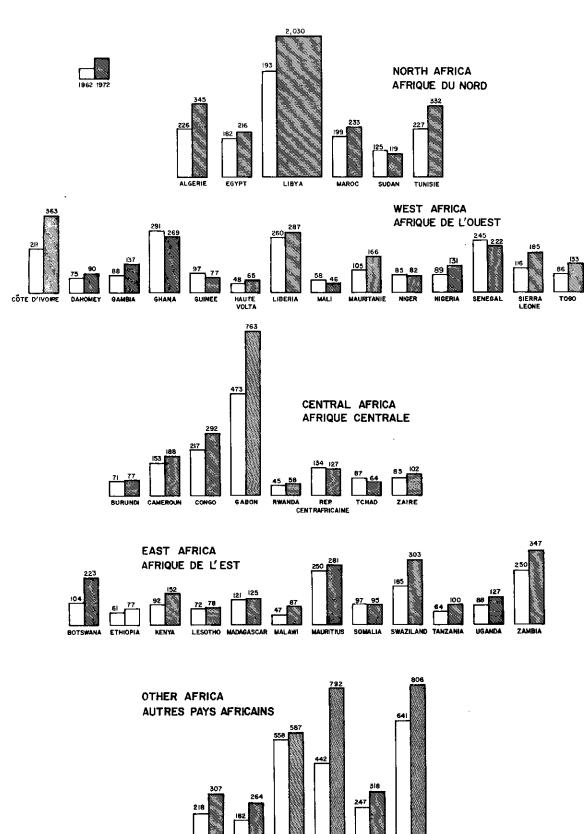
ESTIMATED GROSS DOMESTIC PRODUCT AT CURRENT MARKET PRICES COMPARED WITH SELECTED WORLD COUNTRIES, 1972

PRODUIT INTERIEUR BRUT ESTIME AUX PRIX COURANTS DU MARCHE, 1972 ET COMPARAISON AVEC QUELQUES PAYS EXTERIEURS A L'AFRIQUE



GROSS DOMESTIC PRODUCT PER CAPITA AT 1970 PRICES IN US DOLLARS FOR 1962 AND 1972

PRODUIT INTERIEUR BRUT PAR HABITANT AUX PRIX DE 1970 EN DOLLARS POUR 1962 ET 1972



II

Information on GDP per head at constant prices in African countries is presented in Chart II for the years 1962 and 1972. This presentation makes it possible to form some judgement on income levels and on growth rates. One way of interpreting present African levels and rates of growth is to compare them with corresponding data for the developed countries. As far as levels are concerned, the product per head in the developed countries is generally very much greater with figures of 5,500 dollars per head in the USA and 2,700 dollars per head in the UK in 1972. The average for Developing Africa was less than 200 dollars a head but Libya's level had reached 2,000 dollars.

Historical rates of growth recorded by the now developed countries can be used to provide some measure of the extent to which present African growth rates may be said to be satisfactory. In very broad terms product per head (at constant prices) increased in the UK by 0.2 per cent per annum in the 80 years before its industrial revolution, and by 1.3 per cent a year in the hundred years or so after the revolution. This was, of course, the pioneering industrial revolution; and the average annual compound rates of growth in product per head were generally higher over long historical periods in the other industrial countries where the industrial revolution came later. In fact, a rate of 2 per cent per annum would be a fairly representative figure for the historical growth of product per head in most of the now developed countries. In applying this rate, however, to contemporary African experience, it has to be remembered that present African income levels are generally lower than the historical levels obtaining on the eve of sustained transformation; but that the "demonstration effect" now operates much more powerfully than it did in the nineteenth century.

Between 1962 and 1972, fourteen countries in Africa recorded increases of 4 per cent per annum or more in product per head. The countries which achieved this were Libya (15.2 per cent), Botswana (7.9), Malawi (6.4), Reumion (6.0), Ivory Coast (5.6), Kenya (5.1), Swaziland (5.1), Gabon (4.9), Sierra Leone (4.8), Mauritania (4.7), Togo (4.5), Gambia (4.5), Tanzania (4.5) and Algeria (4.3 per cent). In Tunisia, Liberia and Nigeria the growth rate per head averaged 3.9 per cent a year and in four other countries the rate was 3.3 to 3.8 per cent. In a further 8 countries the GDP per head grew from 2.1 to 3.0 per cent per annum over the ten year period and in 4 the growth rate was 1.1 to 2.0 per cent.

In 13 countries, however, the rates of growth were less than one per cent a year and in 9 of these countries (five of them in West Africa) levels of product per head declined between 1962 and 1972.

Nevertheless, the end result of the growth rates was that (at 1970 prices) by 1972 only twelve countries in Developing Africa had products per head in excess of 300 US dollars; and there were a further eight countries in which product per head lay between 200 US dollars and 300 US dollars. The number of countries with a GDP per head of less than 100 US dollars in 1972 was twelve and these countries must be numbered amongst the least developed of the developing countries of Africa and the world.

The developed countries are generally typified by the high level of manufacturing industry in the total product, while the primary producing sectors - agriculture and mining, are relatively small. In the developing countries it is the primary producing sectors that are most important and, depending on the country, agriculture or mining makes the most important contribution to the GDP. Manufacturing industry is generally only a small contributor although there were a few countries in Developing Africa such as Egypt, Mauritius, Zaire and S. Rhodesia where manufacturing industry contributed 19 per cent or more of the GDP in 1972. In Chart III are given the data on the industrial origin of the GDO in African countries in 1972. Agriculture is the largest contributor to the GDP in the majority of African countries but its importance varies from country to country and from subregion to subregion. Countries where agriculture is particularly important include Gambia, Ghana and Niger in West Africa, Rwanda, Chad and Burundi in Central Africa and Ethiopia, Malawi and Uganda in East Africa.

Where agriculture is not the dominant source of output, considerable importance usually attaches to mining. This is true of Libya, Nigeria and Algeria (petroleum and natural gas), Liberia (iron ore), Zaire and Zambia (copper) and Mauritania (iron ore and copper). In Gabon mining is also important because of the exploitation of crude petroleum and manganese ore; and in Sierra Leone diamond mining is also the major economic acticity.

Manufacturing industry's contribution ranged from 2 to 26 per cent of the GDP in 1972, the higher figure being found in S. Africa and S. Rhodesia and the lower in Libya. Elsewhere only in Egypt, Morocco, Senegal, Cameroon, the Congo, Zaire, Malawi, Mauritius and Swaziland did manufacturing industry contribute 15 per cent and more of the GDP in 1972.

The construction industry which is a most important source of wage employment in the economy, does not make a very large contribution to the GDP in most African countries. Figures around 5 per cent are common although in Algeria, Mauritania, Gabon, Botswana and Zambia the proportion was more than 9 per cent in 1972. These latter countries are all large mineral producers whose economic activity has been stimulated by a good world demand for their products.

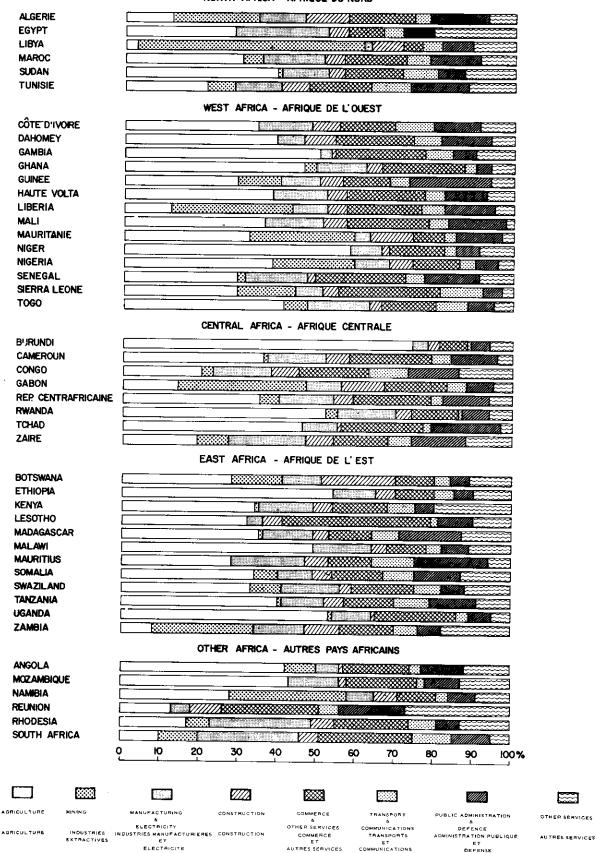
The difference between the relative weights in manufacturing and agriculture as between developed and developing countries is much sharper than in the case of commerce and other services. In fact, commerce and other services make a significant contribution to GDP in many African countries, and in 1972 these services contributed more than 20 per cent of the GDP of virtually all the countries listed in the chart.

Commerce starts to become important when a country moves from a basically subsistence economy and it soon reaches a stage of contributing possibly 10 per cent or more to the GDP regardless of the stage of development of the country concerned.

African surface transport links have grown up basically to provide access for export products to the coastal ports. Since independence there has been a widening of these transport links to bring more areas of the country into the money economy, and links between countries and subregions have also been strengthened. There is a considerable range in the contribution of transport and communications to the GDP, high figures normally

U

NORTH AFRICA - AFRIQUE DU NORD



SOURCES AND USES OF AVAILABLE RESOURCES AT CURRENT MARKET PRICES, 1972

SOURCES ET UTILISATION DES RESSOURCES DISPONIBLES AUX PRIX COURANTS DU MARCHE, 1972

NORTH AFRICA - AFRIQUE DU NORD

		NORTH AFRICA - AFRIQ	UE DU NORD
ALGERIE			34%
EGYPT			п%
LIBYA		SOUTH AND SOUTH	23%
MAROC	- 18-151 Core616		5 %
SUDAN			12 %
TUNISIE	3		24 %
Subregion			20 %
		WEST AFRICA - AFRIQ	UE DE L'OUEST
COTE D'IVOIRE		and the second second	22%
DAHOMEY	徽		I8 ⁰ / ₄
GAMBIA	608		19 %
GHANA			n% [
GUINEE	整		8 %
HAUTE VOLTA	2000		15 %
LIBERIA			28 %
MALI	38		15 %
MAURITANIE			26 %
NIGER	靈		8%
NIGERIA			18 %
SENEGAL	886	na Santa da	п%
SIERRA LEONE			20 %
TOGO	366 ·		19 %
Subregion			17%
		CENTRAL AFRICA - AFI	RIQUE CENTRALE
BURUNDI	{		6%
CAMEROUN			e%
CONGO	鐖		28 %
GABON			43 %
RWANDA	2		и%
REP. CENTRAFRICAINE	i i		la %
TCHAD	88		14 %
ZAIRE	288		3 %
Subregion	10		25 %
		EAST AFRICA - AFRIC	OUE DE L'EST
BOTSWANA	\$555,555	and the same of th	47 %
ETHIOPIA			12 %
KENYA	\$ 200		23 %
LESOTHO	(0.000000000000000000000000000000000000	Section 18	15%
MADAGASCAR	00 00000		9% is ex
MALAWI	3000		18 %
MAURITIUS SOMALIA	696		16%
SOMALIA SWAZILAND	1333	100104	**************************************
TANZANIA	8		21%
UGANDA			12%
ZAMBIA			31%
Subregion	5		19 %
		OTHER AFRICA - AUTRI	***************************************
ANIONI A			
ANGOLA		Company of the second	
MOZAMBIQUE	a constitue	// / / / / / / / / / / / / / / / / / /	19 %
NAMIBIA	2000S		
REUNION RHODESIA	80805800506865		20%
			25 %
SOUTH AFRICA Subregion	The second second		22 %
១៣១. ៩គឺសេរ			
	100 90 80 70	60 50 40 30 20 10	O 10 20 30 40 50 60 70 80 90 100

NET IMPORTS OF GOODS AND SERVICES

GROSS DOMESTIC PRODUCT CONSUMPTION EXPENDITURE GROSS DOMESTIC CAPITAL AT CURRENT MARKET PRICE DEPENSES DE CONSOMMATION FORMATION

NET EXPORTS OF GOODS AND SERVICES ON FORMATION INTERIEURE BRUTE[EXPORTATIONS NETTES DE BIENS DE CAPITAL ET SERVICES

N

IMPORTATIONS NETTES DE BIENS PRODUIT INTERIEUR BRUT ET SERVICES AUX PRIX COURANTS DU MARCHE

being recorded in countries which act as transit territories and low figures in the land-locked least developed countries.

