AN INTRODUCTION TO THE AFRICAN ECONOMY

by

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PREFACE

I SHOULD like to thank the Delhi School of Economics for inviting me to deliver a series of four lectures which were to serve as *An Introduction to the African Economy*. Delhi University's decision to place this series of lectures at the disposal of a wider public gave rise to the publication of this book which I hope will stimulate further the growing interest in the African economy. The approach throughout this book has been mainly historical and descriptive since a comprehensive general background knowledge of Africa does not constitute the normal working equipment of the average reader. At the risk of over-simplification, I have covered familiar grounds, re-stated basic economic trends in general terms and cited some of my examples from outside the African continent. I hope this book will add something, however small, to the current literature on the African economy.

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I

POPULATION TRENDS AND ECONOMIC DEVELOPMENT

Africa is the second largest continent and covers an area of 11,699,000 square miles or 23% of the world's land surface. This vast continent however contains only about 8% of the world's population. A number of factors have accounted for Africa's low population figures. The 'negative areas' of Africa represent about 50% of total land surface. Perhaps, I need not add that the 'negative areas' are those parts of the continent which by virtue of their arid or mountainous character do not permit of close settlement and agricultural development. The whole of the Sahara Desert and the areas to the north and east of it including the Sudan and Ethiopia come within the orbit of Africa's 'negative areas'. In the south, the Kalahari Desert and all the arid areas of the Bechuanaland Protectorate, the Trust Territory of South-West Africa, parts of the Union of South Africa and the south-western section of the Portuguese colony of Angola are all classified as 'negative areas'. The negative nature of the land has been counteracted by other natural factors such as the presence of the Nile and man-made irrigation systems which have rendered large

areas of Egypt and the Sudan prosperous and densely populated agricultural districts.

The fact that stress has been laid on the 'negative areas' requires that a word be said about the 'positive areas'. Here confusing contradictions and anomalies immediately appear. About a third of the 'positive areas' is made up of the forest or 'big bush' which characterizes the vegetation of the southern parts of West Africa and particularly the whole of the Congo Basin. For several generations past, the presence of forests was held to be indicative of soil fertility, but recent investigations have shown that the soil in these 'big bush' areas is notably inferior, being leached of plant food by incessant heavy tropical rains. The picture often given of this area is one of impenetrable, gloomy, primeval forest, sparsely inhabited by human life. It has been seriously suggested that the dense tropical forest rendered West Africa and the Congo Basin difficult areas in which to get food and even today, there are those who would argue that the Guinea Coast still remains one of the most difficult places in the world for food production.

The early medieval history of this part of the world is indicative of population concentration in the open Savannah and small bush belt between the forest belt and the Sahara Desert, and again in the less wooded hilly regions in the forest belt. The tendency to concentrate on the cultivation of less wooded lands where agricultural implements

are fairly primitive is a well known phenomenon in human progress. Even today, one finds that the heavy forest regions of Asia remain amongst the least populated areas in spite of population pressure on land elsewhere on the continent. Africa's forest belt was also a tsetse-fly belt and this meant that cattle or horse rearing was almost impossible. The effect of this has been the virtual absence of animal drawn ploughs, an obvious check on the productivity of agriculture within the region. Animal drawn ploughs, however, existed and still exist in the open Savannah belt.

Quite apart from the unsuitability of large areas of the African continent for close settlement and agricultural development, the Slave Trade served as a check on population growth between 1444 when the first large consignment of African Slaves reached Portugal and 1890 when the activities of Arab Slave raiders in East Africa were curbed. It is customary to imagine that the Slave Trade ended in 1807 with Great Britain's abolition of the trade. The following figures about shipment of slaves from West Africa belie this point. In 1788 the estimated total number of slaves shipped from West Africa was 100,000. The annual shipments dropped to 85,000 in 1810 and rose to 125,000 and 135,000 in 1830 and 1840 respectively. It is not easy to determine the extent of the depopulation which Africa experienced as a result of the Slave Trade, but we get a glimpse of the dimensions of the trade when

it is remembered that in 1753 alone some 101 Liverpool ships transported 30,000 Gold Coast Africans as slaves. This figure did not include those Gold Coast Africans who were shipped through United Kingdom ports other than Liverpool and those who were shipped in vessels belonging to other European countries who were engaged in the trade. If one assumed that the birth-rate in the Gold Coast or Ghana at the time was 40/45 per thousand and the death-rate, because of the prevalence of yellow fever, malaria and other tropical diseases was 30/35 per thousand, and if one only took account of those Gold Coast Africans shipped in Liverpool ships and ignored all the other slave carrying vessels, one would need to credit the Gold Coast or Ghana with a population of 3,000,000 in 1753 in order to ensure population stability. It is of interest to add that the 1901 census give the population of Ghana as 1,502,186.

Within the last twenty or more years attempts have been made to estimate the population of Africa during the Slave Trade era. Sir Alexander M. Carr-Saunders gives the population of Africa in 1650 as 100,000,000 as compared with 100,000,000 for Europe, 1,000,000 for North America, 12,000,000 for Central and South America, 2,000,000 for Oceania and 330,000,000 for Asia. Africa's population in 1750 is given as 95,000,000, the figure for 1800 as 90,000,000 and that for 1850 as 95,000,000 in contrast to 266,000,000 for Europe, 26,000,000 for

North America, 33,000,000 for Central and South America, 2,000,000 for Oceania and 749,000,000 for Asia. The population of Africa in 1900 has been estimated at 120,000,000. Figures furnished by the United Nations differ slightly from those given above, but both Sir Alexander Carr-Saunders and the United Nations are agreed upon the population of Africa for 1650 and 1900. The United Nations holds that Africa's population remained at 100,000,000 from 1650 to 1850. I am not here concerned with the economics of a declining population. One knows that if one liquidated the top brains in any literate or pre-literate society, the progress of the society would be checked for a time. In a literate society the destruction of all available literature also serves the same purpose. We cannot tell how often the top brains in given African societies were killed in the slave hunts or shipped to the New World and the effect that these developments had on the skills and accumulated knowledge that a given generation was able to hand over to the next. Again, we do not know to what extent Africa found itself unable to exploit the economic possibilities of all its known resources as a result of a stagnant or declining population which was further experiencing all the uncertainties and fears of the Slave Trade. There is enough evidence to show that certain skills have not been handed down and one example of this is the indigenous damask and velvet making industry of the Belgian Congo which

Duarte Lopez recorded in 1591, but which is today a lost art in that part of the world. In West Africa, we also have an example of the neutralization of all top brains and the destruction of all available literature in the closure of the University of Sankore in Timbuktu in 1591, the burning of all public and private libraries and the deportation of the professors. It is perhaps of academic interest to note that Professor Ahmed Baba of Sankore claimed, while in captivity in Morocco, that his library of 1,600 volumes was the smallest amongst his professional colleagues at Sankore. Passing reference must also be made to skills which have been rendered redundant in Africa because the end-products of the skills have been prised out of the market by cheaper imported substitutes. Changes in the quality of the population and in accumulated knowledge affect economic growth, and in the African context one cannot help but feel that such changes have played an important role in determining the pace of economic development.

Africa's population which was estimated at 18.3% of world total in 1650 shrunk to about 7.4 % and 7% of world total in 1900 and 1933 respectively. There have been some significant changes in the population trends in the African continent since 1900 and more particularly since 1920. The first of these changes relates to the size of the population and to population growth in general. It is estimated that Africa's population rose to 136,000,000

in 1920 and to 155,000,000 in 1930. The tendency for the population to expand (contrary to what had happened between 1650 and 1850) continued in subsequent years and for 1939 and 1949, the population was 175,000,000 and 198,000,000 respectively. Africa's estimated population at mid-1955 is given as 223,000,000 or 8.25 % of the world total. Since 1920 the population of Africa has been increasing by a little more than 1.3% per annum. It would be misleading for us to impart to the above figures a factual precision which they do not possess. It must be remembered that even today only areas covered by 44% of the estimated total population have anything approaching a real population census. Where no census figures exist use is made of such non-census statistics as appear or seem to be relevant. The recorded total population of Africa in 1955 contains a considerable margin of error. The reliability of the population estimates become more questionable as one leaves more recent years and attempts to take a peep at the size of the population in the dim past. If we take the four main regions of Africa, we find that rate of population growth has not been constant in any one of them. In the region represented by the negative areas of North Africa, the rate of population growth was 1.5% in 1920-29, 1.7% in 1930-39 and 1.9% in 1940-49. In East-Central Africa the rate of increase for 1920 to 1949 varied between the very narrow margin of 1.2% and 1.3%. The interesting point

is that in West-Central Africa which represents one of the main positive areas of the continent the rate of population growth varied from 1.2% in 1920-39 to 0.9% in 1940-49.

About 97% of the population is either indigenous or has been long resident in Africa. There are roughly 5,000,000 Whites or persons of European origin and of these 2,500,000 are in the Union of South Africa, 320,000 in East and Central Africa, 80,000 in Western Africa and the rest numbering about 2,000,000 are concentrated mainly in North-Western Africa. There are over 584,000 Indians in Africa and more than 60% of them live in the Union of South Africa. The increase in the rate of population growth in North Africa becomes intelligible if it is remembered that French settlement policy in North Africa has led to the introduction of new economic and social factors including improvement in health and sanitation standards which have resulted not so much in an increase of the birth-rate as in a definite lowering of the death-rate. In South Africa where the gold and diamond industries coupled with the presence of European settlers gave rise to rapid industrialization, urbanization, improved means of communication, an upward trend in the standard of living, modern sanitation and improved health facilities, the rate of population growth stood at 2.2% for the period 1920-29. The very factors which in their initial stages lead to a spectacular drop in the death-rate

tend in the long run to condition men's attitude towards child-bearing and it is perhaps not too much to assume that the South African growth rate of 1.6% for 1940-49 reflects this point. We must, however, recognize other factors when dealing with a society in which race and politics condition the standard of economic welfare. In this connection it is significant to record that in 1944, the National Health Services Commission of South Africa reporting on the indigenous African population, stated that "all the evidence we have received strongly suggests—in the absence of precise data extending over a long period it could do no more—that in the Territories, on the farms, and in the towns, their poverty is increasing and health deteriorating." In West-Central Africa improvements in sanitation and health standards have not kept pace with the growth in the per capita income of the population with the result that a modified attitude towards child-bearing is taking place without a corresponding drop in the death-rate.

Africa is normally regarded as a thinly populated continent. The density of population is 7 persons per square kilometre as compared with 18 for the world in general. Not a single one of Africa's four main geographical divisions gives a population density comparable with that of the world in general. North Africa has a population density of 8 persons per square kilometre ; West-Central Africa 6, East-Central 7 and South Africa 5 persons per square

kilometre. These figures tend to give the impression that nowhere in the African continent is the population pressing heavily on the available land. In Egypt where the natural increase in population is over 2%, the need to provide food and employment for an additional million or more people every three to four years is imposing an ever-increasing strain on the nation's economy and presenting the authorities with grave problems which, it is hoped, would be partially solved by the construction of the Aswan Dam.

The density of population in Africa varies from region to region and between localities in the same region. In Eastern Nigeria some 7.9 million people occupy about 46,000 square miles while next door in the British Cameroons 750,000 people inhabit 15,581 square miles of territory. The population density for the whole of Nigeria is 85 persons per square mile as compared with 800 in Holland, 525 in the U.K., 312 in India, 205 in Pakistan, 50 in the U.S.A. and 14, 67 and 50 respectively in the three African territories of Belgian Congo, Sierra Leone and Ghana. There are areas in South Nigeria where population density is 400 to 500 per square mile and here an optimum population can be said to have been attained when population is related to the fairly primitive agricultural implements in use, the general mode of agricultural production and diminishing agricultural yield. In the Kikuyu areas of Kenya alienation of land to White settlers

coupled with over-cropping and over-grazing of the limited lands available to the indigenous population has created a marked degree of land-hunger. Nowhere on the African continent, however, except in the Nile Basin in Egypt and in one or two limited areas do we get anything like the density of 1,000 per square mile or more so closely associated (in your own experience) with the Old Delhi State, Travancore-Cochin, and with the Indo-Ganges and Yangtse valleys and plains. In the Kikuyu reserves of Kenya figures given in the British Parliament on the 1st of February, 1944, indicated that in some areas population density of 1,100 and even 1,800 per square mile, had been reached.

In underdeveloped areas like Africa and parts of Asia and Latin America, the percentage of total population under 15 years of age is generally 40 as compared with 20 in an advanced country like Britain. The tendency in all such cases is to have about 55% of the population between the ages of 15 and 59 and the remaining 5% aged 60 and above. Areas in this group are characterized by a very high birth-rate and a high death-rate in contrast with countries like America and Britain which before the Second World War possessed a low birth-rate and/or very low death-rate. Population trends in the U.K. and U.S.A. since the Second World War show that though death-rates have remained very low, birth-rates have tended to rise. This development is, however, likely to prove transitory.

In countries with very high birth-rates and high death-rates one effect of improvements in health and sanitation standards is to have a quick lowering of the death-rate without a corresponding drop in the birth-rate. Ceylon and Puerto Rico have in very recent years shown such trends and their natural increase in population like that of Egypt has been above 2%. For the whole of the African continent as indeed for parts of Asia, it is to be expected that improvement in health standards will create a period of rapid population growth, but as we have already observed in the case of South Africa, this phase may last only for a limited number of years. Improved standards of health and sanitation are normally associated with rising standards of living and with a conscious limitation of the size of the average family.

Countries which have as much as 40% of their population under the age of 15 suffer certain definite economic disadvantages in that an undue strain is placed on the 55% who are between the ages of 15 and 59. The remaining 5% aged 60 and above are generally an additional burden on the 55%. In communities where a drop in the death-rate has been in operation for several years, the tendency is for burden on the productive group, arising out of the existence of the under-15s, to decrease while the economic burden arising out of the survival of the 60s and over increases. This later development is to be expected in Africa as medical science makes

more headway and the standard of living rises.

