AFRICA AND INDUSTRIALISATION

by JACK WODDIS

AT THE CENTRE of the preoccupations of the governments and people of the independent African states is that of economic growth. Now that some 200 million Africans live under sovereign African governments and no longer under the harsh tyrannical rule of foreign imperialists they are setting their sights on the higher material standards and fuller life which was the main aim of the struggle for national independence.

To appreciate Africa's urge for economic growth one need only look at her present economic and social situation. Africa's 250 million people constitute 8 per cent of the world's population, and they inhabit a continent covering nearly a quarter of the earth's land surface. Africa has enormous mineral resources—copper, gold, diamonds, bauxite, chrome, manganese, cobalt, tin, uranium, iron, coal, as well as a number of rare mineral ores essential to modern industry. She has considerable energy resources—coal in the south, oil and gas in the north (the prospecting now taking place will probably unearth supplies of these in other areas of the continent, too), and water power, especially in the west, centre and east. She has immense and varied timber resources and produces many valuable agricultural items, both foodstuffs and raw materials for industry—cocoa, coffee, palm oil, sisal, pyrethrum, tobacco, cotton, maize, tea, ground nuts and so on.

Yet Africa's share of world output is only 2 per cent. The net value of her annual output is only £9,200 million—about half that of the United Kingdom which has a population only one-fifth that of Africa's. An analysis made in the mid-1950s showed that Africa possessed only 2 per cent of the world's stock of tractors; and she received only 1 per cent of the world's supplies of nitrogenous fertilisers. Latest figures show that Africa produces only 2 per cent of the world's electricity. Africa's per capita income—£40 a year (£32 if we exclude the Republic of South Africa)—is less than one-tenth that of the industrial countries.

These figures are sufficient to show the enormous problem that faces Africa. But for most African states the task is even greater, for the figures for Africa as a whole do not sufficiently bring out the extent to which industrial developments have hitherto been concentrated in a few areas of heavy Western investment and considerable white settlement. One can take the figures for the distribution of electricity produced in Africa in 1957—a sure index of the distribution of industry in Africa.

PRODUCTION OF ELECTRICITY IN SELECTED AFRICAN COUNTRIES AND TERRITORIES

(*In millions of kilowatt-hours*)

	1957
Belgian Congo	2,489.0
Nigeria	331.0
Sierra Leone	14.34
Kenya	268.0
Mauritius	43.3
Uganda	148.8
Northern Rhodesia	1,054.0
Nyasaland	9.5
Southern Rhodesia	1,363.0
Ethiopia	72.56
French Equatorial Africa	39.0
Madagascar	62.4
French West Africa	168.0
Ghana	282.0
Liberia	30.54
Angola	95.8
Mozambique	81.8
Sudan	60.1
Union of South Africa	18,947.0

[Source: *Economic Survey of Africa Since 1950*: UN, 1959]

These figures show that no less than 94 per cent of all the electric energy produced in Africa in 1957 was concentrated in four territories—the Republic (then Union) of South Africa, Southern Rhodesia, Northern Rhodesia, and the Congo (formerly Belgian). The Union of South Africa alone accounted for about 74 per cent of the total output.

With the low economic level existing in Africa it is not surprising to find that her illiteracy rate often reaches 95 per cent, or that disease, ill-health and malnutrition are widespread.

The independent African states are beginning to battle against this terrible heritage of colonialism, but it must be remembered that most of them only became independent in 1960, and several even a year or two later. Therefore, one cannot say more than that the first steps (and sometimes not even that) are being taken to break the colonial pattern of the economy and lay the basis for rapid economic growth.

Under colonial rule Africa was converted into a huge plantation, turning out foodstuffs and industrial crops for Western consumption, and a rich mining base from which valuable ores were shipped to Western factories. The production of minerals and agricultural items was based on low wages for the workers and low pay for peasant producers. Where crops were produced on European plantations and farms, these, too, were based on low wages together with low prices for land. Thus a major aspect of Africa's colonial economy was the production of cheap raw materials for export. For her manufactured goods Africa was compelled to rely on imports from the industrialised Western powers—imports which were often manufactured from the very raw materials which Africa herself had exported.

