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SOME STRATEGIES FOR THE DEVELOPMENT OF NIGERIA'S AGRICULTURAL SECTOR IN THE 1990s

DR. G. E. UKPONG¹

Abstract:

This paper reviews the major policy measures introduced by the government to induce growth of output of the agricultural sector and accelerate its development. Some measures adopted before the introduction of the Structural Adjustment Programme (SAP) included producer price setting through Marketing Boards, establishment of financial institutions and Funds to extend credit to the sector at concessionary interest rates, and the provision of extension services by ministries of agriculture. Agricultural policy measures under SAP consisted, among others, of abolition of Commodity Boards, free market determination of agricultural product prices, a ban on the export and import of selected agricultural products and reduction of input subsidies.

The review is followed by an examination of the response of the agricultural sector to the various policy measures. The results are considered mixed. Modest real output growth of about 2 per cent has been observed in most of the SAP years in contrast to the steep decline and relatively lower rates of growth of the sector pre SAP. This level of performance is far below the real output growth rate of 5.0 per cent set for the sector. The paper then identifies lingering factors which still undermine increases in agricultural output. It concludes that low crop yields are partly related to the system of Nigerian agriculture which is based on numerous small farms, with each farmer working a tiny parcel of land with hoes and machetes instead of adopting available biological/scientific technology (disease resistant, high-yielding seedlings). The paper stresses that high output increases have been achieved with respect to cassava and yams whose cultivation is widely based on high breed varieties. Other problems facing the sector include persistent bottlenecks in the supply of essential inputs, weak extension services, ineffective agricultural lending, inadequate infrastructure and sub-sector specific specialists.

On the basis of the foregoing, the paper suggests future direction of policy. Among suggested strategies for agricultural development are granting of more credit to formal groups of farmers so that peer pressure would help minimise loan default, greater adoption of technological breakthroughs to increase crop yields, private sector involvement in building suitable silos to reduce post harvest crop losses, training sub-sector specialists for research and extension work, adoption of affordable hand pump-based irrigation technique instead of costly huge dams and broadening environmental protection programmes to embrace erosion and flood control. The paper concludes that if most of these measures are adopted and effectively implemented, the targeted real annual growth of 5.0 per cent for the agricultural sector could be achieved.

INTRODUCTION

The importance of the agricultural sector in the Nigerian economy is generally well known. Most public policy makers, especially since independence in 1960, have expected the sector to satisfy the bulk, if not all, of the food requirements of the country, supply most of the agricultural raw materials needed by the manufacturing sector, provide adequate employment and income to farmers as well as earn substantial foreign exchange. The livestock sub-sector is supposed to make Nigeria self-sufficient in the production of livestock in order to improve the nutritional status of Nigerians through the provision of high quality protein rich product.²

In line with the anticipated contributions agriculture is to make to the overall development of the Nigerian economy, several measures were designed in the years preceding the Structural Adjustment Programme (SAP) to stimulate the growth and development of the sector. Such measures included subsidized/low interest rate policies

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² Federal Ministry of Agriculture and Water Resources, National Livestock Policy, Lagos, 1988.

of the 1970s and early 1980s, establishment of specialised institutions to lend solely to the sector, input subsidies and producer price setting through Commodity Boards. Following the adoption of the SAP in 1986, Commodity Boards were abolished in order to provide productive incentives to farmers through increased producer prices. In the same vein, a unified system of agricultural extension has been adopted to quicken the dissemination of improved husbandry practices and research findings to farmers while more universities of agriculture and research institutes have been established to broaden and strengthen agricultural research. In spite of these measures, the performance of the sector has generally been considered unsatisfactory and the expected significant contribution it was to make towards the attainment of several national economic and social goals remains largely an expectation. The question then is, why have the measures adopted over the year not achieved sustainable growth of the sector and in which direction should policy be focused to hasten the realization of the objectives for Nigerian agriculture?

The aim of this paper is to review some of the key measures which have been adopted to stimulate agricultural growth (with a view to identifying inadequacies), examine the degree of response of the sector to such policy measures and suggest areas of future focus of policy in order to enhance its output and further development. For ease of presentation, the paper is organised in five parts. Part I reviews the key pre-SAP and SAP-induced policy measures pursued to increase agricultural production. The second part examines the response of the sector to measures adopted. Some factors constraining the growth of agricultural output are identified in Part III. Part IV contains suggested future focus of measures of intervention. Part V summarizes and concludes the paper.

PART 1

REVIEW OF SOME MAJOR POLICY MEASURES DESIGNED TO STIMULATE AGRICULTURAL PRODUCTION

A. Measures Adopted From 1970 - 1985

Some of the major agricultural policies and programmes of the Federal Government in the period 1970- 1985 can be classified into three categories, namely, macroeconomic, sector-specific and other policies.

1. Macroeconomic Policies

These consisted of:

- (i) A fiscal policy characterised by increased budgetary allocations to the agricultural sector both for capital and recurrent expenditures. For example, average annual capital allocation of N190.8 million was made between 1975 and 1980, constituting 3.5 per cent of total allocation to all sectors. As a proportion of the total, capital allocation to the sector averaged N213.3 million (4.5 per cent) in the period 1980 - 1986 before rising to an average of N729.5 million or 3.2 per cent in 1987-1992 (See Table 1);
- (ii) Concessionary tax policy measures such as tax holidays, elimination of export taxes on agricultural commodities and income tax relief for new agricultural ventures;
- (iii) A monetary policy characterised by favourable credit allocation to

agriculture and concessionary interest rates of 3-7 per cent on agricultural loans compared with 6-12 per cent in the rest of the economy in the 1970s and early 1980s. Cheap credit in the pre-SAP era was expected to quicken the pace of agricultural development. The reponse of banks was not encouraging since it was unprofitable to lend at lower than the cost of acquisition of loanable funds; and

- (iv) A trade policy characterised by liberal importation of agricultural inputs (fertilizers, chemicals), equipment to boost production, and food including livestock).

2. Sector-Specific Policies

The major sector-specific policies included intensification of agricultural extension through Agricultural Development Projects (ADPs), direct funding of agricultural research institutes, agricultural marketing via Commodity Boards, administrative fixing of producer prices and establishment of River Basin Development Authorities to produce food and provide water for irrigation. Agricultural extension services were initially provided mainly by the government through the states' Ministries of Agriculture and later by ADPs which have continued to expose farmers to modern farming techniques as well as distribute inputs. The government also encouraged the flow of credit to the sector by stipulating sectoral credit limits, including mandatory compliance by banks and by establishing the Nigerian Agricultural and Cooperative Bank (NACB) in 1973 with authorised and paid-up capital of N2 million to cater for credit and investment needs of Nigerian agriculture. Similarly, the Agricultural Credit Guarantee Scheme Fund (ACGSF) was established in 1977 to stimulate the flow of credit to farmers, protect banks against some risks inherent in agricultural lending and to guarantee a refund of 75 per cent of defaulted loans net of the amount recovered by banks from defaulting farmers. As shown on tables 2 and 3 both the NACB and ACGSF have enhanced the flow of credit to agriculture although credit from the latter is on the decline. For example, credit allocation to the sector by the NACB rose from an annual average of N50.9 million in 1980 - 84 to N99.42 million between 1988-92, representing an increase of 95.3 per cent. Loans granted to the sector through the ACGSF averaged N31.863 million and N103.309 million in the respective periods (See Table 3a).