In our modern age, most governments aim at giving formal education to children of school-going age and it is generally recognized that in societies which have 40% of the population below the age of 15, the school-going age group represents 25% of the total population. The problems which face those who wish to introduce compulsory education into Africa are by no means easy, but these are the very problems that must be tackled if new skills are to be acquired and if the standards of living are to rise. The mere fact that outlay on education is not a self-liquidating investment may raise issues as to how much of the national revenue and indeed of the national income should be devoted to this item. The alternate uses of the available limited capital in underdeveloped countries, which are looking round for quick and profitable returns on investment, may induce leaders to play down the needs of that section of the population which in the next generation is to determine whether economic gain has been consolidated and technical skills improved.

In Africa the percentage of the population in school varies from one country to the other. There are also considerable differences in the range, scope, form and type of education given. Some countries like Basutoland which in 1951 had 16.1% of the population in school lay stress on primary or elementary education to the complete or partial exclusion of secondary and university education

and others like Nigeria with 3% of her population in school in 1951 are making increasing provisions for education at all levels. One of the poorest served territories in the African continent is British Somaliland where in 1951 only 0.4% of the population was at school.

A few figures based on 1951 census may serve to give us a general picture of the percentage of population in school in Africa.

Percentage of Population in School
(1951)

British Somaliland	0.4
French West Africa	0.7
French Equatorial Africa	1.4
Sierra Leone	1.5
Gambia	1.5
French Somaliland	2.8
Nigeria	3.0
French Morocco	3.3
Uganda	3.9
Tunisia	5.6
Bechuanaland	6.2
Kenya	6.1
Swaziland	6.4
Gold Coast (Ghana)	6.5
Belgian Congo	8.1
Northern Rhodesia	8.3
Nyasaland	9.4
Basutoland	16.1

Rapid developments are taking place in many parts of Africa and in Ghana, for example, there was 180% increase in school population during the period 1951-57. In the Belgian Congo where 8.1% of the population was at school in 1951 normal official outlay on education represented about 4% of the ordinary Central Government expenditure. In Basutoland education accounted for close on 15% of Central Government expenditure and in British Somaliland it was just under 4%. The above figures which reflect to some extent the degree of importance accorded to education in the National Budget, do not, however, become fully meaningful until the size of the budget itself is known and until various claims on the resources of the state are examined. The financial outlay which any community makes on the health and education of its members has both a direct and an indirect bearing on production and on capital accumulation, but unlike investments in recognizable economic services, it is very difficult to assess results of investment on health and education in concrete measurable terms. It is, however, not very difficult to assess the results of investment in the training of agricultural assistants and in agricultural extension work.

Throughout the African continent vast natural resources remain underdeveloped and human effort has not been geared up to a high standard of efficiency because of the lack of skills and the paucity

of existing educational facilities. Various debilitating diseases continue to enfeeble the people and to set a limit to production, but as medical facilities are made readily available and sanitation measures improved, one can expect a rapid increase in population, an increase in the percentage of population above 60 years of age, greater stamina on the part of the people and a greater potential output in production. Already, in a matter of some fifty years, Africa's population has about doubled, but there can be no suggestion of an optimum theoretical population having been attained. If the living standards of the African people are to rise, the optimistic views expressed above can only come true if the ghost of Malthus is effectively laid to rest. Sir Alexander Gray has pointed out that in a world in which the rich half has perhaps prematurely relegated Malthus into the background, the precarious efforts made by the poor half of the world to draw its sustenance from a distressingly thin layer of soil on the surface of a globe which is not getting bigger is often overlooked. The world glibly speaks of 'Poverty in the midst of Plenty' and looks to a proper system of distribution to put everything right, but it is worth remembering that what must be distributed must first be produced. One authority has forecast that world agricultural production in 1960 may rise from 20% to 25% above the 1930 level, whereas over the same period, world population may show an increase of from

30% to 35%. It can be deduced from this that countries which now maintain a fair degree of subsistence economy may find themselves unable to feed their populations adequately. Africa's population is increasing everywhere and land will gradually become a scarce factor of production. Furthermore, soil fertility is diminishing and unless actual or potential population pressure can be relieved by the provision of new means of livelihood, per capita income will decline.

In an age which advocates moral restraint, the tendency sometimes is to write off Malthus' repertory of positive checks and Nature's balancing hand as outmoded, but an ever-increasing moral restraint can have no meaning for many African societies like that of Ghana where no person is regarded in the indigenous sense as having attained full manhood or womanhood until that person has become a mother or a father. Even where no such social force for the perpetuation of the race exists, the apostles of moral restraint in capital-poor, surplus-labour countries have not found ready and willing disciples. Perhaps the ghost of Malthus still stalks around to disturb the easy-going attitude and the over-optimism so characteristic of underdeveloped countries reaching out for higher standards of living.

The problem of food represents the most fundamental of human problems. Without food life itself is impossible. Modern society aims at meeting

in full its obligations to make available to all its members at least the minimum adequate nutrition. It is a well known fact that the United States of America is amongst the best fed nations in the world, yet it has been estimated that 40,000,000 more acres of food and feeding stuff crops will need to be grown if that country is to produce the amount of food needed to feed the whole population on a health standard. For capital-poor countries like Egypt, Kenya, Belgian Congo, Sudan, Nigeria, Ghana and all the other territories in Africa, and most countries in Asia, such estimates are not available, but it is clear that much larger increases in energy producing foods and more particularly protective foods will be needed if anything like a health standard is to be attained for the bulk of the population.

Even in a comparatively rich country like the United Kingdom, the working class population spends on an average between 40 and 50 per cent of its total family income on food alone, and amongst some of the poorest families the percentage of income spent on food is 70. In his study of German families in 1857, Ernst Engels noted that the poorer the family, the greater the proportion of its outlay that must be used for the purchase of food. Adam Smith had observed eighty-one years earlier that "the desire for food is limited in every man by the narrow capacity of the human stomach; but the desire of the conveniences and ornaments of building,

dress, equipage, and household furniture, seems to have no limit or certain boundary." Without in any way attempting to get mixed up with physiological and psychological factors, it is to be noted that in the satisfaction of human wants, basic food wants are met first, but as the human stomach has a limited capacity, these food wants soon cease to compete with non-food wants in man's consumption budget. It must be realized at all times that the relation of the price of food to purchasing power is one of the main factors determining the poverty line. From this it may be surmised that decisions taken with regard to food affect almost every aspect of the social and economic structures of the community.

It is further to be noted that in very poor countries such as some of those in Africa nearly the whole of the adult working population is required in agriculture just to produce enough food to feed the community. As a community acquires a higher degree of efficiency in food production, the proportion of the population needed to produce food diminishes. These observed trends are summarized as follows:

First, that in a progressive economy, the proportionate contribution of agriculture to economic welfare steadily declines. Second, that the decline of agriculture's proportionate contribution is one aspect of the changes in industrial pattern in society which occur under and constitute a condition of economic progress. Third, that the essential mechanism of the relative decline in agriculture is the

diversion of working population to secondary industries and more particularly, to tertiary industries, mainly services. This diversion may take the form of an actual transfer of labour from primary industries (mainly agriculture) and/or take the form of the rising generation entering secondary and tertiary industries. The economic force behind these trends is furnished by changes in the consumption pattern under conditions of increasing per capita real income in the whole of the community.

It would be clear from this that the higher the percentage of the working population engaged in agriculture, more specifically in food farming, the lower the level of the economic welfare of the people. In fact, it has been pointed out that the simplest index of productivity in any country is to ask what proportion of the adult working population is needed in agriculture to produce enough food to feed the whole country. A study of the economic history of the more advanced countries of the world portrays the nature and the trend of the drift from agricultural production in those countries over a series of years. We shall take the single example of the United States of America, a country which is regarded today as the leading industrialized country of the world, at least so far as the techniques and the volume of modern production are concerned. In 1820 about 70% of the working population of the U.S.A. was engaged in agriculture. In 1860 the percentage had dropped to 60%, in 1920 only 20%

of the working population was engaged in agriculture and today the agricultural population represents about 12% of the total working population. New techniques of agricultural production had to be found so that agricultural yield could be increased per unit of land or per unit of labour. This is where the agricultural research scientist comes in with improved types of seed, as has been done with maize in America, the oil palm in Belgian Congo and Amazon cocoa in Ghana. In the Federation of Rhodesia and Nyasaland the use of improved seeds made it possible for maize production to increase by 70% between 1950-51 and 1954-55 and for the yield per acre to increase from 5 or 6 bags to 15 or 20 bags. Crop rotation, the proper use of fertilizers and of all forms of manures, the use of animal drawn ploughs, mechanization of agriculture, soil conservation and anti-erosion measures, soil surveys, anti-locust campaigns, and the use of vaccines against animal diseases are all measures designed to protect the food of people. Even the system of land tenure prevailing in a country must be taken into account for this will determine whether field crops or tree crops should be readily grown and whether it is worth while sinking a lot of capital in the land. But there is a limit to the amount of food any individual can consume and this is the force behind the drift which leads men to consume more of their wealth on secondary and tertiary industries.

Agriculture is still the main occupation of the peoples of the African continent, but the difficulties which one generally meets with when collecting vital statistics about Africa present themselves when the attempt is made to find out the percentage of working population engaged in agriculture. The United Nations *Special Study on Economic Conditions in non-Self-Governing Territories*, published in 1955 gives the percentage of total population in agriculture for certain African countries as follows:

Central Africa	
Belgian Congo	79
French Equatorial Africa	74
Northern Rhodesia	76
Nyasaland	89
West Africa	
French West Africa	84
Gambia	98
Gold Coast (Ghana)	70
Nigeria	85
East Africa	
British Somaliland	95
French Somaliland	95
Kenya	74
Uganda	98
Zanzibar	74

South Africa	
Basutoland	85
Bechuanaland	85
Swaziland	74
North Africa	
Morocco	67
Tunisia	68

The above figures cannot give us a completely true picture of the percentage of working population engaged in agriculture. It is to be noted that for the whole of the African continent, it has been estimated that 74% of the working population is engaged in agriculture, and where no local estimates are available as in the case of Swaziland, Zanzibar, Kenya and French Equatorial Africa, 74% has been put down. It is this rather questionable yardstick which made it possible for Dudley Stamp to give the percentage of working population employed in agriculture in Nigeria in 1931 as 74, while 85% represents the United Nations figure nearly a generation later. In fact both figures are misleading for the 1953 census makes 76% for the whole of Nigeria a more reliable figure to work on. It is difficult to accept the figure of 98% which has been shown against Uganda and the Gambia even if all persons who divide their labours between trade and agriculture are classified as farmers, and even if allowance is made for the fact that some farmers concentrate

their attention on the production of export crops such as coffee, cotton and groundnuts.

There are marked variations between regions in the same country with regard to the percentage of working population engaged in agriculture. In Northern Nigeria the percentage is 80, in Western Nigeria 70 and in Eastern Nigeria 74. The Northern Territories of Ghana has 90% of its working population engaged in agriculture as compared with an average of 70% for the whole country. There is no doubt that the standard of economic welfare in the Northern Territories of Ghana is the lowest for both Nigeria and Ghana although Ghana as a whole has a higher standard of economic welfare than Nigeria. It would, however, be unwise by just looking at the figures given earlier to conclude that the standard of economic welfare in the Northern Territories of Ghana is higher than that of Uganda and the Gambia, for in the last two mentioned territories cash crops form an important item in agricultural production, while in the first, 90% of the working population is engaged almost solely on food production for a predominantly subsistence economy. In both Northern Nigeria and the Northern Territories of Ghana, one sees the shadow of Africa's negative areas.

The point is sometimes made that the fertility of tropical African soil under the existing system of soil management is low. It has already been stated that in certain areas soil fertility is diminishing

and agricultural yield is tending to fall. Parts of Ghana, Eastern Nigeria and Kenya are examples of areas where agricultural productivity is falling. Falling productivity is more marked in the case of food crops like yams and others with an annual cycle than in the case of permanent tree crops like coffee and cocoa where the trees afford cover for the soil. Agricultural yields per acre all over Africa is low compared with food crop yields elsewhere in the world and it has been estimated that Africa's food crop yields per acre are less than 60% of the world average. Maize, millet, sweet potatoes and groundnuts are grown extensively in Africa and receive considerable attention but even in the case of these crops yields are respectively 60%, 67%, 66% and 60% of world average. Low or diminishing agricultural productivity to which the existing poverty of African peoples can be partly attributed arises out of over-cropping and a shortening of the period of fallow due to developing population pressure on the land.

If the extension of medical and health facilities continues and the present rate of population growth in Africa is maintained, it is easy to predict that in the absence of improved agricultural techniques, increasing pressure on the land will lead to a falling off in living standards. Any measure designed to improve soil fertility or increase agricultural yield is bound to raise the standard of economic welfare of the people, provided that population increase

does not swallow up all the increased yield and provided that labour force which is surplus to agriculture is diverted to secondary and tertiary industries and is not retained on the land in the form of under-employed labour. Shifting cultivation which was a sound agricultural technique when population density was low enough to make it possible for long periods of fallow to be practised must give way to a more intensive form of agriculture when lands are alienated to European settlers or plantation companies and Africans headed into reserves and when the introduction of cash crops for the export market leads to an increasing demand for land. That these new developments throw up a challenge to the indigenous inhabitants of Africa and their governments need not be stressed. The challenge itself is nothing new and prior to the advent of the European, Africans themselves developed advanced farming techniques which permitted continuous use of the same parcel of land where local circumstances did not allow of the long fallow periods necessary in most of tropical Africa. Instances of advanced types of indigenous intensive cultivation are to be found in Western Dinka, the Aweil district of the Sudan, in South-West Sukumaland, in the Lake Victoria region and in the hilly country to the north of Togoland where the Kubara through the use of irrigation, canals and manures succeeded in turning their arid mountainous country into impressive, large and well-tended gardens. The African farmer

did not wait for the Western agricultural scientist before obtaining answers to his problems. Those who met the challenge in another age had security of tenure in the lands which they cultivated and we cannot consider further the new challenge presented by Africa's increasing population without a study of the prevailing land tenure system.