Public administration is another sector in which the differences between developing and developed countries are not great in terms of relative importance in total output. In half the African countries public administration accounted for more than 10 per cent of the GDP in 1972. Part of the reason for this relatively high weight can be found in the range of development responsibilities which falls directly on governments in developing countries.

In any period of time, total resources available to a country will comprise the results of domestic economic activity (GDP) plus additional goods and services imported from abroad. Total resources may be used to meet private consumption demands, to sustain government services, to permit capital formation, or to meet demands for goods and services from abroad. From Chart IV it may be seen that many African countries as measured by the level of net imports of goods and services, receive a not insignificant proportion of their total available resources from abroad.

In Libya as a particular exception, net exports accounted for one—third of the available resources in 1972 leaving only 67 per cent to be used in the domestic economy. Libya was building up its external reserves at a fast rate at that time. By contrast the imports into Botswana and Lesotho were very much higher than exports and this meant that more resources were available for consumption and investment than the level of GDP. Besides Libya, the countries Liberia, Mauritania and Swaziland were comparatively large net exporters in 1972, while Egypt, Dahomey, Gambia, Upper Volta, Senegal, Mali, Congo, Zaire, Malawi and Somalia were other countries where imports were considerably higher than exports.

As far as the domestic uses of resources are concerned, the largest allocation is to consumption; and in 1972 the share of total resources consumed ranged from 44 per cent (in Libya) to 94 per cent (in Burundi and Guinea). The Libyan figure reflects, of course, the dominance of petroleum exports in the economy and the fact that the economy has not as yet developed consumption and other patterns which would correspond to its relatively high product per head.

Much attention has been paid in the discussion of economic growth to the relative allocation of resources to capital formation. It is not realistic to consider this question on the basis of figures for a single year; and it is difficult to specify an optimum proportion. It may be suggested, however, that in the developed countries the relevant proportion is normally greater than 20 per cent; and it is of interest to note that in the various subregions of Africa the allocation to investment in 1972 was 20 per cent in North Africa, 17 per cent in West Africa, 25 per cent in Central Africa and 19 per cent in East Africa. A total of 16 developing countries used 20 per cent or more of the available resources for investment but in a further four countries only 10 per cent or less of such resources were used in this way.

There is naturally a relationship between GDP growth rate and the share of resources allocated to investment. It is probably reasonably

accurate to assume that a growth rate of 6 per cent in the GDP growth rate and a population growth rate of about 2.7 per cent, Africa's per capita GDP would increase by more than 3 per cent a year. We saw earlier that between 1962 and 1972 some 21 countries registered this rate of increase.

The target growth rate of the GDP for the 1970's is a minimum of 6 per cent a year for African countries. The experience of the years 1971 and 1973 suggests that it may be difficult to reach this target growth rate for the first part of the decade unless there are some very good agricultural seasons in 1974 and 1975. Economies are being diversified but the importance of the agricultural sector is still so fundamental that a poor growing season may lead to little or no growth in the GDP of a particular country and hold back the average growth of Developing Africa as a whole. The average growth rate for Developing Africa for 1971 to 1973 was about 4.6 per cent a year.

Chart V shows the central government expenditure per head in 1966 and 1973 in 36 African countries. The amount per head has been converted into US dollars at 1972 exchange rates and the 1966 figures have been a adjusted for the change in the consumer prices index number between 1966 and 1973. It is obvious from the chart that there has been a substantial increase in central government expenditure per head in most countries of North and Last Africa but in West and Central Africa only a limited number of countries show such increases. It is also obvious that the general level of expenditure, which stems from the low per capita GDP, is still very small in far too many countries.

In eight of the countries shown on the chart central government expenditure was less than 25 dollars per head in 1973 and in three - Upper Volta, Burundi and Rwanda, the figures were less than 10 dollars per head. It is quite impossible for Governments to provide the level of services required particularly in the social fields at such low levels of expenditure.

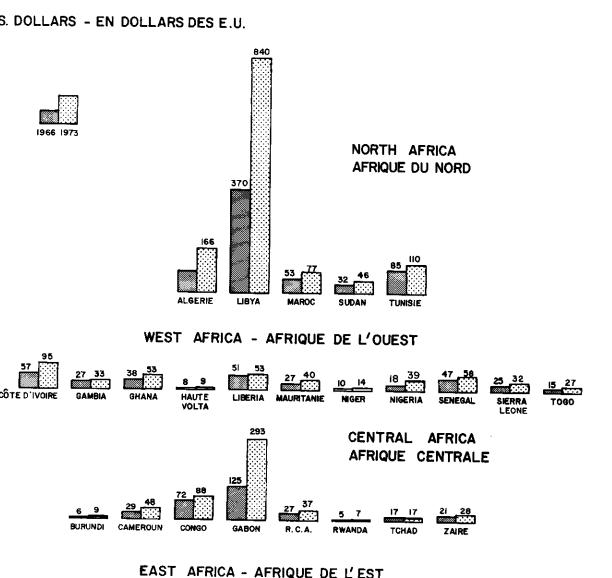
At the other extreme, eight countries - Algeria, Libya, Tunisia, Gabon, Botswana, Mauritius, Swaziland and Zambia, showed expenditure levels of more than 100 dollars per head in 1973. The highest growth rates between 1966 and 1973 in the level of central government expenditure per head were achieved in the important crude petroleum producers countries, Algeria, Libya, Nigeria and Gabon and in Zambia, Kenya, Botswana and Swaziland whose economies have also been growing rapidly.

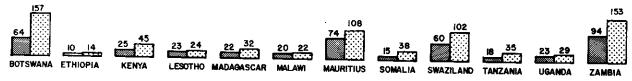
The countries with the highest proportion of the GDP represented by central government expenditure in 1973 were Algeria, Libya, Sudan, Ghana, Gabon, Botswana, Mauritus, Somalia and Zambia. In each case the proportion was in excess of 30 per cent.

CENTRAL GOVERNMENT EXPENDITURE PER HEAD AT 1972 PRICES IN SELECTED AFRICAN COUNTRIES 1966 - 1973

DEPENSES DES ADMINISTRATIONS CENTRALES PER CAPITA AUX PRIX DE 1972 DANS QUELQUES PAYS AFRICAINS 1966-1973

IN U.S. DOLLARS - EN DOLLARS DES E.U.





CHAPTER II - POPULATION AND SOCIAL AFFAIRS

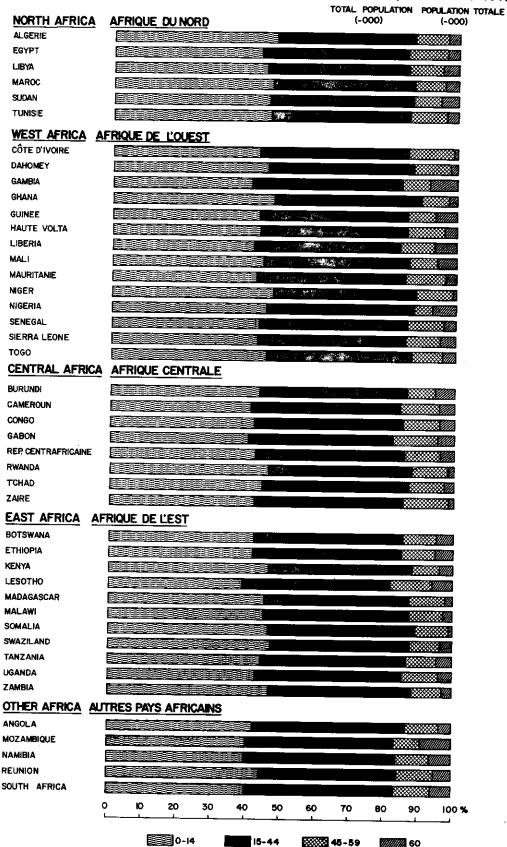
The age distribution on a population affects economic activity and progress in a number of ways. Among the more evident and important of these is that contained in the relationship between the economically active and non-active age groups. In considering this question, a reasonable procedure is to assume that children of 14 years and under the older people of 60 years and over are economically non-active; and that the labour force is drawn entirely from the 15 to 59 age group. On this basis, Chart VI provides some information on African conditions. It is evident from the chart that the dependency ratio in most African countries is extremely high; and that this is mainly because of the marked youthfulness of African populations. Thus in virtually all 46 African countries shown, at least 40 per cent of the total population was 14 years and under. Át the other end of the age scale there was no country in which persons 60 years or over accounted for as much as 9 per cent of the total population, and the average weight of this age group was less than 5 per cent. Nevertheless, because of the weight of youth, the proportion of old and young combined in the total is high. In 1972 there were 9 countries in which the two groups together accounted for more than 50 per cent of total population. A young population is normally associated with a high population growth rate and the present growth rate in Developing Africa is at least 2.6 per cent a year with a 1973 population of about 370 million.

In a sense, youthfulness is also a characteristic of the labour force; and persons in the 15 to 44 age group frequently outnumber those in the 45 to 59 age group by ratios of 4 to 5 to 1 in African countries. In the developed countries senior managerial and executive positions are largely filled by people who are over 45. The chart makes it clear that — apart from questions of education and training — the proportion of African population comprised of persons old enough and still active enough to supply much accumulated experience is relatively small.

The absolute size of population in 46 countries in 1973 is shown in Chart VII which also compares estimates of the population in 1972 and 1982. One striking feature from the chart is the large number of African countries with very small total populations. In 1973 there were only eleven countries in which the population was more than 10 million while in 12 others it was less than 2 million. Only five countries — Egypt, Ethiopia, Nigeria, South Africa and Zaire — had a population in excess of 20 million. Even by 1982, notwithstanding the relatively rapid rate of population increase, there will still be about twenty African countries with a population of less than five million and there will be only thirteen countries with a population in excess of ten million.

The main determinant of population change in Developing Africa between now and 1982 will be an accelerating decline in the death rate, except in North Africa where death rates are already relatively low compared to the other African subregions. As a result, in the developing countries of Africa outside North Africa, population increase in absolute terms will probably be greater between 1977 and 1982 than between 1972 and 1977; and the increase in the latter period should in turn be greater than the increase between 1967 and 1972. In North Africa, increases in each of the

PERCENTAGE DISTRIBUTION OF THE POPULATION BY AGE GROUPS AS AT 1st JULY 1972 REPARTITION DE LA POPULATION PAR GROUPES D'ÂGE, 1st JUILLET 1972



.

