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POPULATION AND DEVELOPMENT IN AFRICA
(Prepared by the Population Programme Centre)

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I. INTRODUCTION

If the purpose of all development activities is primarily to improve the quality of human life, then the importance of the population factor in the economic and social development process in Africa has to be acknowledged.

In an earlier study prepared for the benefit of its member countries, ECA analyzed the impact that population growth would have on the economic and social prospects of the continent over the next decades in the absence of a coherent planning policy that takes full account of the population factor.

It is abundantly clear from this work that with the present population growth rate of around 2.5 or even 3 per cent for the continent as a whole, the minimum rate of investment required merely to ensure that Africans can maintain their present standard of living for the thirty years between now and the end of the century is 8 per cent per annum.

Such prospects, stated in so general terms, can obviously not have the requisite effect of creating at the national level any real recognition of the nature and the magnitude of the problems which accelerated population growth gives rise to in a developing country.

Thus in order to promote greater public awareness in Africa, at the level of the officials responsible for Government policy and in the circles of African researchers and specialists involved with development planning work, for almost two years ECA has been undertaking a new series of research through country case studies which should cover the entire region within the next few years. These are substantive and detailed studies of special situations arising from the impact of the population factor on the main indicators of economic growth and progress.

Above all the programme is intended to furnish the national planning systems in the region with an analysis tool with which it will be possible to study in greater detail the overall mechanism of growth itself and to identify more precisely the interaction of the main factors involved in the mechanism, whose effects for the most part are not readily visible. No doubt in view of the complex variables involved and the level of statistics available, in the past the impact of population growth has been neglected in the implementation of many African plans or merely dealt with in general terms on the basis of sometimes contradictory approaches. Hence it was impossible for economic policy-makers and planners then to have an exact idea of the importance of the population factor in the general context of national development in the region.

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Inevitably, in view of the slow rate of progress on the economic and social levels in a number of countries in the region over recent years, not to mention the failure of many plans as regards the attainment of the basic social objectives set following independence, it is necessary now, more than ever before, to seek a new concept of development ^{1/} which will to a greater extent and in a more systematic way take into account the population factor which so far has been left aside in the basic planning machinery until recent times by many experts in Africa.

This document sets forth a number of conclusions reached by the authors as a result of their participation in the first phase of ECA's programme of case studies which covered 16 subjects, 10 of which were at the macro level and 6 at the micro level; they were submitted to the African Population Conference and the first Conference of African Demographers, both of which were held at Accra in December 1972.

A list of these publications is annexed hereto. Among the principal indicators by which the various authors attempted to identify some of the direct and indirect effects of a significant change in population behaviour on general growth and development trends in Africa in the future, those felt to be particularly decisive are: gross domestic product, average per capita income, the level of domestic savings and investments, recurrent items in the national budget generated by the general level of social demand resulting from demographic situation such as education, training, health and environmental and sanitation expenditure, the level of food demand in the towns and in the rural areas and so forth.

1/ See Africa's Strategy for Development in the 1970s.

Table 1

Estimates of crude birth rates, crude death rates, natural growth rates and expectation of life at birth, African regions and countries, 1950-55 and 1955-70

Region and country	Crude birth rates			Crude death rates			Natural growth rate			Life expectation at birth		
	1950-55	1955-60	1960-65	1950-55	1955-60	1960-65	1950-55	1955-60	1960-65	1950-55	1955-60	1960-65
North Africa	48.0	47.5	46.9	23.7	21.2	19.1	2.43	2.63	2.84	42.3	44.8	47.3
Algeria	51.0	50.8	49.1	23.9	21.2	19.4	2.71	2.96	3.10	43.1	45.6	48.1
Sudan	50.0	51.4	49.3	26.3	23.0	21.3	2.37	2.84	2.80	40.1	42.6	45.1
Tunisia	46.4	46.7	46.3	22.7	20.3	17.9	2.37	2.64	2.86	43.6	46.1	48.6
Egypt	44.9	43.2	44.1	21.6	19.9	18.0	2.33	2.33	2.55	42.4	44.9	47.4
West Africa	48.8	48.8	48.8	28.3	26.6	25.2	2.65	2.20	2.38	32.3	34.5	36.8
Ghana	49.6	49.2	47.5	23.0	22.0	19.9	2.66	2.12	2.76	38.4	40.9	43.4
Mali	50.1	50.1	49.4	33.1	31.7	29.0	1.70	1.84	2.04	33.5	34.7	36.0
Nigeria	49.1	49.4	49.6	27.5	26.2	25.0	2.16	2.32	2.50	31.3	33.4	35.9
Senegal	47.1	46.3	46.3	29.4	27.4	25.8	1.77	1.89	2.07	33.4	35.9	38.4
Central Africa	45.5	45.2	45.3	29.3	27.6	26.1	1.62	1.76	1.89	34.5	35.7	36.9
Cameroon	43.7	43.2	42.7	28.8	27.1	25.0	1.49	1.61	1.77	33.4	35.9	38.4
Zaire	44.4	44.5	44.4	28.0	25.9	24.5	1.64	1.86	2.00	38.3	38.4	38.4
East Africa	47.2	46.8	46.4	26.8	25.3	23.6	2.04	2.15	2.28	35.0	37.5	40.0
Ethiopia	45.7	45.6	45.6	30.5	29.2	27.5	1.52	1.64	1.75	31.3	33.4	35.9
Kenya	48.6	47.7	47.8	18.3	18.2	18.3	3.03	2.95	2.87	40.0	42.5	44.9
Tanzania	47.6	47.0	47.2	26.1	25.1	23.7	2.15	2.19	2.44	34.2	36.7	39.2

Source: United Nations, Estimates of crude birth rates, crude death rates and expectation of life at birth, regions and countries, 1950-1965 (ESA/P/WP/38), February 1971.

II. STATUS OF THE AFRICAN ECONOMIES IN THE 1970s AND PROSPECTS FOR THE FUTURE

1. DEMOGRAPHIC SITUATION

Current demographic trends, as characterized by rapid population growth, are a relatively recent phenomenon in Africa.

1.1 Fertility and mortality

The two basic traits of the demographic situation, as in other under-developed regions of the world, are a regular lowering of the mortality rate over the last twenty years combined with a relatively stable fertility level which results in a natural population growth rate averaging at present around 3 per cent per annum in most countries in the region.

This trend has been analyzed in many studies, working groups and seminars of which the more significant have been the symposium on population problems in Africa held at Cairo in 1962, the sessions of the Conference of African Statisticians and the working groups on fertility studies.

Furthermore, in addition to the Commission's regular statistical publications and those of national statistical services, there are many works available on this subject.

Nevertheless, a cursory evaluation of African plans shows that the relationship between this trend and the economic and social progress registered has not in the past been given the attention it deserves.

Table 1 gives the estimated birth and death rates for the major regions of the continent and for some specific countries. The figures reveal a clear drop in mortality in the region as a whole over the last 20 years - from 28.3 in 1950 to 24.3 in 1970 - whereas the birth rate has hardly varied from 48.8. The result has been that the population growth rate on the continent has risen from 2.05 to 2.45 in the space of 20 years and the expectation of life at birth from 32.3 to 39.2. The following table summarizes these trends:

Table 2

Parameters		1950-1955	1955-1960	1960-1965	1965-1970
Birth rate		48.8	48.8	49.0	48.8
Death rate	m	28.3	26.8	25.2	24.3
Growth rate	d	2.05	2.20	2.38	2.45
Expectation of life at birth	e	32.3	34.5	36.8	39.2

One extremely important fact which the figures reveal is that even if the death rate has dropped, it is still generally very high, which means that there is room for an appreciable improvement in the general demographic situation on the continent in the forthcoming decades.

The reasons for the situation are well known. The drop in mortality, particularly in tropical Africa, is the result of two actions combined: preventive medicine in the form of large-scale campaigns against major epidemics over a period of some years which have helped little by little to eliminate some epidemic and communicable diseases such as meningitis, small pox, yellow fever, sleeping sickness and tuberculosis which in the past ravaged the population of Africa; and on the other hand there has been some improvement in the sanitary conditions in general and in personal hygiene in particular thanks to education through mass communications media such as the radio, and educational television and the development of social and educational centres which to a large extent have made it possible to disseminate simple prophylactic techniques and the practice of certain elementary rules of personal hygiene within the reach of the people in both the towns and the countryside.

Recent studies have in particular dealt with the impact of health education on child mortality (children between 1 and 4 years of age) in a rural community in Senegal and showed what effect the elementary hygiene courses for parents could have on crude infant mortality rates in the absence of ecological and other considerations.