II

LAND TENURE AND AGRICULTURAL PRODUCTION

We need not labour the point that customs and laws governing the use and ownership of land are of major economic importance especially in predominantly agricultural countries. Again, there is no need reminding ourselves that the productivity of land and the social advancement of the peoples of Africa, as indeed of Asia, are dependent as much upon the evolution of sound systems of land tenure as upon the development of improved agricultural methods. In your study of Indian Economics, you have had occasion to examine the agrarian structure and to consider the economic disadvantages of excessive fragmentation of holdings. The Indian Government's efforts at securing consolidation of holdings, granting security of tenure to tenants, encouraging co-operative activities and ensuring increased yield in agriculture as with the use of Japanese methods of rice cultivation are matters well known to you. Your knowledge of Asia with 70% of its working population in agriculture should guide you when you come to consider Africa with 74% of its working population engaged in agricultural production.

An attempt to adopt an analytical approach in this Survey can only be achieved by pruning down basic facts about land tenure systems in Africa, but since we do not wish to prune down basic facts, we must for the most part forgo an analytical approach. A study of the land tenure systems in Africa lends itself more readily to the techniques of the social anthropologist and perhaps to those of the jurist than to the approach of the economist. A jurist usually finds difficulty in forming a clear view of the complex social privileges and obligations that surround land-use and land-holding and even the social anthropologist is not completely happy when attempting to categorize what appear to be indeterminate rights, uses and obligations. A body of case-law has grown up in West Africa which has helped to throw some light on the indigenous systems of land tenure and we shall now proceed to present the facts in clear, simple and precise terms. Unrestricted individual rights in land are alien to African traditions and the existence of freehold tenure in any part of Africa today can be regarded as due to alien influences. Indigenous rights in land centre around the community, group or tribe, family and in a qualified sense, the individual. These land rights are usually either usufruct rights in perpetuity or usufruct rights of a less permanent character as distinct from absolute ownership. The radical title to the land remains with the collective unit, be it the family or the community, but

the individual can acquire the right to land-use. The relation between the family, group, community or tribe and the land is a complex one and the rights of an individual in land co-exist with those of the family or whatever the larger unit may be. Indigenous African society generally recognizes three main categories of land tenure, namely family land, tribal or community land, and stool-land. Family land is land under the control of the head of the family for the use and benefit of the whole family. Tribal land or community land is land under the control of the chief for the use of the tribe or community, and the stool-land is land under the control of the chief for the benefit of the stool family. We shall not burden ourselves with too many fine divisions and definitions, but it is worth mentioning that there is often a tendency to confuse tribal or community land with stool-land mainly because the chief is everywhere regarded as the symbol of the residuary and reversionary ownership of all land held within the tribal or group area. His role is in fact that of a caretaker or trustee coupled with the right to allocate pieces of the land to heads of families and even to strangers subject to the overall consent of his council of elders.

It has been argued that the piece of land allocated to an individual by his head of family gives that individual a possessory title which he enjoys in perpetuity and confers on him powers of user and of disposition scarcely distinguishable from those

of an absolute freeholder under English Law. The argument goes further to state that the individual in this case is neither a lessee nor licensee. He is not, as is often made out, even an usufructuary. It is true that he pays tribute to no one and that his powers transcend those of usufructuary under Roman Law, but to argue that he has powers of disposition scarcely distinguishable from those of an absolute freeholder under English Law, is to play down the complex co-existence of individual and group rights in the same piece of land.

In the leading case of Amodu-Tigani *vs.* Secretary, Southern Nigeria, (1921 A.C. 399), Viscount Haldane in a judgement delivered by the Privy Council summarized the indigenous land tenure system prevailing in Nigeria and other parts of Africa, as follows:

"The next fact which is important to bear in mind in order to understand the native land law is that the notion of individual ownership is quite foreign to native ideas. Land belongs to the community, the village or family, never to the individual. All the members of the community, village or family have an equal right to the land, but in every case the chief or Headman of the community or village, or head of the family, has charge of land, and in loose mode of speech, is sometimes called the owner. He is to some extent in the position of a trustee, and as such holds the land for the use of the community or family. He has control of it,

and any member who wants a piece of it to cultivate or build upon goes to him for it. But the land so given still remains the property of the community or family. He cannot make any important disposition of the land without consulting the elders of the community or family, and their consent must in all cases be given before a grant can be made to a stranger. This is a pure native custom along the whole length of this coast, and wherever we find, as in Lagos, individual owners, this is again due to the introduction of English ideas. But the native idea still has a firm hold on the people and in most cases, even in Lagos, land is held by the family. This is so even in cases of land purporting to be held under Crown grants and English conveyances. The original grantee may have held as an individual owner, but on his death all his family claim interest, which is always recognised and thus the land becomes again family land. My experience in Lagos leads me to the conclusion that except where land has been bought by the present owner there are very few natives who are individual owners of land."

In the same judgement, Viscount Haldane added: "Their lordships doubt whether any really definite distinction is connoted by the expression 'stool lands'. It probably means little more than lands which the chief holds in his representative or constitutional capacity, as distinguished from land which he and his own family hold individually." The confusion between tribal or community land and

stool-land is brought out indirectly in Viscount Haldane's words.

Now that the legal concept of landholding in Africa has been made clear, we must go further if we are to obtain a correct picture of indigenous attitudes towards land. The African regards the earth and all things that grow on the land or have the earth as their foundation as sacred. The African holds that land is more ancient than the tribe and that the link or tie between the two is never complete. When tribes have migrated from other regions, distinctions are drawn between the gods of the land and the gods of the tribe, for the gods of the land alone possess the land, control the fertility of the soil and protect it from misuse or abuse by mortal tenants. Until recently no clay or salt or mineral was mined, no tree was felled, without a sacrificial offering or invocation to the gods of the land. The real owners of the land were spirits or the departed members of the tribe who had become the guardian spirits of the tribe.

The possession of land in Africa has a social and political significance, for the individual's right in the land is not only his source of livelihood, but it is also a tangible proof of his membership of the social unit. The size of the land under his control is generally an index to his social status either in the family or the community. Whatever the constitution of a tribe, personal rights in land are limited to land actually under cultivation and in a country which

practises shifting cultivation, this may include land under fallow. Community grazing and hunting rights exist side by side with individual rights in tree crops. Products of special value such as copper, iron, salt and tin were formerly the monopolies of clans who alone knew not only how to mine and treat them, but more important still, how to perform the right religious ceremonies that would bless their users. In all African communities, rubber, firewood, fruits, honey and game were the property of none but their finders.

It has been strongly suggested that the indigenous African land tenure systems were devised to meet a 'static self-subsistence economy' and therefore, cannot be held to be suitable for the more dynamic conditions of today which have made peasant production a part of a wider economy. Faulty and insecure titles to land militate against the will to carry out improvements. The dead hand of tradition tends to stifle initiative, innovation and progress. Community rights tend to impinge heavily on individual rights and thus serve as a serious obstacle to the improving cultivator. Grim as these defects in the agrarian structure may appear to be, the evidence in Africa shows that the communal systems of land tenure have not proved so inflexible as to inhibit development and to prevent the adoption of new methods.

There have been cases more particularly in Ghana, Uganda, and Nigeria where political, social and

economic factors have created conditions which have made it possible for individuals including some chiefs to encroach on the ultimate land rights of the extended family, the village, group or tribe. In Uganda, for example, the 1900 agreement between the British and the Buganda Government ignored the communal nature of landholding and provided for the division of 9,003 square miles of land between the Kabaka (King), Kakaba's family, and other chiefs and notables in the Buganda state. The area affected covered half of Buganda. The British Government acquired the unrestricted ownership of the other half which has since come to be known as 'mailo lands'. Overnight a landlord class has been created in Buganda and subsequent legislation in 1908, 1918 and 1927 served not only to strengthen the hands of the newly created landowning class but also to sanction the free transfer and disposal of land between the indigenous inhabitants of the country.

In many parts of Africa, the introduction of perennial crops such as coffee, cocoa and oil-palm has tended to minimize the importance of shifting cultivation and to establish permanent vested interest in a given piece of land without any apparent break with traditional concepts for as we have already hinted, the clearing of virgin forest, the digging of a well, the building of a house and the tending or cultivation of tree crop, such as cocoa or coffee created a property right personal to the man who

effected it. The same rights which accrue to one's labour have made it possible for farms to be pledged, mortgaged or otherwise alienated in conditions amounting almost to outright sale.

Mention has already been made of the impact of Europe on African landholding rights. The state represented by metropolitan countries with African colonial interests, has tended to maintain an ultimate or superior proprietorship over land and its disposition. This superior proprietorship has often been accompanied by a declaration that indigenous customary rights would be respected. Both the French and the Belgians in their African dependencies claim the control of all *terres vacantes et sans maitre* and they actually exercise considerable powers over the allocation and use of land. Virtual ignorance of the nature of indigenous communal tenure associated with shifting cultivation led the Belgians and the French to regard as 'vacant lands', lands which were lying fallow. The same absence of light characterized the British approach in Kenya. In French Equatorial Africa large tracts of 'vacant lands' amounting to about two-thirds of the entire territorial area were given away to forty companies and though the French authorities later attempted to reverse the procedure because of its adverse effects on African society, this change of policy appears in some cases to have come a bit too late. In the Belgian Congo, it was found in 1908 that 11.5% of the country's 2,343,930 square kilo-

metres of land had been acquired by private concessions. Here again, an attempt was made to reverse the trend of events and concessions were reduced to 7.2% of the territorial area of the country. The concession lands which were mainly in the Mayumbe, Kivu and Katanga areas occupied the most favoured parts of the country and already carried a large concentration of the autochthonous population. Kenya represented the second category and here all land not previously alienated was treated as Crown Land, but definite areas were set aside as Native Trust Lands and Native Reserves to be occupied in accordance with customary land rights. The third category in the British set-up included Ashanti, the Gold Coast Colony Proper (Southern Ghana) and Southern Nigeria. The Crown in this case claimed no ultimate or superior proprietorship and land rights were solely vested in the indigenous inhabitants. Under the third category it is possible for the indigenous inhabitants themselves to alienate their land and in the case of Ashanti in 1935, some 2,986 square miles of the territory's 24,379 square miles had been alienated to concession hunters and in the Gold Coast Colony Proper (Southern Ghana) 8,805 square miles out of a total area of 23,937 square miles had been similarly alienated. Practically all the concessions granted were for non-agricultural purposes. In the first two categories the state can if it so desires, alienate land from the indigenous population, encourage

settler groups and stimulate the growth of plantations as opposed to peasant farming. Examples of this type of development are afforded by Kenya today, by Uganda during the early years of this century and by Tanganyika under German rule.

The alienation of land to settler groups has profoundly affected indigenous agriculture and land tenure in East, Central and South Africa. We are not concerned here with the political consequences of the alienation, a subject which would take us, through Kenya and across the Sahara northward to Algeria. We are however concerned with whether Africans in Kenya, Southern Rhodesia, South Africa and Northern Rhodesia, who live in reserves have sufficient land to support their growing numbers given the existing local techniques in agricultural production and animal husbandry. The fact that political and racial factors dominate economic thought and action in Central, East and South Africa necessitates a very careful approach to the study of economic trends in these areas. Even when one is considering such basic subjects as land tenure and agricultural production one is constantly reminded that one must take other than purely economic factors into consideration.

In the settler areas one often finds large-scale agriculture organized on a plantation basis. There is generally a concentration on a few products destined for the export market. Plantations have been held to be superior to peasant cultivation because

of their greater capacity for intensive production as a result of the application of scientific knowledge, the command of adequate capital including expensive machinery for large-scale operations and benefits arising out of regular, uniform and selective large-scale marketing. Plantations have definitely established their superiority over peasant cultivation in the case of sisal production in Tanganyika, tea in Nyasaland, and pyrethum in Kenya. Even though cocoa plantations exist in the Cameroons, coffee plantations in Kenya and palm oil plantations in the Belgian Congo, it is to be noted that peasant production of cocoa in Ghana, Nigeria and the Ivory Coast, palm oil in Dahomey and Nigeria and coffee in Ethiopia vie effectively with the plantation products. In addition to cocoa, palm oil and coffee, peasant production of sugarcane and rubber has held its own against plantation production. In the case of sugarcane one must however remember that the peasant has often to rely on the large estates which own sugar factories. The peasant may in other cases benefit from experiments carried out on the plantations.

Large estates making use of machinery may be said to be best suited to areas with low population densities. In countries where population is dense in relation to culturable area, plantations, more particularly mechanized plantations, tend to create land-hunger and unemployment. In Africa it has been found that the introduction of a plantation

economy often tends to have an adverse effect on village social organizations especially where the labour force is recruited from long distances. The system itself offers no worthwhile economic return to the native and furthermore the creation of a landless rural working class which is further differentiated from the estate owners by 'high visibility' or race is likely to give rise to social and political discontent and unrest as with the Mau Mau in Kenya.

Plantations have not always been an unmixed blessing even for the planters. These agricultural estates have in the past counted on the continued supply of cheap labour. There is bound to be an ever-increasing demand for higher wages and better housing conditions and these if unaccompanied by improved methods of production and by favourable agricultural prices are bound to eat into plantation profits. Where labour becomes a scarce and expensive factor of production a plantation economy may have to maintain itself through the increased use of labour-saving devices.

