

The Nigerian economy: Agriculture and the livestock sector

For some years Nigeria has been seeking to achieve economic take-off by using her oil resources.¹ The 1973–74 fourfold rise in oil prices enabled the Government to launch an ambitious investment programme.² The principal aim of the Third Development Plan was to diversify the economy, which at that time was primarily based on oil and agriculture. Diversification was to be achieved by implementing industrial projects, and the initial aim was to set up the necessary economic infrastructure for industrialization and development. During the Third Plan, half of total Government investment expenditure, which rose rapidly, was devoted to infrastructure and industrial projects, leading to a high economic growth rate (8.5% per year, according to ILCA estimates).

1. Oil production, which began in earnest in the early 1970s, now stands at somewhat over 100 million tonnes Per annum.
2. A total of 42.000 million naira were scheduled for investment during the Third Development Plan covering the period 1975–80. On the basis of official exchange rates the average value of the naira is US \$1.55

Growth components in Nigeria, 1970–1978.

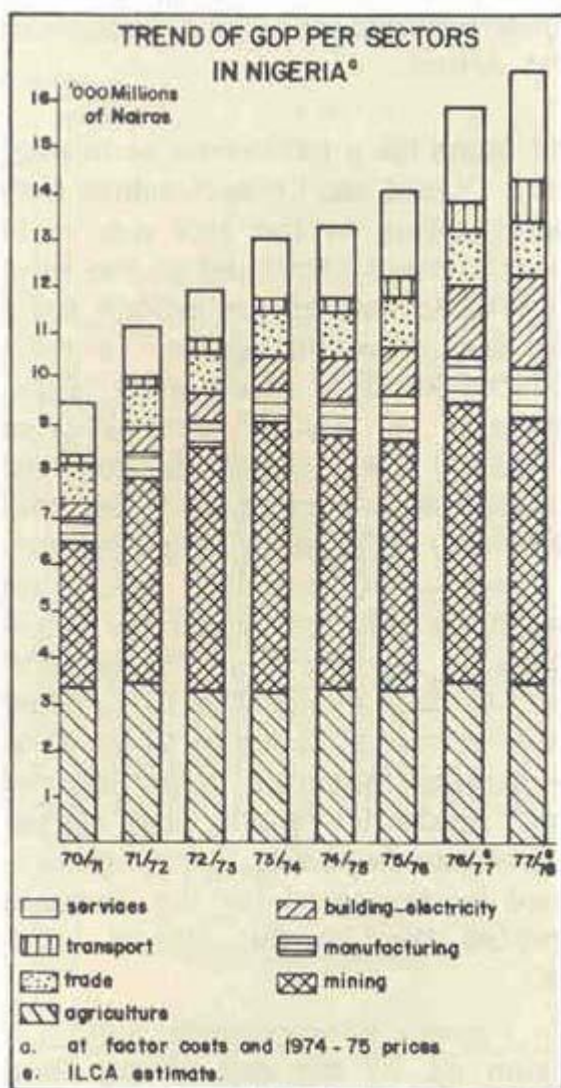
Sectors	1970–74	1974–78 ^e	1970–78
Oil sector	+23.5%	0	+ 9.5%
Non oil sector	4.0	+11.0	+ 8.0
Agriculture	–1.5	+ 0.4	0
Other	+10.0	+18.0	+14.5
GDP	+12.0	+ 8.5	+ 8.6

e. ILCA estimate

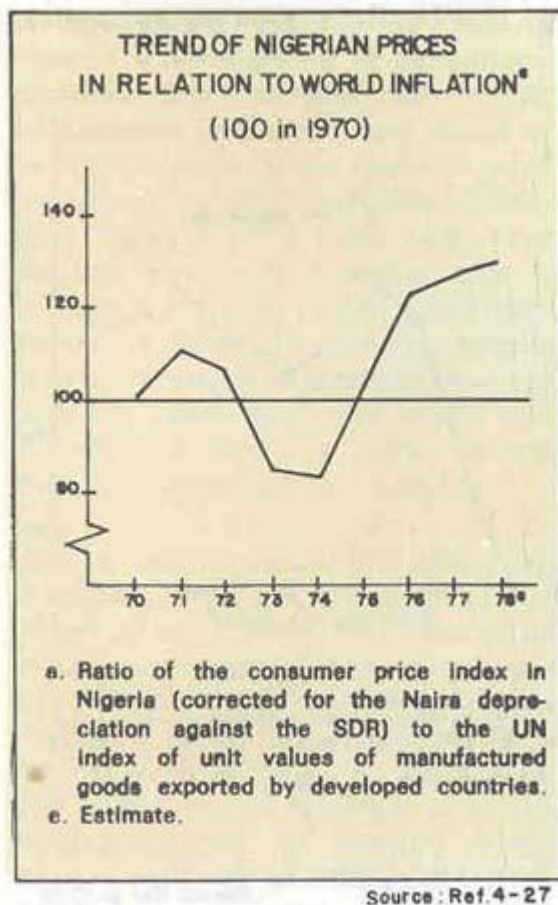
a. Manufacturing ind., building and public works, services

Source: Ref. 4.10.11

Growth has mainly affected the secondary and tertiary sectors. The building and public works sector, which had already made rapid strides forward between 1970 and 1974, is growing by over 25% per year (ILCA estimate), allowing even more rapid growth in the transport sector: over 30% annually, according to ILCA estimates. Growth in the manufacturing industries has also accelerated, climbing at over 14% per year (9.5% between 1970 and 1974). Light industries, such as food construction materials, textiles and car assembly, have been particularly prominent. Oil production, on the other hand, which was up to full capacity by the end of 1973, has reached a ceiling, while agricultural output, which fell from 1970 to 1974, has since stood still. The high growth rate of the Nigerian economy over the last ten years has not affected the agricultural sector, whose share in the GDP is estimated to have fallen from 36% in 1970 to 25% in 1974 and (according to ILCA estimates) to 20% in 1978.