Some of the factors responsible for the continued high fertility levels are given in the case studies prepared by Mr. Henin for the Sudan and by Mr. Farag and Mr. El Sayeh for the Arab Republic of Egypt. These two papers tackle the question of the low marriage age generally registered in these countries, where most of the women are married under twenty. Rural-urban migration accompanied by new forms of pressure relating to urban employment and the tendency of a growing number of town people to prolong their schooling generally raise the marriage age, which has an obvious effect on fertility. In the rural sector, however, the transition from the traditional sector to the modern sector may have quite the opposite effect. In this regard, Mr. Henin has noted that the settled population engaged in commercial agriculture in the Sudan has a considerably higher level of fertility than the nomads and the small farmers who are at the mercy of the annual rainfall ^{2/}. Although nomadism may be a factor of secondary importance in many African countries, the same cannot be said for isolated small-scale farming of a basically subsistence nature. Consequently, the majority of African Governments are striving more and more to improve and extend stable settlements geared to commercial agriculture and to reduce the size of the sector dependent on subsistence-level production.

2/ R. A. Henin, op. cit.

There is a functional relationship between the persistence of a low marriage age and an extension of the average duration of marriage. According to Henin and Farag, there are two reasons for this. The first is related to the drop in the death rate in general and in maternal mortality in particular, which increases life expectancy, reduces the risk of widowhood and ensures a longer marriage for the couple. The second relates to the drop that has occurred in the divorce rate in Egypt and the Sudan which may in part be attributed to greater stability of life. For example, the divorce rate in Egypt fell from 4.2 per thousand in 1945 to 1.9 in 1965, or a drop of over 50 per cent in only 20 years 3/.

On the other hand, statistics for Egypt show that women continue to bear children regularly during their marriage as long as they are able 4/. Although the other monographs in question do not give any information in this regard, it is probable that at least among the illiterate or little educated sections of the population in African countries, greater stability in marriage and an increase in its average length will for some years be a powerful obstacle to any reduction in present fertility levels.

1.2 Structure by age

Table 3 gives an idea of the distribution of the African population by major age groups. The dominant feature continues to be that it is extremely young.

It will easily be noted that a high percentage of the population is under 15 years of age. Although this is not due solely to the rapid increase in the population, when the high fertility and mortality level produces a relatively 'young' age structure, the drop in mortality tends to aggravate the problem.

The mortality rates for infants and children is even today fairly high in most African countries. Among the countries for which monographs have been prepared, Egypt is the only one where the estimated child mortality rate is less than 100 per thousand live births 5/. Here again, there is every reason to believe that the situation will improve; with continued stability or an increase in the level of fertility, the population pyramid may become even wider in many countries.

3/ Farag and El Sayeh, op. cit.

4/ Ibid.

5/ Farag and El Sayeh, op. cit.

Table 3. Estimated percentage distribution of the population by age groups and the population of selected African countries in 1970

Subregion and country	Age group			
	0-14	15-44	45-59	60 and over
<u>North Africa</u>				
Algeria	47.2	39.8	8.3	4.7
Sudan	45.1	41.8	8.7	4.4
Tunisia	45.4	40.5	8.8	5.2
UAR	42.8	42.5	9.5	5.2
<u>West Africa</u>				
Ghana	46.6	42.7	8.0	2.7
Mali	43.9	42.5	9.1	4.5
Nigeria	43.0	48.4	5.1	3.5
Senegal	42.8	42.9	9.5	4.8
<u>Central Africa</u>				
Cameroon	41.3	41.4	11.9	5.4
Zaire	44.3	41.8	9.3	4.6
<u>East Africa</u>				
Ethiopia	41.6	43.2	10.0	5.2
Kenya	46.6	41.6	7.9	3.9
Tanzania	44.4	42.4	8.8	4.4

Sources: United Nations, Estimates of crude birth rates, crude death rates and expectation of life at birth, regions and countries, 1950-1965 (ESA/P/WP/38), February 1971; and ECA, Survey of Economic Conditions in Africa, 1970, table A65.

The problems implicit in this trend will obviously have a decisive effect on the economic and social picture of the continent in the next decades because they affect such vital matters as education, training, employment and the food supplies of a country even though their gravity may vary according to the nature of the society in question: a traditional one primarily based on a subsistence economy or a modern society governed mainly by a commercial economy where the level of social demand is of prime importance. Indeed, in a traditional society child-rearing is relatively uncomplicated as, for example, no conventional education is required and children can become economically active at an early age. In a more modern society, education, improved hygiene and other costly matters assume the greatest importance. Under these conditions, the child is dependent or non-productive for a longer time; this presupposes an increase in social expenditure, which in most cases has to be borne almost exclusively by the State.

1.3 Geographical distribution

Another indisputable fact is that at the present time profound changes are taking place in the African population. They are indeed slow, but they are quite noticeable. Although a high proportion of the people still live in rural areas, urbanization is becoming a continental-scale phenomenon in Africa and the major urban centres in Africa are in their turn experiencing the same problems as the other two underdeveloped regions of the world have been facing for a long time. Emigration from the rural areas, particularly on the part of young people, is in itself an extremely important phenomenon because of the direct impact which it has on the economy of the regions concerned: upheaval of the labour market, marginal productivity of some categories of unskilled workers in the modern sector and the creation of shanty towns of a highly insalubrious nature around the major urban centres.

Table 4 gives the distribution of the population among rural and urban areas in certain African countries. As can be seen, a high proportion of the population in most African countries still lives in the rural areas. Among the countries covered by the case studies, Egypt was the only one where nearly 40 per cent of the population lives in the towns. In various other countries such as Tanzania, Sudan and Ethiopia, according to recent estimates, the percentage of the urban population is still around or under 10. Although the definition of the urban sector varies considerably within Africa as in the rest of the world, it would probably not be wrong to say that for several years to come the distribution of the population of most Africa countries will be marked by the preponderance of the rural element. In some countries even a sizeable proportion of the city dwellers still rely basically on agriculture as their means of existence.

There have nevertheless been large-scale migration by the rural population towards the urban centres in Africa particularly in the last few years. The growth rate of the urban population, particularly that of the large towns, has on average been three times that of the over-all population growth rate 6/. It is difficult to give precise reasons for this population drift and the question arises as to whether it is related to disaffection with the poor conditions prevailing in the rural areas or the attraction of the employment possibilities and other advantages of urban life. As can be seen from some of the studies, one major consideration may be the difference in income level between the rural areas and the urban centres. These differences are enormous in many countries and draw the poor from the rural sector to the towns in search of money and a better life 7/. In view of the rapid expansion of industry in a good number of African countries in recent years, this situation is probably the outcome of a set of extremely complex factors. It is quite apparent that the standard of living, in real as well as in relative terms, of the small scale farmers and shepherds has stagnated or even fallen in many countries 8/.

Most of the people who migrate to the towns are young. In Egypt, for example, the proportion of children (0 to 14 years) and young people (14 to 24 years) is appreciably higher in the urban centres than in the countryside, whereas old people (aged 65 and over) account for the major portion of the rural population. This trend is of special importance in view of the fact that in the urban environment education and training are prerequisites of development and too high a proportion of inexperienced young people may well hamper rather than favour the development process.

6/ The figures in the case studies support this assertion as the estimated growth rate of the urban population varied from a little over 5 per cent in Tanzania to around 7.5 per cent in Ethiopia. Other figures show an urban population growth rate of 10 per cent or over in a number of countries at the end of the 1950s and the beginning of the 1960s. See in this connexion, the Demographic Handbook for Africa, March 1968, table 12.

7/ See for example ECA, Survey of Economic Conditions in Africa, 1969, Part II, particularly pages 50 and 62.

8/ The growing income gap has been noted in an interesting study on income trends in Uganda between 1963 and 1968. It is stated that in the commercial economy, real per capita income fell by around 2.5 to 3 per cent among the small-scale farmers in the trading sector but rose by 8 to 14 per cent among African wage-earners. See in this connexion the working paper entitled "Demand patterns in East Africa" prepared by Mr. S.D. Mehta for the East African Development Bank (ECA, June 1970), pages 7-9. A similar trend is noted in the monograph on Tanzania prepared by Mr. Kantner.

In the Sudan, thanks to the implementation of large-scale agricultural projects, there is also migration to the rural areas. Migrants generally come from the traditional rural sector and to a lesser extent from the small towns.

As they develop, African countries will, however, have to take greater account of two types of population growth in the modern sector. Firstly, there is obviously the natural population growth in the sector. Secondly, there is internal migration on the part of the population from the traditional rural sector either to the stable and more modern rural areas (where commercial agriculture based on irrigation is practised) or to expanding urban centres. This is a form of migration from a sector where little demand is placed on the commercial economy towards areas where growing needs have to be met as regards social services and the standards of the labour market.