The post Second World War period has seen a number of attempts by colonial and metropolitan governments to stimulate economic growth more particularly agricultural development. In certain cases, the predominant feeling was that capital could accomplish almost everything. Capital could nullify all time factors and it was only lack of capital and human volition which prevented mankind

'from converting a desert into an agricultural paradise'. This attempt to stress the omnipotence of capital was reflected in the rush with which in a little over nine weeks a United Kingdom Visiting Mission to East Africa covered 1,000 miles by rail, 2,000 miles by road and 10,000 miles by air and proposed a groundnut scheme to cover many thousands of square miles of East African territory. In West Africa another U.K. Visiting Mission achieved a similar feat in comparable circumstances.

In both East and West Africa, the Oilseeds Missions regarded not only time as an obstacle, but the African man himself was treated as a nuisance to rapid economic development. The absence of population in any given area was a sure guide that the area could be developed quickly "unencumbered by native or other rights". The failure of the groundnut scheme has been attributed by some economists to the failure of machines. The fallacy that machines which have worked well in one part of the world could be dumped elsewhere on the globe under different environmental circumstances and be expected to yield identical results has been brought home forcibly. It was forgotten that the time factor involved in arduous experimentation, research, re-designing and pilot schemes could not be bought with capital. No attention was paid to the fact that the specialized human agency required to pioneer large-scale mechanization could not be replaced with capital. Then again initial and run-

ning costs were only partially recognized both in East and West Africa. The building of houses, bungalows, roads, railways, power stations, the supply of pipe-borne water and many other costs incidental to the projects could not be shared by various industries, but fell completely on the projects. The possibility of low agricultural yields was never fully considered. The inadequate returns from the Damongo Scheme in Ghana stem from these same factors. The economies of scale which it was hoped to achieve failed to take into account an accepted economic principle regarding size in agricultural operations. We have recently been reminded that though a European farm of 100 arable acres is more efficient than one of 40 acres, it does not follow that a farm of 1,000 arable acres is noticeably more efficient than one of 300 acres. In fact, efficiency may fall sharply as the size of the arable unit is extended beyond these limits and failure of the 30,000 acres unit farms of the East African Groundnut Scheme and the identical fate of the giant grain farms of the U.S.S.R. are due to the law of diminishing returns as it operates on size in agricultural production. Lessons of this nature are often lost on the world and in spite of the experience of the last two decades, the idea of giant farms has not died out and one African territory at least now talks of a £ 1,000,000 cocoa farm. What this means in terms of acres or in terms of supervision has yet to be made known.

The failure of large unit farms should not be taken as an endorsement of the perpetuation of the indigenous methods of peasant production. Indigenous agriculture as applied to field crops entails shifting cultivation and long periods of fallow. This in turn implies that a larger area of land is required to support an individual than would be the case under a system of intensive agriculture. It is worth recalling that though Africa contains about one-fifth of the total agricultural area of the world, only 5.9% of African land is arable. Nearly half of Africa is waste land and desert or what we designated as 'negative areas'. Forest accounts for 28.4% and natural and seeded grassland for 17.2% of the total land surface. There is, however, no immediate danger of land-hunger except in areas like Kenya and parts of South Africa where the settler problem has led to pressure of the African population on the limited land available in the 'native reserves'. At the risk of repeating ourselves it must be stressed that as Africa's population increases, pressure on the land will increase if no improvements in agricultural methods and techniques are forthcoming and if potentially productive land which is at present waste land is not brought under cultivation through irrigation schemes.

Measures for bringing waste land under cultivation are pretty well advanced in some African territories. The Gezira Scheme in the Sudan represents an outstanding example of an officially sponsored

large-scale mechanized agricultural development project designed for the communal peasant cultivation of crops both for subsistence and for the market. The scheme which dates from 1913 was operated until 1950 under a tripartite arrangement in which the Sudan Government, the Sudan Plantations Syndicate and the cultivating peasants acted as partners and shared in the proceeds in the ratio 2:1:2. The Government made itself responsible for the provision of land, payments of rents for the land, the construction, maintenance and operation of the Sennar Dam, the main canal and the main canalizations. The tenant-cultivator undertook to grow crops under the supervision of the Sudan Plantation Syndicate and to provide the necessary labour. The Syndicate was responsible for constructing and maintaining the subsidiary canalization, the cleaning and levelling of land, the provision and maintenance of buildings, machinery and stores needed for operating the scheme, the provision and working of ginning factories, the supervision and letting of land, the granting of loans to tenant-cultivators, and the collection, storage and marketing of the cotton crop. Since 1950, the Sudan Government has taken over the functions of the Syndicate and with it the Syndicate's 20% share in the proceeds. Over one million feddars (420,000 hectares) of land are involved in this scheme and the average income of the peasant-cultivators has in some years amounted to over £ 200.

Apart from the Gezira Scheme mention must be made of the Niger Development Project which represents an attempt by the French to adapt indigenous agriculture and land tenure to modern conditions. The project has gone forward under the tripartite arrangement involving the Government, the Niger Office (Office du Niger) and the peasant cultivators. The Office du Niger is a corporation created in 1932 and financed mainly by the French Government. The Corporation which is the largest semi-public organization operating in French African territories is charged with the responsibility of developing vast areas in the Niger bend for the cultivation of irrigated rice and cotton. The Corporation has constructed dams and irrigation canals, built processing factories, shops, houses and a cotton experimental station. In recent years the Niger Office has carried out pilot schemes involving the mechanized cultivation of rice. The Corporation's ten year development programme beginning 1949 includes a plan to put 50,000 hectares of land under cotton and a similar area under rice. It is hoped within this period to raise rice production from 8,000 tons to 90,000 tons and cotton exports from 360 tons to 10,000 tons per annum. In the case of the Gezira Scheme, the bulk of the tenant-cultivators are made up of local inhabitants, but in the Niger Development Project, the cultivators have been brought from distant areas to what to them are unfamiliar environments. Cultivators have been

drawn from the densely populated central Sudan region of French West Africa and settled in village units averaging 300 persons each. Ownership of the land allocated to them has remained vested in the state and these peasants have enjoyed usufruct rights only. Lord Hailey's view that tenant-cultivators in the Gezira Scheme work under a type of strict supervision which tends to give them a sense of instability and insecurity and prevents them from taking the fullest possible interest in their holdings can with greater justification be applied to the cultivators on the Niger Development Project. The Gezira Scheme entailed a very high initial capital expenditure, but in spite of this, the scheme has proved a most profitable undertaking and even before the Second World War, what was then the Anglo-Egyptian Sudan Government was deriving 25% of its annual revenue from the scheme. In the case of the Niger Development Project, however, poor cotton crop yields and high cost of production in respect of rice cultivation have so far tended to render capital outlay irrecoverable.

Quite apart from these major land-utilization schemes, the Belgians have in the Belgian Congo inaugurated a *paysannat indigene* policy as the proper complement to the large-scale mineral and industrial developments in the country. Hitherto attention had been concentrated on big business agricultural activities and large plantation units, but though these still continue to function fairly

successfully, the comparatively small return on capital employed in agriculture as compared with that engaged in mining and industrial development, has led the authorities to encourage peasant production. Village settlement schemes have been introduced and to ensure that sufficient lands are available for each family unit, the traditional system of shifting cultivation has been modified and controlled but not entirely abandoned. Here as in Nigeria, Sierra Leone, Ghana, the Gambia, Uganda and other African territories, the peasant who previously concerned himself only with subsistence agriculture is being encouraged to grow cash crops which are in demand on the world market. Export demand for primary agricultural products has been very strong in recent years and in many parts of the continent this high demand has led to a disproportionate share of the resources available being devoted to export crops. An imbalance between production for local consumption and production for export has often developed.

Food production has fallen short of the demand generated by increasing population, rapid urbanization and rising per capita income associated with high prices for primary products. In the Belgian Congo the authorities found it necessary to make food production the main pivot of the policy of *paysannat indigene*. This is perhaps not surprising since the pace of urbanization in the Belgian Congo has been rapid as illustrated by the fact that Leo-

poldville's African population increased from 45,000 in 1940 to 330,000 in 1955.

Nowhere in the continent has it been easy to assess the relative progress that has been made in production for export and production for domestic consumption. Complete and reliable statistics relating to external trade can be furnished almost everywhere in Africa, but estimates of total production are seldom available and rarely reliable. Even where export crops are involved one has to draw a clear distinction between crops which are not consumed locally and those which have local uses. While it is possible to equate exports of cocoa, coffee, sisal and rubber to total production, exports of sugar and oilseeds do not serve as indexes either to total production or to actual local consumption levels. Thus a statement to the effect that Africa in 1954-55 produced 25% of the world's output of groundnuts, 17% of the world's coffee, 58% of the world's sisal, 60% of the world's cocoa and 80% of the world's palm oil must be taken with the necessary reservations (see table, pp. 58-9).

External trade statistics since 1939 point to a considerable increase in the volume of Africa's main agricultural exports. Where no such increases are recorded the explanation invariably is either that there is an increased local consumption of the product or crop diseases have affected output as in the case of West African cocoa. There is nothing to suggest major increases in the output of agricul-

tural products earmarked for local consumption and where such increases have occurred, it is a moot point whether these increases have more than kept pace with normal population growth. The above point about the volume of agricultural exports is borne out by figures relating to the major agricultural exports of Africa's non-self-governing territories (see table, p. 60).

In the short time at our disposal, we can only touch certain limited aspects of our subject. It has not been possible for us to relate agricultural exports to the size of the total net geographical product in any given African territory or to stress the heavy dependence on a single crop. The dangers inherent in monoculture have so far not even been mentioned. The fact that in 1953 groundnuts represented 86% value of Gambia's total exports, rubber 67% of Liberia's exports and the further fact that Portuguese Guinea, French West Africa, Uganda, French Equatorial Africa, French Cameroons, Tanganyika, Nyasaland, Ethiopia, Ruanda-Urundi, Southern Rhodesia, Ghana, Zanzibar and Pemba, generally depend on single export crops to the extent of more than 40% of their total exports, brings home the vulnerability of the economies of many African territories arising out of price fluctuations of primary agricultural products. The vulnerability is accentuated by the fact that with but the exception of Ghanaian and Nigerian cocoa and of clove from the islands of Zanzibar and Pemba,

PRODUCTION OF SELECTED AGRICULTURAL COMMODITIES IN AFRICA

Crop	*Pre-war* (mainly average 1934-38)	1950-51	*In thousands of metric tons*			World total
			1951-52	1952-53	1953-54	1953-54
Cereals						
Barley	2,275	2,910	3,101	3,492	3,687	55,100
Maize	4,584	5,994	5,279	6,694	8,347	144,600
Millet & sorghum	9,274	10,674	11,483	12,578	12,019	55,800
Rice	1,561	2,508	2,380	2,683	2,678	171,000
Wheat	2,616	3,282	3,191	3,641	3,853	163,800
Beverage Crops						
Cocoa	484	519	460	513	480	740
Coffee	150	281	308	325	375	2,500
Tea	9	20	21	21	20	600
Wine	2,140	1,837	1,730	1,610	2,270	21,700

Vegetable Oils and Seeds						
Cotton Seeds	389	623	574	657	688	13,600
Groundnuts	1,685	1,982	2,681	2,730	2,876	10,800
Olive oil	69	80	100	80	140	1,310
Palm oil	. .	331	309	330	360	560
Palm kernels	. .	830	740	730	770	920
Seasame	104	271	148	176	177	1,770
Fibres						
Cotton (lint)	190	308	287	334	332	7,390
Sisal	155	215	245	260	280	480
Wool	153	68	68	78	83	1,010
Miscellaneous						
Citrus fruits	325	812	890	807	921	16,800
Sugarcane	1,014	1,445	1,340	1,501	1,589	21,700
Tobacco (unmanufactured)	70	130	130	150	170	3,330
Rubber	12	56	74	75	78	1,755

SOURCE: "Review of Economic Conditions in Africa", *Supplement to World Economic Report*, 1949-50, United Nations, p. 25.
"Economic Developments in Africa 1954-55", *Supplement to World Economic Survey*, 1955, p. 7.

MAJOR AGRICULTURAL EXPORTS ON NON-SELF-GOVERNING TERRITORIES IN AFRICA

Commodity	*Percentage of World Exports in* 1948-50	*In thousands of metric tons*			
		Average 1934–38	*Average* 1948–50	1951	1952
Palm products (Oil equivalent)	71	491	593	589	626
Cocoa	59	407	411	418	389
Groundnuts & oil (Oil equivalent)	56	302	318	227	300
Olive oil	34	42	36	20	22
Sisal	11	40	41	49	44
Cotton seed & oil (Oil equivalent)	8	16	10	13	13
Citrus fruit	7	10	121	125	124
Coffee	9	77	168	187	206
Cotton	6	112	144	150	172
Bananas	6	95	125	161	177
Sugar (mainly raw)	4	305	423	532	530
Tobacco	3	10	17	22	17
Cereals	2	585	663	734	797
Rubber	1	6	17	35	36

SOURCE: *Special Study on Economic Conditions in Non-Self-Governing Territories* (United Nations Publication, 1955), p. 77.

the territorial output is rarely large enough to influence world prices. It goes without saying that there is real need for a diversification of agricultural production in a number of African territories.