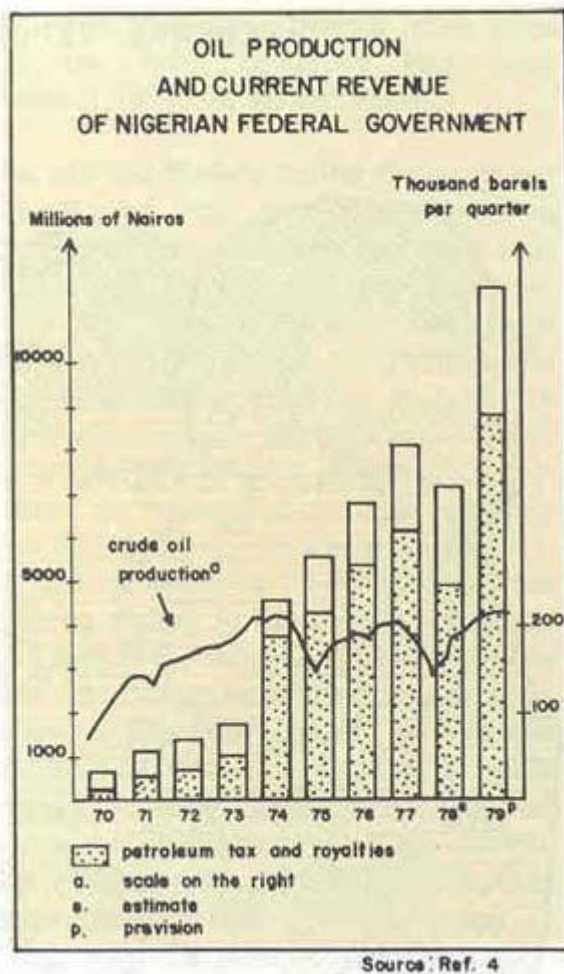


Source: Ref 4-8-9-10-11-12



Growth has also been accompanied by marked inflation. The annual increase in prices rose to over 22 % between 1974 and 1978 (reaching 25% in the case of food prices). On average it was 50% higher than in the rest of the world, leading to a growing overvaluation of the naira. Various factors have combined to fuel inflation. Wage increases (50% in early 1975) have added to rising labour costs in the public and private sectors. although they have also increased the purchasing power of part of the population. Public expenditure has moved forward considerably, forcing the Government to place a growing reliance on the banking system to finance its cash requirements, despite the spectacular increase in Government revenues. Lastly, the distribution of credit to the private sector has been particularly generous. In short, the increase in the money supply has been unrelated to the actual growth of the economy. It has also occurred at a time when considerable tension has already arisen as a result of too rapid growth.

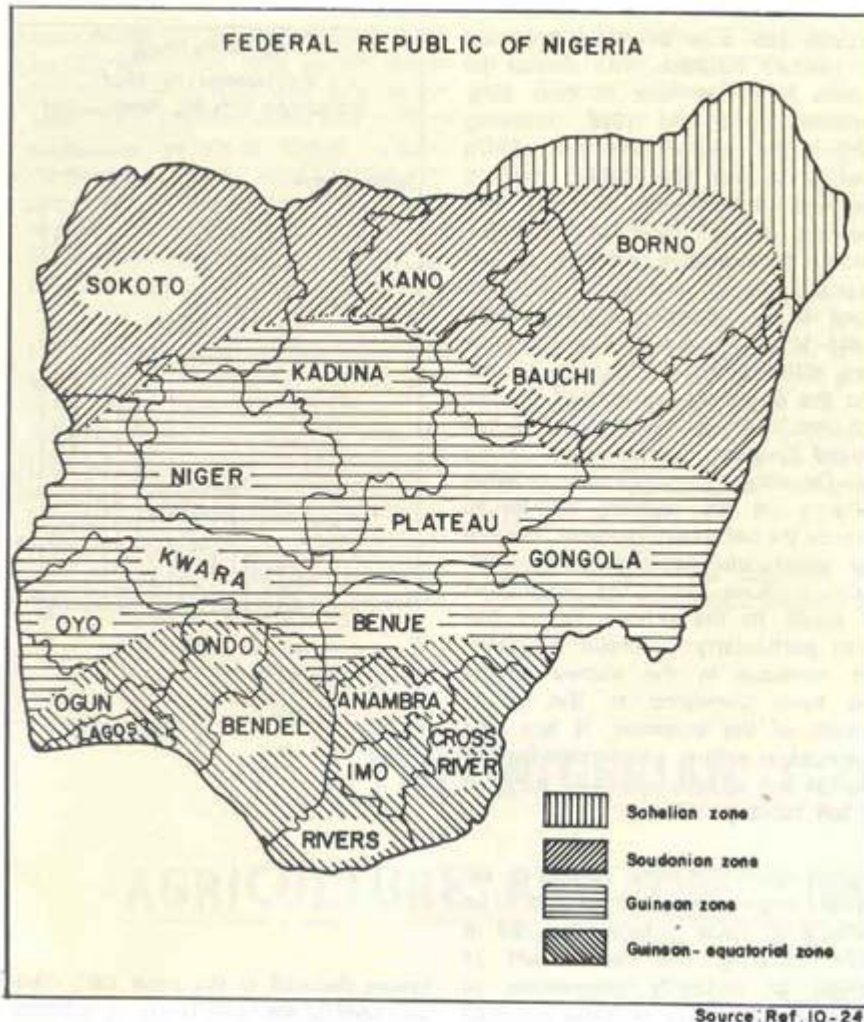
Nigeria's position with regard to external trade has deteriorated. The balance of trade entered the red in 1978, inducing the Government to launch an austerity programme in early 1978 in order to stem the tide of inflation. Imports were curbed, credits were curtailed and public spending was cut. However, the higher level of oil output since the beginning of 1979, combined with the rise in oil prices decided at the June 1979 Geneva conference, will result in a heavy increase in oil revenues for 1979 (approx 2,500 million naira), which will bring about a decisive improvement in Nigeria's public spending and balance of payments position.