Table 4. Percentage of population in towns of 20,000 and more inhabitants in selected African countries

Subregion and country	Year	Percentage of the population in towns of 20,000 and more inhabitants
North Africa	1960	24
Algeria	1966	26.5
Sudan	1962	3.9
Tunisia	1966	22.9
Egypt	1966	38.2
West Africa	1960	12
Ghana	1960	12.3
Mali	1962	4.7
Nigeria	1963	14.0
Senegal	1960-61	22.5
Central Africa	1960	8
Cameroon	1962-64	6.6
Zaire	1959	9.1
East Africa	1960	5.7
Ethiopia	1965	4.7
Kenya	1962	5.9
Tanzania	1967	5.1

Source: ECA, Demographic Handbook for Africa, March 1968, pages 39-42.

III - THE AFRICAN ECONOMY:

RECENT TRENDS BROUGHT OUT BY ECONOMIC AND SOCIAL INDICATORS OF GROWTH

It is from the main per capita figures that the relationships between the increase in population and economic growth can be seen most clearly. Although the value of the per capita indices drawn from national accounts, which are the ones normally used in the African context, is somewhat questionable primarily because of the size of the gap between the large proportion of the population in many African countries living basically outside the commercial economy and the proportion of the population involved in this sector, they are nevertheless the best tool available at the present for making international comparisons and evaluating economic development ^{9/}.

These figures do not of course reflect the results actually registered in the various countries as they are heavily weighted by the data for the most densely populated countries in the different regions such as Nigeria in West Africa and Zaire in Central Africa ^{10/}.

Nevertheless, these figures would indicate that it will be difficult for a number of countries to reach the growth target for the gross domestic product of 6 per cent that the United Nations has set for the Second Development Decade (1970-1980) ^{11/}. Furthermore, the many countries where the population growth rate is around 2.5 to 3 per cent per annum need such a level of overall economic growth if they want to secure an appreciable improvement in the relatively slight increase in per capita income registered during the 1960s.

^{9/} Survey of Economic Conditions in Africa, 1970, p. 21.

^{10/} Ibid., page 22.

^{11/} Ibid. p. 22.

1. Gross domestic product

Table 5 shows the changes in the average growth rates for the gross domestic product for the four subregions of Africa during the period 1960-1969. The following trends emerge in particular:

a) It is clear that the GDP increased at a slow rate over the decade, since the average annual growth rate was around 4 per cent, or lower than the 6 per cent that is generally taken as the minimum target for the countries of the region in line with the United Nations resolution on the Second Development Decade.

b) In a number of countries in the region this has been the direct cause of an extremely weak rate of growth in the real per capita GDP.

Table 5. Changes in GDP (at constant 1965 prices)

Subregion	1960-1965	1965-1968	1968-1969	1960-1969
North Africa	5.7	4.6	3.0	5.2
West Africa	4.6	1.5	2.1	3.2
Central Africa	1.5	4.9	5.8	3.0
East Africa	4.5	5.4	5.8	5.0

Source: Survey of Economic Conditions in Africa, 1970, p. 21.

Table 6. Gross per capita income

Subregions	1960-1965	1965-1968	base 100-1960	
			1968-1969	1960-1969
North Africa	3.0	1.6	-	2.4
West Africa	2.3	1.0	0.4	0.8
Central Africa	0.7	2.7	3.6	0.8
East Africa	2.0	2.9	3.3	2.4

Source: Survey of Economic Conditions in Africa 1970, p. 21.

The effects of population are even clearer here. The constant drop in real per capita income in a good number of African countries shows in fact that more than elsewhere there is a strong correlation between population growth and the general level of material well-being in the region. The following table is a meaningful illustration of this fact.

Table 7. Average growth rate of gross per capita income in Nigeria between 1959 and 1969.

Population and per capita income	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Population	2.7	2.9	2.7	2.7	2.8	2.7	2.7	2.8	2.7	2.8	2.8
Per capita income	11.0	2.7	7.8	3.8	1.0	3.0	1.3	7.5	0.3	1.4	1.4

Source: C. Okonjo - Population Dynamics and Nigerian Development.

Moreover the extreme variations in per capita income from year to year shows how dependent the African economies are on an agricultural sector which is basically subject to substantial fluctuations in the prices of raw materials on the international market. This is of special significance in view of the size of the population directly involved in the agricultural economy.

In the case of Nigeria for example, the agricultural sector employs as much as 70 per cent of the total population of the country.

2. Private consumption

As can be seen from table 6 the level of private consumption tended to fall throughout the continent during the period 1960-1970. In fact, the growth rates of real private consumption hardly surpassed the population growth rates in the four subregions. Since income has not been decisive as individual purchasing power has been slowly eroded, population growth has probably been the main factor behind the changes in the level of demand for goods and services in most cases. Although on the whole demand has not increased very much outside the privileged classes, there has been a spectacular increase in the demand for certain foodstuffs such as rice and maize which are basically commercial products whose consumption was hitherto confined to the urban centres but has gradually spread to the rural areas where the traditional foods had been home grown millet, sorghum and other cereals. There has thus been a gradual qualitative change in the structure of the demand for food products which has often had the effect of seriously disturbing the supply circuits in some countries.

Frequent breaks in supplies have thus compelled officials to resort to rationing to cope with food shortages.

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3. Part played by the main sectors in the composition of the gross domestic product

The part played by the main sectors in the composition of the GDP also shows that agriculture continues to dominate the African economies in the 1970s. This is true even for countries like Nigeria where the economy includes a sizeable mining sector but where the agriculture and fisheries sector nevertheless accounted for 53 per cent of the GDP in 1970.

Table 8 gives the composition of the GDP by branch of industry for the four African subregions. The importance of agriculture is immediately apparent. In all cases, agriculture accounts for the main part of the GDP. In fact, except for North Africa, agriculture contributes two or three times more to the GDP than the next sector of the economy. The share of agriculture is, however falling in all the subregions as a result of the fairly rapid growth in other sectors such as the extractive industry in North and West Africa and manufacturing in a large part of the region and a certain increase in the contribution of commerce and the administration to the GDP (see table 8).

Another reason for the decrease in the share of agriculture in the GDP is the slow rate of growth in this sector. The average rate of growth in agricultural production over the last decade did not exceed 3 per cent in any of the subregions of Africa and the figure was even lower in West and Central Africa. It should however be acknowledged that the figures reflect primarily production in the commercial sector of the economy and therefore underestimate the high proportion of agricultural production for which the subsistence sector accounts. In addition, the price of several of the main agricultural products stagnated or fell during the decade, particularly on the export market, with the result that their value did not increase as it might. It is nevertheless clear that, generally speaking, agriculture is of prime importance for future development, particularly in those countries which might be considered to have an economy with an agricultural bias ^{12/}. Thus the ability of many African countries to guarantee a high rate of growth in the GDP over the next ten or twenty years will continue to depend rather on an increase in production and productivity in the agricultural sector than on progress in the more complex sectors of their economy.

^{12/} Survey of Economic Conditions in Africa, 1969 (Part II), in particular pages 131-137. Assuming that agriculture accounts for 50 per cent of the GDP, industry for 15 per cent and services for 35 per cent, a drop of 2 per cent in the agricultural production growth rate would entail a drop of 1 per cent in the growth rate of the GDP if everything else remained the same. A similar fluctuation in manufacturing (which accounts for a much smaller portion of the GDP), would have much less effect.

Considering agricultural production in terms of per capita volume, expansion seems even more problematical. Table 8 A gives the agricultural and food production indices and the per capita agricultural and food production for Africa as a whole and for three countries in particular. From the base of 100 - 1952-1956, the overall production index for foodstuffs in Africa reached 139 in 1967; but the increase was hardly up to that of the population and the per capita food production index did not surpass 101. Over-all agricultural production was hardly more satisfactory. Whereas Ethiopia and the Sudan registered a sizeable increase in the volume of agricultural and food production per person during this period, Egypt only just managed to maintain its previous level. As a whole, although the production of agricultural and food exports increased considerably, in many countries the per capita volume of food and agricultural production for the domestic market probably decreased.

Table 9 shows the distribution by sources and uses of available resources in the four subregions of Africa in the 1960s. Generally speaking, in 1969 all the subregions showed a favourable trade balance, although there were surpluses in only a few countries in each subregion since in 1969 most developing African countries still imported more than they exported 13/.

In general, the rate of Government consumption increased over the decade and the growth rate was uniformly higher than that of private consumption. There is no doubt that to some extent this reflects the increase in expenditure for the operation of the necessary social services. It also, however, reflects the growing magnitude and scope of Government services in general which has brought about a relatively rapid increase in the public administration sector, particularly in North and East Africa. (See table 8B).

13/ Survey of Economic Conditions in Africa, 1970, pages 115 and 116.

