
The Industrialization of Nigeria

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Seldom do new states provide the factors needed for a study in depth of industrialization. But patterns begin to appear which give an indication of things to come.

What does it mean to industrialize? Obviously the replacement of hand tools by machine and power tools is the *sine qua non* of an industrialized society. But industrialization also involves vast economic and social changes, e.g., a tendency toward urbanization, a growing body of wage earners, increased technical and advanced education. By studying these and other concomitants, one can detect the sign of incipient industrialization in Nigeria.

Historically, the pattern of settlement in Nigeria has been, for the most part, one of farmers living in towns and cities, traveling many miles a day to tend their fields. Today the forces of urbanization are serving to accentuate this existing tendency. With an estimated population of 40,000,000, approximately 10% live in 56 cities of more than 20,000 each. The Western Region is the most highly urbanized section of the country, containing six of the seven largest cities.

There are two large sources of existing and potential wage earners: peasant farmers who either begin to produce a surplus for sale, or who go to work for another farmer, and the ever increasing number of school graduates. Most of these young, literate Nigerians feel that peasant farming offers no future, and yet the majority of them have not been trained for any specific job. Although all young developing economies suffer from the problem of underemployment and unemployment, the situation has been aggravated in Nigeria by the increased pace of basic education. Advanced education is still somewhat of a novelty, and tends to become a status symbol rather than a force for economic progress. The Nigerian economy simply cannot at present absorb the existing labor supply.

In spite of the large amount of labor available, Nigeria is greatly handicapped by the paucity of skilled labor. This is probably her greatest obstacle to more rapid development. Managerial skills are also in short supply. Very few Nigerian businessmen are willing to launch a manufacturing venture at their own risk. This is largely due to limited capital and to the lack of an industrial tradition. Although ideally, government's role in economic development should be, for the most part, one of help and encouragement to the private sector of the economy, the great shortage

of entrepreneurial skills at all levels has forced the Nigerian government not only to assume that role but also be manager and consumer. Therefore, though there is no doubt that public investment can lead to private investment, in Nigeria public investment must not only act as a stimulus but also "lead the way."

Nigeria is also handicapped by a lack of data. Statistics on the economy before 1950 are completely inadequate, and still leave much to be desired. Population figures are only estimates because a census has never been successfully taken. This lack of data handicaps government planning, and also tends to discourage potential foreign investors. To encourage foreign investment, the U. N. provided the money for preinvestment studies of large-scale projects, and the Rockefeller Brothers Fund has sought industrial possibilities and local entrepreneurs and then looked for private foreign investment to match.

Industry requires good transportation facilities. At the time of independence, Nigeria had only 5,300 miles of paved roads and approximately 1,770 miles of railway track. However, both of these are being constantly extended. At present, steamer traffic on the inland waterways system is governed by the time of year, i.e., going farther up-river at flood time. Nigeria does not have a good natural port. The two main ports are Lagos and Port Harcourt.

Another hindrance to economic development is the fact that in most of Nigeria confused land laws make it difficult to secure land for factory construction. Even when land is obtainable, not all manufacturers care to, or can build. There is also a dearth of space for rent. In order to meet the need for industrial sites, some cities in Nigeria have begun to create industrial estates.

To offset these liabilities, Nigeria possesses a great many assets. One of the greatest of these is her stable, conservative government. Although beset by regionalism, the federal government has kept Nigeria free from the political chaos that has had such a detrimental effect on some other new African states.

Because skills can be acquired, the large labor supply should be considered as an asset. One of the prerequisites for economic development is the willingness of the labor force to migrate to areas where economic opportunity is greater, and further, to remain mobile being willing to change employment when income can be increased. This seems to be true in Nigeria. As the percentage of wage earners increases the demand for goods will also increase. This demand will, in turn, necessitate an increased number of wage earners to produce these goods. With a population the size of Nigeria's, the domestic market becomes a factor of great importance.

Nigeria also has fuel, water, some capital, and several important raw materials. In terms of value, tin is the most important mineral mined in Nigeria. Nigeria produces five per cent of the world's tin and 75% of the world's columbite. The latter was formerly thrown away until its value as an alloy for toughening steel was discovered.

The occurrence of lead and zinc has not been fully ascertained. However, they are known to occur in a narrow, north-south belt in the east-central part of the country.

Stone and building material occur widely and are generally obtainable. Limestone and gravel supplies are good, the latter being in short supply only in the north. Nigeria has the necessary materials for a cement industry and her two modern factories are producing 300,000 tons a year.