	NORTH AFRICA - AFRIQUE DU NORD GROWTH RATE (% PA		POPULATION 1973
	NORTH APRICA - APRICADE DO NOTO	2.24%	35.62
EGYPT		2.5%	16. 90
SUDAN	1505-0-1504-0-1	2.6%	16. 19
MAROC ALGERIE	STREET, STREET	3.0%	14, 60 5, 50
TUNISIE	AND CONTROL S	2.2%	2.15
LIBYA	班8	3.6 %	
SUBTOTAL	1985年 1980年 19	2.5 %	90. 96
Jobioine	WEST AFRICA - AFRIQUE DE L'OUEST		
NIGERIA	AND THE PROPERTY OF THE PROPER	2.5%	71. 02
GHANA	THE PROPERTY SEEDS	2.6%	9. 33
CÔTE D'IVOIRE	ticanitation 500	3.0%	5. 58 5. 21
GUINEE	STREET, ST.	3.0% 2.5%	5. 43
MALI	SHAREHUR SO	2.0%	5. 65
HAUTE VOLTA		2.7%	4. 35
NIGER		2.4%	4. 22
SENEGAL	班的知题 会	2.8%	2.95
DAHOMEY		1. 5%	2.67
SIERRA LEONE		2.5%	2.12
TOGO		3.0%	1. 67
LIBERIA	(2005) 2017	l. 4%	1. 23
MAURITANIE		3.0%	Q. 5 1
GAMBIA	E216)	2.5%	121.94
SUBTOTAL.			
	CENTRAL AFRICA - AFRIQUE CENTRALE	3.0%	23.55
ZAIRE		2.1 %	6.21
CAMEROUN		28%	4.00
RWANDA	ANNIANTE R	l. 7%	3.85
TCHAD	Security 5	2.0%	3. 47
BURUNDI REP CENTRAFRICAINE		2.2%	I. 7 4
		2.2%	L 17
CONGO GABON ^{QI}		2.0%	0. 53 ^q J
SUBTOTAL.		2.6%	44.47
JODIVIAL	EAST AFRICA - AFRIQUE DE L'EST		
ETHIOPIA	30000000000000000000000000000000000000	2.5%	27.12
TANZANIA	STREET, TELESCOPE (From 1 1 Horse S00000000)	2.7% 3.4%	14.38 12.48
KENYA	322(1)(1)(2)(3)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)	3. 4% 3. 3%	10.81
UGANDA	924H5541244(197846918)201 88888888	2.1%	7.16
MADAGASCAR	2:11000000000 XX	2.6%	4.79
MALAWI	WHITE SE	2.7%	4.64
ZAMBIA	and the second s	2.8%	3.02
SOMALIA		2.2%	0.99
LESOTHO		1. 2%	0.86
MAURITIUS		3.1%	0.64
BOTSWANA SWAZILAND	0 1	2.7%	0.46
SUBTOTAL	85.00 B22	2.7%	87. 37
	OTHER AFRICA - AUTRES PAYS AFRICAINS	2.65%	23.60
SOUTH AFRICA	Saltano Harris Company (1985)	2.2%	8.72
MOZAMBIQUE		3.4%	5.88
RHODESIA		2.0%	5. 93
ANGOLA		2.4%	0.73
NAMIBIA		2.6%	0.48
REUNION		2. 6%	45.34
SUBTOTAL			
	0 5 10 15 20 25 30 35 40 45 50 55 60 65 70	75 ∔	
	1972 1962		
- / OOU D. DE MEAD	1012		

a/COULD BE NEARER I MILLION POURRAIT ETRE PLUS PROCHE D'UN MILLION

NOTE: WITH A GROWTH RATE OF 2.5% A YEAR A POPULATION WILL DOUBLE IN 28 YEARS, WITH 3.0% A YEAR IT WILL DOUBLE IN 24 YEARS THE TOTAL POPULATION OF AFRICA IN 1972 WAS 382.000.000 AND THE GROWTH RATE 2.6% A YEAR

AVEC UN TAUX DE CROISSANCE ANNUEL DE 2.5% LA POPULATION DOUBLE EN 28 ANS, AVEC UN TAUX DE CROISSANCE DE 3.0% ELLE DOUBLE EN 24 ANS LA POPULATION TOTALE DE L'AFRIQUE EN 1972 ETAIT DE 382.000.000 AVEC UN TAUX ANNUEL DE CROISSANCE DE 2.6%

ENROLMENT IN EDUCATIONAL INSTITUTIONS 1972 SCOLARISATION DANS LES ETABLISSEMENTS D'ENSEIGNEMENT, 1972

PRIMARY AND TOTAL PERSONS ENROLLED PER 100 TOTAL POPULATION PRIMAIRE ET TOTALE PRIMAIRE ET TOTALE

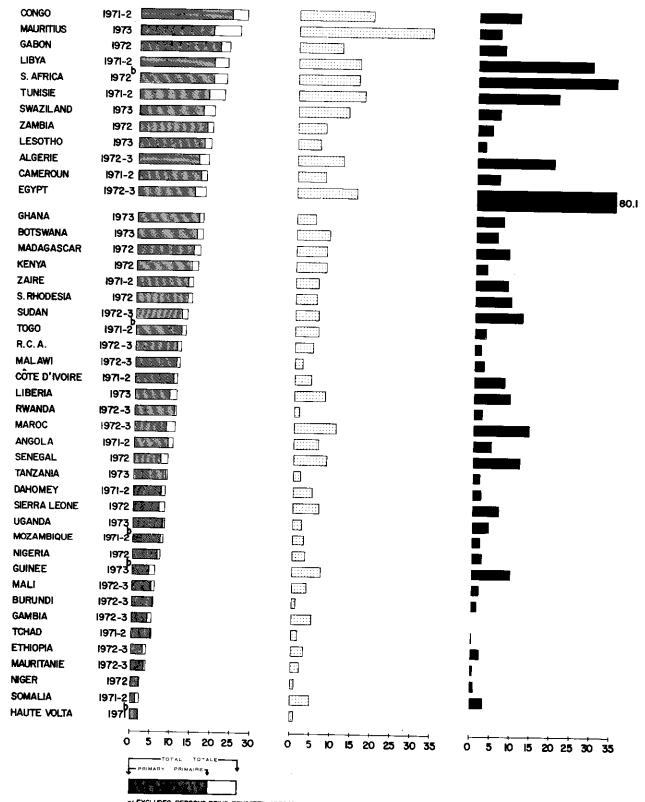
NOMBRE D'INSCRITS PAR 100 HABITANTS
(POPULATION TOTALE)

SECONDAIRE
NOMBRE D'INSCRITS PAR 500 HABITANTS
(POPULATION TOTALE)

SUPERIEUR
NOMBRE D'INSCRITS PAR 10,000 HABITANTS
(POPULATION TOTALE)

SECONDARY
PERSONS ENROLLED PER
500 TOTAL POPULATION
SECONDAIRE

HIGHER 9 PERSONS ENROLLED PER 10,000 TOTAL POPULATION



OF EXCLUDES PERSONS BEING EDUCATED ABROAD NON COMPRIS LES ETUDIANTS A L'ETRANGER

11 1

by ESTIMATES OR UNOFFICIAL DATA DONNES OFFICIEUSES OU ESTIMEES

HOSPITAL BEDS AND DOCTORS RELATED TO POPULATION IN SELECTED AFRICAN COUNTRIES AROUND 1972

LITS D'HOPITAUX ET MEDECINS EN POURCENTAGE DE LA POPULATION DANS QUELQUES PAYS AFRICAINS AUX ENVIRONS DE 1972

HOSPITAL BEDS - LITS D'HOPITAUX **DOCTORS - MEDECINS** (Per 1,000 persons -Pour 1,000 personnes) (1,000 persons per Doctor -1,000 de personnes par medecins) NORTH AFRICA - AFRIQUE DU NORD :::: 1972 **ALGERIE** 1972 **EGYPT** 1973 LIBYA 1973 MAROC 1973 SUDAN TUNISIE 1971 WEST AFRICA - AFRIQUE DE L'OUEST 1972 **GAMBIA GHANA** 1972-3 **LIBERIA** 1972 **NIGER** 1972 **NIGERIA** 0 **SENEGAL** 1972 Ð SIERRA LEONE 1973 **TOGO** CENTRAL AFRICA - AFRIQUE CENTRALE BURUNDI ::: **CAMEROUN** 1971 :::::: 1972 CONGO 1971 **GABON** 1973 R.C.A. **RWANDA TCHAD** 1972 1972-3 ZAIRE EAST AFRICA - AFRIQUE DE L'EST **BOTSWANA** 1973 1972 KENYA **LESOTHO** 1972 1972 **MADAGASCAR** \Box MALAWI 1973 **MAURITIUS** 1973 **SWAZILAND** 1973 \Box TANZANIA 1972 **UGANDA** 1971 ZAMBIA 1972 60 40 50 20 30

NOTE: THEY ARE A NUMBER OF ESTIMATES INCLUDED ABOVE UN NOMBRE D'ESTIMATIONS SONT INCLUSES

IX

sub-periods will be much more nearly equal. This forecast is, of course, dependent on the population planning practices in a number of countries and may be changed by more reliable population data which the present round of censuses should produce.

The economic effectiveness of any given labour force depends <u>interalia</u> on the skills of that labour force. One quick measure of these skills may be obtained from an examination of the educational exposure of the population. Some information on enrolment in education institutions is provided in Chart VIII for 44 African countries around 1972.

It is evident that, with the exception of Egypt, the number of university students in Developing Africa was still very small in 1972. For primary education it is probably realistic to assume that the school going population covers the age range 6 to 14 years and in 1972 there were 20 out of the 44 countries shown on the chart in which about 50 per cent of this age group was at school. As the age group covers about 23 per cent of the total population it was only in the Congo that universal primary education was virtually reached in 1971/72 but in another 10 countries the level was higher than 70 per cent. Secondary education achievements are more difficult to assess but the 15-19 year old age group covers about 9 per cent of the total African population. was only one country - Mauritius, in which secondary enrolments represented more than half the numbers in this age group in 1972/3 while in a further eight countries enrolments were more than 25 per cent. However, the general experience is still one of low enrolment levels and in fourteen countries secondary enrolments were less than one-tenth of the 15 to 19 age group and in 21 (or nearly half the countries) the enrolments were between one-tenth and one-quarter of this age group.

However, this analysis based on a static chart overlooks the very real strides that were made in African education in the 1960's. In 1960 there were 19.2 million primary school students, 2.0 million at secondary schools and 219,000 in higher education. By 1970 the totals had increased to 29.0 million in primary education, 4.6 million in secondary schools and 360,000 in higher education. Further advances were made in the 1970's and development plans indicate that every effort is being made to raise enrolment ratios.

Health is covered on Chart IX which compares the doctors and hospital beds in 32 African countries around 1972. There is a very wide range between the lowest and highest doctor/population ratios in the various countries and in the figures of hospital beds per 1,000 persons. Egypt and Libya had the lowest number of persons per doctor (1,400) and Niger had the highest (60,000). In Gabon there were 7.0 hospital beds per 1,000 population whereas in Nigeria and Niger the ratio was only 0.6 hospital beds.

To a considerable extent the low hospital bed to population ratio and the high population/doctor ratios are linked to low per capita GDP and low per capita government expenditure figures. As an example Rwanda in 1972 had a per capita GDP of about 60 US dollars and the estimated central government expenditure was only 6 dollars per head. There were 52,000 persons to each doctor and 1.5 hospital beds per 1,000 population.