Farm inputs, such as fertilizers were supplied through government agencies, including ministries and public supply companies, while research on improved seed varieties, pest and disease control was vested in established research institutions and stations such as universities of Agriculture, the Nigerian Institute for Oil Palm Research, Forestry Research and Veterinary Research Institutes. For a considerable length of time, produce marketing was handled solely by Marketing Boards until their abolition and liberalization of export trade in 1986. In order to reduce post-harvest crop loss, five publicly-funded silos have been completed in different parts of the country for grain storage. The government also established the Nigerian Agricultural Insurance Company (NAIC) in 1984 to insure farmers against risks and natural calamities.

3. Other Public Sector Programmes

Other institutional programmes were introduced during the three national development - plan periods. For instance, the National Accelerated Food Production Programme (NAFPP), launched in 1973, was tailored specifically to increase the production of the main food crops: rice, maize, guinea-corn, millet, wheat, cassava and yams. In general, various agricultural programmes contained in National Development Plans had specific

performance targets as a means of increasing aggregate output. The pilot projects of the ADPs, started in Funtua, Gusau and Gombe in 1975 by the Government in conjunction with the World Bank, were subsequently extended nation-wide to concentrate on input supply, extension and training. River Basin Development Authorities (RBDAs) were launched in 1973 with the mandate to undertake agricultural production, harness water resources in the country, provide infrastructure such as roads and electricity and distribute various farm inputs. The functions of these Authorities were, however, streamlined under the SAP and their number reduced to eleven. Operation Feed the Nation (OFN) of 1976 aimed at food self-sufficiency. The Green Revolution, introduced in 1980, tried to combine the features of NAFPP and ADPs highlighted above.

B. Strategies And Policies Adopted Since The Structural Adjustment Programme (SAP) in 1986

The general objective of agricultural policy under the Structural Adjustment Programme (SAP) was to invigorate the nation's flagging agricultural economy through an entirely new philosophy of development. In pursuance of this objective, agriculture has been regarded essentially as private sector business with government seeking to play only a supportive role. Government is divesting itself from most investments in direct agricultural production and is privatising/commercialising investments already made. Examples of such enterprises already privatised are Nigerian Sugar and Nigerian Yeast and Alcohol Companies at Bacita. Other elements of SAP included the deregulation of Nigeria's economy, the liberalisation of external trade, and the promotion of self-sufficiency in food and industrial raw material production under the guidance of the recently established Raw Materials Research and Development Council. Some of the key measures adopted under the Structural Adjustment Programme to enhance agricultural development were as follows:-

- (i) Interest rates were deregulated and agricultural loans attract higher rates than hitherto, while agricultural loan terms were liberalised. This policy is believed to encourage the voluntary inflow of credit to the agricultural sector which before SAP was enjoying concessionary rates of interest with the resultant unwillingness of banks to significantly lend to the sector;
- (ii) The tariff structure was adjusted to encourage local production and protect agriculture and local industries from unfair international competition;
- (iii) The naira has been devalued to encourage exports;
- (iv) Marketing Boards for scheduled crops were abolished and individuals were allowed to export their produce and keep the proceeds of their exports in domiciliary accounts. This was aimed at removing the administrative bottlenecks associated with Marketing Boards and to encourage farmers to produce for exports and take advantage of price and other developments in international markets;
- (v) Importation of a number of food items was banned, including most livestock products, rice, maize, wheat and vegetable oils to encourage local production and protect agriculture and local industries;
- (vi) Subsidies on inputs were reduced following malpractices in their allocation; but a 50kg bag of fertilizer which costs the government about N350 is still intended to reach farmers at N40.00, implying a subsidy of about 88.6 per cent. Subsidised land clearing and tractor hiring services are still being provided by many state governments;
- (vii) A number of new institutions were created for agricultural and rural develop-

- ment, among which are the Directorate of Food, Roads and Rural Infrastructure (DFRRI) and the National Directorate of Employment (NDE). They are to create easy access to rural areas to facilitate increased food production, ease the evacuation of farm produce and provide rural infrastructure to support agro-based and cottage enterprises so as to stem rural urban migration;
- (viii) Some existing institutions were reorganised e.g. the River Basin and Rural Development Authorities were directed to dis-engage from direct agricultural production and to concentrate on the provision of water for irrigation of agricultural land and for other purposes;
 - (ix) Most publicly owned agricultural enterprises are being privatised or commercialised while the government pays more attention to environmental problems—pests, disease, drought, erosion and land slides;
 - (x) Land is to be made available to those who are interested in farming through the National Land Development Authority (NALDA) established in 1990 with a take-off grant of N300 million to acquire at least 50,000 hectares of land in each state of the Federation for agricultural activities;
 - (xi) The government is assisting farmers in the formation of Federation of Farmers' Association of Nigeria. It is hoped that this body would, in future, cater effectively for the welfare of its members and if possible, assist in making the distribution of inputs such as fertilizers to farmers under its umbrella more efficient;
 - (xii) The Nigeria Export Import Bank (NEXIM) was established in January 1990 to help encourage exports of the country's agricultural and manufactured products through the provision of pre- and post-shipment financing to indigenous exporters. Financial services to farmers under an evolving NEXIM increased from N552.4 million in 1988 to N713.5 million in 1989 and N1,371.0 million in 1990 before the institution was formally established; and
 - (xiii) The Government has been sourcing credit from International Financial Institutions for specific agricultural projects. These include the Government/World Bank Second Livestock Development Project, Government/UNDP/FAO Livestock Grazing Reserve Development and the Nigerian Economic Reconstruction Fund (NERFUND). Under the first project, N41,440 million has been disbursed to 8,043 small-holder livestock farmers to support their productive activities, 220 boreholes have been drilled to provide water and 24 research projects are being funded in six universities and other higher institutions. Counterpart funding of about N40 million, in support of the programme, is currently outstanding. The second project aims at settling 60 pastoralist families in grazing reserves and developing earth dams and rural roads. At end-1991, 41 families (68.3) per cent were settled and 9 earth dams and 110 km of roads were built. The sources of NERFUND funds include N100 million by the Government and counterpart funding of about \$280 million from the African Development and the World Banks. About 61 agro-allied and industrial projects, in 16 states, were approved with disbursement of \$4,553,549.00 made to 13 of these projects by the first quarter of 1991.