Agriculture

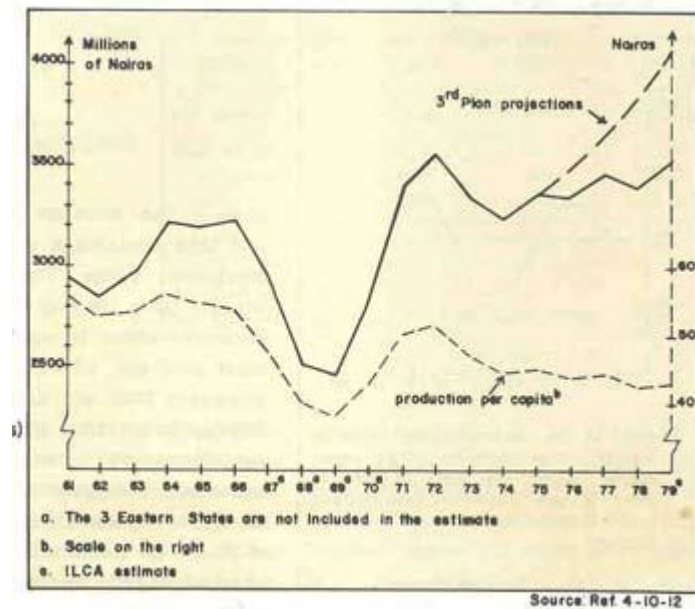
Nigeria lies between 14° and 5°N, and thus contains a wide variety of bioclimatic zones. These extend in parallel belts ranging from the most northern, which is semi-arid, to the most southern, where annual rainfall surpasses 2000 mm. One third of the country is covered by forest which contributes only marginally to the economy. The potential offtake of wood for construction is estimated at 70 million cubic metres per annum, of which Nigeria at present uses only a few million.

The wide variety of bioclimatic conditions means that most crops found in the tropics are grown in Nigeria: cereals (millet, sorghum, maize, rice), tubers (Yam, cassava), oil plants (groundnut, oil palm), pulses, cocoa, cotton, rubber and coffee etc. are all produced. Over half the cultivated land is used for cereals, which are mainly produced in the northern areas. Yields are in the range of 750 kg/ha in a year of normal rainfall (1100 kg for maize). However, owing to their higher yields—almost 10 t/ha, whereas the average yield for tropical Africa is only 7 t—roots and tubers provide the major share in the overall value of agricultural food crops.



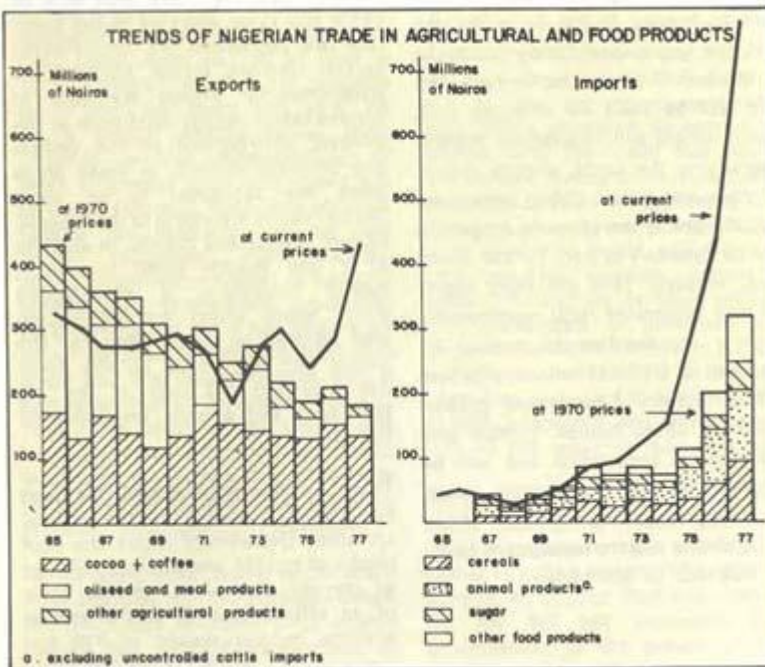
Before the advent of Nigerian oil, agricultural products accounted for three quarters of exports. Sales of cocoa dominated (Nigeria was the world's second largest exporter), consisting of one third of overall exports and over half the total for agricultural products, the latter also including groundnuts (seeds, oil and cakes), palm oil and palm kernels, cotton, rubber and hides and skins.

There are few available data for agricultural output. Owing to adverse circumstances such as the civil war (1967–70) and inadequate rainfall (1973–74), output has been subject to sharp variations over the last 15 years. Over and above these fluctuations, two successive trends may be identified: a slight increase in output from the early 1960s to 1970, during which the maximum yields of ten years previously were overtaken, followed by a period of stagnation or even decline, with output falling short of previous levels in 1976–78, although rainfall returned to normal throughout West Africa.



Food crops have performed somewhat better. Output can be ascertained only roughly owing to the fact that it is almost entirely consumed on the farm or marketed outside the official channels, but it would appear to have exceeded the level of the early 1970s, especially as regards cereals (rice and maize). Cash crops, on the other hand, are estimated to have declined appreciably. Production of groundnuts, for which the quantities marketed through the official channel fell dramatically in the early 1970s, is estimated to have plunged by 75%, while that of cocoa has fallen by 25 to 30%. The decline in cotton, palm oil and kernel production would also appear to have been sizeable, a pattern confirmed by the trend for the amounts marketed through the official channels.