In contrast Libya's per capita GDP was more than 2,000 dollars, its government expenditure was around 800 dollars per head and there were 2,100 persons per doctor and 3.9 hospital beds per 1,000 population.

A wealthy country like Libya can afford to build hospitals and pay to have them manned properly but in most African countries it is difficult to provide medical services on even a very modest scale. It is instructive to note that of the countries shown on the chart with per capita GDP's in 1972 of more than \$200 at 1970 prices, namely Algeria, Egypt, Libya, Morocco, Tunisia, Ghana, Liberia, Senegal, Congo, Gabon, Mauritius, Swaziland and Zambia, most had more than 2 hospital beds per 1,000 population while the number of persons per doctor was generally less than 12,000. This may indicate the level of GDP per head which must be reached before medical services at this very modest level can be provided.

CHAPTER III - INTERNATIONAL TRADE AND PAYMENTS

As measured by the weight of imported goods and services in total available resources and by the share of exported goods and services in final demand, Africa has a very open economy. This is true both for the continent as a whole and for the majority of African countries. The importance of foreign trade varies from country to country in response, to resource endowment and levels of development. As far as the countries of Developing Africa are concerned, international economic relations are of crucial importance in the process of their economic growth.

Chart X records changes in merchandise exports and imports between 1964 and 1973 for Developing Africa and for Africa as a whole. The most striking feature of the trade position reflected in the chart is the change from net importer to net exporter of Developing Africa over this period. Exports from Developing Africa grew at an average annual rate of 11.3 per cent per annum between 1964 and 1973 in current prices. Imports on the other hand grew by 9.3 per cent per annum. The deficit in the balance of trade in the early 1960s was wiped out during the later years and in 1973 the value of exports was 19,800 million US dollars and imports 16,800 million US dollars, giving a surplus of some 3,000 million US dollars. The year 1973 was one in which both exports and imports increased at a high rate (31 per cent and 18 per cent respectively) basically because of the level of inflation in the world economy.

It should be noted that the favourable change in the balance of trade from 1964 and 1973 owed much to special circumstances, including the very marked expansion of mineral exports, notably petroleum, copper and iron ore and favourable market conditions for certain other important exports. Measured in volume terms imports increased by 48 per cent between 1964 and 1973 and exports by 88 per cent.

The commodity concentration of African exports has been a much discussed topic. The proportion of total exports by value accounted for by the three leading commodities in 1973 is shown in Chart XI for 42 countries. African exports have a high commodity concentration and what is of profound significance is the importance of one, two or three commodities in the export trade of individual countries. Where market conditions are unfavourable as for copper in Zambia and cocoa in Ghana in 1971, the influence on the whole economic scene is very disturbing but the reverse applies when, as in 1973, the price levels of export products increased sharply.

More than three quarters of the countries of Developing Africa received 60 per cent or more of their export earnings from only three commodities in 1973 and it is unlikely that this situation can be changed materially in the near future. Although there are grounds for believing that as a country's economy diversifies so the range of its export products is expanded. The countries near the bottom of Chart XI tend to have more diversified economies than those at the top of the Chart.

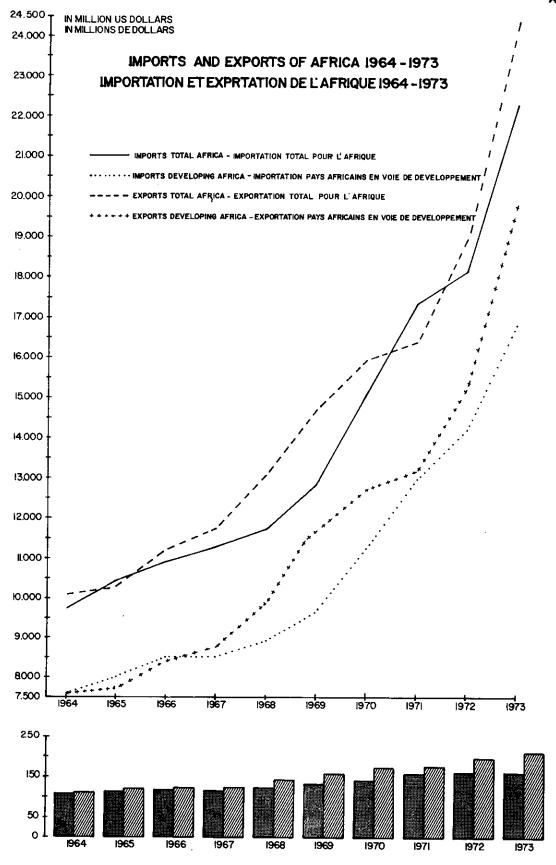
The outstanding examples of countries with virtually monoproduct export trade were Libya (99 per cent from crude petroleum), Algeria (83 per cent from crude petroleum), Burundi (86 per cent from coffee), Gambia (91 per cent from groundnuts), Mauritius (84 per cent from sugar) and Zambia where 94 per cent of 1973 export earnings came from copper. Nigeria had become almost a monoproduct exporter in 1973 when 83 per cent of total exports were represented by crude petroleum.

A majority of African countries still import more in value than they export and Chart XII shows the total value of imports and exports by country in 1973. Although overall, Developing Africa exports considerably more than it imports, there were 25 countries in 1973 which were net importers on balance. That year saw the start of the very high increases in petroleum prices and while in 1973 petroleum and products represented about 6 per cent of total imports in value into the non-petroleum producing countries it has been estimated that this proportion will rise to 15 per cent in 1974 after the massive increase in petroleum prices. Many countries are likely to see their trade deficits, worsen in consequence while the petroleum producers will gain very materially.

Africa's imports are basically of manufactured goods, transport equipment and machinery and those food items which are not produced in the countries concerned. Probably as much as 70 per cent of imports in 1973 were of manufactured products and about 15 per cent were of food, drink and tobacco items. It is still true that a large proportion of current imports could be grown or manufactured in Africa provided the necessary investments were made but it must be said that machinery and transport equipment production in Developing Africa seems likely to grow only slowly in the future.

The development of African economies is ultimately a matter for African planning and effort. External assistance is, nevertheless, an extremely important supplement to such effort; and Chart XIII provides some partial information relating to flows from countries members of the OECD Development Assistance Committee for the years 1965-72. There has been a tendency to emphasise multilateral rather than bilateral aid since 1968 and this is reflected in the data shown on the chart. In 1972 the total of public aid flows shown was 2,163 million dollars compared with 1,701 million in 1965. In the years 1966 to 1968 the aid flows were smaller than in 1965 but there has been an increasing tendency apparent since 1968. The importance of these financial flows is particularly significant in the external sector but as a percentage of the GDP at current prices there was a fall from 4.5 per cent in 1965 to 3.0 per cent in 1970 with some recovery to 3.3 per cent in 1971 and 1972. When private aid flows are added the total in 1972 reached 3,396 million dollars but this is a sensible reduction from the 3,742 million recorded in 1971.

The balance of payments is generally defined as being the accounting system by which a systematic statement is furnished of all economic transactions realized in one year between the residents of the country concerned and those of foreign countries. The balance of payments statistics for African countries have been improved drastically over recent years and Chart XIV covers the figures of 36 countries.



QUANTUM IMPORTS DEVELOPING AFRICA - QUANTUM IMPORTATION PAYS AFRICAINS EN VOIE DE DEVELOPPEMENT (1963=100)

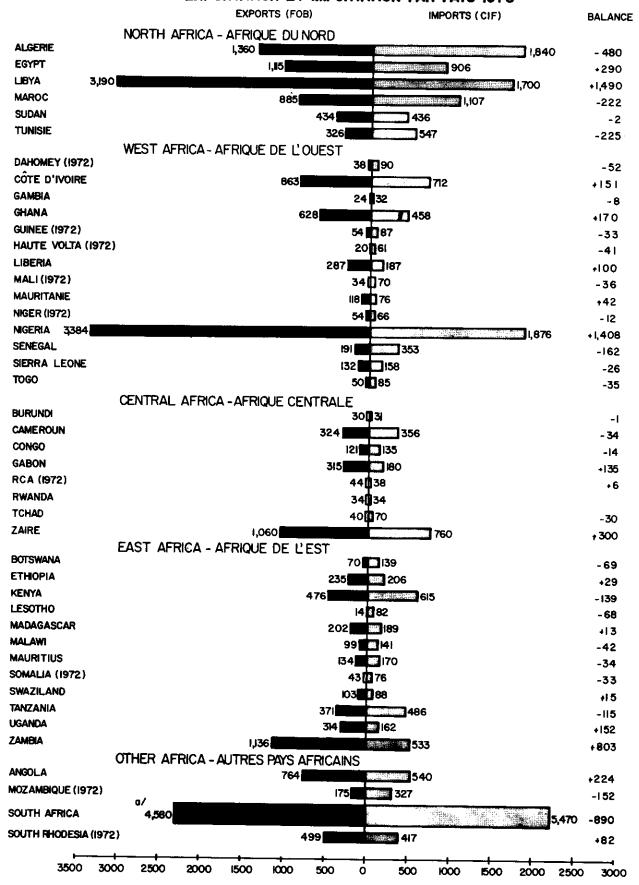
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RELATIVE IMPORTANCE OF THREE PRINCIPAL EXPORT COMMODITIES, IMPORTANCE RELATIVE DE TROIS PRODUITS D'EXPORTATION PRINCIPAUX,

1973

BOTSWANA	MEAT DIAMONDS ANIMAL PRODUCTS
LIBYA	PETROLEUM CRUDE
ZAMBIA	COPPER ZINC → +LEAD
ALGERIE	PETROLE BRUT GAZ NATUREL: VINS
MAURITANIE	MINERAI DE FER CUIVRE POISSON
CONGO	PETROLE BRUT 90IS POTASSE
GABON	PETROLE BRUT BOIS BRUT MANGANESE
MAURITIUS	SUGAR MOLASES +TEA
LIBERIA	IRON ORE & CONC RUBBER TIMBER
BURUNDI	CAFE COTON P PEAUX
GAMBIA	GROUNDNUTS GROUNDNUT OIL GROUNDNUT CAKE
NIGERIA	PETROLEUM CRUDE COCOA GROUNDNUTS
SOMALIA	LIVE ANIMALS , BANANAS MEAT
GUINEE (1972)	ALUMINE ANANAS CAFE
UGANDA	COFFEE COTTON TEA
RWANDA	CAFE MIN ETAIN THE
MGER (1972)	ARACHIDES ANIMAUX VIVANTS URANIUM
TOGO	PHOSPHATES CACAO CACAO
TCHAD	COTON YIANDE + BETAIL
LESOTHO	WOOL LIVE ANIMALS MOHAIR
ZAIRE	CUIVRE COBALT CAFE
SIERRA LEONE	DIAMONDS JIRON ORE → PALM KERNELS
GHANA	COCOA & BEANS TIMBER GOLD
REP. CENTRAFRICAINE(1972)	DIAMONDS CAFE COTON
TUNISIE	PETROLE BRUT PHOSPHATES HUILE D'OLIVE
SUDAN	COTTON GROUNDNUTS → GUM ARABIC
HAUTE VOLTA (1972)	ANIMAUX VIVANTS COTON + ARACHDES
ANGOLA	PETROLEUM: COFFEE DIAMONDS
CÔTE D'IVOIRE	BOIS CAFE CACAO
DAHOMEY (1972)	COTON HUILES DE PALME CACAO
ETHIOPIA	COFFEE HIDES & SKINS OIL SEEDS
MALAWI	TOBACCO TEA ← GROUNDNUTS
MALI (1972)	COTON ANIMALX VIVANTS ARACHIDES
CAMEROUN	. CAFE FEVES DE CACAO BOIS BRUT
EGYPT	COTTON COTTON YARNS + RICE
SWAZILAND	SUGAR: WOOD PULP: IRON ORE
MOZAMBIQUE (1972)	CASHEW NUTS SUGAR
SENEGAL	HULE D'ARACHIDES TOURTEAUX D'ARACHIDES + PHOSPHATES
KENYA	COFFEE PETROLEUM PRODUCTS -TEA
MADAGASCAR	CAFE GIROFLE ← VANILLE
TANZANIA	COTTON CLOVES
MAROC	PHOSPHATES AGRUMES TOMATES
	0 10 20 30 40 50 60 70 80 90 100%