The policy measures highlighted so far were designed not only to increase aggregate agricultural output and the volume of agricultural export commodities such as palm kernel, groundnuts and cocoa so as to diversify the nation's exports away from crude oil but also to ensure self-sufficiency in domestic production of basic staples (maize, rice, wheat, etc.) and animal protein. It is against this background that the response of the sector to the measures adopted is examined below.

PART II

RESPONSE OF THE AGRICULTURAL SECTOR TO POLICY MEASURES

The financing policies and programmes of Government for agriculture have had mixed results. In spite of increased resource flow to the sector in the pre-SAP era, total agricultural production stagnated and eventually declined. In general, however, some of the policy measures (especially SAP-induced reforms) have assisted in arresting declines in agricultural production and in restoring moderate growth. Details about the degree of response of the sector are given below with respect to aggregate production, sub-sectoral performance, value of exports and agricultural prices.

Most of the 1970s and the first half of the 1980s were characterised by low agricultural output. Staple crop production was adversely affected by the 1971-72 drought and the 1975 rosette virus epidemic. As previously highlighted, some of the major steps taken by the Government to stimulate agricultural growth during this period included using Marketing Boards in setting producer prices and marketing agricultural produce, encouraging the flow of credit to agriculture at concessionary interest rates, funding agricultural production directly through budgetary allocations and by establishing agriculturally oriented institutions, funds, organs and programmes such as NACB, ACGSF, ADPs, RBDAs and OFN.

(a) Aggregate Agricultural Production

Owing to several factors, discussed in detail in Part III, the aforementioned measures are viewed not to have been sufficiently effective in turning the weak performance of the sector around. Total agricultural output, as measured by aggregate index of production, declined in many pre-SAP years. For example, high rates of total output declines recorded were - 15.0, - 6.1, -5.5, -0.2 and -1.5 per cent for the years 1975, 1976, 1977, 1978 and 1979, respectively. Production also dropped by -0.5 percentage points in each of the years 1982 and 1983 (see Table 4). The contribution of agriculture to Gross Domestic Product (GDP) fell from 30.6 per cent between 1971 and 1975 to 22.4 and 25.0 in the periods 1976 - 1980 and 1981 - 1985, respectively. Massive food importation, made possible by enhanced crude oil export earnings but which served as a disincentive to serious domestic farming, was resorted to by the public sector to satisfy the country's food requirements.

In an effort to reverse the low trend of agricultural production, make food available to the populace at reasonable prices, increase farm incomes and agricultural raw materials to industries, several SAP measures were specifically focused on the agricultural sector. Among such measures were the abolition of Commodity Boards, reduction of regulatory controls in favour of market forces, deregulation of exchange and interest rates, provision of more rural infrastructure (roads electricity) through DFRRRI, establishment of more agricultural research institutes and introduction of a unified systems of agricultural extension.

The agricultural sector responded more favourably to the SAP measures. Aggregate agricultural production grew at an average annual rate of 7.0 per cent in the years 1988-1992 as against an average growth of about 1.7 per cent from 1981-1985 (see Table (4)). If the rate of growth of the population of about 3.2 per cent per annum is taken into account, agricultural production recorded an average real growth of under 4 per cent in the SAP years, compared with a minimum real rate of growth of 5.0 per cent

targeted for the sector. The growth in agricultural output was largely induced by nominal increases in producer prices (following devaluation of the naira), generally well-distributed rainfall and absence of drought, slightly improved fertilizer/input distribution arising from decentralization of supply and heightened activities of ADPs in demonstrating better farming practices, disseminating research findings and encouraging adoption of disease-resistant species of crop seedlings. Further agricultural growth was, however, constrained by high costs and shortages of some inputs such as ploughs, hand pumps, tractors, fishing outboard engines, chemicals and livestock vaccines, most of which are imported.

In line with the modest growth of the sector in most of the SAP years, its average contribution to the GDP rose to about 37.9 per cent between 1986 and 1990 from 25.0 per cent in the period 1981-1985 (see Table 5). Other developments regarding the pattern of agricultural production are provided in the next section which covers the sub-sectors: crops, livestock, fishery and forestry.

(b) Performance of the Sub-Sectors

(i) Crops

Food Crops

As evident from Table 6, food crop production recorded substantial increases over the years. The productive gains were more pronounced for cassava, yams and rice whose average rates of growth were 8.3, 20.1 and 14.6 per cent between 1988 and 1992. Their respective average growth rates in the pre-SAP period, 1991-1985 were 6.9, -1.2 and 8.7 per cent. Some factors which contributed to food crop output increases were the introduction/dissemination of disease-resistant cassava cuttings by the International Institute for Tropical Agriculture (IITA), improved yam seed multiplication technique (mini set) by the Tree Crop Research Institute (now University of Agriculture), Umudike, generally favourable weather conditions and special government crop-support programmes such as Accelerated Wheat Production Programme (AWPP)³ and the ban on import of selected staples. Price deregulation and the more than "an average of 60 per cent increase in the prices of food during the SAP period" provided some incentives to farmers to increase supplies⁴. Food crop production, particularly grains, was significantly reduced in 1992 following delayed rains in many Northern parts of the country and malpractices in the distribution of subsidised fertilizers nationwide.

Tree Crops

Tree crop production has been generally unsatisfactory. Although cocoa beans, groundnuts and palm oil are some of the most important commercial, agricultural products in Nigeria, their production has tended to decline since the mid 1970s. In the immediate pre-SAP years, 1981-1985, the average rate of decline in cocoa production was 9.8 per cent. That rate has been reduced marginally to 9.2 per cent in the SAP period, 1988-1992. Output of groundnut and palm oil declined, on the average, by 14.8 and 1.8 per cent between 1981 and 1985 before attaining respective average growth rates of 9.4 and 8.3 per cent from 1988-1992 (see Table 6). Increased demand for vegetable oils and the corresponding rise in their prices are some factors which have induced the supply of groundnut and palm oil, while weak demand for cocoa beans in international commodity markets and high costs of chemicals for treatment of pod disease have constrained the

³The ban on importation of wheat and the government funded AWPP had only limited output gains, raised wheat prices and encouraged smuggling, leading to the lifting of the ban in October 1992

⁴The Impact of SAP on Agriculture and Rural Life, Vol. 1, The National Report, CBN, Lagos, 1992.

growth of cocoa output.

(ii) Livestock

The livestock sub-sector has been depressed for many years. Its output declined by about 18.2 and 4.4 per cent in 1982 and 1983, respectively. Thereafter, the respective growth rates of 8.8 and 4.2 per cent were achieved in 1984 and 1985. The fortune of the sub-sector did not improve and might have worsened in the SAP years. For example, production in the sub-sector grew by about 2.1, 3.0 and 0.7 per cent in 1987, 1990 and 1992, while it recorded declines of 12.0 and 1.6 per cent in 1989 and 1991, respectively (see Table 4). The modest growth in livestock production was explained by sustained drive to minimize the effects of diseases and pests by relevant government agencies. Inadequate feeds and vaccines, which have become very expensive to import given the reduced value of the naira, have adversely affected the poultry segment of livestock and in turn, the overall performance of the sub-sector.