Table 8. Industrial origin of GDP at current factor cost in the subregions of Africa, 1960, 1965 and 1969 (in percentages)

ORIGIN OF GDP									
Subregion and year	Agri- cul- ture	Min- ing	Manu- fac- turing ^a	Con- struc- tion	Com- merce	Trans- port	Ser- vices	Pub- lic admin- istra- tion	GDP (million \$US)
North Africa									
1960	29.0	4.2	14.8	5.4	15.0	7.0	15.0	9.6	8 897
1965	25.6	11.4	14.4	5.3	12.8	6.9	13.1	10.5	13 306
1969	22.3	17.6	13.3	5.5	12.3	5.4	12.6	11.0	17 785
West Africa									
1960	55.1	2.4	6.3	5.0	13.2	5.0	6.1	6.9	6 314
1965	48.1	5.1	8.2	5.2	14.5	5.1	7.3	6.5	9 033
1969	46.3	4.2	11.1	5.0	14.0	4.6	8.1	6.7	11 068
Central Africa									
1960	40.0	5.3	12.1	3.8	13.7	6.2	7.1	11.8	2 332
1965	35.1	4.8	13.3	4.2	15.1	5.6	8.5	13.4	2 715
1969	33.2	6.5	15.8	4.5	15.5	5.4	7.1	12.0	3 567
East Africa									
1960	44.5	8.0	7.2	4.7	11.4	5.8	12.4	6.0	4 293
1965	43.1	6.2	8.7	4.5	12.7	5.8	12.0	7.0	5 847
1969	37.8	7.1	10.3	5.1	12.7	6.4	13.6	7.0	7 757

Source: ECA Survey of Economic Conditions in Africa, 1970, page 26.

^{a/} Includes energy.

Table 8A. Compound growth rates of GDP (at 1960 factor cost) by industrial origin in the African subregions (in percentages per annum)

Subregion and year	ORIGIN OF GDP							
	Agri- cul- ture	Min- ing	Manu- fac- turing ^a	Con- struc- tion	Com- merce	Trans- port	Other services	Public administration
North Africa								
1960-1969	2.8	20.8	4.2	5.2	2.9	2.1	2.9	6.9
1960-1965	3.4	26.7	5.1	5.7	1.9	5.7	2.7	7.1
1965-1969	2.0	13.8	3.1	4.5	4.2	-2.2	3.2	6.5
1968-1969	-1.7	6.5	3.6	5.2	3.9	6.2	2.4	7.1
West Africa								
1960-1969	1.6	8.9	8.8	2.5	3.4	2.0	5.4	2.6
1960-1965	2.0	20.7	9.3	4.6	6.1	4.4	7.4	2.9
1965-1969	1.2	-4.2	8.1	-0.1	0.0	-1.0	2.9	2.2
1968-1969	3.4	4.0	5.1	2.3	-2.4	-1.1	-0.4	-0.5
Central Africa								
1960-1969	0.4	5.9	6.5	3.8	4.0	1.5	3.1	3.2
1960-1965	-1.7	-0.4	3.4	1.3	2.6	-1.1	4.8	3.8
1965-1969	3.0	14.3	10.6	7.0	5.9	4.9	1.1	2.6
1968-1969	7.2	6.2	8.8	4.4	8.3	6.8	6.6	4.6
East Africa								
1960-1969	2.8	1.4	8.5	5.3	5.5	5.3	5.5	6.0
1960-1965	3.4	-1.3	7.9	2.7	5.8	3.9	3.2	6.6
1965-1969	2.1	5.0	9.4	8.6	5.0	7.0	8.5	5.3
1968-1969	3.9	20.2	6.4	3.9	2.7	2.5	6.7	3.2

Source: ECA, Survey of Economic Conditions in Africa, 1970, page 27.

^a/ Includes energy.

Table 8F: FAO index numbers of food production, total agricultural production, per caput food production and per caput total agricultural production for Africa and selected countries on the continent, 1948-1967

Food production		1948-52	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
Africa	87	93	98	101	107	107	109	113	119	117	124	128	130	131	139	144	146	146
Ethiopia	-	91	98	100	112	117	114	120	124	127	136	132	139	136	147	154	161	186
Sudan	-	83	94	97	119	123	128	133	127	128	137	147	143	141	149	158	165	191
Egypt	-	85	93	104	112	115	112	117	124	117	135	139	144	141	149	158	165	191
Total agricultural production																		
Africa	86	93	97	101	107	108	110	115	122	119	127	131	135	133	135	144	144	144
Ethiopia	-	91	97	100	111	117	114	121	130	132	136	138	145	145	147	152	152	152
Sudan	-	80	95	98	120	129	115	135	131	129	156	154	158	141	165	191	191	191
Egypt	-	95	92	102	107	115	106	120	127	112	135	136	144	141	144	144	144	140
Per caput food production																		
Africa	95	97	100	101	102	100	99	100	103	99	102	103	99	101	99	101	98	101
Ethiopia	-	94	99	100	108	112	106	111	112	113	114	114	115	115	115	114	114	116
Sudan	-	88	97	97	112	113	114	115	107	105	108	114	113	111	113	114	114	129
Egypt	-	89	95	104	107	107	102	104	108	199	103	112	109	110	109	111	111	106
Per caput agricultural production																		
Africa	94	97	100	101	103	101	101	102	106	100	105	105	103	104	103	101	101	104
Ethiopia	-	94	99	100	108	112	106	111	117	118	119	119	120	123	120	120	120	122
Sudan	-	84	98	98	113	118	102	117	110	106	124	119	116	106	116	118	118	132
Egypt	-	100	94	102	102	107	105	107	110	95	111	109	110	111	110	107	107	102

Source: FAO, Production Yearbook, 1968, pages 27-32.

Table 9. Sources and uses of available resources by subregions of Africa (based on current market prices) 1960, 1965 and 1969 (in percentages)

Subregion and year	Sources			Uses		
	GDP	Imports-exports	GDCFa/	Private consumption	Government consumption	Exports-imports
North Africa						
1960	92.3	7.7	20.0	72.7	15.0	-7.7
1965	99.9	0.1	18.2	64.6	17.3	-0.1
1969	103.3	-3.3	17.5	60.4	18.8	3.3
West Africa						
1960	96.7	3.3	12.8	80.2	10.3	-3.3
1965	97.5	2.5	14.9	77.4	10.2	-2.5
1969	101.7	-1.7	13.7	73.1	11.5	1.7
Central Africa						
1960	103.3	-3.3	15.3	65.7	15.7	3.3
1965	101.7	-1.7	15.4	64.6	18.3	1.7
1969	100.7	-0.7	20.3	61.3	17.7	0.7
East Africa						
1960	100.4	-0.4	14.8	74.0	10.8	0.4
1965	100.6	-0.6	15.6	70.8	13.0	0.6
1969	101.6	-1.6	18.1	66.9	13.4	1.4

Source: ECA Survey of Economic Conditions in Africa, 1970, pages 240 & 241.

a/ Gross domestic capital formation.

It has often been pointed out that the relationship between gross domestic capital formation (GDCF) and economic growth differs from one developing country to another. The relationship is, nevertheless, a strong indicator of the level of savings and, therefore, of the proportion of resources that can be allocated to investments. Trends in GDCF during the decade varied from subregion to subregion and above all among the individual countries. During this period, it absorbed on average between 16 to 18 per cent of available resources, a figure slightly below the 20 per cent envisaged for the Second Development Decade 14/.

14/ Ibid. page 31.

Agriculture and mining

Although the urban population in Africa has grown considerably in recent years, the great majority of people in most African countries still live in the rural areas and will continue to do so for many years to come. In addition, a high proportion of the rural population are excluded from the commercial economy and live above all on subsistence agriculture and small-

Table 10. Average annual growth rates of resources and uses (at constant prices) by subregion of Africa (in percentages)

Subregion and period	Resources			Uses		
	GDP	Imports	GDCF ^{a/}	Private consumption	Government consumption	Exports
North Africa						
1960-1969	5.2	2.3	3.5	3.4	8.1	6.1
1960-1965	5.7	1.2	4.3	3.5	8.7	6.1
1965-1969	4.6	3.7	2.5	3.4	7.4	6.1
1968-1969	3.0	10.8	4.3	3.1	6.1	6.3
West Africa						
1960-1969	3.2	1.1	3.7	2.3	3.8	3.6
1960-1965	4.6	2.6	7.3	4.0	3.7	3.3
1965-1969	1.5	-0.8	-0.7	0.3	4.0	4.0
1968-1969	2.1	10.2	6.7	0.9	1.2	12.2
Central Africa						
1960-1969	3.0	0.7	6.3	2.1	4.6	0.1
1960-1965	1.5	-2.9	1.3	1.1	4.9	-3.5
1965-1969	4.9	5.3	12.8	3.4	4.2	4.6
1968-1969	5.8	-4.8	22.7	5.9	-0.1	-10.9
East Africa						
1960-1969	4.9	4.0	7.1	3.9	7.4	4.4
1960-1965	4.5	3.1	5.3	3.6	8.2	3.6
1965-1969	5.4	5.1	9.4	4.2	6.5	5.5
1968-1969	5.8	-3.6	1.2	2.4	3.5	9.0