Since the prices of Africa's raw materials exports tend to rise more slowly than the prices of her imported manufactured goods (and sometimes raw material prices even slump heavily), Africa loses millions a year through the unequal exchange, and the gap between Africa and the economically advanced countries becomes wider and wider. There are many examples which show that despite a considerable expansion in the *volume* of raw materials produced and exported, the fall in prices has resulted in African states obtaining practically no benefit from their greater production efforts.

Thus, when Uganda became independent in October 1962, it was revealed that over the previous eight years she had increased the *volume* of her domestic exports by 80 per cent, but the *value* of these exports had gone up by less than 5 per cent (*Guardian*: October 9, 1962). In 1960, according to United Nations FAO reports, the difference in value between Africa's exports of logs and imports of wood products amounted to a loss to Africa of about £43 million. This is just for one item, wood, so it can be easily imagined how much Africa loses each year through the unfavourable terms of trade if one were to take into account all the commodities exported and imported.

Figures recently released by the Nigerian Government are a striking demonstration as to how Africa suffers from this warped division of labour in the world.

Nigeria is now the world's second largest cocoa producer, having recently overtaken Brazil. Yet she is now earning *less* from her cocoa exports than before, despite the huge increase in the actual volume exported. In 1954-1955, Nigeria exported under 84,000 tons of cocoa, for which she received £30 million. In 1961-1962, Nigeria exported 186,000 tons, which earned only £29 million. In other words, *Nigeria increased her export volume over this period by well over 120 per cent, yet her earnings dropped by over 3 per cent.* If 1961-1962 prices had been the same as 1954-1955, Nigeria would have earned from her cocoa exports in 1961-1962 as much as £70 million instead of £29 million. Thus, the fall in cocoa prices on the world market represented *a loss to Nigeria of no less than £41 million.*

But even this does not represent the whole picture, for while the prices of Nigeria's cocoa exports have been falling, the prices of the machines and manufactured goods which Nigeria imports from the imperialist countries have been rising. So that the £29 million which Nigerian cocoa exports earned in 1961-1962 represents, in terms of actual commodities which Nigeria can buy, considerably less than £29 million would have bought in 1954-1955.

It is therefore not surprising that Nigeria's Federal Prime Minister spoke bitterly at last year's Commonwealth Premiers' Conference of developing countries being 'caught in a vicious trap', as a result of the deteriorating terms of trade. He went on to point out that Nigeria's losses in this way exceeded the 'aid' she had received from the West.

The disastrous effects to Africa of the present warped division of labour between the imperialist countries and the economically developing countries are underlined by the incredible extent to which Africa has been made reliant on imports for even the most elementary of things. In a number of French-speaking territories in west and central Africa one can buy bottles of gum labelled 'Best Senegalese Gum. Made in France'. The raw material is transported all the way from Senegal to France, where it is processed and bottled—and then the bottled gum travels all the way back to Senegal for sale. In Liberia it is said that the new Ducor Palace Hotel in Monrovia was built entirely from imported materials (apart from some local stone). Even the nails had to be imported. Liberia's limited industrial development, it should be stressed, is by no means an exception in Africa.

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As these examples show, industrial development in Africa has, in most cases, hardly started. The net value of Africa's total industrial output is under £1,000 million—or less than that of Sweden. But even this is only part of the problem, for one-third of Africa's 'industrial' output is accounted for by mining, most of it to assist overseas industries; and another third is estimated as originating from small-scale handicrafts. Thus, manufacturing on modern lines, i.e. factory production, produces only about £350 million a year for the whole of Africa (excluding the Republic of South Africa). This is a total value equal to less than 5 per cent of the national income.

While Africa's modern manufacturing sector produces goods to the value of only £350 million a year, her imports of manufactured goods come to over £1,800 million; and for decades the major share of these imports has been of consumer goods, very often manufactured from the very raw materials which Africa exports. Import substitution by local manufacture is beginning to take place in the independent African states, notably in Ghana and Egypt. This is helping to save considerable amounts of foreign exchange which can be used to purchase machinery and other capital goods and thus assist industrialisation.