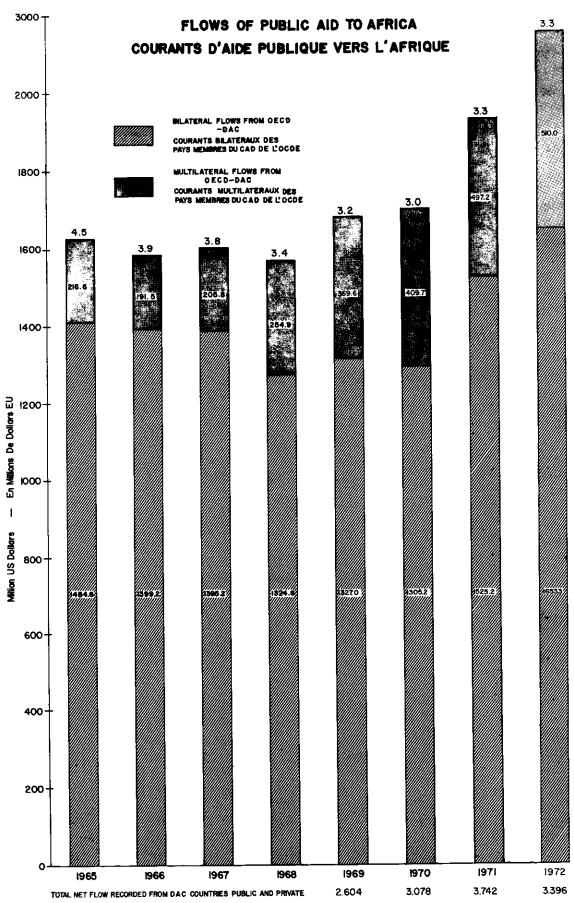


FIGURE ON TOP OF EACH BAR REPRESENTS FLOWS OF PUBLIC AID AS A PERCENTAGE OF GOP AT CURRENT MARKET PRICES IN DEVELOPING AFRICA

LE CHIFFRE HIDIQUE AU-DESSUS DE CHAQUE SARRE REPRESENTE LE MONTANT DE L'AIDE PUBLIQUE EXPRIME EN POURCENTAGE DU PIB AUX PRIX COURANTS DU MARCHE POUR L'AFRIQUE EN VOIE DE DEVELOPPEMENT

The typical pattern in the chart is of a current account deficit for goods and services financed by inflows of transfer receipts (mainly aid) and capital. Libya is a particular exception with a very large surplus for goods and services and an outflow of capital and transfer payments.

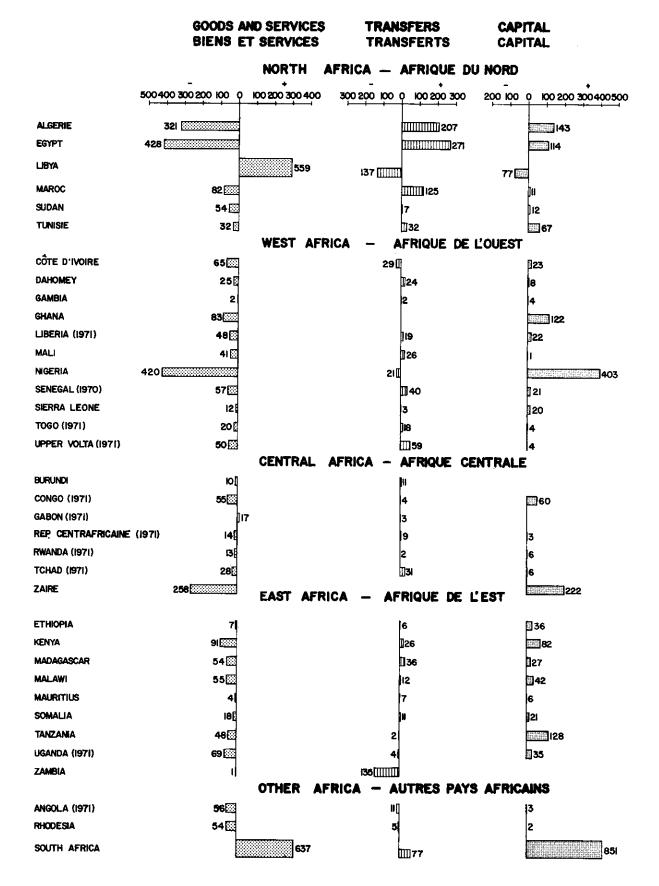
For the 35 developing countries shows on the chart (basically for 1972) the net inflow of capital was 1,589 million US dollars, net transfer receipts were 655 million and the net deficit for goods and services was 1,559 million. There were some additions to net external reserves and for Developing Africa as a whole these increased from 5,640 million to 6,140 million dollars between December 1971 and December 1972. Without Libya the increase was from 2,990 to 3,210 million dollars.

This trend to higher reserves continued in 1973 on an increasing scale and the total for Developing Africa reached approximately 6,900 million US dollars giving an increase during the year of some 760 million. During 1973 Libya's reserves fell from 2,925 to 2,127 million dollars so the increase for the rest of Developing Africa was from 3,210 to 4,770 million dollars.

BALANCE OF PAYMENTS OF SELECTED AFRICAN COUNTRIES, 1972 BALANCE DES PAIEMENTS DE CERTAINS PAYS AFRICAINS, 1972

IN MILLION US DOLLARS - EN MILLIONS DE DOLLARS

ΧIV



CHAPTER IV - ENERGY

Although Africa has extensive reserves of natural gas and crude petroleum and a very considerable hydro-electric potential, at the present time consumption of all forms of energy is still very small. Production of crude petroleum in particular grew very rapidly in the 1960s but as most of this production is exported, it figures only to a very limited extent in Africa's consumption. In 1972 only 14 per cent of the energy produced in the developing countries was actually consumed and in Developing Africa the per capita consumption in terms of equivalent coal was about 160 kilograms. This consumption level is less than one-twelveth of the world average level and is a good indication of the stage of industrial development reached as in the modern world energy is a crucial constituent of economic progress. Chart XV shows the production and consumption of primary energy of selected countries of Africa in 1972. The main consumers of energy in order of importance in 1972 were South Africa, Tgypt, Algeria, Morocco, S. Rhodesia, Nigeria, Zambia, Kenya, Sudan, Zaire and Ghana.

The countries with a per capita consumption of electricity in excess of 200 kwh in 1972 numbered only eight and in Developing Africa, Zambia had the highest consumption with nearly 1,000 kwh per head as large quantities are used in its copper mining industry. It is only where industry or mining are important that electricity consumption starts to be significant. Ghana had an average of more than 300 kwh per head in 1972 because large quantities were used to smelt alumina to produce aluminium and Liberia's consumption of nearly 500 kwh per head was used largely in its iron ore mining industry. The average for Developing Africa in 1972 was only about 155 kwh per head or less than one-tenth of the world average. By contrast, consumption in South Africa was more than 2,300 kwh per head.

Libya, Nigeria and Algeria are the largest producers of crude, petroleum and most of their output is exported; these same three countries are the largest producers of natural gas and Algeria and Libya have reached the stage where sizeable exports are being made. Coal production is only significant in the south of the continent and South Africa's output accounted for more than 90 per cent of the total in 1972.

Hydro-electric production is more evenly distributed throughout the region and most countries have some production. The largest producers at present and Egypt, Ghana, Zaire, S. Rhodesia and Zambia but there are number of sizeable projects which will add considerably to Africa's output once they are completed. Two countries make substantial exports of electricity to neighbours, these are S. Rhodesia to Zambia and Uganda to Kenya. Ghana is beginning exports to Togo and Dahomey. In 1972 Zambia's production from its HD generating stations rose to 3,300 million kwh following the entry into production of the Kafue scheme.

Africa's known energy resources also include uranium oxide which has been discovered and is being exploited in Central Africa and South Africa. Other deposits have also been located and are being further explored.

In 1972 it was announced that Ethiopia's geothermal energy resources could meet most of the present electric power requirements of the country.

The crude petroleum reserves of Africa are being intensively prospected and the level of current development suggest that the continent will probably be found to possess extensive reserves over and above those which have already been identified. Every year new deposits of importance are being discovered. The search for crude petroleum has also led to the discovery of natural gas reserves in a number of countries. These latter reserves can only be used fairly quickly where a market (domestically or in a near neighbour) already exists. For example Egypt intends to exploit the natural gas found in Nile Delta area for its domestic economy while reserves in Mozambique may be piped to South Africa where a large market already exists. The scale of the investment needed to liquify natural gas for export to the markets in the developed world has meant that this branch of exploitation has had to proceed fairly slowly but over the next few years Nigeria hopes to join Algeria and Libya as a natural gas exporter.

The world energy crisis which arose at the end of 1973 with the reduction of production and the high prices of crude petroleum led to even greater prospecting activity in Africa in 1974 and a number of previously located deposits which had been classed as uneconomical at the earlier price levels are being closely examined to establish whether they are now exploitable. There has also been a much greater interest in developing hydro-electric projects and in the prospects for other types of energy, - wind, solar and geothermal.

Africa's imports of petroleum products in 1974 cost nearly three times as much as in 1973 and it has been estimated that 33 non-oil producing developing countries would have to spend 1,300 million dollars on their petroleum imports in 1974 compared with 500 million in 1973.