Source: ECA, Survey of Economic Conditions in Africa, 1970, page 238.

a/ Gross domestic capital formation.

scale local trading. It would probably be more correct to ascribe these small-scale farmers to the traditional sector rather than the subsistence sector since in many countries they make a substantial contribution to the agricultural GDP. The authors of the monographs on Ethiopia and the Sudan for example have estimated that in recent years the traditional sector provided nearly 50 per cent of the agricultural GDP. ^{15/} Although there is only limited data available on the subject, there is reason to believe that, with the exception of a few agriculturally developed countries such as Egypt, especially in those countries where the rural population is very large, the traditional sector probably provides a substantial part of the total agricultural GDP. Nevertheless, the share of agricultural production provided by large-scale commercial farmers is disproportionately big. In 1964 in Zambia, 700 European families accounted for 71 per cent of the sales of agricultural products against a corresponding rate of 29 per cent for the 450,000 African families dependent on agriculture in the country. ^{16/} It is clear that the contribution of the majority of African farmers, who use primitive methods, are excluded from the best marketing systems and operate at a low level of productivity, to agricultural sales is excessively limited in relation to their numbers.

Whether the sector is described as traditional agriculture or subsistence agriculture, the main point is still clear. Over most of Africa, there is a large group of the population that does not effectively contribute to the growth of the economy and, in addition, constitutes a group of consumers which are at best marginal and, in view of their present economic level, incapable of profiting from the progress made in manufacturing and commerce. The economic stagnation among the small-scale farmers and nomadic shepherds which in many cases constitute a sizeable group, may well hamper sustained and generalized development by offsetting the greater prosperity in the more dynamic sectors of the economy and reducing the size of domestic markets for the goods and services provided by the modern industrial and commercial enterprises.

It is often difficult in practice to separate subsistence agriculture from commercial agriculture. It is a fact that a certain portion of the produce grown in the modern farms is intended for local consumption. ^{17/} For the main

^{15/} According to Henin, in the Sudan the subsistence sector contributed more than 49 per cent between 1965 and 1969. With regard to Ethiopia, Bekele considers that the relevant rate was in the order of 55 per cent in 1968. Henin, op. cit.; Bekele and Bondestam, op. cit.

^{16/} Frederick F. Clairmonte, Towards a Strategy of African Agriculture, a mimeograph.

^{17/} In this connexion, attention may be drawn to the specific case of the Gizeria agricultural project in the Sudan. Although it is geared to the production of agricultural exports, principally cotton, 50 per cent of the land is reserved for the personal use of the farmers. R.A. Henin, op. cit.

part, subsistence farmers may sell part of their produce in order to acquire certain essential goods which cannot be made at home. In many regions, the small-scale farmers in the traditional agriculture sector concentrate on acquiring income rather than on local food crops.^{18/} Nevertheless, the agricultural concerns which use more modern methods such as irrigation, fertilizers and mechanization and grow a single crop or a limited number of crops (or engage in livestock farming), whose production is intended for internal or external markets contribute a disproportionate share of the agricultural GDP in relation to the proportion of the rural agricultural labour force that they employ.^{19/}

Vast agricultural projects geared to the export market have been carried out in the last decade. Some plantations, such as sisal and rubber, were set up in Africa in some countries during the colonial era. Nevertheless, the introduction of large-scale projects for the purpose of modernizing production techniques in the holdings operated by co-operatives or individual farmers has been almost exclusively a postcolonial phenomenon. This is perhaps one of the reasons for the slow or moderate rate of growth in agricultural production in the 1960s. Furthermore, some large-scale and highly capitalized enterprises have only just come on stream or are still being established. In areas where commercial agriculture is at the mercy of the annual rainfall, conditions and therefore the size of the yield have varied enormously from one year to another. This can be seen from table 9 which shows the production of cotton and sorghum during the period 1962-1963 to 1968-1969 in areas of the Sudan where rain crops are grown. Where agriculture is an important factor in the gross national product and where there are subsidiary agriculture-based industries, fluctuations in production resulting from poor harvests which generally go hand in hand with a drop in effective demand and domestic savings may make the difference between appreciable economic growth and stagnation

^{18/} This comment is particularly valid in the case of a number of export products such as groundnuts which are not covered by large-scale irrigation plans or organized in plantations. The cultivation of groundnuts in Senegal is a good illustration of this. (P. Cantrelle, Case Study: Population et ressources dans une zone rurale, Sénégal, prepared for the African Population Conference, Accra, December 1971).

^{19/} In the monograph on Algeria, Tabah illustrates this kind of situation. Under the colonial régime, most of the big commercial holdings were in the hands of the Europeans. When the European farmers began to leave the country in 1963, they were taken over by Algerians. Tabah points out that this provided a living for 135,000 farmers on a permanent basis and for 100,000 seasonal workers. In all, a population of around one million derives its means of livelihood from some 3 million hectares of land. The rest of the agricultural land, an area of around 6 million hectares, supports almost 4 million people. As in colonial times, many of these are compelled to cultivate marginal land outside the most fertile areas and thus have a low level of productivity and income. Tabah in fact feels that the changes that have taken place in the traditional sector between the time of colonization and accession to independence have been fairly limited.

throughout the economy.^{20/} As can be seen from table 10, which also relates to the production of cotton in the Sudan, fluctuations in world prices have had a marked effect on the value of sales and therefore, as far as exports are concerned, on foreign exchange earnings from year to year. In fact the price of cotton has remained fairly stable in the long term, but that of certain agricultural products such as groundnuts, palm oil and sugar fell during most of the decade 1960-1970, which had an adverse effect on the export earnings of those countries where such crops are important.

Table 11: Mechanized farming in wet areas, 1962/63 - 1968/69

Season	COTTON			SORGHUM		
	Surface ^{1/} area	Production ^{2/}	Average yield	Surface ^{1/} area	Production ^{2/}	Average yield
1962/63	32.7	4.9	0.15	313.3	126.6	0.40
1963/64	18.7	2.1	0.11	316.0	102.2	0.24
1964/65	18.4	2.5	0.14	432.9	154.3	0.13
1965/66	12.0	2.1	0.17	565.7	152.1	0.14
1966/67	7.0	1.0	0.14	381.7	79.1	0.15
1967/68	31.3	3.4	0.11	612.3	257.3	0.14
1968/69	34	3.7	0.10	776.3	217.3	0.12

^{1/} In 1,000 feddans (1 feddan = approximately 58 ares).

^{2/} In 1,000 tons.

Source: R.A. Henin, Population Growth and Economic Development: the Sudan, A Case Study.

^{20/} National Academy of Science, Rapid Population Growth, Consequences and Policy Implications, Vol. 1, Summary and Recommendations, Johns Hopkins University Press, 1971, page 25.

Table 12: Quantity, price and value indicators of cotton exports from the Sudan between 1949 and 1961 (1949 = 100)

Year	Quantity	Price	Value
1949	100	100	100
1950	102	117	120
1951	146	163	239
1952	85	178	152
1953	138	101	140
1954	93	121	113
1955	145	109	159
1956	176	124	219
1957	96	125	120
1958	120	97	117
1959	275	76	211
1960	161	108	174
1961	163	100	163

Source: R.A. Henin, Population Growth and Economic Development: the Sudan, A Case Study.

Nevertheless, the over-all balance of visible trade has improved over recent years. Developing Africa ^{21/} in fact moved from a deficit of \$US420 million in 1965 to a surplus of \$US1,430 million in 1969. This was due to a strong increase in exports, whose growth rate (10.1 per cent) approached that of the developed market economies and clearly exceeded that of the rest of the developing world, and by the fall off in imports for which the rate of growth (4.3 per cent) was much lower than that registered in the developed market economies and the developing world as a whole. ^{22/}

Despite the drop in the prices of some agricultural products, the terms of trade for developing Africa as a whole improved in the late 1960s. The terms of trade are basically a yardstick of the purchasing power, as far as imports are concerned, of export earnings and are therefore an indicator of relative prices.

^{21/} Developing Africa includes all African countries except South Africa.

^{22/} Survey of Economic Conditions in Africa, 1970, page 110.