(iii) Fishery

Fish production has been recovering gradually from the declines observed in the pre-SAP era of liberal food importation. The government has adopted a programme of integrated fishery development with the assistance of the World Bank. The progress made is, however, being threatened by the pollution of coastal waters through illegal discharge of untreated solid wastes, occasional crude oil spillage, sharp increases in the prices of fishing inputs (nets, boat engines, fuel shortages, etc.) and the low level of adoption of fish farming (aquaculture). For example, three visits to selected fishing villages along the coast (Enwang and Ibeno) in Akwa Ibom and (Bonny and Degema) Rivers States in 1989 and early 1990 showed that fishermen now make the bulk of their catch by operating at considerable distances from coastal waters, where they pointed to floating dead species of fish occasioned by environmental pollution. With respect to fishing inputs, data at the disposal of the National Council on Agriculture confirmed the trend of rising prices. For instance, the price of a five horse power (hp) outboard engine (Yamaha) rose by 1,828.7 per cent from an average of N300 in 1982 to N9,900 in 1991, while that of a 25 hp engine (of the same make) increased by 3,900 per cent from N1,000 to N40,000 during the same nine-year period (See Table 7)

(iv) Forestry

Output of forest products, such as sawn, round and ply wood has been growing at about 2 per cent per annum owing to intensive exploitation occasioned by strong demand and prospects for high returns. The supply of these products is somewhat constrained by ageing equipments, which are very costly to replace, and swampy terrain during rainy season. Substantial depletion of existing forests could only be prevented through the development of new ones.

(c) Exports of Agricultural Commodities

Following the adoption of the Structural Adjustment Programme in 1986, the steep decline in total exports of Nigeria's major agricultural commodities has been slightly arrested. The abolition of Commodity Boards, in the course of implementation of the SAP, has resulted in a more aggressive export drive as relatively higher nominal export prices became more attractive to exporters. For example, the volume of agricultural exports increased from an average of 393,000 tonnes in 1981-1985 to 441,000 tonnes in 1987-1990⁵. The average value of exports rose from N276.6 million to about

⁵The Nigerian Economy, Policy Reforms, Performance And Prospects, CBN, Lagos, 1992

N1,656.1 million in the respective periods. The share of agricultural exports in total exports fell from an average of 8.3 per cent in 1971-1975 to 4.5 per cent in 1976-1980, dropped further to 3.0 per cent in 1981-1985 and averaged 3.5 per cent between 1986 and 1990 (see Table 8).

On a commodity by commodity basis, the country's agricultural export performance leaves much to be desired. In line with reduced level of production, Nigeria's share in world groundnut exports fell from 43.0 per cent in 1963 to 0.0 per cent in 1975; and since 1972 there has virtually been no palm oil export to speak of. Domestic palm oil production of 730 thousand tones in 1983 did not even meet domestic demand and the country had to import about 138 thousand tonnes of palm oil for domestic consumption in 1983⁶. Government's order which placed a ban on imports of vegetable oils early in 1992 was rescinded in the 4th quarter of that year to make the product more available at reasonable prices. In the case of cocoa, a rise in average export price from about N1,692 per tonne in 1981-1985 to N10,588 in 1988-1992 has not been a sufficient condition to reverse declining production. The rise in price is mainly an exchange rate effect as demand for the commodity in international markets is weak.

(d) Producer and Input Prices

With the deregulation of producer prices, exchange and interest rates and reduction of subsidies, most producer prices tended to double. On the average, the prices of cocoa, palm kernel and rubber rose by over 300 per cent between 1986 and 1989, declined in 1990 and then continued to rise in 1991 and 1992 mainly as a result of currency devaluation. But for money illusion, farmers appeared not to have been better off as the rate of inflation largely kept pace with nominal producer price increases. The above measures of deregulation contributed to high costs of agricultural implements, labour, credit and inputs, thus hindering the capacity of an average small-holder farmer to mobilise adequate resources to expand production. The trend towards general increases in prices has resulted in a situation where food is available but hardly affordable by most households. For example, "the rise in meat price from N0.78 per kilogram pre-SAP to N14.40 in 1989" has reduced meat consumption by low and middle income households by 42 per cent and shifted consumption from meat to fish⁷.

The response of the agricultural sector to various pre-SAP and SAP measures adopted by government has been examined in the preceding section. The measures are considered to have had mixed results. An attempt is made, in the subsequent section to identify some of the lingering factors which constrained further progress.

⁶ G.E. Ukpog, Analysis of Factors Associated with declining Supply of Nigeria's Major Oilseeds, Washington, D.C.; 1986

⁷ C.B.N. op. cit., p. 127

PART III

SOME LINGERING PROBLEMS CONSTRAINING THE GROWTH OF AGRICULTURAL OUTPUT

The low degree to which the sector has responded to policy measures may be partially understood in the context of the country's agricultural system. The Nigerian system of agriculture is based on numerous small farms. A 1970/71 rural survey indicated that about 55 per cent of all producing farms were smaller than 2.5 acres and that 82 per cent of all farms had less than 5 acres⁸. Even for tree crops, which are often grown on large-scale plantations in other parts of the world, small holdings are the rule in Nigeria. The small farmers, each working a tiny parcel of land with hand hoe and machete, were/are responsible for about 90 per cent of all production. Thus a major factor which undermines agricultural growth in Nigeria is the low level of application of modern farming technology, including inadequate cultivation of high yielding seeds and seedlings. The preceding section referred to the persistent low growth of output of the major agricultural export crops, even though the government set very high production targets for them in Nigeria's Fourth National Development Plan: 1981 - 85 and planned massive rehabilitation of tree crops to ensure realisation of the targets⁹.

Another study concluded that, in the case of palm oil, such targets were unachievable because of the following:

- (1) Dependence on wild, low-yielding and ageing palm trees for about 90% of total palm oil production, instead of cultivating the high-yielding tenera palms;
- (2) Insufficiency of modern oil-extracting mills- which leaves the traditional method of hand processing, with low oil recovery rate, as the main processing option available to most producers; and
- (3) The government's heavy dependence on the Nigerian Palm Produce Board to effect most measures of improvement (rehabilitation, replanting, acquisition and installation of mills, etc) in the industry, even when that Board was not adequately funded or suitably staffed to execute such functions, which in turn frequently contributed to insignificant rates of implementation of planned improvements¹⁰.