It is indicative of the changes taking place in Africa that machinery and equipment, which in 1950 accounted for only 3 per cent of African imports, reached 12 per cent by 1960; their volume increase in those ten years was seven-fold.

Africa spends enormous sums every year importing foodstuffs. Sierra Leone last year, for example, spent over £5 million—about 16 per cent of her total imports—on food. Ghana still has to spend a similar percentage. Obviously there can be no manufactured import substitution for food—yet, all the same, industrialisation can help enormously to solve this kind of problem. It has been estimated* that if grain to feed India's additional population over the next five years were imported, the cost would be about £350 million. If, instead, India were to import the necessary fertilisers to produce the needed additional grain, then the cost would only be £100 million. But this is only the beginning. If, instead of importing fertiliser, a new fertiliser factory were to be built *each year* in India, to produce 350,000 tons of ammonium sulphate, the foreign exchange cost would be reduced to only £40 million. And the foreign exchange costs of a heavy machine-building factory *to manufacture machinery to be installed in such a fertiliser plant every year would be about £8 million*. Thus, by an initial and single expenditure of £8 million,

* *Industrial Growth in Africa*: Report of UN Economic Committee for Africa, December 1962

India could save hundreds of millions of pounds otherwise spent on importing grain.

The same report contains similar calculations for mining machinery plant and heavy electrical equipment, resulting in vast savings. For £110 million, including £60 million of imported machinery, India could install a million-ton steel plant with an annual product value of £30 million. But if the £60 million were invested in a heavy machine-building factory, then, allowing for imports of about £40 million a year, it *could produce each year roughly £60 million worth of machinery or the equivalent of the imported machinery needed to set up a million-ton steel plant.* Once such a heavy machinery plant went into production, it would be possible *out of India's resources to start a new million-ton steel plant every year!*

The above examples demonstrate only too clearly the enormous advantages to be gained by industrialisation and the speed with which the whole economy can march forward if the basic heavy industry is there. It is therefore completely understandable that Guinea's economic plan should stress that industrialisation is the basis of her economic independence, and the surest way to progress 'because it is in that sector that the productivity of labour is highest. It is therefore industrialisation which will facilitate a rapid development of the country's wealth, without which the nation would be condemned to stagnation'.

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Enough has been said to indicate that the key to Africa's economic growth is industrialisation—that is, the creation of a heavy industry capable of manufacturing the means of production. This means a modern engineering industry which can produce machines and machine tools, and with its basis in an iron and steel industry, supplies of fuel and power, chemicals and non-ferrous metals. It is a striking commentary on the nature of the imperialist exploitation of Africa that after sixty years of Western domination, the whole of Africa, apart from the white-dominated Republic of South Africa, has no such industrial base. (And even in the case of the Republic of South Africa industry serves the European minority, not the African majority.)

Yet without industrialisation Africa cannot solve her problems. Industrialisation means farm machinery, electric power, fertilisers and insecticides which are necessary for modernising agriculture. Industrialisation means machines for light industry, thus making possible an increased output of consumer goods. Industrialisation means the creation of a skilled working class, an advance in education, technique and culture. Industrialisation leads the way to less heavy manual work and, by raising productivity, makes possible higher wages, better conditions and shorter hours. Industrialisation makes possible modern methods for building more schools and hospitals, and the rapid large-scale construction of housing. Industrialisation, by expanding the national income and the internal market, will stimulate the all-round growth of the economy. Industrialisation will enable Africa to catch up the economically more advanced countries, to end her dependence on imperialism for machinery and spare parts, and to strengthen her national defences. Thus, in every way, industrialisation will improve the lives of the African people and help them to uphold their newly-won independence.

As long as Africa remained under colonial rule, industrialisation was out of the question. In the plans of the imperialists, Africa was destined to be simply a raw materials appendage to Western industry. All the pre-independence 'Development Plans' of the colonial powers showed that this was their policy. For example, out of the £148 million allocated between 1946 and 1956 under the United Kingdom Colonial Development and Welfare Act, only £545,000—less than ½ per cent—was for industrial development. Of the £55 million granted in loans by the Colonial Development Corporation between 1948 and 1955, only 7 per cent went for 'factories'; the lion's share went to mining and agriculture.