PRODUCTION AND CONSUMPTION OF PRIMARY ENERGIE, 1972 PRODUCTION ET CONSOMMATION D'ENERGIE PRIMAIRE, 1972

ΧV

IN THOUSAND TONS OF COAL EQUIVALANT EQUIVALENCE EN HOUILLE, EN MILLIERS DE TONNES

	MAIN PRODUCERS OF CRUDE PETROLEUM PRINCIPAUX PRODUCTEURS DE PETROLE BRUT	
LICOVA	138,200	1973
LIBYA		·
NIGERIA	124,500	128,60
ALGERIE	67,500	68,900
EGYPT		13,700
ANGOLA	\$\$\$\tau_{\text{\$\infty}}\text{\$\infty}\$\$	9,600
GABON		8,800
	MAJOR NATURAL GAS PRODUCERS GRANDS PRODUCTEURS DE GAZ NATUREL	
ALGERIE	GRANDS PRODUCTEONS DE ONE TANONEE	
ALOCKIL	MAIN COAL PRODUCERS PRINCIPAUX PRODUCTEURS DE HOUILLE	
SOUTH AFRICA	58,400	62,40
SOUTH RHODESIA	*****	
ZAMBIA		
MAROC	8	
	MAIN HYDRO-ELECTRICITY PRODUCERS	
SOUTH RHODESIA	PRINCIPAUX PRODUCTEURS D'ELECTRICITE HYDRAULIQUE	
EGYPT		
ZAIRE		
GHANA		
NIGERIA		
	PRINCIPAL CONSUMERS OF PRIMARY ENERGY PRINCIPAUX CONSOMMATEURS D'ENERGIE PRIMAIRE	
SOUTH AFRICA	72,380	
EGYPT	PP 8,710 - HE 630 - COAL 500 - NAT. GAS 120	
ALGERIE	P P 5,110 - NAT.GAS 2,400 - HE 70 - COAL 320	
South Rhodesia	COAL 2,800-PP 380-HE 540	
NIGERIA	RP 2,880 - HE 270 - COAL 360	
MAROC	RP 2,430 - COAL 560 - NAT GAS 70 - HE 200	
ZAMBIA	COAL 1,500 - P.P. 720 - HE 560	
KENYA	RP. 1950-HE80-COAL 90	
ZAIRE	P.P.I,030 - COAL 480 - HE 420	
SUDAN	RP (,980 - HE 20	
GHANA	OTHER SELECTED CONSUMERS	
TUNISIE	AUTRES CONSOMMATEURS	
MOZAMBIQUE	PR 1290 - COAL 100 - NAT GAS 20 - HE 10	
CÔTE D'IVOIRE	☐ COAL 650 - P.P. 780 - HE 30 E PP 1/220 - NE 30	
LIBYA	≅ ss fleo	
ETHIOPIA	☐ FRI,000-HE40-COALIO	
TANZANIA	≅ 881'000 - 881'000	
UGANDA	RP 710 - HE 70	
CAMEROUN	2 PR 450 - HE 40 PR = PETROLEUM PRODUCTS	
LIBERIA	RP 590 - HE 30	
TOGO	P.R.170	
.000	\$1000	

0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 50000 60000

COMMERCIAL ROAD MOTOR VEHICLES, 1965 AND 1972 VEHICULES AUTOMOBILES COMMERCIAUX EN SERVICE, 1965 ET 1972 Thousands - Milliers

940 XVI NORTH AFRICA SUB-REGIONAL TOTAL - SOUS - REGION TOTAL AFRIQUE DU NORD 1965 1970 294.3 SUB-REGIONAL TOTAL- SOUS-REGION TOTAL 137.1 1970 190.4 1971 215.0 1972 237.9 1970 1971 WEST AFRICA AFRIQUE DE L'OUEST CENTRAL AFRICA SUB-REGIONAL TOTAL-SOUS-REGION TOTAL AFRIQUE CENTRALE 1965 63.0 110.0 1970 1971 SUB-REGIONAL TOTAL - SOUS - REGION TOTAL 1965 1970 1971 1972 141.7 207.9 237.5 257.9 EAST AFRICA AFRIQUE DE L'EST 294.0 OTHER AFRICA SUB-REGIONAL TOTAL-SOUS-REGION TOTAL **AUTRES PAYS AFRICAINS** 360.8 539.4 612.7 TOTAL AFRICA - AFRIQUE TOTAL 1965 931.1 1970 1,342.0 1971 1.508.0 1972 1.649.3

1965

1972

CHAPTER V - TRANSPORT

Africa's transport services include ports and harbours (both sea and river ports), railways, roads and road transport, air transport and there is also a growing merchant shipping fleet based in Africa to handle more of its imports and exports. Charts XVI to XVIII cover the commercial road vehicles in use, the rail freight traffic and the tonnages handled at the ports in African countries in 1965 and 1972. The maps on charts XIX to XXII give the approximate position of the various transport media in Africa.

The number of commercial road vehicles in Developing Africa rose from 637,000 in 1965 to 915,000 in 1970 or by 44 per cent and for Africa as a whole the increase was from 931,000 to 1,342,000 also by 44 per cent. The annual growth rate in each case was 7.6 per cent but although this rate is significant, the number of vehicles in use in Africa is still very low when compared with the developed countries and related to road distances and population. In 1971 the number of commercial vehicles in Developing Africa increased by 11 per cent to about 1,020,000 and in 1972 by a further 7 per cent to about 1,090,000.

The road lengths in 1970 totalled about 1,200,000 kilometres in Developing Africa with 144,000 kilometres classed as paved roads and about 210,000 kilometres as main roads. Vehicles in use excluding tractors, buses and motor cycles totalled about 2,670,000. In Africa as a whole, there were approximately 4,630,000 vehicles. By 1972 the totals had risen to 3,175,000 in Developing Africa and 5,485,000 in Africa as a whole.

Rail freight statistics help to indicate the degree of trade and commercial activity. A total of 29 countries is shown on Chart XVII and the railway freight carried in Developing Africa increased by 22 per cent between 1965 and 1970 while for Africa as a whole there was a much larger increase of 41 per cent. Between 1970 and 1971 there was a fall in the railway freight traffic carried in Developing Africa and Africa as a whole but in 1972 some recovery was recorded in Developing Africa and a growth of 3.5 per cent in Africa as a whole.

The port freight handling statistics are shown on Chart XVIII; these port statistics cover a high proportion of the exports and imports of Africa. A total of 31 countries is covered on the chart and the total freight handled increased from 253.1 million tons in 1965 to 490.7 million in 1970 or an increase of 94 per cent. In Developing Africa, the totals were 231.4 million tons in 1965 and 457.1 million in 1970, giving a rise of 98 per cent.

The major growth has been in exports of crude petroleum and these figure particularly in the totals for Libya, Nigeria, Gabon and Angola. The total of goods loaded in Developing Africa increased from 183.3 million tons in 1965 to 395.2 million in 1970, a growth of 121 per cent. Apart from crude petroleum, some large increases in iron ore exports from Mauritania, Liberia and Angola were recorded. There were eight countries, Algeria, Libya, Dahomey, Liberia, Nigeria, Gabon, Madagascar

and Angola which recorded increases of more than 100 per cent in export loadings between 1965 and 1970 but in a few countries including Egypt, Ghana and Guinea, a decline was recorded.

In 1971 the total cargo handled at Africa's ports fell by 3 to 4 cent because of reduced crude petroleum loadings from North Africa sufficiently large to more than offset the substantial increase in crude petroleum exports from Nigeria. Total cargo loaded was reduced from 411.5 million tons in 1970 to 387.2 million tons in 1971 but the cargo unloaded increased from 79.2 to 86.4 million tons. There was a small increase in cargo loaded in 1972 to 393.6 million tons but cargo unloaded fell to 85.3 million tons.

The development of crude petroleum and iron ore production has led to the building of special crude oil and mineral terminals in the countries concerned. Natural gas is exported from Algeria and to a limited extent from Libya and the growth of these exports in liquified form has already led to the development of terminals to load the special tankers.

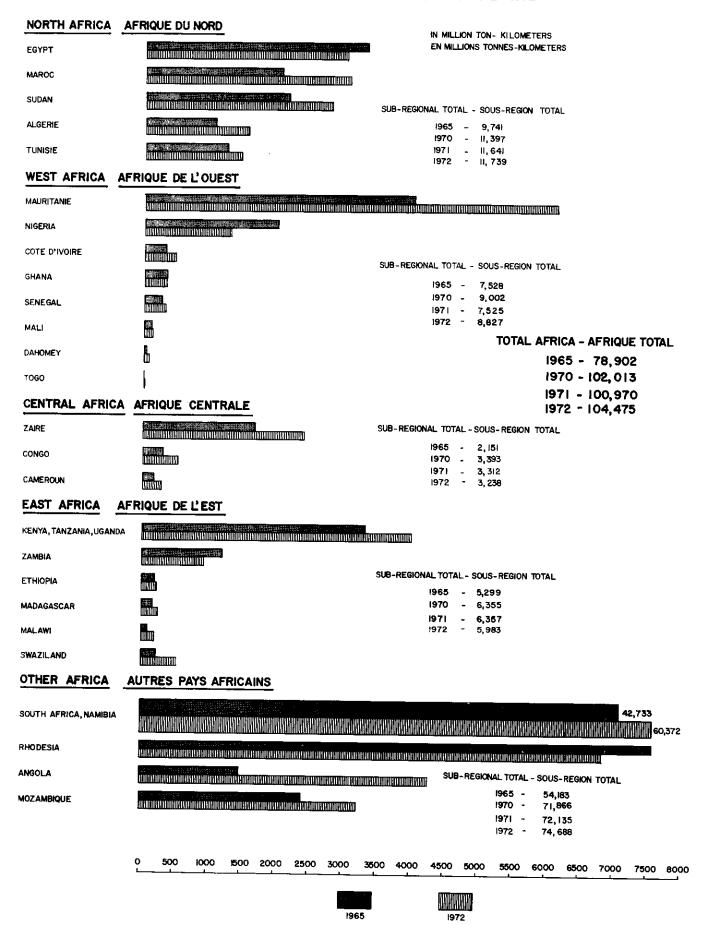
The tonnage of goods unloaded at the coast ports probably serves as an indicator (imperfect and incomplete) of development. In Developing Africa, goods unloaded increased from 48.1 million tons in 1965 to 61.9 million in 1970 or by 28 per cent. For Africa as a whole the growth was from 60.4 to 79.3 million tons or 31 per cent. From 1970 to 1972 there was a further growth in goods unloaded in Developing Africa of about 9 per cent.

The various forms of transport in Africa - rail, road, river, sea and air make up what can be described as an integrated system but it is obvious from a perusal of the maps on pages 38 to 41 that there are many gaps in the system and in certain areas such as those fringing the Sahara Desert the only practical links between African countries are by air.

Africa's railways have been built to a large extent to connect the ports with important mineral areas or with those producing the commercial agricultural products needed by the world's developed countries. Compared with Southern Africa which has a well developed railway system integrated to its more advanced economy, the West African subregion, for example, has only a poorly developed and poorly integrated railway system. The North African coast covering the northern part of Morocco, Algeria and Tunisia has a better interconnected system but East Africa and Central Africa have railways which need more interconnecting links to make them better suited to the requirements of the subregions. The present construction of the railway between Tanzania and Zambia is a step in this direction.