Another factor which constrained output increase in agriculture in the years before the SAP was low producer price (set through administrative fiat, Marketing Boards) as it was a disincentive to the farmer. The Eastern Nigeria Marketing Board openly stated that "if the Board was to continue to contribute anything to development, any increase in producer prices seemed out of the questions."¹¹ Thus, non-increment of producer prices was a means of generating revenue to government. Although remunerative producer prices can motivate the farmer, high producer price increase alone (as was the case for export crops in Nigeria starting from 1977) did/may not induce substantial

⁸ IMF, Survey of African Economics, Vol.6, Washington, D.C., 1975, pp. 289-90.

⁹ Groundnut oil production was to rise from - 2.5% annual rate of decline between 1976-80 to 8.9% rate of growth per annum from 1980-85. Similar targets were set for palm oil and kernel (see Fourth National Development Plan 1981 - 85, Vol.1, Lagos, 1981 pp. 81 and 83.

¹⁰ Ukpong, op cit., pp. 136-137

¹¹ Eastern Nigerian Marketing Board, Eighth Annual Report of the Eastern Nigerian Marketing Board, Jan - Dec., 1962, p. 13.

growth of output when other factors serve as a hindrance. A related factor is poor credit administration. Although government has taken several measures to facilitate the flow of credit to agriculture, administrative delays often cause credit to reach many farmers after the planting season thus providing an opportunity for loan diversion to unproductive activities, leading to eventual poor repayment. It is not surprising, therefore, that a recent study found a "positive but inelastic relationship between credit (supply) and agricultural output in Nigeria"¹².

The problem of inefficient supply of agricultural inputs such as fertilizers, agro chemicals and improved seeds has continued to slow down the tempo of agricultural development. Inadequate and untimely delivery of these inputs as well as their reported frequent diversion to unintended beneficiaries have contributed to observed low yields of many crops. In a similar vein, inadequate provision (in rural areas) of suitable infrastructure, such as motorable roads for produce evacuation and storage facilities for reduction of post harvest-crop losses, also hampers the production and exports of a variety of crops. For instance, Helleiner observes that groundnuts became a major export after the completion of the rail link from Kano (in the North) to the South (Lagos) in 1912.¹³

One conclusion that could be drawn from the analysis in Part II is that agricultural extension services and research are relatively weak. It has been indicated that research breakthroughs, in the areas of disease-resistant cassava cuttings and more efficient technique of yam propagation, have made meaningful contribution to output growth. The more research achievements are made in other areas, the greater the chances for better agricultural performance. The newly introduced unified system of agricultural extension, incorporating former extension staff of agricultural Ministries and those from ADPs, is yet to take root. Most extension officers still focus mainly on crops to the detriment of the livestock, fishery and forestry sub-sectors as a result of their limited exposure. As long as that state of affairs persists, extension services will not sufficiently engender adoption of modern farming and husbandry practices capable of improving performance. The problem of inadequacies in implementation of agricultural projects and programmes has already been alluded to. This tends to manifest itself by way of insufficient funding and ineffective utilisation of funds, non-availability of suitable and experienced manpower, establishment of over ambitious targets, insufficient information and data for decision making, internal inconsistencies and lack of follow through. Under these circumstances, it would be unrealistic to expect attainment of set targets and objectives.

Natural disasters such as droughts, floods, landslides, animal and plant diseases and pests render agricultural activities risky. The drought of 1971-72 and floods in the North in 1992 were disastrous to hundreds of farmers. Several poultry farms in the country have been wiped out by diseases owing to insufficient availability and high cost of drugs and vaccines. Remedial measures and contingency plans to deal with these undesirable factors should be designed in advance if their menace to the agricultural sector is to be minimised. The role of appropriate irrigational facilities to deal with periods of scanty rainfall cannot be overemphasised. Delayed rainfall largely contributed to the reduction of the output of all grains in the Northern part of the country by about 33 per cent in 1992.

¹² E. Balogun, and M. Otu, "Credit Policies and Agricultural Development in Nigeria," CBN Economic and Financial Review, Lagos, June, 1991 p. 138.

¹³ G. K. Helleiner, *Peasant Agriculture, Government and Economic Growth in Nigeria*, Homewood, Illinois, 1966, p. 109

It is against the background of these lingering problems which severely limit agricultural output increases that suggestions on future direction of policy focus are made in the next section.

PART IV

SUGGESTED FUTURE STRATEGIES FOR AGRICULTURAL DEVELOPMENT

It has been noted that while agricultural credit was increasing and multiplicity of government financial and other programmes observed since the 1970s, aggregate agricultural production tended to stagnate. Apart from finance, several factors discussed below have contributed to the non-commensurate response of aggregate agricultural production to the various policy measures.

In the area of credit supply, farmers complain that loans are often disbursed late (sometimes after the planting season) with actual disbursement falling far short of loan approvals. Lending banks, on the other hand, maintain that credits are curtailed or delayed because of rising incidence of defaults. High rates of default are not only associated with natural hazards but also with poor farm management, bad record keeping, diversion of loans to other unproductive activities, which ultimately combine to reduce returns on investments and the farmers' ability to repay. Similarly, improper monitoring of agricultural projects by the lending institutions also contribute to default and ultimate ineffectiveness of a project in contributing to agricultural growth. Low level of credit allocation by some lending institutions to certain sub-sectors, as reflected by the actual level of credit disbursements relative to loans sanctioned (lack of balanced sectoral approach), also contributed to the poor performance of some sub-sectors. For example, until the second half of the 1980s when high costs of feed and vaccines contributed to the decline of poultry farming, lending to that sub-sector was considered more profitable than extension of credit for the development of tree crops which have long gestation period. In order to minimize these finance-related problems in the years ahead, banks and agricultural credit/extension officers should encourage the formation of formal self-help groups (SHGs) and link them to financial institutions to encourage savings which could serve to satisfy partially the requirement for tangible collateral to support lending¹⁴. Lending to groups under the linkage programme has many advantages, including higher loan repayment rates because of peer pressure, lower transaction costs for all parties and better spread of loan to various activities.

Some programmes have been ineffective in contributing to the growth of the agricultural sector as result of defects in their conceptualization and inefficient implementation. For example, programmes such as Operation Feed the Nation, National Accelerated Food Production Programme, River Basin Development Authorities, etc. were rather all-embracing and too large in scope as to be efficiently implemented. A better approach is for projects to be modest, sector-specific and for pilot programmes to be undertaken before replication if benefits are found to outweigh costs.

Other areas which require considerable attention in view of their potential contribution to agricultural growth are input procurement/distribution and application of suitable technology. Adoption of modern farming/husbandry practices, such as the supply of improved seeds/seedlings, agricultural chemicals for pest and disease control and fertilizers to enhance yields, is generally recognised as a means of minimizing the problem of low agricultural yield/output. Yet the procurement and distribution of

¹⁴ This concept has been originated by the Agricultural Finance Department, Central Bank of Nigeria

fertilizers have been characterised by bottlenecks resulting in inadequate quantities of the product reaching farmers at more than twice the subsidized rates. It is suggested that fertilizer procurement and distribution be privatized and a better mechanism for providing fertilizer subsidy be evolved - preferably through ADPs or farmer associations. Similarly, research institutes should ensure that improved and high-yielding seeds and simple technologies capable of increasing output are made available to farmers at reasonable costs.