In the French African territories, minimum producer prices are guaranteed for the major agricultural exports and in some cases special funds derived from export duties are used to promote the cultivation of particular crops and to maintain prices wherever such a step is found feasible and necessary. Cotton and cocoa in French Equatorial Africa and groundnuts, cocoa and coffee in French West Africa have been singled out for such treatment. The French authorities have in recent years aimed at developing oilseeds resources within the French Union and as part of this policy they have protected the French groundnut oil and rapeseed oil market by imposing restrictions on the importation of competing oils from foreign sources. The French Government fixes the minimum price to be paid to the groundnut producers and, in the years 1950-53, the price for groundnuts (shelled and delivered in Marseilles) was above the world groundnut prices from other origins. In the Belgian Congo the marketing of cotton and palm products are subject to special marketing arrangements which have made it possible for the *Caisse des palmistes* and the *Caisse de reserve cotonniere* to accumulate considerable reserves. The Maize Control Boards in British East Africa and the Federation of Rhodesia

and Nyasaland guarantee prices to producers in the same way as the French in North Africa guarantee minimum producer prices for wine, cereals and other crops which are being specially encouraged.

The price stabilization schemes which during and since the Second World War have been operated in United Kingdom territories in respect of cocoa, coffee and other agricultural products have come in for a great deal of comment in the course of the last six years. Though we speak of 'price stabilization schemes', it must be noted that in the official policy statements marking the establishment of marketing boards, the concept of stabilization was never clearly defined and it remains a moot point whether stabilization referred specifically to prices or money incomes or real incomes. Stabilization of any one of these measurements may lead to the destabilization of the other two because of changes in import prices or fluctuations in the size of the crop. In the past, an increase in the size of the crop unaccompanied by an increase in demand created a stabilization of money incomes through a drop in price.

The monopolistic role of statutory marketing boards in the economic life of some of the United Kingdom or ex-United Kingdom territories cannot be over-emphasized. In 1951, marketing boards in Nigeria controlled 69% by value of all exports and 78% of all non-mineral exports. The boards in Ghana controlled 69% by value of all exports and 90% of all non-mineral exports. The prices

paid to producers affect (*a*) the level of incomes, (*b*) the people's standard of living, (*c*) the community's ability to save, (*d*) the balance of payments (through influence on flow of incomes and consumption of imports), (*e*) production of different crops for both internal and external markets, and (*f*) the accumulation of reserves by the boards. It will be impossible for us to examine briefly any but a few of the economic consequences of fixed producer prices. The aspect of statutory board operations to which attention has been directed of late relates to the degree of compulsory saving associated with the stabilization schemes.

The statutory produce marketing boards offer a substantial incentive for maintaining and increasing production by guaranteeing prices and marketing facilities. In the Federation of Nigeria, the production of 'special' grade palm oil increased from 1% in 1950 to 50% in 1955 mainly because of a price differential which placed a premium on the 'special' grade. The price policies of the various marketing boards meant that between 1939 and 1951, cocoa producers in Ghana and Nigeria received 55% and 54% respectively of the commercial values of their products. Since 1951, the tendency has been to increase the rate of forced saving arising out of the sale of cocoa. Between 1942 and 1950 groundnuts and palm kernel producers in Nigeria received 37% and 45% respectively of the commercial values of their products. In Uganda, compulsory saving

arising out of the production and sale of cotton and coffee for the period 1948 to 1953 amounted to £44,475,000 or nearly five times the total African wage bill in Uganda in 1952 and a little more than the total African cash incomes for that year. It has been argued that if the commercial price had been paid over to the producers in West and East Africa, the larger cash incomes of the producers would have been spent on increased consumption and that there would have been little effort to invest the additional funds. The withholding of part of the full realized price is held to constitute forced saving out of which new capital assets would be obtained. There is a fundamental presumption that the state would in all cases spend the money more wisely than the individual. Government expenditure in a number of underdeveloped countries does not warrant such a thorough-going presumption. The argument assumes that the disposition to save is undeveloped amongst Africans and though one may find on their limited use of savings bank as proof of such an assumption, the fact that Africans in both East and West Africa have been ready to save money towards the capital costs of new water installations, community centres, new farms, and medical and educational services negates the above assumption.

High prices constitute the prime incentive for the maintenance, improvement and extension of productive capacity. A policy of prolonged payment

of producer prices considerably below commercial values cannot fail to affect adversely the ability to maintain or increase productive capacity. The principal competitors of the East and West African producers have for the past ten years received prices which are much nearer commercial values and this has both enabled and induced them to expand production. The unilateral niggardly price policy being pursued in West and East Africa will in the long run undermine the competitive position of these territories.

It has been argued that the Ghana Cocoa Marketing Board which is the most important of the produce marketing boards has had a stabilizing effect on incomes and prices but others including Paish and Bauer have disputed this point and argued in turn that quite apart from an overall destabilization of incomes occasioned by the Board's activities over the years, inter-seasonal producer prices have also been destabilised in recent years. As a result of an infinitesimal drop in its substantial reserves during the 1948-49 cocoa season, the Board reduced the producer price for the next season by roughly 31%. This reduction in the basic producer price in September 1949 was the second largest reduction in price from one season to the next at least since 1922, which is the first year of the regular series of prices quoted in the Nowell Commission Report which was published in 1938. Again, the increase in the price of cocoa in Septem-

ber 1950 was the largest seasonal increase on record. These two points have established fairly convincingly that the price policy of the Board has not achieved stability in any significant sense and if anything, the reverse has been the effect of the Board's price fixing policy.

It can, however, be asserted with much justification that the price policy of the Ghana Cocoa Marketing Board has eliminated the weekly and sometimes daily fluctuations in the prices offered to the producer before the Second World War. Then again the Board in its quasi-monopoly position as a seller of cocoa has been able to sell cocoa to greater advantage than would have been the case had there been a multiplicity of sellers as was the situation in the pre-war days. The policy of building up a huge reserve, though it has been carried to a stage which is beyond what would reasonably be required for stabilization purposes, has had the effect of limiting to some extent purchasing power in the hands of the consumer and thus minimizing certain inflationary tendencies.

In recent years the activities of the Ghana Cocoa Marketing Board have become part of Government's fiscal policy and the original motives behind the establishment of the Board appear to have been partially discarded. The Board has been criticized for fixing the basic producer price far below what can be justified by the prevailing world price for cocoa and the accumulated reserves. To this, the

answer has been that very high basic producer prices will in the absence of large quantities of consumer goods create inflation. This argument held good in the immediate post-war years when there were marked world shortages and lack of shipping space. The justification for keeping the producer price down at present appears to arise out of an anticipated pressure on shipping space due to the Government's development plan and the desire to direct a substantial part of the world price of cocoa to general revenue for development purposes.

In August 1954, the Gold Coast (Ghana) Government conscious of the destabilization occasioned by the marked variations in inter-seasonal prices decided to peg the price of cocoa at the September 1953 producer price of 72/- a load of 60 lbs. At a time when the world price for cocoa stood at 300/- a load, it was not unnatural that there should have been protests from at least a section of the farmers. The price in Ghana was far below the prevailing Nigerian producer price of 105/- a load and the Sierra Leone price of 150/- not to mention prices ranging from 120/- to 200/- per load payable in the adjacent French colonies. A lot of expense has had to be incurred to prevent smuggling over the borders into French territories. What one is inclined to question is not the decision to peg the price of cocoa, but whether it should have been done at such a low level bearing in mind the commercial value of cocoa at the time and the size of the stabili-

zation fund. The fact that the state expected to raise at least £40,000,000 primarily for development purposes should not cloud the issue. The issues involved here are far too complex for a simple straightforward economic analysis. P. T. Bauer is right in saying that for good or evil the boards must be seen as instruments for the socialization of peasant production in West Africa. He holds that suggestions that the boards are devised for price stabilization or that they are individual commercial organizations only obscure their nature and function. I agree with him that this fundamental aspect of statutory board marketing, policies and operations raises political and social issues of the widest significance, but an attempt to probe into these issues would be inappropriate not only because socialization of saving and socialization of peasant production have not been advanced in support of the policies of the boards, but also because the issues themselves fall outside the scope of organizations established to promote the interests of West African agricultural producers by means of price stabilization.

The subject of forced saving received the attention of the East African Commission which issued its report in 1955. The Commission reported that in the course of their travels they were "constantly informed that there was a shortage of capital for small traders; yet if producers had been able to increase their incomes they would have been able to lend some of this additional income to others

for productive use in trade and other enterprises. Those who argue that loans would not be made, or more generally that the African is incapable of utilizing resources productively are in effect arguing that a transition from the restrictive subsistence economy to the modern exchange economy is not possible except under compulsion. But to argue in this way is to argue contrary to the observed facts that the indigenous peoples in many areas are making great efforts to acquire money incomes and that they show considerable aptitude in utilizing their money resources efficiently over a wide range of activities."

To end with, it must be admitted that some degree of compulsory saving for development purposes is necessary; however, care must be taken not to blunt incentives. Compulsory saving which is both prolonged and excessive is apt to militate against the spending, saving and investment potential of producers and to depress a developing economy. Where any African state holds that it is its duty to establish basic services and to create a favourable climate for investment and that it is for private enterprise to carry out the type of investment which would lead to an increase in the national income, forced saving has of necessity to be limited unless it is proposed either to make use of foreign private capital for the bulk of local productive investment or to have the state acting as the main lender of capital to local entrepreneurs.

III

TRADE AND INDUSTRY

THE DEVELOPMENT of a modern commercial economy in Africa can be said to be of recent origin. This does not mean that we endorse what appears to be the current view that no commercial economy existed in Africa before Europe's penetration into what has been styled the 'Dark Continent'. 'Legitimate trade' existed in most parts of Africa before the Slave Trade and even the Slave Trade did rank as a commercial activity. It may be said that the Slave Trade era which lasted in parts of Africa from 1444 to 1890 was characterized mainly by the barter system; however, a money economy did exist in the greater part of North and West Africa before 1591 and if recent archaeological finds are any guide, East and Central Africa cannot be excluded from the picture. Though we speak of a modern commercial economy in respect of Africa, we do recognize that we are still actually dealing with a dual economy, an economy which has both a subsistence sector as well as a money sector.

In a number of African territories, the subsistence sector of the economy still looms large. For the period 1950-52, the imputed money value of subsistence activities expressed as a percentage of total

net geographical (money) product was roughly as follows:

Tanganyika	65
Kenya	29
Uganda	32
Ghana	33
Belgian Congo	22
Northern Rhodesia	5½
Southern Rhodesia	3½
Union of South Africa	1½

In the case of Southern Rhodesia the figure of 3½% just given tends to exaggerate the degree to which a money economy has gained ascendancy over the local indigenous subsistence economy, for it is to be noted that 56% of Southern Rhodesia's wage-earning labour force in 1951 represented immigrant labour. We must however stress the significant difference in the subsistence pattern between the mineral areas such as the Union of South Africa, Southern Rhodesia and Northern Rhodesia and the non-mineral areas such as Tanganyika, Kenya and Uganda.

We shall concern ourselves here only with the dominant aspects of trade and industry in Africa and for that reason we shall not attempt a study of the relative decline of direct African participation in external trade. We shall mention in passing the oligopolistic characteristics of West African trade

whereby some six or seven extra-territorial companies handle between two-thirds and three-quarters of a large and varied trade. It has recently been pointed out that in normal private enterprise trading, so high a degree of concentration is exceptional for such a diverse and extensive market as that of the West African territories which judging by recent records engage in an external trade of between £ 300 and £ 400 m. per annum, ranging over forest products, agricultural crops, processed foodstuffs, manufactures and raw materials including minerals.[7] Several factors have contributed towards the excessive concentration of trade activities in the hands of a few extra-territorial companies and amongst these factors we shall list: (1) Drastic attempts by expatriate companies to push out Africans from direct participation in external trade ; (2) Reluctance of extra-territorial banks to grant credit and accommodation facilities to African businessmen ; (3) Cut-throat competition amongst expatriate companies themselves leading ultimately to failures, amalgamations and market-sharing agreements ; (4) The development of a system of sole agencies ; (5) Conditional sales and the pass-book system. It will take us too much time to examine all these factors in any detail, but it must be stressed that Nigeria has tended to counteract the prising out of Africans from direct participation in external trade by developing indigenous banks. The Nigerian success in the

banking field was largely the outcome of national faith and an uncompromising determination. The pioneers of indigenous banking in Nigeria had on two occasions to wind up business and even the first auditors' account on the winding up of the company should have been sufficient to destroy public confidence in the directors, but so convinced were the Nigerians of expatriate sabotage of the indigenous enterprise that the directors came back a second and yet a third time and eventually succeeded in establishing a healthy banking institution. In other African territories indigenous business houses have not been able to reassert themselves to the full and whatever control has been gained over aspects of external trade is due to the state operating through statutory marketing boards, guaranteeing funds for co-operative banks and setting up in commercial banking. Ghana is a case in point. The overall effects of oligopoly and monoply trade tendencies on the part of expatriate companies and statutory marketing boards will not be examined at this stage. The role of indigenous women in internal trade and their domination of the market in foodstuffs as in Ghana is an interesting aspect of our subject which we shall leave out of the present survey. Our preoccupation with the money sector of the economy leads us to focus attention on external trade.

The money sector of the economy is in the main export and import orientated. This is true both of the mineral and non-mineral producing areas in

Africa and is but a reflection of the so-called 'colonial type' of foreign investment. The so-called 'colonial type' of investment merely implies that foreign investment constitutes an outpost of the advanced creditor economy whose needs dictate the nature and direction of the investment. The investments may take the form of an outlay on ships, sugar estates, slaves and trading posts as illustrated at one time by the complementary economies of Africa, the West Indies and Britain. Investments may be in lubricants such as West African oil palm products which became important commodities immediately after the Industrial Revolution in Britain. The need for raw materials for metropolitan textile industries may create a demand for investments in cotton plantations in colonial territories. The shortage of fats in Europe may result in an East African Groundnut Scheme. The industrial needs of advanced creditor countries may lead to the exploitation of valuable mineral resources in colonial territories. This type of investment is not peculiar to colonial territories, but is to be found in all underdeveloped countries. The pattern of American investments since the Second World War shows that investments in underdeveloped countries have gone primarily into extractive industries working mainly for export to the advanced industrial centres. In an era of currency restrictions, it may be argued that exchange control risks and transfer difficulties are

minimized if investments are in undertaking catering for export rather than for domestic markets in underdeveloped territories. A study of investments in earlier periods, however, indicates that foreign investments in export industries were no less marked. This was true of British investments in the nineteenth century as it was true of American investments in 1920s when exchange control was non-existent and when transfer difficulties were seldom considered.