The main roads in Africa are being continuously improved and better intercountry links are being forged whilst the roads are becoming more effective in linking the various parts of individual countries. However, much more needs to be done and there is also a special requirement to change gravel-surfaced main roads to ones with tarmac surfaces to reduce road maintenance costs and the heavy wear and tear on the transport vehicles. The gaps in Africa's road system are apparent from the map (Chart XX). The present project for the Trans-Africa Highway linking Mombasa in Kenya to Lagos in Nigeria will help fill an important gap and the proposals for an

RAILWAY FREIGHT TRAFFIC 1965 AND 1972 TRAFIC FERROVIAIRE DES MARCHANDISES 1965 ET 1972



MARITIME FREIGHT TRAFFIC, GOODS LOADED AND UNLOADED AT AFRICAN PORTS 1965 AND 1972

TRAFIC MARITIME, MARCHANDISES CHARGEES ET DECHARGEES DANS LES PORTS AFRICAINS, 1965 ET 1972

XVIII

IN THOUSAND METRIC TONS EN MILLIERS DE TONNES METRIQUES

UNLOADED - DEBARQUEES LOADED - EMBARQUEES NORTH AFRICA - AFRIQUE DU NORD LIBYA 106,020 21,284 WEST AFRICA " AFRIQUE DE L'OUEST NIGERIA - 88,400 SUB-REGIONAL TOTAL SOUS-REGION TOTAL 1985 - 48,716 1970 - 99,289 1971 - 119,891 12,208 TOTAL AFRICA - AFRIQUE TOTAL LOADED EMBARQUEES - UNLOADED DEBARQUEES 1965 - 192,702 1970 - 411,473 1971 - 387,247 1972 - 393,592 60, 419 79, 182 86, 361 85, 308 CENTRAL AFRICA - AFRIQUE CENTRALE 101 HE 91' 31 GARON SUB-REGIONAL TOTAL SOUS-REGION TOTAL INBARQUEES-UNLOADED DEBARQUEES fide that 3 CONGO ZAIRE CAMEROUN EAST AFRICA - AFRIQUE DE L'EST SUB - REGIONAL TOTAL SOUS - REGION TOTAL EMBARGLIEES - UNLOADED KENYA TANZANIA MAURITIUS ETHIOPIA MADAGASCAR SOMALIA OTHER AFRICA - AUTRES PAYS AFRICAINS SOUTH AFRICA and NAMIBIA 9,000 SUS - REGIONAL TOTAL SOUS - REGION TOTAL LOADED EMBARQUEES - LINL.DADED DEBARQUEES 1965 - 18,491 17,431 1970 - 38,054 23,652 1971 - 40,390 26,101 1972 - 42,756 24,790 ANGOL A ionemujenaminismentar just ja ja ja j MOZAMBIQUE

2,000 4,000 6,000 8,000 10,000

0 LEGEND-LEGENDE 1965 1972

24,000 22,000 20,000 18,000 16,000 14,000 12,000 10,000 8,000 6,000 4,000 2000

Eastern Highway running from Gaberone in Botswana to Cairo in Egypt and for two major roads in West Africa will aid Africa's integration. The Trans-Saharan road from Algeria to Mali and Niger has been completed to In Salah in Algeria.

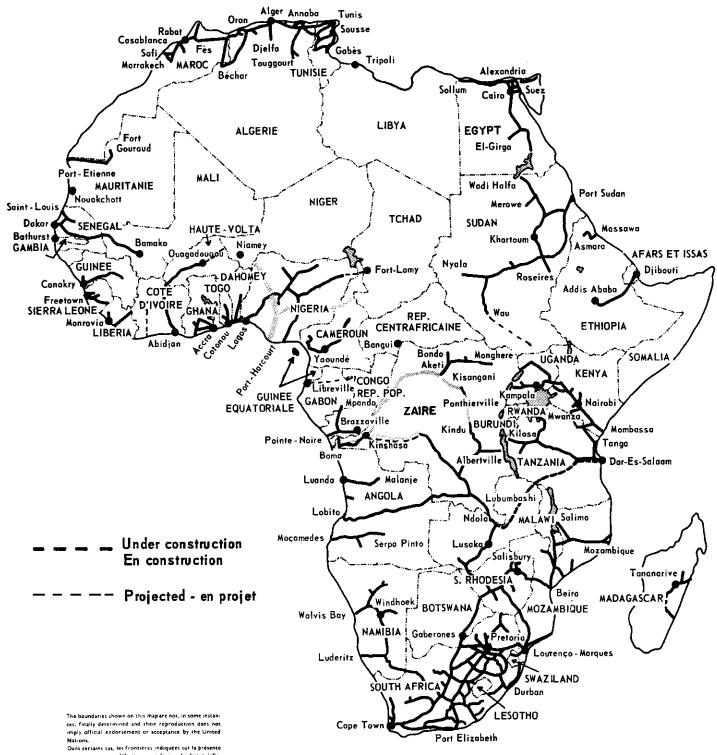
The map giving Africa's ports also shows the major rivers which act to some extent as transport links. The Congo (Zaire) basin in particularly important as a river transport system and the Nile has been used extensively for a very long period. The River Niger also serves Mali, Niger and Nigeria. The great lakes in East Africa act as transport links.

There are a very large number of harbours in Africa and many of the important ones as indicated earlier have some rail connection with their hinterland. The development of ports in the future will be more extensively linked to providing facilities for the larger ships which are now used by the worlds maritime fleets. This will be the case particularly for petroleum and ore transporters. However the further development of Africa's coastal trade will call for the continued use of the small vessels which handle this trade and general harbour development will need to cater for these vessels and the medium sized ships used for general trade.

Africa's airports have undergone extensive transformation and development over the last decade and a continuation of the relatively fast growth rate in air travel will mean that this trend will continue in the future. There are a limited but growing number of airports in Africa which now handle jumbo-jet aircraft but within Africa smaller aircraft are the common form of transport. Within individual countries the smallest commercial aircraft are used and there is an extensive network of small aeordromes or landing strips.

This brief description of Africa's transport system may assist in the understanding of the present and continuing need to improve the system as rapidly as possible. Trade between African countries has been generally neglected in the past because transport links are poor and the growth of commercial activity within individual countries has also been slower than otherwise because of a lack of transport facilities. For Africa to reach the considerably higher growth rate needed to meet the aspirations of its people, a continuation and an improvement of the present rate of investment in transport is a crucial constituent.

RAILWAYS CHEMINS DE FER



Dans certains cas, les frontières indiquées sur la présente carte ne sont pas définitivement fixées. Le fait qu'elles ont indiquées ne signifie pas que l'Organisation des Nations Unies les reconnaît ou les approuve officiellement.

ECA STAT. DIV.

MAIN ROADS PRINCIPALES ROUTES

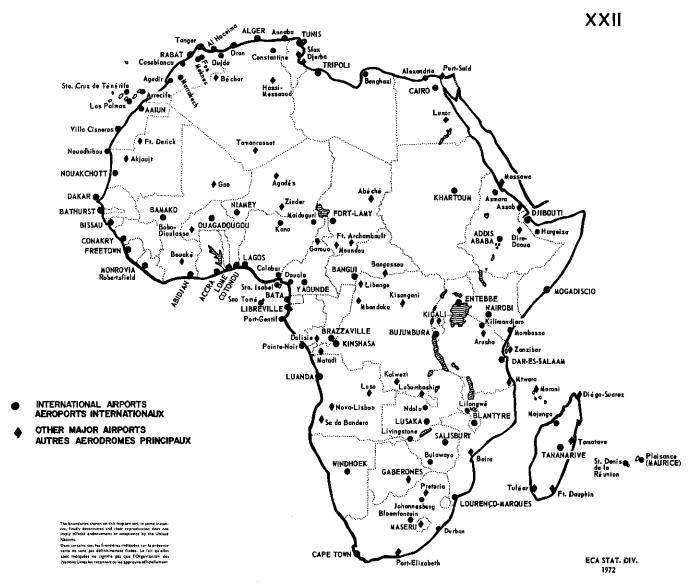


1972

THE AFRICAN HARBOURS
LES PORTS AFRICAINS

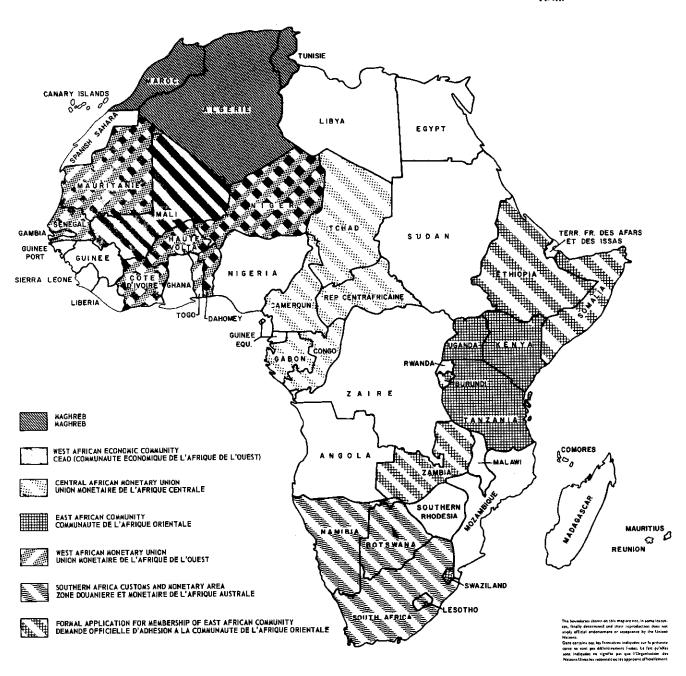


AFRICAN AIRPORTS LES AEROPORTS AFRICAINS



SELECTED ECONOMIC GROUPINGS (I JANUARY 1973) GROUPEMENTS ECONOMIQUES (I JANVIER 1973)

XXIII



CHAITER VI - ECONOMIC GROUPINGS

The next three charts show the different economic groupings within the region. One reason for such grouping is that many African countries are very small when measured in terms of effective purchasing power and need to combine for the speedier development of the group. Economic cooperation in a number of sectors or to deal with a specific commodity has also been found to be particularly valuable. The process of the development of economic cooperation is a continuing function and the stage reached is indicated below in the listing of certain major groupings.

The East African Economic Community: This covers Kenya, Uganda and Tanzania. It has grown out of the economic cooperation between the three countries which started in the 1920s. The Community aims "to strengthen and regulate the industrial, commercial and other relations of the partner States to the end that there shall be accelerated, harmonious and balanced development and sustained expansion of economic activities, the benefit of which shall be equitably distributed." A number of institutions have been established and the East African Authority is the supreme head. The transfer tax system operates to share the benefits of the industrial output and in recent years many of the Community's operating units have been dispersed from Kenya to the other member States. Four countries, Burundi, Ethiopia, Somalia and Zambia have made formal applications to join this Community.

Maghreb Permanent Consultative Committee (CPCM): This comprises Algeria, Morocco and Tunisia and involves cooperation in industrial development, transport, trade and tourism, but also aspires to economic union. Committees have been set up to coordinate various common economic and social activities, e.g. postal services and telecommunications and tourism. An Industrial Studies Centre (ISC) has been established and there is provision for the establishment of a Maghreb Development Bank and for common payments arrangements.

The Central African Customs and Economic Union (UDFAC) was first established in 1964 and comprised Chad (which withdrew in 1968), CAR, Congo and Gabon. It aims at gradually establishing a Central African Common Market through the elimination of all restrictions to trade between the states, harmonious industrialization programmes, joint development of other economic activities, e.g. transport and communications and the establishment of common external tariffs. It has a supreme organ, the Council of Chiefs with a Management Committee and a General Secretariat. The Heads of State take all decisions on the advice of the Management Committee.

The African, Malagasy and Mauritian Common Organization (OCAM):
This evolved from the original "Brazzaville Group" and was created in
1966 with 14 countries Cameroon, Gabon, Chad, Rwanda, CAR, Congo, Zaire,
Ivory Coast, Dahomey, Upper Volta, Niger, Togo, Senegal and Madagascar
as members. Mauritius joined in 1971. Its aim is cooperation in the
development of the major sectors of economic activity, e.g. agriculture,

industry and transport and communications and much emphasis is placed on intra-african trade. Decisions taken by the organization have involved schemes for promoting African enterprises, social security, common accounting systems, inter-university cooperation and other aspects of research and human resources development. It has also created a Development Bank.