As regards extension services, the Unified System of Extension, which incorporates ADP staff and selected staff from various Ministries of Agriculture, should be followed. However, as the system seems to concentrate on crops, extension officers should be trained in other aspects of agriculture, including livestock and fishery. Besides, there are some technological problems which extension officials can educate farmers on how they could be overcome. For example, the use of different but suitable equipments for tackling agricultural activities in various stages to reduce the tediousness of the work should be encouraged. Such devices include modern diggers, ploughs (instead of hand hoes), non-harmful chemicals for containment of weed, etc.

In order to revamp the tree crop sub-sector and hasten the realization of the benefits of non-oil export drive, increases in output of palm produce can be brought about in the short term, through better maintenance of existing wild palms, sustaining favourable producer prices, more frequent harvesting/processing of palm fruits and acquisition of inexpensive mills suitable for small holder use. In the long-run, staggered replanting of old, wild palms with the hybrid (tènera) would enhance yields and output. Improved variety of planting material and suitable irrigational facilities would induce groundnut output in the Northern States. The feasibility of producing some of the chemicals used in the treatment of cocoa diseases domestically in order to reduce cost and make them readily available should be examined by research institutes. In order to reduce oversupply of beans and strengthen cocoa price, more processing and adding of value should be encouraged and alternative uses of cocoa sought.

Inadequacy of infrastructure has also hindered progress in agricultural development. Additional suitable silos should be built by the private sector for grain storage to minimise crop loss and make grains available at reasonable prices during off seasons. This is a profitable venture which should not be considered the business of government. The provision of access roads in rural areas, to enhance agricultural output and minimize cost of produce evacuation, should be tackled more vigorously in the years ahead by relevant government agencies.

Additional focus is necessary in the area of environmentally related measures designed to stimulate agricultural growth. Past efforts were largely concentrated on the provision of irrigational facilities, such as dams in drought-prone sections of the country and on tree planting to slow down desert encroachment. A shift should be made to the less expensive but effective fadama-type irrigational facilities relying on hand pumps and with the capacity for greater territorial coverage than dams. For the South, programmes would have to be developed to minimise damage to top soils and resultant poor crop yields caused by erosion, floods and land slides. In this regard, the expertise of agronomists and other specialists should be brought to bear.

In order to avoid duplication of research activities and wasteful funding, it is proposed that selected research projects, in specialised research institutions, aimed at

eradication of the menace of pests and diseases as well as the production of high yielding varieties of planting materials should be funded. Funding could be graduated and paid by increasing installments as more progress is achieved by a given research institution.

In view of the importance of the livestock sub-sector in the provision of protein-rich diet and the fact that low income households can hardly afford meat, more grazing reserves should be established in order to increase livestock output especially as existing reserves are dwindling owing to population pressure, environmental degradation, natural disasters and social conflicts. Availability of suitable grazing reserves would enhance the health of livestock and stimulate growth. The reserves should be established through coordinated efforts of the three tiers of government which are expected to bear the initial costs, with agreed rents collected from pastoralists settled in a particular reserve for eventual off-setting of establishment costs.

Greater attention would have to be paid to human resource development in the agricultural sector. Agronomists, monitoring and evaluation officers, project officers, extension staff, fishery and forestry specialists and forest guards should be increasingly given opportunity to update skills and keep abreast with current developments in their fields. In the absence of skilled and dedicated personnel, other efforts to promote agriculture will hardly produce desirable results. Hardworking staff should be increasingly rewarded and penalties enforced for erring ones.

Finally, more weight would have to be attached to data gathering, coordination and reconciliation to enhance planning and facilitate decision-making. Ultimately, a viable national agricultural data bank, capable of meeting the needs of relevant users, would have to be established and funded. Information sharing and utilization should attract stipulated and agreed user fees in order to make such a system self-sustaining in the long run.

PART V

SUMMARY AND CONCLUSION

The paper attempted to review some key policy measures adopted by the government before and following the SAP to stimulate agricultural production in the country. Pre-SAP measures included producer price setting through Marketing Boards, establishment of financial institutions to extend credit to the sector at concessionary interest rates, direct government involvement in agricultural production and provision of extension services by the ministries of agriculture. Some of the measures under SAP consisted of reliance on free market, deregulation of exchange and interest rates, new land use policy and establishment of NALDA, the ban on export of selected agricultural products, reduction of input subsidies and provision of rural infrastructure through DFRRRI. In examining the response of the sector to these measures, the conclusion was that the performance, as measured by low levels of aggregate agricultural production both in the pre-SAP and SAP periods, was less than satisfactory. The paper then identified constraints to increased agricultural production to include small proportion of actual credit disbursed to the various sub-sectors relative to sanctions, bottlenecks in input supply, poor infrastructure, and output losses attributed to droughts, erosion, floods and pests. The paper suggested that in the years ahead, more agricultural credit should be provided to formal and informal groups of committed farmers so that peer pressure would help minimize incidence of loan defaults; that pilot programmes should

be tried and replicated if benefits outweighed costs in order to move away from establishment of gigantic, unviable and loss-making public-sector projects. In addition, programmes of environmental nature should not only be limited to the management of droughts and desert encroachment but should include measures designed to minimize agricultural output losses through erosion, floods, land slides and pests. The paper also recognised the need for the development of human resources involved in the sector.

It is believed that if these recommendations are adopted and the lingering constraints addressed in the next few years, the targeted real annual growth of 5.0 per cent for the sector could be achieved.