France and Belgium followed precisely the same policy. Of the considerable sums allocated under the French FIDES Plan for French overseas territories, for the period 1949-1953, less than ½ per cent went for industrial development. In the estimates for the Ten Year Plan for the Congo, 1949-1959, industry does not appear at all!

Figures for particular regions or countries show the same general pattern. Nigeria's Development Plan for the period 1951-1956 allocated only 3.5 per cent of the total planned expenditure for industry. The 1955-1960 plan allocated only 1.3 per cent. Kenya's development programme for 1954-1957 did not even bother to mention industry at all.

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While Africa lay under the heel of colonialism it was simple enough for the rulers to ensure that industrialisation did not take place. They held the state power, they controlled the economy, they laid down the laws, they decided the policies to be followed. But today they cannot operate in the same way. They no longer hold state power over 200 million Africans. They no longer have undivided control of the economy. They are no longer in a position to lay down laws or to decide the policies of governments. Of course, they still have influence in many states but they no longer have the direct control of affairs in their own hands.

This has compelled the imperialists to lay down a heavy propaganda barrage during the past few years 'advising' Africans against industrialisation. Thus Kenneth Bradley, in a British Government publication *Britain's Purpose in Africa* (H.M.S.O. 1959), argued that the economy of Africa 'must always be based on peasant economy'. Mr. T. R. Batten (*The Problems of African Development*) asserts that 'most parts of Africa are quite unfitted for large-scale industrial production' and that consequently 'agriculture must always be the principal source of wealth'.

The International Bank of Reconstruction and Development, which has produced economic development surveys of a number of African territories, betrays a consistent anxiety that the independent African states may take it into their heads to build up their industry. Thus in its study of Tanganyika, published in 1961, it tends to decry basic industrialisation and to place the emphasis instead on agriculture. It argues that 'The scope of the domestic market is limited, and its expansion must depend primarily on the growth of agricultural incomes. There is neither the need for, nor the possibility of, rapid absorption of a large volume of unemployed or underemployed labour through industrial expansion' (p. 233).

Even when it comes to deal with the possible development in Tanganyika of local manufactures to replace present imports, it concentrates on such things as beer, cigarettes, sugar, textiles and cement and warns that 'Machinery and transport equipment, which comprise a fifth of total imports, must clearly be excluded'. When it comes to consider the question of expanding manufactures for export it can only think in terms of wattle extract, cashew nuts, lime juice, desiccated coconut, starch products and so forth. After all this, it is not surprising to find that in its final section, point 1 in its List of Recommendations is put as follows:

> 'The task of securing widespread income increase is to a major degree one of agricultural and livestock development' (p. 491).

It is sometimes quite incredible to see the extent to which the opponents of industrialising Africa push their arguments. In the report of one of the committees participating in the Convention on Social and Economic Development in the Emerging Kenya Nation, August 12 to 17, 1962, one can find it solemnly argued that to offset the decline in the prices of Kenya's major exports, particularly coffee, 'the further expansion of tourism' should be considered as the alternative for earning foreign exchange and that therefore 'substantial capital should be devoted to this purpose' (*The Kenya We Want*).

After this it is not surprising to read in the election manifesto prepared by the Kenya Africa Democratic Union for the May 1963 elections:

> 'Kenya's greatest potential economic expansion lies in the attraction of tourists to our country.'

That KADU should be prepared to follow the anti-industrialisation policy of the imperialists will not come as any great surprise. What is more disturbing is that some of the major national parties in Africa tend to accept the advice of Western 'economic experts'.

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In general, however, it can be said that political opinion in Africa is turning increasingly towards the idea of industrialisation. The recent report by the United Nations Economic Committee for Africa on *Industrial Growth in Africa* recognises this advance. The significant thing about this report is that it is predicated on the assumption that industrialisation is indispensable to economic growth. It points out that 'Rapid industrial expansion is . . . being accepted as the major means of economic growth of the under-developed countries' (p. 17).