American investments in developed and underdeveloped territories in 1948 showed that 59% of total investments in underdeveloped countries went into extractive industries, 16% into public utilities, 22% into distribution and manufacturing for both export and domestic market while the remaining 3% went into miscellaneous items. Investments in advanced countries showed that extractive industries accounted for 23%, distribution and manufacturing 59%, public utilities 7% and miscellaneous items 11%. These figures merely stress the differences in the pattern of foreign investments in developed and underdeveloped countries and bring into focus the concentration on extractive industries (chiefly agriculture and mining) and on the export markets so far as investments in low-income countries are concerned. It is possible to read too much into the facts and to see in every aspect of the pattern a sinister hand ready to exploit underdeveloped territories and to turn

their inhabitants permanently into hewers of wood and drawers of water. No one can claim that there has not been some exploitation of underdeveloped territories, but it must be admitted that where the markets in developed territories are assured, it is not very tempting for the foreign businessman to seek to create markets in underdeveloped countries for a locally processed material. Markets in low-income countries present real difficulties for the investor not because low-income countries lack populations with real wants and desires, but because effective demand is lacking.

Opportunities for investment appear to be limitless in underdeveloped territories. The very high premium or usurious rates paid for capital in capital-poor countries may lead one to conclude that the marginal productivity of capital and therefore the yield of capital will be high. In the absence of risks and other extraneous impediments, one would expect capital to flow readily from developed to underdeveloped territories. In actual fact we find that the absence of adequate public services which serve as a framework within which economic growth can take place makes it difficult for the high potential yield of capital in capital-poor countries to be readily realized, unless it is possible for a number of projects to share the cost of laying down essential basic services which the average businessman in a developed economy takes for granted. What therefore pass for social services and public utilities

in developed economies tend to enter into private business calculations in underdeveloped territories and though a particular investment may reflect a high social marginal productivity of capital, it is the high private marginal productivity of capital which will determine whether the foreign investor and for that matter the local investor should invest his capital in a particular venture.

Cases may arise where a 'perverse' flow of capital may be stimulated because the existence of a prosperous mass market in a developed country may lead to a flow of capital from an underdeveloped or capital-poor country in which investment incentives are depressed. Examples of 'perverse' flow of capital can be found in the Central Government and Statutory Board investments of surplus funds in certain African territories, notably Ghana and Nigeria.

Professor Frankel in his special study, *Capital Investment in Africa* has shown that in 1936 the highest levels of cumulative investment per capita in the African continent were to be found in the mineral regions, namely the Union of South Africa and South-West Africa (£55.8), Southern and Northern Rhodesia (£ 38.4) and the Belgian Congo (£13.0). Countries like Nigeria and French West Africa which possess limited commercially exploitable mineral resources were shown to have very low per capita investment figures amounting only to £ 3.9 and £ 2.1 respectively. Frankel was

concerned with external capital and, therefore, took no account of capital accumulation and investment within the indigenous economic framework. In any case, it is doubtful if an academic exercise relating to capital accumulation and investment within the indigenous economy would have been rewarding because of the absence of a proper basis for statistical compilation.

Investment possibilities are never even for two countries possessing similar natural resources and enjoying similar climates. Personal skills, scientific knowledge and individual capacity in any given community are as essential to economic growth as the availability of natural resources and the capital to exploit them. In the special mineral regions of Africa, personal skills, scientific knowledge and capital were furnished by the settler elements and by investors from the settlers' country of origin who regarded the mining areas as outposts of their metropolitan economies. In these mineral regions there was universal dependence on black labour for unskilled work. Direct and indirect methods were employed to force or attract African labour into the mines and into the ancillary services that had been created. The readiness of foreign investors and settler elements to exploit the dual existence of a cheap labour force and valuable mineral resources determined the rate of capital investment in the mineral areas and also the rate of economic growth as reflected by the overall per capita income of the population.

There is a superstition abroad that the exploitation of Africa's mineral wealth owes its origin entirely to European enterprise in the late nineteenth century and early twentieth century. It has been estimated that Ghana (Gold Coast) exported £ 600,000,000 worth of gold between the years 1471 and 1800. The gold was produced solely by African enterprise, labour and capital. Bosman writing in 1705 stated that it was doubtful whether any European had ever seen a single mine in the country as these mines were everywhere most carefully guarded. Indigenous mining has not ceased on the African continent and it is worth noting that even though Ghana produced by weight 10% of the world's diamond output in the period 1951–54, more than 50% of this was the result of African enterprise, capital and labour employing purely indigenous method of production. Production trends during the period 1950–55 show that African participation in diamond mining in Sierra Leone is on the increase.

Mining is an old industry in Nigeria, but since the introduction of modern capitalist methods of mineral production, indigenous African mining enterprise has declined partly because of the virtual monopolization of known deposits by Europeans, partly because of the low technical knowledge of native Nigerians and partly because of the competition of European goods which have tended to prise out of the market the finished end-products of the

indigenous mining industries. In 1884, Europeans trading in Nigeria observed that the tin used by the Hausas for tinning their brassware was mined and smelted by Nigerians in the Naraguta district. By 1923, however, the indigenous tin mining industry had completely disappeared. Smelting of surface iron-stones as local sources of iron has been discontinued in most areas of Nigeria because of the competition of imported iron bar products. The local iron smelting industry however continues in Bida and Bamenda in the British Cameroons, but the indigenous mining of galena for cosmetic purposes at Abakaliki in Ogaja and Arafu, south of the River Benue has ceased as a result of European enterprise. Even the local salt making industry in Nigeria has suffered an eclipse because of the introduction of imported salt.

When the British Government revoked the charter of the Royal Niger Company in 1899, the Crown acquired the company's mining rights in Northern Nigeria but undertook to pay the company half the royalties on all minerals for a period of 99 years. During the fiscal year 1947-48 alone the United Africa Company (the successors of the Royal Niger Company), received £ 257,469 as its half share in the royalties from Northern Nigerian minerals. In February 1950 the U.A.C. received one million pounds sterling from the Nigerian Government as compensation for the termination of the 99 years agreement. Control of all minerals

in the Northern Territories of Ghana is vested in the state. In parts of French Africa, Belgian Congo, Northern and Southern Rhodesia there is a trend in favour of state ownership and control of mineral deposits. State monopolies over potassium have been in existence in French Africa since January 1937. In the same territories state monopolies over radioactive substances are governed by a decree of 5 April 1946 and a law of 3 April 1950.

In the Belgian Congo, the government has made no efforts to reserve any special rights over radioactive minerals and experiments in state gold mining as at the Kilo-Moto gold mines have been given up. The government, however, has acquired shares in a number of small and large private mining companies and in the case of the Comite National du Kiyu, the Comite Special du Katanga, the Societe de Mines d' or de Kilo-Moto and la Forminiere, the state has controlling interest. In Kenya, the British Government through the Colonial Development Corporation's subsidiary company, the Nyanza Mines Limited, is endeavouring to promote the production of copper, gold and zinc in the Macalder mines. A parallel and more significant development is to be noted in the case of the French who in 1948 established a public corporation, the Bureau Minier de le France de' Outre' mer, with a capital of 700,000,000 francs to reinforce the work of the Department of Mining of the Ministry of French Overseas Territories and to promote prospecting

for minerals and the development of mines. The overriding interest of metropolitan countries in the mineral resources of Africa is clearly brought out in the *Second Report of the Organisation for European Economic Co-operation* (Paris, 1950) where it is stated that "For many years to come, the main industrial activity in Africa will be the exploitation for export of its rich mineral deposits."

The Union of South Africa which is the leading mining country of the continent realized £228,000,000 in 1954 from the sale of primary minerals. In 1954 Africa's output of selected minerals expressed as percentages of world output was as follows:

Antimony	41.7
Chrome	40.3
Cobalt	80.9
Copper	27.3
Gold	58.7
Manganese	36.0
Tin Concentrates	13.9
Asbestos	17.5
Phosphate rock	32.1
Diamonds	98.6

Africa is however very deficient in coal and iron resources and produced 3% and 5.1% respectively of the world's output of these minerals in 1954. In arriving at the above percentages, the output of the U.S.S.R. in respect of all minerals, China's output

in respect of antimony, gold, coal and iron ore, Rumania's output of gold and silver and Czecho-slovakia's output of antimony and silver have been excluded.

The exploitation of the mineral resources of Africa has in many instances contributed materially towards a diversification of the economy by increasing the range of exports and thus minimizing the vulnerability of the continent's rudimentary economies by offsetting part of the weak economic position of her primary producing areas which depend mainly on the exchange of raw materials for finished or manufactured goods. The export of minerals has in the main increased the source of foreign exchange for the territories concerned and has further increased the purchasing power of the local communities and made it possible for them to import both capital goods and consumer goods. It is, however, possible to exaggerate the benefits which accrue to a country as a result of the exploitation and export of its wasting asset. The diversification of the economy which may arise out of the addition of minerals to the list of exports, can be carried a stage further by the local processing of minerals. The processing of phosphates into fertilizers in Algeria, Morocco and Tunisia, the processing and refining of copper in the Belgian Congo and the Copper Belt, the making of cement, bricks and tiles out of local sand and limestone in most African territories are but a few examples of the type of

diversification that can take place. In the Union of South Africa, Northern and Southern Rhodesia where industrialization has made much headway, the processing of raw materials has been carried a stage further and the production of finished manufactured goods for both the domestic and export markets has become a normal feature of the economies of these territories.

We should at this stage say something, however brief, about problems of industrialization in Africa. In approaching the problems, we recognize that any programme for industrialization and capital formation should be linked up with measures for increasing agricultural productivity. Since the demand for manufactured goods is in general less urgent than the demand for basic food needs, it is safe to assume that unless a community is assured of its basic food requirements, the productivity of industrial workers would be relatively low. The labour that is diverted from agricultural pursuits into industry has still to be fed and supplied with raw materials. In the circumstances, the development of the non-agricultural sector of the economy is to be seen as something more than a mere expansion of manufacturing industries. Industrialization must be considered merely as part of the total process of economic development or as an aspect of the development of agriculture, mining, transport, power and all other sectors of the national economy. In the case of surplus-labour countries an expansion

of industrial production may not necessarily require the expansion of agricultural production provided the increased industrial output is backed by a growing export of manufactures. Even here agricultural production would need to be stimulated since such a step would render it less necessary to rely too much on an export-drive in respect of manufactured goods.

No country in Africa (not even Egypt) can be described as a surplus-labour country. But in Africa as in other underdeveloped areas, the three sectors of the economy whose balance is vital to sound economic development are agriculture, secondary industries and basic equipment or what others would describe as the economic infra-structure of common services and facilities such as water, power, transport and communication which serve as major props to a specialized exchange economy. In sum, it is essential that all sectors of the economy should grow simultaneously, so as to ensure maintenance of a proper balance between agriculture and industry, and between production for export and production for the domestic market. In most African countries, agricultural output is the main determinant of the standard of living and agricultural incomes determine the size of the industrial market. The point is often made that agricultural production must be raised parallel with the expansion of manufacturing industries where secondary industries cater for the domestic market, but

where industrial output is intended for the export market, agricultural production must be increased prior to the expansion of secondary industries. Agricultural output has to be stepped up in the face of a relative decline in the rural labour force, hence the need for something approaching a revolution in production techniques in the agricultural sector of the economy as a pre-requisite of rapid industrialization.

The main obstacles to industrialization in Africa as indeed in other underdeveloped territories are (*a*) the unsuitability or inadequacy of basic economic facilities, (*b*) social structure, institutions and social values which are inimical to economic growth, (*c*) the paucity of technical knowledge and (*d*) limitations imposed by international conditions. It will not be possible in the course of this survey to deal at length with any of the listed obstacles to industrial development. So far as the inadequacy or unsuitability of basic economic facilities is concerned, cognizance must be taken first of the availability, cost and effectiveness of the transportation system prevailing in the continent for these factors determine not only the correct choice of location, but also the cost of assembly and distribution. Africa as we noted earlier, produces only 3% of the world's coal output and furthermore her known oil resources have yet to be commercially exploited. This means that for the present at least, the absence or inadequacy of fuel and power constitutes a

serious obstacle to industrialization. Attempts are being made to meet the continent's power and fuel requirements through the development of hydro-electric power and already a number of hydro-electric schemes have been executed or are in the course of execution. Ghana's Volta River Project (which is perhaps the most thoroughly investigated project in Africa today) and the Belgian Congo Project at Inga on the Lower Congo are amongst the many hydro-electric schemes which await execution.

The proposed barrage at Inga is estimated to have twelve times the capacity of the United States of America's Grand Coulee Dam which is today the biggest in the world. Inga's estimated power potential of 200,000 m. kWh. per annum represents a fifth of the U.S.A.'s annual electricity consumption and more than the United Kingdom's total annual consumption. It is hoped that once the technical problems attendant on Inga have been resolved and the huge capital needed has been found, the Lower Congo could be turned into the African Ruhr with iron and steel industries, paper factories and uranium plants operating on a full scale. In this connection, it is perhaps pertinent to add that zinc processing plants, factories for metal packing materials; chemical, electric cables and building materials plants; tobacco, vegetable oils, textile, leather-goods and shoe factories; breweries and diaries are amongst the many industries that have

already been established in the Belgian Congo. The finance and skills needed for the operation of these industries have been furnished by Europe, but the autochthonous population is beginning to edge its way effectively into all these industrial activities.