SELECTED REFERENCES

1. Alegieuno, J. and Ukpong, G E. "National Agricultural Information Management System: Meeting the Data Requirements of Specialised Institutions", Mimeograph, CBN, Lagos, 1992.
 2. Balogun E. D. and Otu, M: "Credit Policies and Agricultural Development In Nigeria, Economic and Financial Review," CBN, Lagos, June, 1991, p.138.
 3. CBN: The Nigerian Economy: "An Overview of Policy Reforms And Performance, 1985 - 1992," Lagos, 1992.
 4. CBN/NISER: "Impact of the Structural Adjustment Programme on Nigerian Agriculture and Rural Life," Lagos, 1991..
 5. Eastern Nigeria Marketing Board: "Eight Annual Report of the Eastern Nigerian Marketing Board," Jan. - Dec. 1962, p.13
 6. Federal Republic of Nigeria: "Fourth National Development Plan 1981-85, Vol.1, Lagos, 1981," pp.81 and 83.
 7. Federal Ministry of Agriculture and Water Resources: "National Livestock Policy," Lagos, 1988.
 8. Helleiner, G.K.: "Peasant Agriculture, Government And Economic Growth In Nigeria" Homewood, Illinois, 1976, p.109.
 9. IMF: "Survey of African Economies," Vol.6, Washington, DC., 1975.
 10. Inang, E. E. (Chief): "An Update of Agricultural Financing Facilities and Programme," Mimeograph, Research Department; CBN, Lagos, 1990.
 11. National Council On Agriculture: "Grazing Reserve Development, Settlement of Pastoralist and Responsibilities of the Three Tiers of Government" Calabar, 1991.
 12. Ojo, M. O. (Dr.): "Food Policy and Economic Development In Nigeria," Lagos. 1991.
 13. Ojo, M.O. (Dr.) and Palmer, E: "An Appraisal of the Role of the Public Sector In Agricultural Finance In Nigeria," Mimeograph, CBN, Lagos, 1991.
 14. Ukpong, G. E.: "Analysis of Factors Associated with Declining Supply of Nigeria's Major Oilseeds," Washington, D. C., 1986.
 15. Ukpong, G.E. and Usman, M.: "Federal Government Policies In Respect of Agricultural Finance," CBN Bullion, Lagos, 1991.
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TABLE 1
FEDERAL GOVERNMENT CAPITAL EXPENDITURE ON AGRICULTURE AS
A PERCENTAGE OF TOTAL FEDERAL BUDGET (1970 - 1992)
(N MILLION)

Year	Agric. Capital Expenditure (1)	Total Federal Capital Expenditure (2)	(1) as % of (2)
1970	5.6	22.0	2.5
1971	8.4	173.8	4.8
1972	20.7	457.3	4.6
1973	35.4	565.7	6.3
1974	87.4	1,549.5	5.6
1975	211.2	3,578.2	6.0
1976	129.2	4,219.5	3.1
1977	113.7	5,442.3	2.1
1978	125.0	5,197.0	2.4
1979	98.3	4,837.4	2.0
1980	467.3	8,395.5	5.6
1981	400.4	5,696.9	7.0
1982	278.9	7,950.2	3.5
1983	291.1	5,868.6	5.0
1984	160.9	3,812.2	4.2
1985	87.9	1,707.4	5.1
1986	60.3	8,473.9	0.7
1987	232.4	16,458.0	1.4
1988	213.0	6,179.7	3.4
1989	173.2	15,034.1	1.2
1990	1,598.2	24,429.5	6.4
1991	1,219.0	29,286.2	4.2
1992	941.3	38,453.0	2.4

Source: Central bank of Nigeria, Lagos.

TABLE 2
LOANS AND ADVANCES BY NIGERIAN AGRICULTURAL
AND COOPERATIVE BANK TO AGRICULTURE 1973-1992
(N 000)

YEAR	NUMBER OF PROJECTS (1)	AMOUNT APROVED (2)	AMOUNT DISBURSED (3)	(3) AS % OF (2) (4)
1973	1	3,752	3,752	100
1974	47	46,031	7,731	16.8
1975	55	52,392	102,975	196 (cum)
1976	67	162,805	40,527	29.4
1977	7	20,523	52,452	155.6 (cum)
1978	38	45,979	44,588	97.0
1979	44	22,605	29,658	131.2 (cum)
1980	66	44,796	28,816	64.3 (cum)
1981	543	105,893	71,123	67.2
1982	618	61,609	83,356	135.3
1983	1,552	10,247	22,469	(cumulative)
1984	729	32,036	24,026	75.0
1985	9,230	943,530	311,212	33.0
1986	9,536	(Cumulative)	319,317	33.8
		(3 years)		
1987	28,153		312,481	33.1
1988	31,109	119,895	431,000	259.5 (cum)
1989	31,068	108,117	412,000	281.1 (cum)
1990	30,704	98,500	n.a.	n.a.
1991	22,014	82,107	n.a.	n.a.
1992	21,206	88,481	n.a.	n.a.
TOTAL	186,787	2,049,088		

Source: Central Bank of Nigeria, Lagos.

TABLE 3a
NUMBER AND AMOUNT OF LOANS GUARANTEED
BY ACGS (1978-1992)

YEAR	NUMBER OF LOANS	AMOUNT OF LOANS (N 000)
1978	341	11,234.4
1979	1,105	33,596.7
1980	945	30,945.0
1981	1,275	35,642.4
1982	1,076	31,763.9
1983	1,642	36,307.5
1984	1,333	24,654.9
1985	3,337	44,243.6
1986	5,203	68,417.4
1987	16,209	102,152.5
1988	24,538	118,611.0
1989	34,518	129,300.3
1990	30,704	98,494.4
1991	22,014	82,107.4
1992	21,206	88,031.8
Total	165,446	935,503.2

Source: ACGS, Annual Reports

TABLE 3b
NUMBER AND AMOUNT OF LOANS BY ACGS BY
PURPOSE (1978-1992) (N'000)

Year	LIVESTOCK		MIXED FARMING		FOOD CROPS		CASH CROPS		OTHERS	
	No	Amount	No	Amount	No	Amount	No	Amount	No	Amount
1978	137	6,040.0	35	1,555.5	116	2,868.2	—	—	53	820.7
1979	339	21,442.8	27	2,220.0	391	7,456.1	97	737.6	251	1,749.2
1980	263	21,064.8	12	2,761.3	472	5,176.3	123	965.6	75	977.0
1981	275	23,147.5	30	1,128.4	702	7,444.7	107	1,032.7	181	889.1
1982	232	21,875.5	5	77.7	658	5,706.4	22	850.5	69	3,523.8
1983	362	23,364.7	20	1,998.6	736	8,202.6	50	334.0	165	2,407.6
1984	541	12,642.5	5	227.5	803	4,784.8	30	280.0	258	6,720.1
1985	768	14,876.6	18	2,180.2	1,909	13,569.2	36	208.1	606	11,536.4
1986	731	27,449.1	20	2,353.6	4,204	34,953.9	190	2,112.3	58	1,548.5
1987	1,108	33,914.2	14	2,102.0	13,674	56,906.6	1,027	7,162.0	386	2,067.7
1988	1,128	23,017.2	415	3,199.1	21,426	77,979.9	1,307	12,150.2	263	2,294.6
1989	1,065	12,413.3	19	227.7	29,688	100,240.8	34,518	129,300.3	3,825	16,646.2
1990	427	4,967.2	1	1,000.0	27,196	79,869.6	1,020	4,085.6	1,234	4,671.3
1991	509	7,446.9	1	54.0	19,320	64,944.8	997	4,722.0	956	3,241.5
1992	384	6,648.7	1	350.0	19,049	72,722.8	1,043	4,588.2	605	2,981.4
Total	8,268	259,711	623	214,356.0	140,344	542,826.7	40,547	168,529.1	8,985	62,075.1