It should however be noted that the spectacular increase in export earnings was unduly influenced by a relatively limited number of non-agricultural products first and foremost among which are petroleum and copper. From only 3.8 per cent in 1963, the share of petroleum in total exports from developing Africa rose to 28.3 per cent in 1969, which represents an average annual growth rate of over 23 per cent. ^{23/} This increase of course eclipsed the less rapid rise in many agricultural products. The importance of the mining industry can also be seen from the fact that in 1969 for the first time the value of exports of petroleum and other mineral products represented more than 50 per cent of all exports from Africa as a whole. ^{24/}

Two further comments should be made with regard to the mining sector. Firstly, even though exports of petroleum and other mineral products are a good way of obtaining needed foreign exchange, it should not be forgotten that these resources can be exhausted. Secondly, in general, mining industries require a lot of capital. Although in many cases it may be easy to obtain foreign capital for this kind of operation, it may not contribute noticeably to a better distribution of income at the domestic level or to improving the situation of a large sector of the population unless the foreign exchange derived from mineral exports is used to increase and broaden the level of internal development.

Secondly, mineral exports and the current upswing in the price of petroleum and copper in particular affect only a relatively small number of countries. In recent years the mining sector has accounted for over 20 per cent of the GDP in only 6 countries and territories in developing Africa: Libya, Namibia, Zambia, Liberia, Mauritania and Gabon. ^{25/} The Republic of Zaire has also benefitted greatly from the boom in copper since 1965. Thus the decidedly positive visible trade balance for the region as a whole conceals the fact that in most of the countries in developing Africa (27 out of the 40 for which data are available) imports continued to exceed exports in 1969 as they had done during most of the decade. ^{26/}

Manufacturing industries and commerce

During the 1960s, the percentage expansion in manufacturing industries was rather rapid throughout Africa (See table 5). In all the subregions with the exception of North Africa, where petroleum was the main factor, the contribution of manufacturing to the total GDP increased appreciably. In most cases, however, this came on top of an extremely limited base, with

^{23/} Ibid. page 355

^{24/} Ibid. page 59

^{25/} Ibid. page 589.

^{26/} Ibid. pages 344 and 345.

the result that in some countries just a few major projects have had a striking effect. In addition, the growth of the manufacturing sector was not consistent from year to year and varied from country to country, perhaps because of the time at which certain plants were established and the situation in other sectors of some economies in terms of favourable or unfavourable harvests.

The expansion of manufacturing mainly related to consumer goods and in particular to essentials and export products. The number of new industrial enterprises established between 1967 and 1969 reveals a particularly rapid rate of growth in some branches of activity such as food preparations and preserves, textiles, wood products, including pulp and paper, and cement. 27/

The processing industries still do not constitute an important sector in terms of employment, which is summarized in table 11 which gives the estimated proportion of wage earners in selected African countries. The figures take into account the high number of employees in not only the manufacturing sector but also the mining industries and construction. They probably also include a sizeable number of workers in commerce, transport and services.

27/ Ibid. pages 76 and 77.

**Table 13: Wage employment related to population in latest available year
in certain African countries**

Subregion and country	Total population (1,000)	Wage employment (1,000)	Percentage of total population	Percentage of active population ^{1/}
North Africa				
Algeria (1968)	12,791	1,148	9.0	22.4
Egypt	32,944	7,714	23.4	58.4
West Africa				
Ivory Coast (1965)	4,295	215	5.0	12.5
Mali (1966)	4,640	52	1.1	2.8
Nigeria (1970)	66,174	1,385	2.1	5.2
Central Africa				
Cameroon (1966)	5,370	94	1.8	4.4
Republic of Zaire (1967)	20,267	1,035	5.1	12.8
East Africa				
Kenya (1969)	10,581	1,072	10.1	25.3
Tanzania (1969)	12,886	368	2.9	7.1
Zambia (1968)	3,955	354	9.0	22.4

^{1/} The active population is estimated at 40 per cent of the total population.

Source: Survey of Economic Conditions in Africa, 1970, page 341.

At all events, as can be seen, only in a few countries did wage employment represent 5 per cent of the total population and, where there is an appropriate level of economic activity, 15 per cent of the active population.

In Africa in many cases the growth of the manufacturing sector has suffered as a result of unforeseen investment expenses, weak economies of scale and extremely high unit of production costs. Leaving aside all other considerations, the capital expenditure required for a given productive capacity varied considerably even within the same industry that uses normal and well-known techniques.^{28/}

Consequently it has been difficult in many African countries to stimulate an increase in the exports of industrial goods and particularly those which require a more advanced level of processing than primary exports. The share of primary products in total exports fell during the 1960s but the drop was a fairly small one from a rate of 81 to 78 per cent.^{29/} It is thus clear that, even when manufacturing is expanding constantly, for many years, primary products will continue to form the basis of the foreign trade of the majority of African countries.

4. Foreign trade in these conditions

The pattern of Africa's trade relations with the rest of the world is deserving of special consideration. The present situation may be expressed in terms of the following facts:

- (1) 25 per cent of the region's Gross Domestic Production is exported to the rest of the world, whereas Africa imports the equivalent of 27 per cent of its gross domestic resources for purposes of end consumption and for the development of its economic and social infrastructure.
- (2) The major share of these exports is still made up of basic agricultural commodities (which accounted for 70 per cent of Africa's total export trade in 1966) although the mining and extractive industry (various kinds of ores, petroleum, etc.) is becoming increasingly important in this respect. Moreover, African exports comprise an exceptionally limited range of products, being confined to coffee, cocoa, raw palm oil, groundnuts, tea, cotton, wood and citrus fruits.
- (3) Africa's trade with the rest of the world is still heavily concentrated on traditional imports and exports to which the countries in the region were, to a greater or lesser extent, committed prior to independence. Such trade accounts for 50.5 per cent of exports and 43.3 per cent of imports.
- (4) Finally, an analysis of the pattern of Africa's foreign trade during the period 1949-1961 shows that exports in particular rose steadily not because of the prices accorded to African products on the international market but solely because of the steady increase in the volume of exports. In other words, the deterioration in the terms of trade is having a direct impact on Africa's economy.

^{28/} One example is the cement industry in West Africa where the investment required for an annual capacity of 100,000 tons varied from 1.63 million to more than 10 million US dollars. Ibid., page 79.

^{29/} Ibid. page 103.

Table 14: Volume, price and value indexes for African exports during the period 1949-1961 - base 100 = 1949

Year	Volume	Price	Value
1949	100	100	100
1950	102	117	120
1951	146	163	239
1952	85	178	152
1953	138	101	140
1954	93	121	113
1955	145	109	159
1956	176	124	219
1957	96	125	120
1958	120	97	117
1959	275	76	211
1960	161	108	174
1961	163	100	163

Balance of payments and liquidities

Since a number of African countries have difficulties in mobilizing domestic savings in reasonable amounts, foreign aid and capital have proven to be necessary if even a modicum of fixed capital formation is to be achieved. Of the 29 developing African countries where accurate data was available in 1968, positive balances were shown for 24 in public transfers, 17, in private transfers; 20, in public capital and 16 in private capital.^{30/}

Although foreign aid and capital relieve balance of payments problems and make funds available for domestic development, they create certain problems of their own. In the first place, a rapid accumulation of "hard" loans (loans which are repayable in currency) results in an immediate increase in the foreign debt. Because of the low level of domestic savings, more countries might find it difficult to mobilize enough funds to cover the necessary payments; and even if the payments can be covered, they are likely to consume a large amount of domestic resources set aside for investment purposes. Second, when the necessary investment is covered by foreign undertakings (as, for example, in the case of a great many petroleum extracting operations), it may happen that the larger share of the income realized from the investment is siphoned off to meet transfer payments outstanding.

For example, the substantial amount of financial resources obtained in foreign loans by the Ivory Coast has more than doubled that country's foreign debt, which rose from 8.7 thousand million CFA francs in 1960 to 20.5 thousand million CFA francs in 1965. In 1965 transfer payments in the Ivory Coast rose to 140 thousand million CFA francs, which represented nearly 40 per cent of that country's GDP estimated at 350 thousand million CFA francs.^{31/} It is not therefore surprising that in recent years many African

^{30/} Ibid., pp. 304-307.

^{31/} S. Amin, Le développement du capitalisme en Côte d'Ivoire.

countries have encouraged the granting of direct assistance and "soft" loans (loans which can be repaid in exports).

In 24 of the 29 countries studied, the over-all balance of payments was unfavourable. In 1969, three other African countries achieved a favourable payments position, making eight countries in all with surplus current accounts (Libyan Arab Republic, the Ivory Coast, Zaire, Gabon, Zambia, Mauritius, Tanzania and Rhodesia).