Attention has already been called to the need to develop Africa's transport and power facilities as a necessary condition for any rapid programme of industrialization. The development of secondary industries also depends to a considerable extent on the size of the local market. The size of the local market is seen ultimately as a function of the national income and its distribution, but in the initial stages of industrialization, it is realistically conceived in terms of the machinery for taking the product to the potential consumer. In most parts of Africa, the commercial sector is inadequately equipped to handle the output of domestic industries and in the circumstances the absorptive capacity of what is in effect a very small domestic market is not even fully realized. The size of the accessible market is often reduced by the inadequacy of the commercial sector and this in turn means that the factory is in most cases compelled to organize the distribution of its products and to carry large stocks of finished goods, raw materials and consumable stores. The absence of ancillary industries which might in certain cases be counted on to utilize the waste by-products of the factory and the lack

of efficient repair facilities increase manufacturing costs as effectively as the need to carry large stocks.

In Africa, imperfect occupational specialization is largely reflected by limited domestic markets, since the division of labour everywhere is limited by the extent of the market. There is general agreement that underdevelopment whether in Africa or anywhere else in the world is linked up with narrowness of markets arising out of lack of capital for storage, high transport costs and the poverty of potential consumers. The narrowness of domestic markets has an inhibiting effect on trade, peasant farming and the development of skills. Large heavily capitalized business undertakings in Africa often find it imperative to spread their operations over a wide range of economic activities, and the same concern may be engaged in the import and export trade, wholesale and retail business, plantation agriculture, shipping, manufacturing and mining. While the need to ensure commensurate economic returns on large capital outlay is a major reason for this diffusion of entrepreneural ability, the desire of established firms to keep out new entrants may be an equally valid reason.

A detailed analysis of the problems of industrialization cannot be attempted here. Though it is generally recognized that the process of industrialization in Africa is being retarded or inhibited by the shortage of entrepreneural and managerial

skills, this brake on industrial growth can be offset in the short run by the importation of foreign entrepreneurs and managers, and in the long run by the education of the autochthonous population and by changes in the social structure. Most countries in Africa suffer from a serious shortage of capital in relation to the land and labour resources available; on the other hand a tradition of industrial investment is often absent, and the lending of money, without enlightened supervision, to inexperienced local capitalists who are deficient in entrepreneural ability and managerial skills has in many instances meant wastage of the very funds that African countries must of necessity conserve.

In spite of the many obstacles to rapid economic development and more specifically to industrialization in Africa, there is sufficient evidence to show that economic growth is taking place in almost every part of this vast continent. It is generally accepted that countries in which the capital-income ratio or the ratio between the value of the existing fixed capital and the national income is of the order of 4 or 5:1, annual investment of 4 or 5% of national income is required merely to maintain the existing level of capital assets per person, if the population happens to be increasing by 1% per annum. Where the population is increasing by 2% per annum as in Egypt, basic pre-expansion investment would be anywhere between 8% and 10% of national income. If population is increasing at the phenomenal rate

of 3% per annum as has been the recent experience of Ceylon and Puerto Rico, the pre-expansion investment required is 12% to 15% of national income. Only a few countries in Asia or Africa have a rate of capital formation as high as 15% of national income. In Africa as a whole, population is increasing at the rate of 1 to 2% per annum, though in many areas the growth rate is nearer 1% than 2%. In 1952, gross capital formation expressed as a percentage of gross domestic product was Nigeria 7%, Ghana 14%, Belgian Congo 27%, Northern Rhodesia 31% and Southern Rhodesia 45%. The comparative figures for a few non-African countries are Australia 41%, Ceylon and the United Kingdom 13%, Burma and France 18%, and the United States of America 38%.

In attempting to draw comparisons between a few African countries on the one hand and some underdeveloped and developed countries on the other, problems of measurement in respect of national incomes and capital formation necessarily arise. There is a general impression that the conventions used in calculating the national income overstate the rate of growth of real income in African and other underdeveloped territories mainly because the monetary sector of their economies expand at the expense of the subsistence sector. Services, which were formerly either excluded entirely or only partially included in the national income, are now included in full because they have

now been transferred from the subsistence to the exchange sector of the economy. One serious omission affecting peasant production for both the export and domestic markets relates to the failure to include time, efforts and money spent on the creation, upkeep, improvement and extension of peasant holdings in the conventional estimates of capital resources and capital formation. Since Africa is predominantly a continent of peasant farmers, the failure to include in the capital formation estimates investment in the millions of acres devoted annually to peasant production of major cash crops such as cocoa, kola nuts, cotton, groundnuts and maize has been held by some economists to account for the superstition abroad that the African peasant is unable or unwilling to take a long term view of economic matters. This is a subject which we cannot profitably pursue at this stage. Whether or not national income, capital formation and the rate of economic growth in African territories are being overstated, the fact remains that industrialization has made some headway in the continent and it may be worth our while to take a closer look at a specific African territory in which industrialization is fairly advanced.

To end this survey, a little more attention will be devoted to the Union of South Africa because it happens to be the leading industrial country in Africa. South Africa's economic development has been stimulated by the injection of foreign capital

into that country's economy. Prof. S. H. Frankel has estimated that between 1870 and 1936 about £520,000,000 of foreign capital was invested in the territory. Until the Second World War, South Africa was in most years a debtor-deficit country, but by the end of the war, she had become a debtor-surplus country. The gold and foreign exchange holdings of the South African Reserve Bank rose from £46,000,000 in August 1939 to £267,000,000 in December 1945. The reasons for this were: firstly, that the United Kingdom made substantial payments to South Africa on defence account; secondly, gold production and commodity exports were higher in value than before the war; thirdly, the effects of rising import prices were largely offset by a fall in the volume of imports; and fourthly, considerable sums were brought into the country by evacuees. An external public debt of £73,000,000 was repaid during the war and there were substantial transfers of South African gold-mining shares and securities from United Kingdom to South African ownership.

It was hoped that the liquid reserves accumulated during the war, together with current earnings of foreign exchange would be sufficient to finance an inevitable post-war boom without fear of any possible embarrassment. Events turned out to be otherwise. The anticipated high level of imports turned out to be abnormally high and persistent. From an average of £81,000,000 in the seven whole

prosperous years before the war, imports rose to £212,000,000 in 1946, £299,000,000 in 1947, £351,000,000 in 1948, dropped slightly to £312,000,000 in 1949 but rose to £467,000,000 in 1951. The value of commodity exports and returns from gold production fell far short of imports. There was a large deficit with both the sterling and the non-sterling areas. The large deficit on current account was financed by new borrowings and by allowing the Reserve Bank holdings of gold and foreign exchange to run down. In 1947 and 1948 when the inflow of capital was at its peak, it was estimated that £260,000,000 of private capital found its way into South Africa. These capital imports were made up partly of genuine investment capital seeking profitable investment in the newly opened gold mines and other development projects and partly of 'hot money' seeking safer refuge. Repatriation of balances held by South African business houses overseas must also be taken into account. From about May 1948 there was a drying up of capital imports and between March 1948 and August 1949 the Reserve Bank lost no less than £214,000,000 in gold and foreign exchange. In August 1949, the Reserve Bank's gold and foreign exchange reserves stood at £54,000,000 compared with £46,000,000 in August 1939. The country's reserves were almost back to the position they had reached ten years earlier.

Apart from the abnormally high level of imports, the basic causes of the unfavourable balances were

the fall in gold production and an adverse movement in South Africa's terms of trade. Population growth and an increased tempo in investments in steel and allied industries, the opening of new gold mines and the provision of ancilliary facilities and services led to a very high demand for both consumer goods and capital goods. It has been suggested that the South African Government was reluctant to take quick action because of the General Election in May 1948 and that the incoming Government was equally reluctant to act immediately after taking office. In November 1948, the South African Government introduced a system of rationing foreign exchange for imports from the non-sterling area and at the same time prohibited the importation of non-essential goods irrespective of their origin. The drain on gold and foreign exchange continued though at a much reduced rate, but in September 1949, devaluation raised the sterling price of gold and improved investment prospects in South Africa. The country's exports to non-devaluating countries were stimulated by devaluation, even though the much reduced imports were now dearer. New capital began to find its way into the country and in March 1951 the Reserve Bank holdings stood at £172,000,000 as compared with £54,000,000 in September 1949. The rising price of primary products which followed the outbreak of the Korean War served to improve South Africa's balance of payments position.

In 1952 it became clear that there was going to be a considerable contraction in the capital available abroad for investment in developing countries. The inflow of capital into South Africa was much less in 1953 than in 1952 and in the 1953-54 budget the South African Government raised taxes in order to provide capital for development purposes as there appeared to be little prospect of raising the necessary moneys abroad. In view of a favourable turn in the country's balance of payments and a £44,000,000 increase in the monetary reserves during 1954, import control was relaxed. As a partial result of the substantial relaxation in import controls announced in late 1954, imports rose to new high levels in 1955 and 1956. Exports also reached new high levels. The point has already been made that the South African economy is generally characterized by a large deficit on trade and invisible account which is normally compensated for by the country's gold output and net inflow of foreign capital. Net capital inflow from overseas fell from £74,000,000 in 1954 to £8,000,000 in 1955. Net current deficit with the outside world was £28,000,000 and this meant that gold and foreign exchange reserves declined by £20,000,000 in 1955. There was no net movement of foreign capital into or out of the Union during the first nine months of 1956 so that the decline of £13,000,000 in the country's gold and foreign exchange reserves during that period represented

the entire net current deficit with the outside world. For the first time since the Second World War, the Union's net current deficit appeared to have virtually disappeared by the end of 1956 mainly as a result of considerable expansion in the country's gold output and in exports generally. A rise in the Reserve Bank's holdings of gold and foreign exchange during the last quarter of 1956, reflected the improvements in the Union's balance of payments.

The use of foreign capital in financing development projects in Africa raise long term issues affecting balance of payments. The foreign capital in the initial stages generally eases any strain that may be imposed on the balance of payments as a result of the importation of both consumer and capital goods needed for the projects. When the country comes to meet the interest payments and amortization charges, no embarrassment need occur if the country is meanwhile in a stronger economic position as a result of the investments having led either to a reduction in imports or to an increase in exports.

Where an African government allows foreign investment to take the form of majority equity shares in an undertaking, there is no guarantee that either the profitability of the company or the dividend policy of its directors, will be geared to the foreign exchange position of the country. Again, the desire of the expatriate directors to repatriate

capital may not necessarily coincide with the availability of foreign exchange for the purpose, but the difficulty is that should the government elect to restrict the rate of transferable profit and the rate of capital repatriation, this would inevitably tend to deter or drive out foreign investors. Since no territory in Africa can do without foreign capital in both the private and public sectors of its economy, the whole subject assumes more than purely academic importance.

IV

ECONOMIC ACTIVITY AND THE STATE

In addition to the normal functions of the state such as the provision of (*a*) justice and incorruptible organs of administration; (*b*) political security; (*c*) a monetary and a fiscal system; and (*d*) other public services; governments in all African territories are at present stimulating economic growth in many and varied ways. They are busy shaping economic institutions through the encouragement of co-operative societies, trade unions, private enterpreneurship, large-scale industries, nationalization of basic industries, agricultural extension programmes and credit institutions. The state is further exerting considerable influence on the attitude of the community towards working for wages, thrift and new production techniques. The increasing functions of the state have led to growing government expenditure and heavier tax burdens on the community. Growing tax burdens are not new to the African peoples and it is perhaps of academic interest to recall the advice Ibn Khaldoun of Tunis (1332-1406 A.D.) gave to the African governments of his day. The fact that the quotation antedates Adam Smith by some 400 years need not

worry us. Ibn Khaldoun wrote as follows :

"Know then that the arbitrary appropriation by the government of men's property results in the loss of all incentive to gain, when men realise that what they have accumulated will be taken away from them. A loss of incentive will lead to a slackening in enterprise, the slackening being proportional to the extent and degree of confiscation. Thus if confiscation is widespread, covering all forms of economic activity there will be a general slackening, owing to the feeling that no branch offers any longer any hope of gain. If, however, confiscation be mild, there will be only a relatively slight falling off in economic activity." In a more sophisticated age, five and a half centuries later, Professor. W. Arthur Lewis makes the same point when he writes that "apart from the actual waste of resources, lavish government expenditure may also retard economic growth if the taxes from which it is financed are levied in such a way as to blunt incentives."

It has been said of the British West African governments (including the present independent state of Ghana) that they have more power over the economies of their respective territories than most governments outside the 'Iron Curtain'. This state of affairs has not originated out of the socialist philosophy of doing away with private capitalists and the government supplying the enterprise, securing the profits and making the savings ; but out of the realization that private capitalists were

not doing nearly enough to promote economic growth. The West African governments aimed at ensuring the general progress of the people towards a higher state of civilization. Education was to be treated as the keystone to progress. However, since the financial outlay on education could not be regarded as a revenue-yielding or self-liquidating investment, it was necessary to raise general revenue if the new services were to be financed and maintained properly. General revenue could be raised by government creating a favourable climate for private investment and by the government itself investing in economic and productive services and in communications.

Emphasis is placed on communications not only because of military and administrative needs but more so for economic reasons. Lack of transport facilities and imperfect means of communication in Africa resulted in the past in the isolation of village and tribal units, in the need for the self-sufficiency of the village and the prevalence of a local economy with its limitations in respect of markets and division of labour. Labour was virtually rooted to one spot, social and cultural outlook was hedged in by the size of the village or the size of the tribe, conservatism held sway and innovations however desirable were often regarded as taboos. There are those who would go so far as to contend that half of the tragedy of Africa lies in the word 'transportation'.