To sum up, by the end of the Third Development Plan Nigeria was very far behind the targets which had been set for the agricultural sector, in which an annual growth rate of 4.8% (4.5% for subsistence crops) had been assumed. As a result, Nigeria's dependence on external food supplies has increased. During 1977 and 1978 Nigeria is estimated to have imported some 1.2 million t of cereals (i.e. almost 15 kg/capita), whereas imports amounted to 300,000 or 400,000 t in 1972-74 (less than 5 kg/capita) and only 50,000 t some 15 years ago. The increase in cereal imports has mainly consisted of rice, for which external purchases exceeded 550,000t per year in 1977 and 1978, whereas they had been negligible in 1974.



A parallel trend has been the collapse of agricultural exports as Nigeria became a net importer of agricultural products. Sales of palm oil, groundnuts, cotton and wood now stand at negligible levels, while those of palm kernels and rubber have fallen sharply. Only cocoa exports have risen over the last few years. However, this is entirely due to the rise in world market prices, since the actual quantities sold have tended to diminish over the last ten years, with the result that Nigeria has lost her place as the world's second largest exporter.

Various factors explain this deteriorating trend. First, the expansion of the industrial and commercial sectors has led to considerable job creation, especially in the building sector, leading to salary levels which are probably far higher than those in agriculture. The extent of this tendency is nevertheless difficult to quantify owing to the lack of available statistics. Secondly, during the recent period of high tension marketing, especially in exports, has evidently been confronted with serious difficulties (transport, congestion in the Port of Lagos). Moreover, several products, notably cotton, were even subject to a total ban on exports for several years.

Finally, agriculture has benefited very little from the enormous development efforts implemented on a countrywide basis. Agricultural expenditure projected in the Third Plan amounted to less than 3% of Government expenditure on development for the 1975–80 period, although over 50% of the working population are still involved in the agricultural sector. Furthermore, even this low figure appears not to have been reached by the federal development budget for the first three years of the plan. The plan had nevertheless allowed for various incentives to stimulate agricultural output, including an increase in producer prices and the stabilization of prices for staple commodities. These aims were to have been achieved primarily by the setting up of two marketing boards, one for cereals and one for tubers, with a mandate to guarantee producers a minimum price and establish storage facilities throughout the country. However, although these two boards have been set up, their influence has been minimal or even non-existent.

The second feature of the Government programme was the implementation of distribution services for inputs at subsidized prices, and the improvement of existing extension and credit

services. This part of the programme was launched in 1976 as part of the 'Operation Feed the Nation' (OFN) campaign, which was intended to mobilize the country to increase production and achieve food self-sufficiency. The programme is chiefly concerned with providing farmers with improved seeds and fertilizers, the latter being sold at heavily subsidized prices (currently at some 25% of the cost prices to the Government). Extension schemes are also being implemented under the programme, and the launching of a series of seed multiplication farms in the various states is being supervised.

The OFN programme has promoted a sharp increase in the consumption of fertilizers, in spite of the many difficulties associated with their distribution, which is often excessively delayed by transport or organizational problems. Imports of fertilizers were estimated at 200,000 t annually in 1977 and 1978. They have risen more than six-fold in ten years. Despite the increase, average consumption of fertilizer per hectare remains low (approximately 8 kg), and its impact on overall agricultural production has been limited.

As regards credit, the Government set up the Agricultural Credit Guarantee Scheme in 1977, to act as a guarantee fund for agricultural loans. Intervention in this field is thus only at an initial phase. However, it may be noted that before the fund was set up the agricultural loans extended by the commercial banks, although small in amount, had nevertheless grown very rapidly during the last few years. Moreover, in the April 1978 budget the Government announced measures to promote investment and output in large and medium-scale enterprises, as well as bolstering the incentives provided for small-scale farmers in the form of improved seeds, fertilizers and farm implements. The measures were as follows:

- (a) encouragement of greater participation by foreign capital in agricultural projects;
- (b) granting of investment allowances consisting of a 10% allowance against any capital expenditure on plant and equipment for agricultural purposes, and a capital allowance on equipment leasing in agriculture;
- (c) a tax incentive scheme for loans to agriculture, involving partial or total tax exemption on interest received on loans made to agriculture;
- (d) the prohibition of re-exports of food items.

Finally, the Government is trying to implement large-scale agricultural development projects. One of the most important of these is the irrigation project in the area south of Lake Chad, managed by the Chad Basin Development Agency. The project aims to irrigate 60,000 ha within the next ten years, completing 22,000 ha by the end of phase one in 1982. The land will be used for cropping rice, cotton, wheat and vegetables, thereby diversifying the crops already grown, sorghum and maize. Other large-scale projects are at the planning stage and will be financed in part by the World Bank. In early 1979 the bank approved two integrated rural development projects representing an overall investment of US\$ 125 million, together with a forestry development project totalling US\$ 80 million. Further projects are in preparation and will be implemented in the coming years. According to current estimates, these will probably require investment totalling US\$ 400 to 500 million.

Livestock

The part played by livestock in the economy is relatively modest, representing approximately 10% of agricultural activity and less than 3% of the GDP. Statistical data for the livestock sector are scarce. According to official estimates³ the national herd in 1974 numbered 8.5 million cattle,⁴ 22 million goats, 8 million sheep, 50 million poultry (45 million in the rural and 5 million in the commercial sector) and 500,000 pigs (450,000 in the rural and 50,000 in the commercial sector). There has been no official estimate made since 1974, but the results of ongoing surveys in the field indicate that the cattle herd has more or less recovered from the effects of the drought. On the basis of this data and using the ILCA Bulletin's usual conversion rates,⁵ the number of ruminants stands at some 13 million LU, i.e. 17 LU per 100 inhabitants. This is a very low figure.

3. Compiled by the National Livestock Development Committee.
4. Nevertheless, the FAO, whose estimates were largely used to complement those of the Nigerian Government, estimated the cattle herd at 11.5 million in 1977/78.
5. One livestock unit (LU) equals one head of cattle or six sheep/goats.