source: ACGS, Annual Reports

TABLE 4
INDEX OF AGRICULTURAL PRODUCTION BY TYPE OF ACTIVITY (1970-1992)
(1975 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1	2	2
																					1990	1991	1992
CROPS	-	-	-	-	-	-	88.8	79.7	77.7	73.9	77.7	80.9	-	-	-	-	104.6	100.2	111.2	128.1	135.5	145.6	154.2
(a) Staples	140.1	119.8	87.5	99.9	118.2	100.0	88.7	75.7	70.8	64.4	67.6	70.1	74.7	72.6	81.5	88.9	(98.6)	(93.3)	(184.6)	(124.9)	(132.5)	143.3	152.0
(b) Other Crops	94.8	93.4	88.4	90.7	118.5	100.0	89.1	94.0	99.1	104.0	109.4	115.1	120.3	108.0	115.1	119.6	(125.9)	(128.7)	(134.3)	(139.3)	(145.3)	153.1	158.0
LIVESTOCK	58.4	-	95.1	101.9	143.3	100.0	103.2	106.0	109.3	113.4	117.1	120.5	98.4	94.1	102.4	106.7	110.7	113.0	115.8	101.9	105.0	103.8	104.0
FISH	-	89.0	64.0	96.0	101.5	100.0	106.2	108.2	111.4	114.8	102.8	104.5	107.7	111.1	73.6	51.9	60.7	84.3	62.6	67.6	58.7	61.5	48.8
FORESTRY	-	-	64.1	94.1	96.0	100.0	102.9	105.7	108.7	111.9	114.5	116.8	113.4	105.7	107.4	110.6	110.7	114.3	117.1	119.6	124.4	126.9	129.8
AGGREGATE	117.9	110.9	89.7	98.2	117.7	100.0	93.9	88.7	88.5	87.2	89.4	92.4	91.9	87.9	91.4	94.8	102.1	110.3	103.8	118.0	123.8	131.1	137.0
Growth Rate %	-	-5.9	-19.1	9.5	19.8	-15.0	-6.1	-5.5	-0.2	-1.5	2.5	3.4	-0.5	-0.5	4.0	3.7	7.7	8.0	-5.9	13.7	4.9	5.9	4.5

(-) = Not Available
1/ Provisional
2/ Revised

Source: Derived from data from F.O.S., F.A.O. Production Year Book, CBN Annual Survey Reports
Gill and Duff Cocoa Statistics and Annual Reports of Federal Ministry of Agriculture.

TABLE 5
AGRICULTURAL CONTRIBUTION TO GROSS DOMESTIC PRODUCT (GDP)
(N' Million)

Year	Average Annual Agricultural Contribution	Average Annual Total GDP	Percentage Share in Total
1971 - 75	7, 478.9	24,406.6	30.6
1976 - 80	6,697.7	29,897.4	22.4
1981 - 85	6,705.8	26,819.1	25.0
1986 - 90	31,498.0	83,118.0	37.9
1991 - 92	28,930.0	96,475.0	30.0

Source:- Computed from various issues of the Central Bank of Nigeria's Annual Reports and Statement of Accounts.

TABLE 6
ESTIMATED OUTPUT OF MAJOR AGRICULTURAL COMMODITIES
('000 TONNES)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	PERCENTAGE CHANGE OVER PRECEDING YEAR										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	1&2	2&3	3&4	4&5	5&6	6&7	7&8	8&9	9&10	10&11	11&12
STAPLE CROPS																							
Cassava	10,600	10,727	10,833	1,209	1,378	1,564	n.a	15,540	17,404	19,043	20,000	21,320	1.2	1.0	11.2	14.0	13.5	-5.0	N.A.	1.2	9.4	5.0	6.6
Maize	1,580	1,750	1,600	1,600	1,515	1,416	1,357	5,268	5,008	5,768	5,810	5,578	10.8	-8.6	0.0	-5.3	-6.53	-4.2	288.2	-4.9	15.2	0.7	4.0
Millet	2,682	2,666	2,783	3,349	3,684	4,111	3,905	5,136	4,770	5,136	4,109	3,986	-0.6	4.4	20.3	10.0	11.6	5.0	31.5	-7.1	7.7	20.0	3.0
Rice	158	212	145	157	196	283	808	2,081	3,303	2,500	3,185	3,074	34.1	-31.6	8.3	24.8	44.4	185.5	157.5	58.7	24.3	27.4	3.5
Wheat	26	26	26	27	79	132	139	565	554	554	455	432	0.0	0.0	3.9	192.6	67.1	5.3	306.5	1.9	0.0	17.9	5.1
Yams	5,212	5,385	4,047	4,600	4,738	5,209	4,886	9,132	9,609	13,624	16,000	18,578	3.3	-24.8	13.7	3.0	9.9	-8.2	86.9	5.2	41.8	17.4	16.1
OTHER CROPS																							
Cocoa	181	160	160	140	160	100	150	253	256	244	180	167	(11.6)	0.0	(12.5)	14.3	(37.5)	50.0	68.7	1.2	4.7	26.2	7.2
Groundnut (in Shell)	608	610	400	550	621	640	657	1,016	1,166	1,031	1,309	1,407	0.3	-34.4	37.5	12.9	3.1	2.3	54.6	14.8	11.6	27.0	7.5
Palm oil	530	500	500	550	615	650	715	614	637	660	786	838	-5.7	0.0	10.0	11.8	5.7	10.0	14.1	3.7	3.6	19.1	6.6

Source:- FOS, FAO Production Yearbook, Central Bank of Nigeria Annual Agricultural Survey, Public Ledger and Financial Times, London.

TABLE 7
PRICES OF SELECTED FISHING INPUTS FOR 1982 AND 1991

INPUT	PRICE (N)		% CHANGE B/W (1) & (2)
	1982 (1)	1991 (2)	
1. 5HP Outboard engine (Yamaha)	₦ 350	₦ 9,900	1,828.6
2. 8hp outboard engine (Yamaha)	450	18,515	3,114.4
3. 10hp outboard engine (Yamaha)	600	22,000	2,666.7
4. 15hp outboard engine (Yamaha)	850	28,000	2,294.1
5. 25hp outboard engine (Yamaha)	1,000	40,000	3,900.0

Source:- National Council on Agriculture, "Memo On The Reduction of Tariffs on fishing Inputs," Calabar, October, 1991.

TABLE 8
VALUE OF AGRICULTURAL EXPORT
(N' Million)

YEAR	Average Value of Agricultural Exports (1)	Average Value of Total Exports (2)	Percentage in Total (3)
	#	#	
1971 - 75	260.8	3,145.3	8.3
1976 - 80	408.7	9,093.9	4.5
1981 - 85	276.6	9,335.1	3.0
1986 - 90	1,656.1	47,666.3	3.5
1990 - 92	1,554.8	145,677.6	1.1

Source: Computed from various issues of the Central Bank of Nigeria's Annual Reports and Statement of Accounts.