The capital needed for the construction of

railways and the establishment of other basic services had in most cases to be raised overseas. The discovery of foreign credit has in certain instances encouraged a carnival of extravagance and conspicuous consumption amongst some leaders and governments in Africa. Ismail Pasha's plan for industrialization and modernizing Egypt in the third quarter of the nineteenth century included the construction of a railway and the digging of the Suez Canal. Unfortunately for Ismail Pasha "the 'meanness' which shows itself in economical business methods and in cutting one's coat according to one's cloth did not commend itself to his princely mind. For a period of thirteen years, £7,000,000 a year on the average was added to the public debt; and except for the Suez Canal which cost £16,000,000 there was practically nothing to show for it." The sale of the Suez Canal shares for £ 4,000,000 in November 1875, did not stave off the financial disaster which overtook the country in April 1876, and Egypt is still paying for Ismail Pasha's extravagant, but well-meaning efforts at industrialization and modernization. The example of Egypt has not been lost on other African governments.

Elsewhere on the African continent, railway construction has been closely related to and in many cases determined by the development of agricultural and mineral exports. Instances exist where freight rates have been designed to favour the export trade. In the case of the Kenya-Uganda

Railway, the need to service and ultimately repay the public debt incurred on the construction, led the state to encourage the inflow of white settlers into the Kenya Highlands. In order to force Africans to abandon a subsistence economy for a money economy and at the same time make both land and labour available to white settlers, native reserves were created and hut taxes imposed on the inmates.

Other African territories soon followed the example of the development in transport facilities taking place to the north and south of the continent. Between 1879 and 1893, a number of business magnates made applications to the British Government for permission to construct railways in West Africa. These businessmen wanted the Government to guarantee a fixed rate of interest. It is to be noted that the men who wished to open up West Africa were most anxious to follow a practice which had been adopted in India. Shortly after the Indian Mutiny or First War of Independence, Lord Dalhousie's scheme for the rapid expansion of rail facilities in India was initiated and in 1859 the Government sanctioned the construction of 5,000 miles of railroads by eight companies. The Indian Government guaranteed interest rates varying from 4½% to 5% in return for the power to control expenditure and operation and with a further right to purchase on the expiry of each contract at the end of twentyfive years. The Government and the

companies were to share profits in excess of the guaranteed interest rates. Between 1870 and 1880 the Indian Government thought it wise to embark on a policy of constructing government or state owned railroads, but in 1880 the new policy was reversed and the private companies were again encouraged to build railways, but this time mainly for civilian use, while the state concentrated on the construction of lines necessary for the military requirements of the sub-continent. It was only natural that businessmen who were acquainted with the special arrangements in India should press to be given similar guarantees regarding railroad construction in British West Africa. The Colonial Office in London refused to permit the construction of railways by private companies on the grounds that if the Government could not itself carry out the construction, it was not prepared to assist private companies who could not possibly secure the confidence of the public to do so. In 1895, Mr. Joseph Chamberlain who was then the Secretary of State for the Colonies decided that the West African Governments should undertake the task of constructing railways and in March 1896, rail construction in West Africa began.

It is estimated that between 1870 and 1936 about £384,000,000 of foreign capital went into railway construction in Africa and that this represented one-third of the aggregate external capital invested in Africa south of the Sahara. These railways for

the most part, took on the form of state enterprises. The huge capital outlay needed for railway construction had in recent years led to a consideration of the relative merits of road and rail transports in Africa. It is generally accepted that for bulk transport of goods over long distances, the railway offers by far the most economic solution. An increase in the volume of goods available for the railways tends to lower the unit cost of operation. Furthermore, so far as the allegedly high cost of railway construction is concerned, recent experience has shown that the construction of a road, for the same traffic and in the same topographical and climatic conditions is, if anything, more expensive than of a railway. The same arguments hold in respect of the comparative costs of road and rail maintenance. Any short-sighted policy in respect of railway construction may inhibit economic growth in Africa, more particularly in areas where bulky or space consuming items like cotton, cattle and groundnuts are produced. The stimulus to production which resulted from the construction of the railways to Kano in Northern Nigeria should curb the fears of those who think in terms of the insufficiency of existing traffic.

Communications have featured prominently in the many development plans prepared and put into operation by African Governments since the Second World War. Expenditure on communications represents 22% of Libya's Capital Develop-

ment Programme. In the Belgian Congo, communications represent 43% of the proposed revised expenditure under the country's Ten Year Plan. Public investments in the French territories made through the Investments Fund for Economic and Social Development (FIDES) during the period 1946-54 show that in French Equatorial Africa communications took up over 60% of the total investment. The corresponding figures were roughly 50% for French Togoland, 57% for French West Africa, 50% for French Somaliland and 74% for the French Cameroons. In the Union of South Africa, inspite of a £ 300,000,000 investment for the improvement and expansion of rail facilities in the eight years up to 1954, it was found that the Railways could not carry all the freight offered in 1955. Plans already being executed involve the expenditure of a further £ 190,000,000 on rail facilities between April 1955 and March 1958.

The development plans in Africa (which in almost all cases cover a period of ten years) cannot be regarded as a planned development of the respective economies. They are in the main merely spending aggregates. The techniques of programming for development or investment planning in the orthodox sense hardly exists in many parts of Africa. The techniques available have been devised for more advanced economies of the West where statistics covering a series of years are readily available and where the technological and economic structure

of society is unlikely to change within the planning period. Statistical data on a broad basis are generally either not available or unreliable or scanty in all African territories. Added to this, a change in the technological and economic structure of society is an essential concomitant of the type of development that is aimed at or envisaged in Africa. Development programmes have, therefore, tended to take the form of a statement setting out desirable and feasible projects against an assessment of finances likely to be available. There is nothing suggestive of an integrated programme even though the magnitude of the projects in relation to available financial resources involve a choice between alternatives, a choice which is often determined by the personality and dynamism of the man behind a particular project rather than by the overall needs and requirements of the community.

The spending aggregates which constitute the development plans of African territories are in the nature of capital works programmes which aim at (*a*) improving the basic equipment, including communication; (*b*) stepping up agricultural production and stimulating industrial development; (*c*) raising the health, education and living standards of the people; (*d*) protecting the known resources of the country and ensuring their most efficient and profitable use; (*e*) assembling fresh information about human and material resources; and (*f*) exploiting new sources of wealth and thus

broadening and strengthening the economic fabric of the country.

The non-existence of an integrated programme is clearly emphasized by the fact that development plans fail to cover all aspects of development financed from public funds. Important aspects of regional development are financed outside the plan and in some cases plans are drawn up separately for the regions as in the Federation of Nigeria. In the British territories, the Commonwealth Development Corporation, regional and local governments, various statutory boards and corporations including agricultural produce marketing boards in East and West Africa carry out a considerable volume of investment. The Office du Niger in French West Africa and Fonds du Bien Etre Indigene in the Belgian Congo are but two examples of semi-public institutions which carry out investments in non-British territories in Africa.

Since this general survey is a brief one, I propose to examine in a little more detail the development plan of a particular African state. I am selecting Ghana because, firstly, it has attracted a lot of attention of late; secondly, it is a predominantly agricultural country with 70% of its adult working population engaged in agriculture (a figure which is close on the average for the whole of the African continent); thirdly, the country enjoys comparative prosperity which is reflected by a per capita income of about Rs. 660 per annum

and by the fact that there is one motor vehicle to every 170 persons; and fourthly, the Government of Ghana is one of the few governments in under-developed territories which has in recent years succeeded in absorbing as taxes about 50% of the net annual geographical (money) product of its territory.

The government has in the course of the last six years undertaken the improvement and expansion of the public services as a pre-requisite to stimulating agricultural and industrial output. Ghana's Development Plan of 1951 was erroneously regarded by some people as a planned development of the country's economy, but in actual fact the plan was in the nature of a capital works programme and followed the general pattern of development plans elsewhere on the African Continent. It was intended that expenditure on the plan should obtain for Ghana a machine that could be geared to the problems of national development. The execution of the plan was not expected to lead to an immediate increase in national income, but primarily to create a favourable climate for private investment. The 1951 Plan was also originally put forward as a ten year programme, but it was later decided to telescope the plan into a five year period ending March 1956. It, however, became necessary to extend the period to six years. In carrying out the very expensive but vital task of extending and consolidating the government services and public utilities to form

a nation-wide structure, Ghana was fortunate in that it was able to provide its own capital. This happy state of affairs was made possible by a steady increase in the value of the country's principal exports and by the government's ability to appropriate a substantial part of the new income for development purposes.

In 1939 Ghana's exports and imports amounted to £13,118,115 and £7,540,931 respectively. The corresponding figures for 1950 were exports £77,406,944 and imports £48,128,966. The value of exports and imports continued to rise in subsequent years but the favourable balance of trade was maintained and in 1954 exports amounted to £114,728,821 and imports to £71,646,535. Central Government revenue also showed the same upward trend, the figures being £3,780,000 for 1938-39, £18,106,000 for 1949-50, £49,942,000 for 1953-54 and £80,568,000 for 1954-55.

Ghana's annual development expenditure rose sharply from £ 6,396,000 or about 3% of income in 1951-52 to £ 13,945,000 or about 6% of national income in 1952-53. Development expenditure for 1953-54 was £ 15,561,000 or about 7% of national income and it was expected that expenditure in 1954-55 would rise to £ 23,000,000 or about 10% of national income, but only £ 15,004,000 was actually spent. Thus between 1953 and 1955, the annual development expenditure was fairly steady and remained much below what was originally

planned. By March 1955, roughly 60% of the planned expenditure had been made in 80% of the original plan period and in 67% of the extended time. As there were ample funds available throughout the period, we have to look at physical and administrative difficulties for the inability to spend the available funds. It had been predicted that port congestion might slow down the programme; however, this fear proved unfounded. Again although the contracting capacity of Ghana's building industry was limited, the readiness of extra-territorial contractors to submit tenders more or less neutralized this apparent obstacle to the realization of targets and objectives. The crux of the whole problem was shortage of technical and administrative staff. We have recently been reminded that where funds available for development remain unspent because of shortage of required skills, political factors will determine whether economic growth should be held up in the interest of quality and propriety, or whether there should be rapid multiplication of the partially trained as happened in Russia in the inter-war years. There is at present no indication that Ghana proposes to sacrifice quality and propriety. Ghana is not the only country in Africa which has been forced to slow down the expansion of her economy because of shortage of skills. In South Africa where there is an industrial colour bar and where since 1948, there has been a decline in the white labour force

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entering the territory, the Ministry of National Economy has recently estimated that 14% more skilled workers are needed to meet the labour requirements of the Union. No industrial colour bar exists in Ghana, but the task of training local skills and/or of attracting foreign skills remains a vital issue for both South Africa and Ghana.

The fact that the Government of Ghana had more money than it could spend, tended to give the impression that there should be no worry about restricting capital expenditure. This, however, was not the official attitude because the Government when drawing attention to the fact that recurrent expenditure has arisen from some £17,000,000 in 1951-52 to £32,000,000 in 1954-55 added that this doubling of recurrent charges on revenue every four years must be discouraged unless the economic and productive services could be developed to sustain the increased charges. Paradoxically, the Government while stressing the shortage of trained personnel as a major obstacle to its development plans put forward the view that the social services including education were in danger of over-expansion and that in the Second Development Plan expenditure under these heads would require careful justification before they were included.

Ghana's Government has undoubtedly been wise to recognize that spending too much of the national income on the social services can be an obstacle

to economic growth. On the other hand it is possible to push this note of caution too far and to ignore the ultimate effects which an expansion of the social services have on economic development. It is possible to exaggerate the overall beneficial effects which the social services have on national output, just in the same way as it is possible to over-emphasize the distinction between income and expenditure on current and capital account and raise false alarms regarding over-expansion of the social services. It is true that the expenditure on education in Ghana rose from £ 1,400,000 in 1951-52 to £ 4,900,000 in 1954-55, however, expenditure on education in particular and on all the social services in general must be viewed in relation to the country's assets. In September 1954, the country's sterling balances totalled £ 189,000,000 and government marketing board holdings amounted to nearly £ 150,000,000. The country's overseas balances rose to £215,000,000 in December 1955, but fell to £ 201,000,000 in June 1957 as a result of the first unfavourable balance of payments for many years.

In the 1955 budget speech, the Government of Ghana expressed the view that reserves should not be spent on the recurrent costs of the social services but kept for capital expenditure. If this official attitude is pushed too far, it would mean in effect that the reserves cannot be spent, because since all capital expenditure adds to recurrent cost,

an unqualified and irrevocable decision to meet all recurrent expenditure out of current revenue amounts to spending the reserves only when current revenue is rising. When revenue begins to fall as indeed has been happening in Ghana in the course of the last two years, refuge is often sought in a type of parsimonius expenditure reminiscent of 'a man who lives on a crust while having thousands in the bank.' It has recently been pointed out that it would be a tragedy if development lagged because financial authorities in underdeveloped territories were bemused by their over-accounting categories. The common fault of many development plans in Africa and in other underdeveloped territories is that investments are too often conceived in terms of concrete things and not so much in terms of investments in persons. Any investment policy which leads to a deficiency in the public health and educational services mainly because of an over-emphasis on 'economic and productive services' endorses this common fault.

In sum, the very attitude of the people and their leaders towards development, the nature of political and social institutions, the speed at which it is expected to spread education amongst the millions who inhabit the continent, the availability of administrative, technological and managerial skills, the acquisition of a fuller and more precise knowledge about the continent's material and human resources, and the response of domestic

and foreign capital will determine the rate at which the output of goods and services can be increased for the satisfaction of the growing wants of the people. In the final analysis the pace and magnitude of economic development in Africa will depend as much on judicious state action as on the quality of the population.

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