Moreover, the livestock population is also unequally distributed. Over 60% of the country lies in the humid zone (the Guinean and forest zones), which are unsuitable for livestock production since they are infested with tsetse fly. Consequently, more than 90% of cattle and three quarters of the small ruminant population are concentrated in the northern states. Only a few trypanotolerant breeds are able to survive under natural conditions in the difficult environment of the central and southern regions. In these areas there are estimated to be some 700,000 cattle belonging to the N'dama, Muturu and Keteku breeds, in addition to a few million small ruminants, mainly consisting of short-legged dwarf goats which are particularly well adapted to humid climates. The centre and the south, on the other hand, contain the bulk of the pig population and a large proportion of the poultry.

There are no precise figures for meat production. According to the Federal Livestock Department (FLD), the beef produced in 1974 amounted to 112,000 t of carcass equivalent, on the basis of an offtake rate of 7.75% and an average carcass weight of 170 kg.⁶ Output of sheep and goat meat, again estimated by the FLD, would have been about equal to that of beef in 1974. Offtake rates were probably about 30 % for goats and 25 % for sheep (which seems rather low), although official slaughterings of small ruminants were only about 6% to 8% of the herd. Even less accurate figures are available for pig and poultry production. Poultry output would nevertheless appear to be fairly considerable; furthermore, production on a commercial basis has made very rapid progress during the last few years and the FLD estimates that it will have doubled between 1974 and 1980. Total meat production is probably no higher than 4 kg per inhabitant, with the result that Nigeria is forced to supplement her domestic supplies with external purchases.

6. Estimates by SEDES (Société d'Etudes pour le Développement Economique et Social), however, calculated Nigerian beef output in 1970 at 139,970 t from a herd of 8,080,000, with an assumed offtake rate of 13%. The figure included a high number of non-recorded slaughterings and assumed an average carcass weight of 129 kg.

Livestock distribution in Nigeria – 1974.

– in '000 units –					
States	Cattle ^a	Sheep/goats ^a	Total ruminants (Liv. Units) ^b	Pork	Chicken
Northern States	<u>7648</u>	<u>27,735</u>	<u>12,269</u>	<u>21</u>	<u>32,500</u>
North East ^c	4,110	10,970	5,938	n	10,000
Kano	1,900	8,700	3,350	n	11,000
Northwest ^d	1,020	3,370	1,581	n	6,200
Kaduna	618	4,695	1,400	21	6,300
Central States	<u>855</u>	<u>3,477</u>	<u>1,433</u>	<u>294</u>	<u>12,300</u>
Kwara	674	927	828	n	2,900
Benue Plateau	181	2,550	605	294	9,400
Southern States	<u>36</u>	<u>6,407</u>	<u>1,103</u>	<u>480</u>	<u>35,400</u>
Total	8539	37,619	14,805	794	80,200

a. Excluding cattle, sheep and goats raised by the nomadic population of the North.

b. One Livestock Unit = 1 bovine Or 6 sheep or goats.

c. Borno–Bauchi–Gongola,

c. Sokoto–Niger.

Source: Ref. 10

At the same time, owing to the country's position on the Atlantic Coast, Nigerians also consume large quantities of fish. National consumption of fish is estimated by the Federal Department of Fisheries to stand at 600,000–800,000 t per year, of which over one third is thought to be imported (200,000–300,000 t of fresh fish equivalent), whereas meat consumption probably barely exceeds 400,000 t.

Nigeria also Imports dairy products. Local milk production is estimated at some 380,000 t per annum, a negligible amount in relation to demand, which is constantly increasing. Further, only a very low proportion of output (estimated at 1.5%) finds its way to the ten government-owned dairy plants scattered throughout the country, with the result that several of them are forced to use substantial quantities of imported powdered milk. There are also several private dairies, again producing liquid milk primarily from imported supplies. Almost all urban consumption is thus supplied from condensed or powdered milk imports. The latter rose from 23,500 t in 1965/66 to 120,000 t in 1976/77, when they amounted to some 450,000 t of milk equivalent and approximately 15% of the value of food imports.

On the other hand, Nigeria is a traditional exporter of hides and skins. Sales have plummeted in recent years, falling to 2000 t in 1976/77 and 1000 t in 1978, as against 8000 t in 1965/66, but the fall has apparently been accompanied by the growth of domestic tanneries and the shoe manufacturing industry, in line with Government policy to promote the processing of local raw materials.

The coastal areas, which are the most densely populated in the country, contain virtually no cattle. Traditionally, this situation has fostered the development of trade between the northern and southern regions, consisting almost entirely of cattle. In addition to these purely internal flows livestock are also Imported from neighbouring countries (Niger, Chad, Cameroon and Benin). According to NLMA⁷ estimates, these imports are believed to have represented some 250,000 cattle In 1977/78, i.e. almost 40% of the total livestock transported from the north to the deficit zones of the centre and south. Like all the other countries in West Africa, Nigeria was affected by the drought. Cattle slaughterings fell abruptly in 1975, after the sharp increase of 1973/74 brought on by herd liquidation. The slump was caused by a simultaneous drop in domestic production and imports, the latter falling from 285,000 to 130,000 animals between 1973 and 1976.

7. National Livestock and Meat Authority.

Meat supplies in Nigeria—1974.