This conclusion is based on the calculation that to bring Africa to the economic level of the industrialised countries, *the output of her agriculture would have to be doubled whereas that of her industry would have to be increased 25-fold.*

How long will this take? On the basis of a per capita annual increase in output of 1½ to 2 per cent for agriculture and 7 to 8 per cent for industry, the UN report estimates that the transformation of Africa from an industrially backward region to an economically advanced one would take about 50 years or possibly less. Another estimate, given in *The Development Decade* (a report prepared by the United Nations Economic and Social Committee), calculates that on the basis of a per capita rate growth for the whole of the economy of 5 per cent per year, Africa, to catch up the industrialised countries, would need 45 to 60 years. If Africa were to build her industry at the rate of that taken by the countries of Western Europe during their century of industrialisation, it would take 100 years for Africa to reach present European levels.

The African people are certainly not going to let themselves be tied down to such slow 'Western type' time-tables as these. But if they are to advance more rapidly, then, in addition to making a number of radical political and social changes, they will have to abandon capitalist economic theories and draw on the experience of the Soviet Union and other socialist countries which have shown in practice that it is possible for an economically underdeveloped country to industrialise very rapidly. The Soviet Union commenced its First Five Year Plan in 1928. By 1937, after fulfilling two Five Year Plans, the generation of electric power had increased between seven and eight times, the output of iron and steel by four times, of coal by three and a half times, of oil by rather less than three times and of cement by three times. The building of the engineering industry went ahead still more rapidly. Between 1928 and 1940, the output of motor vehicles in the Soviet Union increased from 840 to 145,000, and of tractors from 1,300 to 31,600. China and other socialist countries have made similar phenomenal advances.

It was only after considerable discussion that the Soviet Union finally hammered out its policy of priority for heavy industry as the way forward to expand the whole economy, and the First Five Year Plan fully embodied this new principle. Hitherto, in world economist circles the theory of 'textiles first' (i.e. a slow path to industrialisation via light industry first and ending with heavy industry) held sway. The Soviet Union challenged this conception, first in theory and then in practice. Now all the socialist countries have demonstrated brilliantly in practice that a drive for basic industrialisation is the quickest way to advance the whole economy and to raise living standards.

Yet, as we have seen, bourgeois economists and advisers still work to persuade African leaders and governments away from industrialisation. Where they are driven to concede the necessity to industrialise they try to limit it to a question of the simple processing of local raw materials; and, even when they have to go beyond this, they strive to encourage the idea that the building of heavy industry can only be an ultimate aim, the culmination of a long effort to build up the economy in stages—first agriculture, then light industry, and finally heavy industry.

A valuable exposure of these theories has been made by Maurice Dobb in his recent study on *Economic Growth and Underdeveloped Countries* (Lawrence & Wishart, London, 1963: 3s. 6d.). Dobb concentrates his argument around the key economic question facing the newly developing countries—how can they make *the most rapid* economic progress. He shows absolutely convincingly that the drive for basic industrialisation is the answer. The key problem is how is the economic surplus each year to be utilised so that it promotes rapid economic growth. In many new African states much of it is absorbed by various forms of excess consumption by the upper class, by hoarding at home and abroad, by flamboyant spending for personal ostentation, by the maintenance of unnecessarily large and unproductive bureaucracies which have been encouraged very often by the former colonial power in the final stages of its surrendering political control, and sometimes by expensive military establishments. There are also many untapped resources and forms of waste.

But the main thing which needs to be emphasised is that it is the way a newly developing country distributes investment between industries which make capital goods and industries which make consumer goods which will determine its rate of economic growth. And if sufficient investment is made in expanding capital goods, then, however small the usable surplus may be to begin with, its rate of growth (if the appropriate political and social organisation exists to mobilise and inspire human endeavour) will develop at a staggering rate. Dobb's arithmetical example is useful here. He points out that if we were to start with an investible fund growing at the rate of 2 per cent a year, at the end of 20 years it will have increased by 50 per cent, and after 100 years by only seven times. But if the growth rate can be stepped up to 10 per cent, then the initial amount available for investment will have increased two and a half times in a decade and by six or seven times in 20 years. By the end of a century it will be in the neighbourhood of several thousand times!