The deficits shown in the majority of countries were mainly due to large amounts of investment income paid abroad as discussed above and to deficit merchandise accounts. In 1968 developing Africa received \$1.396 thousand million in transfers and public capital, whereas the net value of investment income paid abroad amounted to \$1.012 thousand million. Moreover, it is possible that this heavy influx of capital was responsible for the deficit in certain merchandise accounts since part of the amount received was undoubtedly used to make purchases abroad of such items as machinery and transport equipment which cannot be manufactured locally.^{32/}

Countries whose foreign assets were decreasing in value or had stagnated at a very low level were in a particular unfavourable position as far as their balance of payments was concerned. In 1968 and 1969 only eight African countries managed to improve their position in this respect. These countries included Libyan Arab Republic, Nigeria, Sierra Leone, Zaire and Zambia, whose balance of trade showed a considerable surplus mainly due to exports of mineral products, and three countries in East Africa (Kenya, Uganda and Tanzania), where favourable results were obtained as a consequence of tourism or of sizeable public investments from abroad.

As a general rule, those countries whose foreign assets decreased or remained at the same level found themselves in a similar predicament where international liquidities were concerned. Table 12 shows the amount of the international reserves of selected African countries during the 1960s and compare the amount on reserve in 1969 with the value of imports effected in the same year. It will be noted that in a number of cases the amount of liquidities on reserve in 1969 represented less than 20 per cent of the value of imports, reflecting a situation which could turn critical in, for example, a bad harvest year when it might suddenly become necessary to import large amounts of foodstuffs.

The situation appears even more acute when it is examined in light of the fact that in much of Africa the increase in the agricultural output has barely kept pace with the growth in the population and that a number of African countries must import foodstuffs even though they have a broad agricultural base. Consequently, one or two years of poor crops, which would have an unfavourable impact on export earnings and make it necessary to import basic food commodities to sustain a rapidly growing population, might have a severe effect on the international financial position of a large number of African countries.

^{32/} Survey of Economic Conditions in Africa, 1970, Part I (United Nations publication, Sales No. E.71.II.K.9), p. 112.

Table 14A: International liquidity of selected African countries, 1960-1969

<u>Subregion and country</u>	<u>Liquidity position at end year</u>						<u>Imports (c.i.f.) 1969</u>
	<u>International reserves in million US dollars</u>						
	1960	1965	1966	1967	1968	1969	
<u>North Africa</u>							
Libya	82	246	339	385	539	918	676
Sudan	167	60	57	55	48	36	266
Tunisia	85	36	28	40	36	37	261
Egypt	264	193	156	196	168	145	638
<u>West Africa</u>							
Ghana	388	132	126	100	113	87	347
Mali	...	3	-	1	1	1	39
Nigeria	434	246	227	122	126	138	696
<u>Central Africa</u>							
Equatorial Africa ^{a/}	47	75	66	39	55	55	453
Zaire	63	21	21	68	138	198	390
<u>Eastern Africa</u>							
Ethiopia	53	77	79	65	66	72	155
Kenya							327
Tanzania	184	143	239	206	246	305	199
Uganda							127
Malawi	...	25	21	23	23	21	74
Zambia	...	200	211	180	199	369	437

Source: Survey of Economic Conditions in Africa, 1970, Part I (United Nations publication, Sales No. E.71.II.K.9), p. 337.

a/ Cameroon, the Central African Republic, Chad, the Congo and Gabon

Manpower

With an increase in population comes an increase in the labour force available within the economy. An expanding active population not only promotes increased production and economic growth, it also puts pressure on the economy to create employment and on the service sector to initiate educational and training programmes so that manpower resources are not wasted.

Even though the urban population is expanding rapidly and a disproportionate share of the increase is accounted for by young adults, who are the most likely candidates to fill available jobs, almost everywhere in Africa the large majority of workers are still to be found in rural areas performing traditional activities related to agriculture, forestry and fishing. Although figures vary from country

to country and have almost certainly decreased in recent years, it is estimated that about two-thirds of the active population of Africa is engaged in such activities. 33/

Labour force participation has dropped slightly in almost every part of Africa during the past 10 years. It is estimated that the crude activity rate fell from about 41 per cent in 1960 to 39.8 per cent in 1965 and 38.9 per cent in 1970. 34/ Although this drop was observable for all age groups, it was most apparent in the youngest and the oldest groups. Data for Egypt show that during the period 1937-1969 the activity rate for young men and boys fell from 22.4 to 12 per cent for those under 15 years of age and from 82.4 to 68.5 for those in the 15-to-19-year age group. The activity rate for men over 60 dropped from 92.5 per cent to 72.4 per cent during the same period, while the rates for men in the other age groups remained almost steady. In Egypt this pattern was clearly related to urbanization. The economic activity rate for very young and very old people (under 20 and over 60) remained very high in rural areas whereas they dropped significantly in the cities where on-going education and training are required for a large number of occupations and retirement is becoming the rule in vocational life. 35/

The secondary and tertiary sectors of the Egyptian economy are relatively well developed, and it is probable that in most African developing countries the activity rate did not decline so sharply. However, a similar pattern of economic activity is unquestionably a concomitant of the growth of modern economic structures. As the process of modernization and urbanization advances in the African developing countries, members of certain age groups will cease to be economically active and will become the responsibility of the economic sector, making special demands on it in the realm of education, health and other social facilities.

Of course the cause and effect relationship between population growth and an expanded labour force takes a fairly long time to emerge. Most of those individuals who are now entering the active population were born at least 15 years ago, which means that the present trend towards a growing population will not affect the labour force until at least 15 years have elapsed. Between 1965 and 1970, the African population between the ages of 15 and 64 grew from about 114 million to nearly 127 million, showing an annual average rate of growth of 2.1 per cent. This growth rate is markedly lower than the rate of total population increase in Africa, and will necessarily climb significantly in the years to come. 36/ Increased unemployment and underemployment in a number of economic sectors clearly shows that many African countries are finding it difficult to deal with the larger numbers of persons now seeking employment.

33/ Ibid., p. 160.

34/ Ibid., p. 159.

35/ Farag and El Sayeh, op. cit.

36/ Survey of Economic Conditions in Africa, 1970, Part I (United Nations publication, Sales No. E.71.II.K.9), pp. 158 and 159.

The capacity of the economy to absorb available manpower effectively may be measured by the level of unemployment and underemployment. Unfortunately, little data exists in this connexion for the various subregions of Africa, and most studies on unemployment and underemployment must therefore be based on estimates. Nevertheless, urban unemployment and rural and urban underemployment are familiar problems in the African context. The economic survey carried out in the Sudan in 1967 showed that unemployment had increased substantially in the large cities in the period 1967-1968. Although this may have been in part due to the lay-off of labourers and craftsmen from certain projects which had recently been completed, some of the figures relating to Khartoum show that over half of the unemployed workers on the rolls were unqualified migrants who had come to the city in search of permanent or temporary employment. 37/

Underemployment is also a serious problem. In traditional societies, it may not have been important to utilize manpower efficiently because the production of goods over and beyond those required to meet the basic needs (food, shelter, clothing and handmade tools) probably served a relatively limited purpose. In a more highly developed economy, the situation is altogether different. The need to ensure a surplus output of certain types of exports and to expand the domestic market by raising per capita income calls for utilizing the potential offered by the active population more and more efficiently.

In all rural areas except those where irrigation makes it possible to raise a variety of crops, agricultural pursuits occupy workers for only a part of the year. During the off-season farm workers have the choice of finding work in their place of residence or going to a city or another rural area in search of work. Many of these people either are unable to find any work at all or engage in trade ventures or other activities of little importance which occupy them only marginally.

The problem of underemployment also affects permanent residents of urban centres, many of whom are unqualified and often times illiterate as well. Such people are usually employed in menial positions or do small jobs. The problem does not lie in getting such tasks done but in the large number of people who are engaged in doing them. This often results in an extremely low level of productivity in the performance of tasks which could be carried out just as effectively by fewer people.

Social services

The development of social services, particularly in the fields of education and health, is closely linked to the formulation of a labour policy aimed at bringing a viable and competent labour force into being. It was not very long ago that education and training and improved health conditions first received recognition in a great many development plans as being essential to the growth of a modern economy. Governments are becoming increasingly of the need for improved social services to ensure that properly trained manpower is available.

37/ R.A. Henin, op. cit.

Estimated enrolments in institutions of primary, secondary and higher education in the various African subregions in 1965 and 1969 and their share in the total population are given in table 13. It will be seen that although the number of enrolments in all sectors of education increased during the period under consideration, the proportion of school-age children actually attending school remained low. During the school year 1967-1968, the rate of primary school enrolments was 80 per cent or higher in only a few countries. The rate of secondary school enrolments exceeded 20 per cent in two countries only (Mauritius and Egypt). In most African countries and in almost all countries in tropical Africa, the rate of secondary school enrolments was lower than 10 per cent. ^{38/}

Although health services have shown some improvement, it must be acknowledged that what progress there has been has been made from a very narrow base. Two factors are especially important in this context. In the first place, the number of individuals for each doctor is in general very high. Only a few of the relatively more highly advanced countries have one doctor for every 10,000 inhabitants whereas a number of countries, many of which have a low per capita income and are highly dependent on agricultural production, have less than one doctor for every 20,000 inhabitants. Secondly, those doctors who are available tend to concentrate in the urban agglomerations, and in some countries medical attention is almost totally unobtainable outside the urban centres. Progress in this connexion has been fairly slow since the opportunities for African universities to train more doctors and to raise the standard of the medical education they offer are still relatively limited. The majority of doctors are foreigners, at least in most countries in tropical Africa; and it is unlikely that their number will increase in future. Although there are excellent opportunities for training nurses and other paramedical personnel, not much was done in this connexion in the past and progress at present is slow.