—in '000 tonnes c.w.—				
Items	Recorded slaught ^a (head of cattle)	Estimated production ^b	Livestock imports ^b	Estimated consumption ^b
	1	2	3	4 = 2 + 3
Beef	1,018,881	112.0	48.8	160.8
Mutton/goat	1,932,698	105.8	—	105.8
Pork	83,364	13.5	—	13.5
Chicken	—	68.0 ^e	—	68.0
Total	3,034,943	299.3	48.8	348.1
Per capita		4.01 kg		4.76 kg

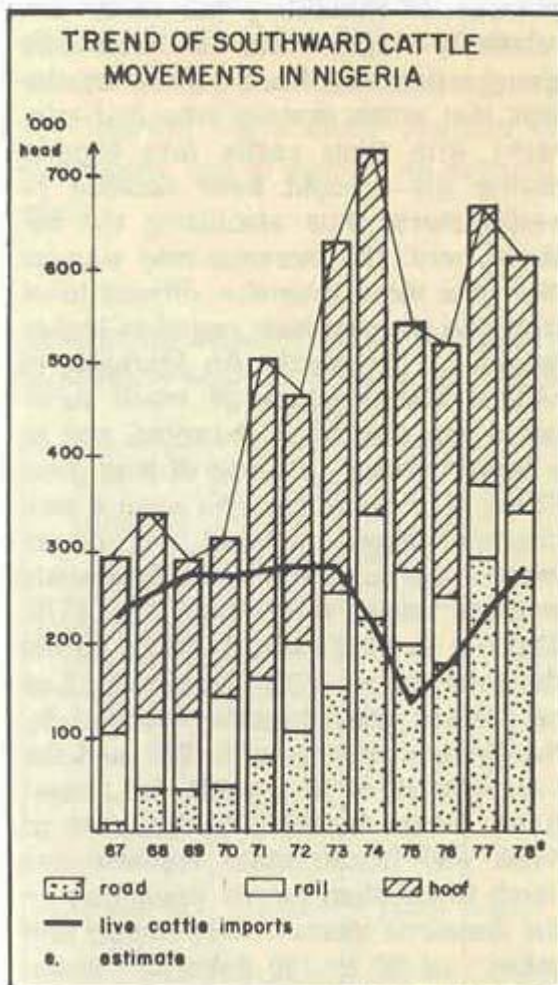
a. Source: Digest of Statistics—October 1976

b. Federal livestock Department estimates

c. Including live cattle imports

d. Rural production = 10.1; commercial production = 3.4

e. Rural production = 48.0; commercial production = 20.0

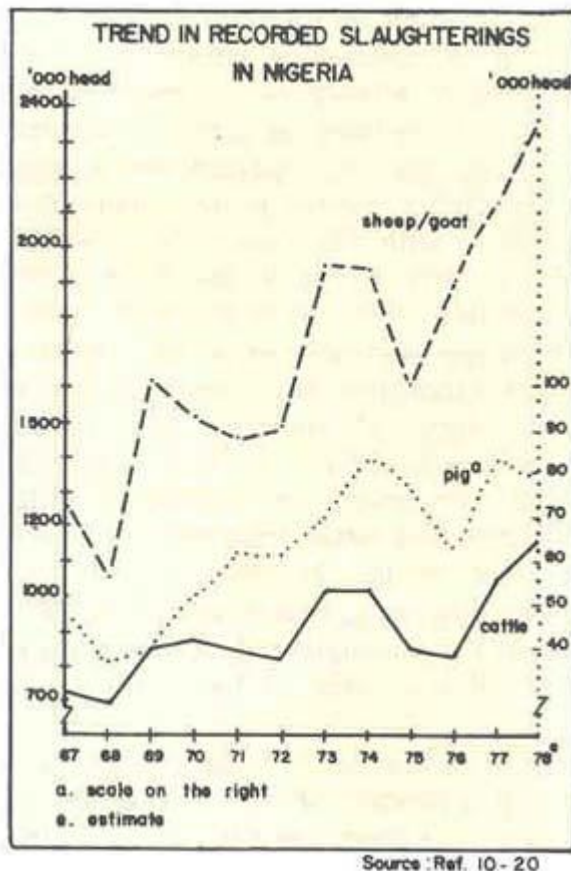


Source: Ref. 20

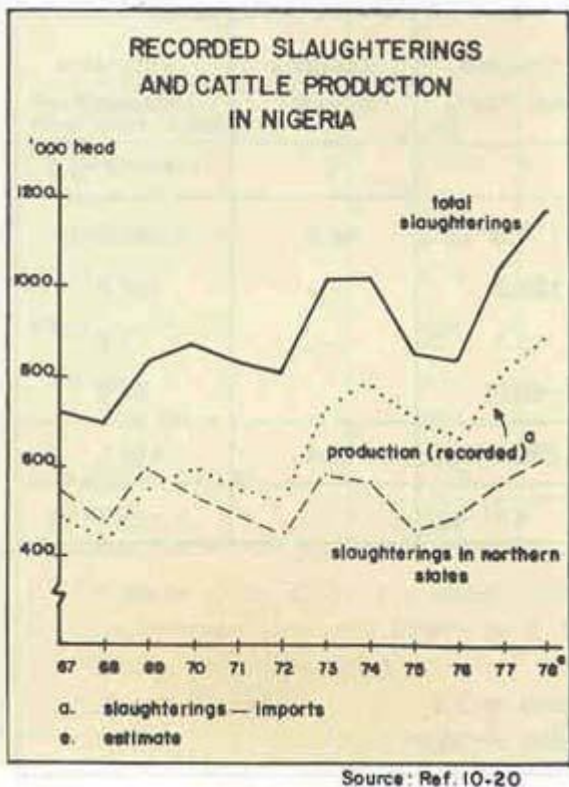
Slaughtering recovered in 1977. Imports are estimated to have returned to their pre-drought level, while domestic production marketed through recorded channels apparently stabilized at around 800,000 head of cattle, i.e. a higher level than before the drought. This trend is somewhat paradoxical: after the process of herd liquidation in 1973/74 it would have been more usual to enter a period of low production, as occurred in most Sahel countries, brought about by lower herd numbers and the necessary process of rebuilding the herd. The relatively high level of domestic slaughtering may be explained by the fact that some owners who had migrated with their cattle into Nigeria during the drought have decided to settle there, thus stabilizing the national herd. The increase may also be due to a more intensive offtake level from the national herd owing to higher prices for livestock. An increase in official slaughterings of small ruminants has also been observed, and to a lesser degree in those of pigs also. Since 1976 there has also been a sudden escalation of fresh and frozen meat imports, which were previously virtually non-existent: 1,300 t in 1976 28,000 t in 1977, and 21,000 t during the first half of 1978, despite the ban on frozen meat imports imposed by the Government in April 1978, and the introduction of a permit to import fresh meat. In 1977/78 the cost of fresh and frozen meat imports was much lower than prices prevailing on the domestic market; their import unit value was 90 to 120 kobo/kg,⁸ according to customs statistics, whereas the price of beef in Lagos was around 4 naira.