Thus, once an adequate rate-growth has been achieved by ploughing back the increment, there will soon be an ample margin to increase both consumption and investment at the same time.

In other words, by making strict economies and postponing non-essential consumption for a time, one very quickly reaches a position in which it is possible to start making huge strides forward in raising living standards. Capitalist theoreticians who are anxious to delay Africa's industrialisation pretend that the policy of giving priority to investment in heavy industry means one of forgoing consumer benefits until some long distant date in the future. In reality it is industrialisation which will enable the raising of standards to be made most rapidly.

No one would argue that the new African states should divert 100 per cent of their investment funds to expand the capital goods sector. Part of the surplus, even in the earliest stages, must obviously go to expand consumer goods production in order to supply the needs of the growing army of workers. Social needs, such as housing, health facilities, better education and so on, must be met; they are essential to help the workers incréase productivity, for it is obvious that lack of training and skill, and debilitating illnesses—grim legacies of colonial rule—are a barrier to higher productivity. For the same reason there needs to be provision for higher wages and a system of social security. But for quite a foreseeable time ahead it will be necessary for priority to be given to capital goods production to the extent that it enables the given country to achieve a sufficiently high rate of growth to enable a rapid expansion of the total economy.

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Of course, in explaining the need for industrialisation in one short article, it has not been possible to deal with a whole number of related problems. Consideration needs to be given to the various methods of accumulating capital within the country. Technicians and skilled workers have to be trained. Revolutionary changes need to be made in agriculture so as to enable a quick growth in that sector, too, and to enable the new scientific methods and farm machinery to be effectively utilised. The State sector of the economy should be built up and, at a certain stage, foreign monopolies nationalised. Economic planning is essential so that the concentration of funds and resources and effort can be made on the most important sectors of the economy. Control of foreign trade and a sound trade policy will make possible the best use of foreign exchange earnings. Economic relations of one-sided dependency on the imperialist powers must be ended. Relations of mutual economic benefit with the socialist countries hold many advantages for African states.

In particular, on the central question of industrialisation, there is a striking difference between the policy pursued by the socialist countries and that of the imperialist powers. Whereas the latter divert most of their funds in Africa to the production and export of raw materials, the socialist countries, to the extent of their practical possibilities, are ready to build whole factories which, when completed, belong entirely to the new African states. This is of considerable help in assisting Africa to overcome her colonial economy and to become industrialised.

There is one final point about industrialisation in Africa which needs to be emphasised. Here, in this article, we have been mainly concerned to explain the reasons for Africa's economic backwardness and the poverty of her people, and to point to the path of industrialisation as the way forward. At the moment there are 32 sovereign African states; before long there will be over 50. Obviously, if each of the 50 or so independent African states, some of them populated by only a few hundred thousand people, were to embark separately on its own path of industrialisation the task would be immense. Economic co-ordination, regional development, all-African planning—this is the surest way to a rapid advance of Africa's economy. To take Africa's water-power resources as one example, these naturally fall into several key regions which could be the basis for an electric grid system, first regional and then linked up in an all-African grid. The alternative of building simultaneously over 50 hydro-electric projects, one for each state, would be economic madness. Similarly, the concentration of minerals in certain regions (copper in the Congo and Northern Rhodesia, iron ore in Liberia, Guinea, Gabon, Mauretania and other west African states, bauxite in Guinea, Ghana, the Cameroons, etc.), the suitability for some regions for livestock development, others for growing cotton and developing a textile industry—all this underlines the importance of hastening the drive to all-African unity.

As long as different African states remain within the sphere of different imperialist economies, so long will the possibilities of all-African economic planning and development be hampered. The uprooting of imperialism in Africa is therefore essential for strengthening African unity and making possible Africa's industrialisation and speedy economic progress. And this process will be hastened if the Republic of South Africa, the continent's most industrialised state, is restored to the African people, so that it can give powerful assistance to the industrialisation of the whole continent.