Iron ore is widespread but is generally of low quality. Although the

coal reserves have not been accurately estimated, enough is produced for domestic use plus some for export. Very little of this coal is suitable for coking. Tests have shown that the coal yields much gas and tar oils on distillation, revealing the possibility of its use for gas or chemical by-product manufacture. Oil was discovered seven years ago in Nigeria. After more than twenty years of onshore drilling, Shell-BP made its first commercial discovery at Afam in 1957. In 1961 a new export oil terminal which can handle tankers up to 18,000 tons was built south of Port Harcourt. The latter city was the site chosen for a million-ton-capacity refinery. It has been conservatively estimated that Shell-BP will produce 200,000 b/d by 1970. In January of this year, Gulf struck oil offshore.

An underdeveloped country that is modestly endowed with natural resources, but wishes to industrialize, must look to the agricultural sector for its economy, for from this area will come most of the exports for the earning of foreign exchange, and the livelihood of the majority of the people. A country of peasant farmers must find ways to raise income per capita in order to create a domestic market for industrial products, to increase the tax base of the country, and to create a source of internal capital formation.

Under British rule, palm oil and cotton were the chief exports. Today, Nigeria also exports cacao, groundnut oil, hides and skins, rubber, wood products, and some of the minerals discussed earlier.

Nigeria's export base is much broader than many other African countries, but nevertheless, to increase economic activity it should be broadened still further. Nigeria's exports face stiff world competition and fluctuating world prices.

The exact balance to be achieved between agriculture and industry seems to be an elusive thing. In the past, industrial possibilities were neglected, and now it appears that there is some danger that agricultural possibilities might be.

The underutilization of agricultural potential can and needs to be remedied. Proper care and planting of palm and rubber trees would increase yields significantly. In order to make her generally infertile soils more productive, the import and use of fertilizers must be expanded. Widespread mechanization of Nigerian agriculture is not feasible at this time because of high original costs, the difficulty of servicing, and the lack of training in the use and care of farm equipment.

After a country is producing a wide range of goods in profitable quantities, it can then consider industrialization. In taking the first step toward this end, the most obvious place to start is with the processing of local produce. Such processing then stimulates the growth of other industry, e.g., the processing of groundnuts to oil has led to soap manufacturing.

Not only has the groundnut oil industry grown, but also the palm oil industry. The hydrogenation process renders palm and peanut oil odorless so that they can be used for margarine, salad oil, and soap. Nigeria used to export her cotton and import yarn and textiles. The import of piece goods averaged 170,000,000 square yards a year in the early 1950's. Now factories at Lagos, Kano, Kaduna and Onitsha have started supplying part of this large domestic demand. Using Nigerian leather and rubber, factories in Kano and Apapa are now supplying perhaps as much as one-third of the domestic demand for shoes.

Most manufacturing firms in Nigeria are modest in size, with large scale industrial establishments practically confined to Lagos, Abeokuta, Ibadan, Sapele, Enugu, Kaduna, and Kano. The number of firms is growing most rapidly in the southern part of the country. This is not surprising since this is the most densely populated area and the most urbanized.

There appears to be a trend in Nigeria toward centralization of industry.

The production of consumer goods seems to be well established. But there is a growing need, particularly in the urban centers, for service industries. But right now the government is mainly interested in the diversification and increase of industry and the introduction of heavy industry. The latter has been embodied in the Six-Year-Development Plan.

This plan was inaugurated in 1962. Its expressed aim is a diversified economy with sufficient income and savings to finance its own rate of growth. In order to achieve the 4% aimed at, about 15% of the estimated gross national product will have to go into productive sectors of the economy.

Of a total planned expenditure of 876.8 million pounds, the largest amounts will be spent on transportation (including ports), and electricity. Three multi-purpose dams will be built; the first at Kainju on the Niger, the other two at Jebba and Shiroro Gorge. Another large amount has been allocated for trade and industry. The two chief projects will be an iron and steel mill and an oil refinery. The mill is expected to be in operation by 1966 at the earliest. The refinery is now under construction at Port Harcourt. Since Nigeria can supply one one-half of the money needed, she hopes to get the rest from the U. S. and other friendly nations, the International Bank for Reconstruction, and from private investors. It is hoped that once the public improvements have begun, that private foreign capital will be attracted more readily.

Nigeria's economic situation has shown definite improvement in recent years. The trade deficit was sharply reduced in 1962, and the production of all major exports increased. Although not impressive yet, the number of factories is increasing steadily. And perhaps most important of all is the fact that the government continues to be stable.

Nigeria hopes to be in a position by 1977, to be able to generate capital to the extent that foreign assistance will not be needed to finance economic growth. Foreign observers generally say that it will take longer than this, perhaps a generation. But no one has said that it cannot be done.

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