8. 1 naira = 100 kobo

Although demand for beef is increasing in response to the rise in income, the development of output is hampered by two main constraints: the reduced availability and degradation of rangeland in pastoral areas, and tsetse infestation in the central and southern regions. Traditional extensive grazing systems have exhausted most of the existing potential in arid regions, so that the long-term aim is to develop livestock production in subhumid or even humid areas. These offer real development possibilities, if and when the problem of trypanosomiasis is solved. A tsetse eradication programme is currently being implemented and an area of approximately 207,000 km² has already been cleared in the Sudanian and Guinean zones.



At the same time, efforts are being made to develop pastoral resources, both in the forest zone and beyond, and to lay the foundations for the stratification of animal production through the setting up of government-owned ranches in the main livestock production areas. The ranches are designed to develop milk and meat herds by means of selective breeding within local zebu breeds and the propagation of trypanotolerant breeds (particularly Muturu and N'dama) as well as by crossing indigenous with exotic animals.



The Third Plan, which had initially allocated 344 million naira to the livestock sector (i.e. 15% of the total for agriculture, but barely 1% of overall projected expenditure), bears witness to these concerns. Over 20% of the investment planned was to be spent on stratification schemes involving the setting up or further development of commercial ranches, and the promotion of livestock activities in small mixed enterprises. Under 20% was allocated for the development of pastoral areas in the form of water resources and controlled grazing, while 10% was earmarked for the improvement of animal health. A further 10% was allocated for the development of pig and poultry husbandry.

In the field of cattle production a vast development programme, partially financed by the World Bank, is currently being implemented. The programme has several components, including the development of pastoral resources and of rearing and fattening ranches in different ecological zones, aimed primarily at the production of improved breeds for dissemination in the private sector. Another component is the promotion of private ranches and individual fattening operations, while a third consists of training and research.

Considerable efforts are also being devoted to the poultry sector, mostly under the OFN programme and the Agricultural Credit Guarantee Scheme, and involving production centres for improved breeds to boost the development of commercial egg and broiler production, which is mostly owned by the private sector.

The Government has also made efforts to promote the animal feeds industry, but not without being confronted with various difficulties. From a 1975 survey it emerged that existing plant with a capacity of 447,000 t was working at only 42% of capacity and was primarily supplied with imported products. Output of animal feeds has nevertheless risen by 54% between 1975 and

1978, so considerable progress has been made. However, raw material supplies remain problematic, although the Government is taking steps to solve these difficulties.

Livestock development projects in Third National Plan (1974/75–1979/80)

– Thousand nairas–					
Development targets ^a	Federal government	Northern States	Central & South. States	Total	Percentage
Tsetse control	19,818	–	–	19,818	5.8%
Cattle production	72,702	60,269	48,087	181,058	52.6%
Animal health	12,099	12,736	11,918	36,753	10.7
Pastoralist areas	30,458	30,251	6,080	66,789	19.4
Stratification	30,145	17,282	30,089	77,516	22.5
Sheep/goat production	5,896	1,350	3,285	10,531	3.1%
Pork/poultry production	7,706	5,430	23,459	36,595	10.6%
Other	67,054	10,794	18,195	96,043	27.9%
Marketing	19,744	1,413	3,031	24,188	7.0
Dairy	3,715	5,994	7,380	17,089	5.0
Hides and skins	1,710	520	830	3,060	0.9
Training	14,500	100	4,041	18,641	5.4
Miscellaneous	27,385	2,767	2,913	33,065	9.6
Total	173,176	77,843	93,026	344,045	100

a. ILCA classification based on the projects as listed in the Third Plan.
Source; Ref. 11

Despite the efforts launched in recent years the impact of steps taken to increase production remains limited, the more so since the Government is confronting obstacles in implementing its development strategy in the livestock sector as in the economy as a whole.

Price indicators

A total of seven marketing boards are responsible for the marketing of agricultural products in Nigeria. Two of them were set up only recently, in order to market subsistence crops (cereals and tubers). The others date back somewhat further, but they have been restructured several times. The present system is oriented towards marketing boards specializing in a single product, although the role of each board varies. The boards market a high proportion of cocoa, cotton and palm kernel output, although intervention is considerably more modest as regards groundnuts (less than half of total output) and palm oil (under 10%). There is little or no intervention in the field of subsistence crops, since guaranteed prices are lower than the market price. The Tuber Marketing Board is estimated to have purchased 221,400 t of yams in 1978 (the first year in which purchases were made), whereas production is over 14 million t. In the same year the Cereals Marketing Board purchased under 2,000 t of rice. Marketing of

subsistence crops is thus almost entirely in the hands of the private sector, and the same is true for livestock products.

There are no data available for producer prices other than those determined by the marketing organizations. Furthermore, data on retail prices are riddled with serious sampling errors. The estimates on market prices given in the table which follows should therefore be considered as indicative rather than definitive, serving to illustrate the present position of agriculture and to outline its development.

Prices for agricultural products in Nigeria and in the world markets—1978.