Conseil de l'Entente: This was established in 1959 by Dahomey, Ivory Coast, Niger and Upper Volta and aimed at strengthening the solidarity of member States through a formula for guaranteeing external loans contracted by any of the member countries. It established in 1966, a Central Aid and Loan Guaranty Fund and in 1970 an Entente Meat Market was created. Training institutions in fisheries and mechanical engineering have been established and other schemes involve coordination of transport and communication, industrial and tourism development, joint exploitation of hides and skins and stabilisation of grain supplies.

West African Economic Community: This covers Dahomey, Ivory Coast, Mali, Mauritania, Niger, Senegal and Upper Volta and was established in 1970 to replace the West African Customs Union. Its objectives are to improve distribution facilities, develop transport and communications, harmonise industrial developments within the member countries and expand intra-African trade.

Organization for the Development of the Senegal River (OMVS): This was established originally in 1963. Its members included Senegal, Mali, Mauritania and Guinea and it aims at promoting joint solutions to the problems of development and in particular to promoting intra-African trade and payments. In 1970/71 its objectives were expanded to include the establishment of a common market and harmonization of development plans and the allocation of strategic industries. Guinea subsequently withdrew from the organization.

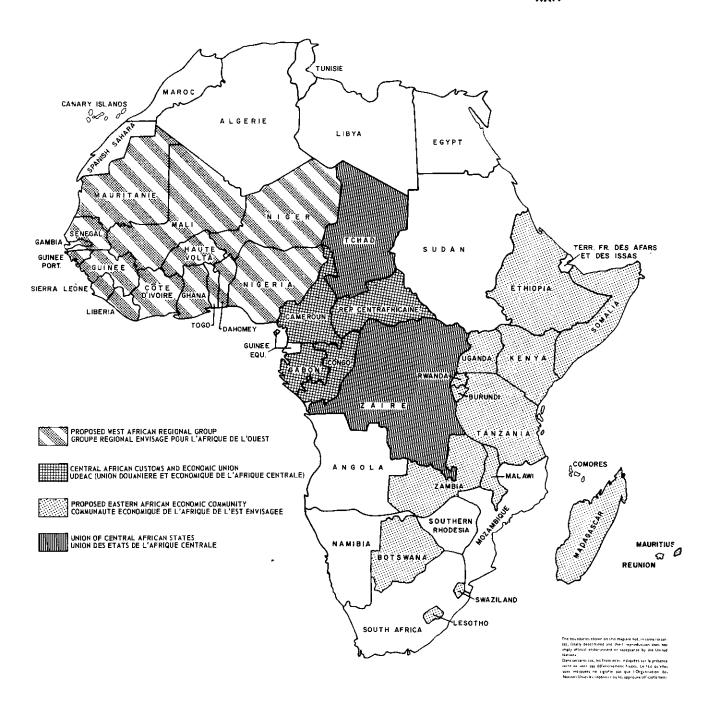
The Conference of East and Central African States: The primary objective of the Conference is the coordination of the economic activities of the member states, which comprise Burundi, CAR, Chad, Congo, Ethiopia, Equatorial Guinea, Gabon, Kenya, Malawi, Rwanda, Somalia, Sudan, Tanzania, Uganda, Zaire and Zambia. The Conference of Heads of States and Government is the supreme body of the Conference. Sectorial committees have been established for industry and energy, human resources, trade and tourism, transport and communications and agriculture.

There are some very important economic groupings which have been proposed such as the West African Regional Group open to all countries in the sub-region and the Eastern African Economic Community for the countries in East Africa.

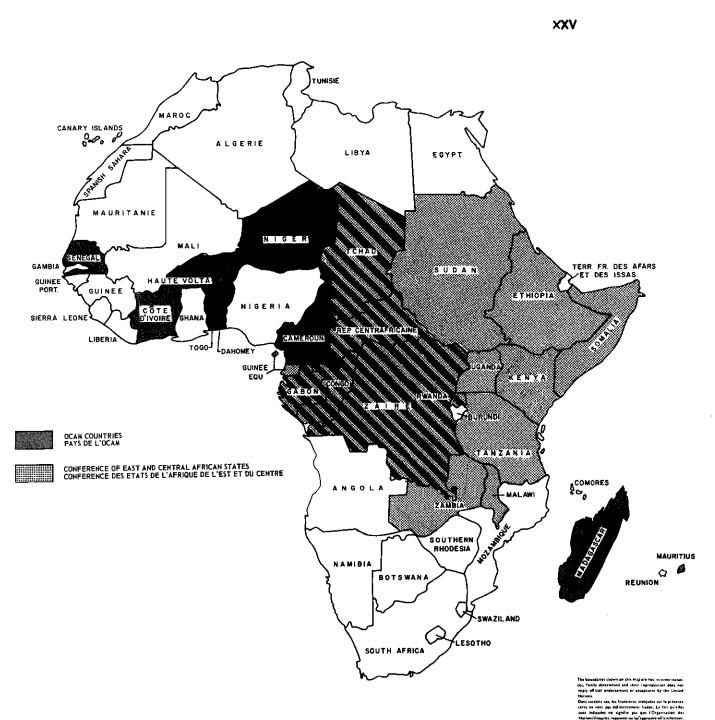
Other groupings include cooperation in the monetary field, e.g., the Southern African Customs and Monetary Union, L'Union monétaire de l'Afrique équatoriale et du Cameroun and L'Union monétaire de l'Afrique de l'Ouest, and the African Development Bank.

SELECTED ECONOMIC GROUPINGS (1 JANUARY 1973) GROUPEMENTS ECONOMIQUES (1 JANVIER 1973)

XXIV



SELECTED ECONOMIC GROUPINGS (1 JANUARY 1973) GROUPEMENTS ECONOMIQUES (1 JANVIER 1973)



In other economic sections there is cooperation in transport, e.g. the Trans-African Highway, the Association of African Airlines, the African Civil Aviation Commission and Air Afrique.

In the field of agriculture, there exist the Cocoa Producers Alliance, the African Groundnut Council and the West African Rice Development Association.

This list is not exhaustive and African countries also cooperate in commodity schemes which are not exclusively African, e.g. the International Coffee Agreement and the Commonwealth Sugar Agreement.

In the wider field, the cooperation of all underdeveloped countries in presenting an agreed approach in the deliberations of such bodies as UNCTAD should lead to a swifter and more effective development of the underdeveloped areas of the world.

Charts XXVI and XXVII cover the currency areas and the external links of African countries. Generally, the currencies of countries in Africa are linked to the French franc or are in the sterling area or are independent. There are a number of exceptions, for example Liberia is in the dollar zone and Angola, Mozambique and Portuguese Guinea are in the escudo zone. Amongst the franc zone countries are two groups, one in West Africa, the other in Central Africa, whose currencies are controlled by the Banque Centrale des Etats de l'Afrique de l'Ouest or by the Banque Centrale des Etats de l'Afrique Equatoriale et du Cameroun. The seven a and five countries concerned use the CFA franc. The rand serves as the unit of currency in South Africa, Namibia, Botswana, Lesotho and Swaziland. Gambia, Ghana, Sierra Leone, Nigeria, Uganda, Kenya, Tanzania, Malawi and Zambia have their own currencies.

An increasing number of countries in Africa have become independent of any currency area and these include Libya, Egypt, Sudan, Morocco, Algeria, Ethiopia, Somalia, Zaire, Rwanda, Burundi, S. Rhodesia and Guinea.

The external links of African countries devolve into those associated in some form with the EEC and those in the Commonwealth Preference Area. With the entry of Great Britain into the EEC both these groups of countries, perhaps with one or two exceptions, will probably be associated with the enlarged community. At that stage it is likely that only a small number of the countries of Africa would have no links with the EEC.

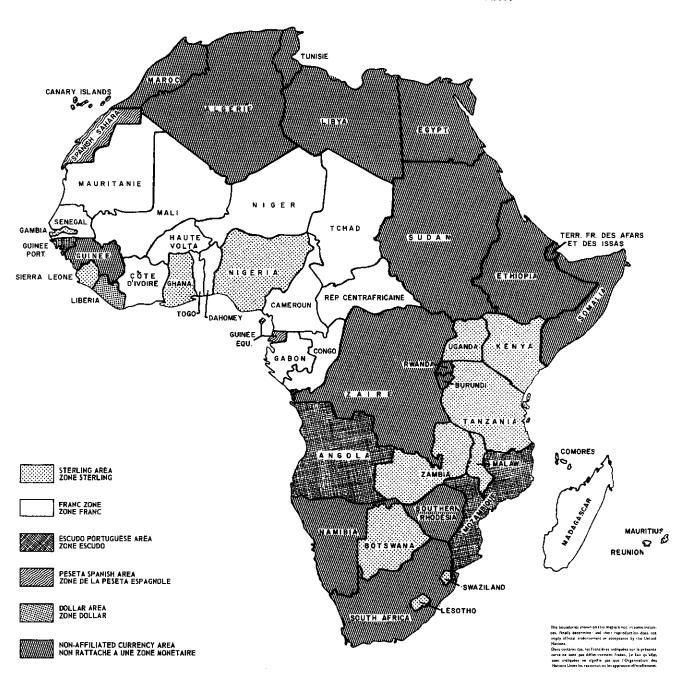
The final chart covers the ECA's subregions. There are four of these: North, West, East and Central Africa. The countries excluded from these subregions include Angola, Mozambique, S. Rhodesia, South Africa, Spanish Sahara and Portuguese Guinea.

To assist in the work of integrating the groups of countries into economic areas, seven United Nations Development Advisory Teams (UNDATS) are being formed each to cover 6 or 7 individual countries.

a/ Mauritania has withdrawn and has established its own currency.

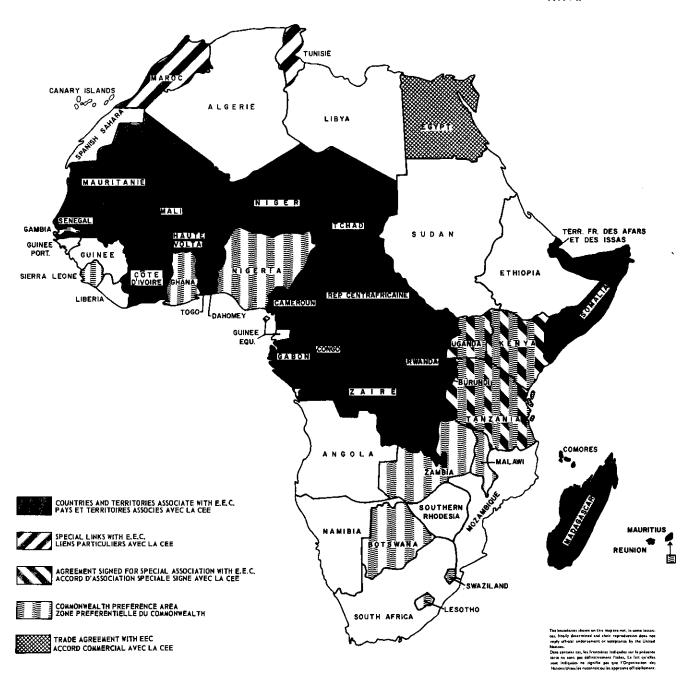
CURRENCY AREAS (1 JANUARY 1973) ZONES MONETAIRES (1 JANVIER 1973)

XXVI



EXTERNAL LINKS OF AFRICAN COUNTRIES (1JANUARY 1973) LIENS EXTERIEURS DES PAYS D'AFRIQUE (1JANVIER 1973)

XXVII



ECA SUB-REGIONS SOUS-REGIONS DE LA CEA

XXVIII