Table 15: The relation of school enrolments to population by African subregion, 1965-1969 (in thousands)

	North Africa	West Africa	Central Africa	Eastern Africa
<u>1965</u>				
Population	73,989	98,901	37,229	70,800
Primary enrolments	7,275	5,791	3,875	4,335
Ratio (%)	9.8	5.8	10.4	6.4
Secondary enrolments	1,568	605	210	378
Ratio (%)	2.12	0.66	0.56	0.53
Higher enrolments	217	24	8	16
Ratio (%)	0.27	0.024	0.022	0.022

^{38/} Survey of Economic Conditions in Africa, 1970, (Part I, United Nations publication, Sales No. E.71.II.K.(9), pp. 164 and 165.

Table 15 (continued): The relation of school enrolments to population by African subregion, 1965-1969 (in thousands)

	North Africa	West Africa	Central Africa	Eastern Africa
1969				
Population	83,300	109,056	40,671	78,169
Primary enrolments	8,300	6,450	4,750	5,650
Ratio (%)	10.0	5.9	11.7	7.4
Secondary enrolments	2,240	740	370	600
Ratio (%)	2.70	0.68	0.99	0.77
Higher enrolments	233	30	18	26
Ratio (%)	0.28	0.027	0.044	0.033

Source: Survey of Economic Conditions in Africa, 1970, Part I
(United Nations publication, Sales No. E.71.II.K.(9), p. 165.

IV. CONCLUSION

A number of conclusions can be drawn by analysing the results of attempts made to bring about the economic and social development of Africa since the time when the African countries achieved independence in the 1960s.

(1) It would seem that in most African countries when planners evaluated the factors governing the economy of underdevelopment, they were not objective enough in considering the impact of population on economic growth in general, and, probably because they lacked relevant data, they failed to study the way in which population interacts with other factors related to development in sufficient depth. With a few rare exceptions, African development plans for the period 1960-1970 are similar in one respect: In the period immediately following independence, economists in the respective countries unhesitatingly adopted highly optimistic assumptions as the keystones of the development plans they were formulating. It was assumed, for instance, that the Gross Domestic Product would grow at an annual rate of 6 per cent even though traditional agricultural structures still predominated in almost all the countries in the region. At the same time it was felt that private domestic consumption could easily be controlled in the short term so that within a relatively brief period of time a country's saving capacity could be raised high enough to give strong support to attempts to induce the growth process in a second phase. Today it is clear from the results obtained that such assumptions must have been adopted without taking account of the impact which demographic factors in particular were bound to have on all the other factors affecting the continent's economic and social growth in this stage in its development.

This decade was therefore considered to be a period of disappointment both by the governmental authorities in many African countries and by a large number of experts who deal with the development problems of the region.

(2) There would seem to be a number of lessons to be drawn from this experience for future application. Some of these are outlined below:

(a) The structural changes which need to be made within a developing economy to create conditions favouring a sustained increase in production are especially slow to come about. This is in part due to various constraints, some of which are imposed by demographic pressure on such vital elements of the economy as employment, private consumption, savings and investment and public expenditures on health and education.

Except in the case of a few countries like Nigeria, Algeria and Libya, which have been able to exploit the vast resources in their subsoil to obtain substantial financial reserves for development purposes, it cannot yet be said that a real cumulative growth process has begun at the continental level in such a way as to ensure that the future needs of the countries of the region can be met in respect of investments and fixed capital in all areas of development.

(b) Moreover, the high level of government expenditures necessitated, among other things, by recurrent obligations in connexion with the many "social investments" made in response to the population thrust is out of all proportion

with the results achieved in such social sectors as health, education and urban development.

(c) Since at the present time the level of domestic savings in Africa as a whole is not high enough to meet the needs which arise, social investments are distinguished by the fact that for the most part they derive from foreign sources and must be repaid.

Thus, not only is the African economy beset by a certain amount of stagnation in so far as production is concerned but it is showing a tendency to become increasingly indebted to external aid sources even though the enormous volume of resources borrowed from abroad is unable to produce the economic and social impact expected of it. The marginal co-efficient of capital reached in a number of countries is rather significant in this regard (table 17).

An examination of the results obtained in one development decade seems to indicate that the over-all growth pattern in Africa is marked by paradox. Foreign aid has with increasing regularity come to the rescue of the economic apparatus and has thus played a stabilizing role where the economies of a number of countries in the region are concerned.

There can be no doubt that the continuation of this trend, by the very fact that it may be considered to be objectively incompatible with the quest for full sovereignty, poses serious problems in respect of the economic and social future of the continent in the years between now and the year 2000.

Table 16: Average annual growth rate of the gross domestic product in recent years and growth rate targets set in the national plans of selected African countries.

Country	Annual growth rate of GDP	
	In past	Plan target
Kenya	3.4	6.3
Madagascar	2.0	4.9
Morocco	3.7	3.7
Togo	4.5	5.6
Uganda	3.2	6.3
Zambia	5.2	11.7

Table 17: Crude investment rates and marginal coefficient of capital in selected African countries as indicated in initial national development plans

Country	Investment rate (as % of GDP)		Planned capital coefficient
	In past	Plan target	
Chad	9	13	-
Gabon	28	26	3.5
Ivory Coast	12	15	2.0
Kenya	13	18	2.5
Madagascar	14	18	3.6
Morocco	13	18	4.9
Senegal	14	15	2.5
Togo	15	13	2.3
Uganda	13	15	2.5
Zambia	11	24	2.0

Source: Survey of Economic Conditions in Africa, 1970 (United Nations publication, Sales Nos. E.71.II.K.9 and E.72.II.K.5).

Table 18: Broad trends shown by a typical African economy at the middle of the First Development Decade

Principal components	(In thousands of millions of CFA francs)		
	Growth recorded		
	1959	1965	Index (100 = 1959)
1. Production by economic branches	60.1	63.3	105
Government services rendered	5.9	9.6	162
Household services rendered	0.3	0.3	100
Services rendered by financial institutions	0.1	0.1	100
2. Gross domestic product	66.4	73.3	111
Imports	12.0	15.2	127
3. Total resources	78.4	88.5	118
4. Private end consumption	55.3	58.4	105
5. Public consumption	7.6	12.5	165
6. Consumption by financial institutions	0.2	0.2	100
7. Exports	9.8	8.3	85
8. Gross fixed capital formation	5.5	9.1	174
9. Total paid employment	78.4	88.5	118
10. Rate of investment (as % of GDP)	7.0	10.0	
11. Foreign deficit (as % of GDP)	3.4	8.8	

The following country papers were consulted in connexion with the preparation of this document:

(a) Maaza Bekele and Lans Bondestam, Ethiopia: A Case Study on the Interrelationships of Population with Social and Economic Development;

(b) John Kantner, Tanzania: A Case Study;

(c) Biyong Boniface, Effet de l'accroissement de la population sur la croissance économique;

(d) Farag and El Sayeh, The Demographic and Economic Aspects of Population Growth in the UAR;

(e) Roushdi A. Henin, Population Growth and Economic Development, the Sudan: A Case Study;

(f) Mahmoud Seklani, Incidences de la baisse de la natalité sur les dépenses de l'éducation: le cas de la Tunisie;

(g) J. Boute, Population et développement économique et social en République du Zaïre;

(h) Y. Diakité, Essai d'étude d'un schéma de croissance de l'économie malienne (1965-2000), basé sur différentes hypothèses d'évolution de la population;

(i) Leon Tabah, Population et économie de l'Algérie;

(j) B.Kwaku Adadevoh, The Effect of Small and Large Numbers of Children on the Welfare and Health of Individual Families - Nigeria;

(k) P. Cantrelle, Etude de cas: population et ressources dans une zone rurale du Sénégal;

(l) W.A. Hassouna, The Impact of Small and Large Numbers of Children on the Health and Welfare of Individual Families: A Micro Case-Study - Egypt;

(m) H. Bouterline Young, Summary of a Micro Case-Study: Tunisia;

(n) Man Thainar N'Doye, Cas du Sénégal;

(o) F.T. Sai, Family Size in Relation to Family Health and Welfare, Micro Case Study: Ghana.