Items	Nigeria		World market
	Kobo/kg	US cents/kg (1N = 1,55\$)	Us cents/kg
Agricultural products			
Millet/sorghum	11/35 ^a	17/54 ^a	9.4 ^b
Maize	13/40 ^a	20/62 ^a	10.0 ^c
Rice (milled)	40/60 ^a	62/93 ^a	36.5 ^d
Yam	12/36 ^a	19/56 ^a	—
Garri (milled)			
cassava)	11/44 ^a	17/68 ^a	—
Groundnut oil	143.0 ^e	221.0 ^e	109.3 ^f
Groundnut			
(shell)	27.5 ^g	42.6 ^g	61.8 ^h
Palm kernel	15.0 ^g	23.0 ^g	36.4 ⁱ
Cotton (seed)	33.0 ^g	51.0 ^g	158.1 ^j
Cocoa	103.0 ^g	160.0 ^g	340.0 ^h
Rubber	36.0 ^g	56.0 ^g	96.8 ^j
Beef	300/400 ^m	465/620 ^m	201.5 ⁿ
Agricultural inputs			
Fertilizers	3.6/4.4 ^o	5.6/6.8 ^o	18.7 ^p
Unskilled labour	250/350 ^m	388/452 ^m	—

a. Minimum guarantee prices/market prices (ILCA estimate).

b. US sorghum, yellow No.2, FOB Gulf.

c. US Maize, “ “ “ “

d. Thailand, white 5% broken. FOB Bangkok.

e. Market price (ILCA estimate).

f. Any origin, CIF Rotterdam

g. Prices paid to producers by Marketing Boards.

h. Nigerian—CIF UK.

i. Nigerian—CIF European ports.

k. Average prices London/New York.

l. Malaysian. FOB Kuala Lumpur.

m. North/South, retail prices.

n. US boneless beef. Argentina CIF USA.

o. Ammonium sulphate/NPK 15,15,15.

p. Import unit value (Nigeria).

Source: Ref. 4, 9, 10, 12, 27.

Generally speaking, the prices offered to producers by the marketing boards are marginally higher than those on the world market for subsistence crops, but lower in the case of cash crops. A pattern of this kind is to be expected in that it reflects the comparative disadvantage of the basic crops which Nigeria in fact imports. However the guaranteed prices have little significance for products consumed locally—subsistence crops, palm oil and, to a lesser degree, groundnuts—since the latter are largely marketed by the private sector. The market prices for subsistence crops are in fact three or four times higher than the minimum guaranteed prices. This discrepancy results from the inflation which the country has experienced over recent years. Whereas prices for export crops, especially cocoa, are affected by price trends on the world export markets, prices for products consumed locally have risen independently, in accordance with the pressure of demand, so that their present level is higher than that on external markets. This situation encourages the development of cereal and meat imports while acting as a disincentive to exports, either directly, in the case of products also consumed locally (groundnuts, palm oil), or else indirectly, through the decline in the output of products for export (e.g., cocoa) in response to market forces.

Owing to the lack of data it is even more difficult to trace relative price movements. An attempt has nevertheless been made to outline price ratio trends for the last ten years. The trends clearly reflect the situation described above. In 1967/68, a kilo of cocoa was worth approximately 5 kg of cereals (or tubers). It was worth only 4 kg in 1970/71, and under 3 kg in 1978. There is a similar trend for other cash crops: groundnuts, cotton and palm kernels. However, price ratios between individual subsistence crops (cereals/tubers) and between subsistence crops and meat are currently at the same level as in 1967/68.

This trend is clearly related to the general decline for almost all cash crops. At the same time, despite generous incentives to farmers, the sharp rise in labour costs caused by the growth of the non-agricultural sector has constituted a handicap felt all the more keenly by farmers since their yields were making little or no progress. This factor would explain not only why the output of subsistence crops has stood still (the shortage of manpower and its ever increasing cost destroys any immediate incentive to increase production), but also why prices have risen so sharply under the subsequent impetus of demand.

Price ratio trends in Nigeria^a

Products	1967/63	1970/71	1978
Cereals/yam ^b	0.96	n.a.	0.97
Groundnut ^c /cereals ^b	1.65	1.2	0.8
Ground.oil/cereals ^b	7.6	—	4.1
Cotton ^c /cereals ^b	2.2	1.8	0.9
Palm kernel ^c /yam ^b	1.2	0.9	0.4
Cocoa ^c /yam ^b	5.0	4.1	2.9
Beef/cereals (North) ^b	7.0	n.a.	8.5
Beef/yam (South) ^b	12.6	9.8	11.0

Beef (South/North) ^b	1.8	n.a.	1.30
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a. Per kg. of products (litre for groundnut oil).

b. Market prices.

c. Producer prices paid by Marketing Boards.

Source: Ref. 4.9.10

Finally, a significant indication of the development of price ratios is provided by the livestock sector. According to data on meat prices converted on the basis of official exchange rates, beef prices in 1978 averaged US \$4.5/kg in the north and around US \$6 in the south. These very high prices—the price of imported boneless beef from any origin in the USA was about \$2/kg during the same period—are a further reflection of the pressure of demand, which has coincided with a drop in potential supplies following the Sahel drought. Consequently, beef prices have tended to improve in relation to the prices of other agricultural products, and especially in relation to the price of by-products used in cattle feeds (especially oilcakes). The beef/subsistence—crops price ratio in 1978, however, bore a close resemblance to that of ten years earlier. The trend of the ratio would nevertheless appear to have been different in the north, where beef is produced and where they would appear to have decline, probably because frozen meat imports have brought pressure to bear on the rise in meat prices. Whatever the case, the divergence between beef prices in the north and those in the south has diminished in relative value (this trend is confirmed by data for livestock prices), a factor which in itself would appear to handicap Government efforts to promote stratification in the livestock sector.

To sum up, not only has growth had little effect on the agricultural sector, but it would also appear to have brought with it a number of distortions, which have coincided with random influences such as those of the Sahel drought. These distortions, which are most apparent in the price structure, appear little favourable to the balanced development of agriculture.

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