

TRANSFORMING TRADITIONAL AGRICULTURE: HISTORICAL BACKGROUND TO MODERN AGRICULTURAL DEVELOPMENT IN NIGERIA

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ABSTRACT

Recently, the current Nigerian government under the leadership of President Umaru Musa Yaradua announced that it will soon embark upon large-scale agricultural projects as a strategy for meeting the food needs of Nigerians and for export. However, the announcement also carried a caveat that the pitfalls of past projects must first be reviewed before any new venture can be undertaken. This paper is a contribution in that direction as it examines the history of Nigerian agriculture from pre-colonial to post-colonial times, dwelling extensively on the efforts of the colonial masters and independent Nigerian leaders to transform traditional agriculture in the country. In doing this, the paper critically assesses these efforts and comes to the conclusion that their level of success was, to say the least, far from satisfactory and in many instances actually counter-productive as they ended up depressing rather than improving the conditions of the peasant farmers. The study notes that the problems of low agricultural production are manifold, including faulty agricultural policies, inadequate manpower, socio-economic problems, political instability and climatic uncertainties, among others. The study concludes that in order to successfully transform traditional agriculture in Nigeria, the lessons from previous attempts at agricultural modernization must be seriously addressed.

KEY WORDS: Nigerian agriculture, Lessons, Prospects.

INTRODUCTION

Change is of the essence in Nigeria's agricultural systems, with farmers striving to support themselves and their families, and to produce saleable surpluses of crops and livestock, against the backdrop of changing environmental and socio-economic circumstances. Intervention by governmental agencies and other organizations has, over the years, also ensured that patterns of farming have not remained static for long in Nigeria. Those who continue to cultivate as their forebears did are unlikely to make a significant contribution to the economic growth of the country. Customary agricultural practices, however suited to past social and physical conditions, are not enough to meet the challenge of the 'revolution of rising expectations' which has swept Nigeria since independence in 1960.

Shifting cultivation, indiscriminate use of fire, excessive fragmentation of holdings, and primitive technology are relics of earlier rural economies which are incompatible with effective development of agricultural resources. To extol traditional rural societies in Nigeria, as some people do, and to defend their ways of living when these ways provide total earnings of only a few naira a year, is mere sentiment. Preservation of land-use customs in the face of absolute poverty is an unacceptable proposition. Reduced to its simplest terms, the issue is essentially one of development of natural resources versus the preservation of traditional systems: human and land development versus human and land degradation.

While we may agree that agricultural changes are inevitable in Nigeria, it is another matter to know how to introduce these changes so as to cushion their impact and to create as little harmful disruption as possible to existing social patterns. Ultimately all the problems of land use centre around the farmer and his family. If his views are not adequately taken into account, if he is not won over to the programme of reforms which is planned on his behalf, then his ways of farming may never be improved. Nigerian and expatriate planners, in Ministries of Agriculture and other organizations, should not forget that "it is the people that matter, not the soil, the crops or the livestock, except in their relation to the total prosperity and happiness of the people" (Lynn, 1949).

Fortunately, an interest in innovation and an eagerness to learn and to try out new ideas has always been characteristic of Nigerian farmers. This appears to fly in the face of the established picture of marked conservatism and distrust of change on the part of rural populations. In fact, it is customary to state that farmers the world over are by nature conservative. When one lives close to or on the poverty line, one is not unnaturally reluctant to experiment with new and untried methods of farming that may not succeed, and may bring the farmer and his family to the brink of starvation. At the same time, the idea that all cultivators are irrevocably against change is a myth. One does peasant farmers an injustice by assuming that they will not respond to new ideas once their value has been clearly demonstrated.

In Nigeria, due to various incentive schemes and educational programmes over the years, many farmers have been quick to grasp the advantages which can be derived from new techniques and practices. The Agricultural Development Project (ADP) is a case in point. We need not anticipate reactionary social responses to agricultural reforms in the future therefore, even if the specifics prove less easy to implement.

Historical Background

A review of historic attempts to modernize agriculture in Nigeria now follows, recording the successes but, regrettably, also the frequent failures of numerous programmes to transform peasant farming in the past. Lessons to be learned from abortive projects are important to contemporary and future planning for the agricultural sector.

Nigeria was annexed by the British in 1861, with much of the country being administered by a private British firm, the Royal Niger Company. Government protectorates of Northern and Southern Nigeria were created in 1900 and the two regions were united into a colony in 1914. The country gained its independence as a member of the commonwealth in 1960 (Floyd, 1969; Eicher and Liedholm, 1970).

During the century of British control, determined efforts were made by numerous agencies to promote agriculture. Most of the early trade was in 'naturally occurring' products extracted from the rainforests of southern Nigeria: wild palm oil, palm kernels, and wild rubber. Virtually all

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production was in the hands of small collectors who also head-loaded the produce and moved it by canoe to European trading stations on the coast, which then arranged their export.

The earliest attempts to improve on this system, by religious missions and commercial concerns, laid emphasis on introducing modernized agriculture through technical education of the masses and the deliberate production of crops for the world market. Model farms were set up to instruct local people in scientific methods of agriculture and in appropriate procedures for handling export crops: 'the plough assisting the bible to Christianize Africans.' Large estates or plantations, at Abeokuta and Agege in south-western Nigeria, featured both mechanized and labour intensive production of cotton for export to the mills of Lancashire. Technical training facilities were provided for farmers on these projects (Berry, 1979).

The Abeokuta experiment to mechanize the cultivation and processing of cotton ultimately failed while the Agege plantations succeeded, demonstrating that it was possible to modernize agriculture without elaborate mechanization. However, such successes as were achieved were short-lived. The flow of labour dried up, the price of export crops fluctuated, and the ecological conditions eventually proved unsalted to some of the tree crops initially cultivated. Problems of forest clearance, maintenance of soil fertility, frequent inter-tribal warfare, and a preoccupation with evangelical activities by missionaries initiating the development efforts, also contributed to the failure of these yearly projects (Berry, 1979).

Trade and the Colonial Relationship

Early resource development policies in Nigeria were clearly governed by the socio-economic processes that had arisen in Britain as a result of the industrial revolution. There was a mounting demand for industrial raw materials and foodstuffs, and this could only be met by exploiting territories in the overseas empire. The resultant expansion of trade between Nigeria and Britain was to be the primary instrument for the doctrine of "Dual Mandate". This stated that the resources of a colony were to be exploited to aid development of the indigenous population as well as the inhabitants of the Mother country. Despite this lofty ideal, there is little doubt that the bulk of the benefits of raw material trading fell into the hands of capitalist 'captains of industry' in the imperial metropolitan areas.

In order to expand international trade, the British gave great emphasis to the development of infrastructure (transport, communications) and the maintenance of law and order. Major reliance was placed on a railway to open up the country, at first linking the production areas for cotton, palm oil, and later cocoa in the southwest, but subsequently connecting areas of oil palm production in the southeast and, groundnut and cotton in the north. The rail link between Lagos and Kano was completed by 1914. Feeder roads soon developed, in both the south and the north, joining more distant agricultural areas with the line of rail. The extensive rail and road network, together with the wide range of ecological zones, enabled Nigeria to develop a diversified export agriculture within 30 years (1900-1930) (Oluwasanmi, 1966).

The availability of suitable lands and abundant rural labour also stimulated the incorporation of rural Nigeria into the world economy. Cash cropping in particular became a major feature of peasant agriculture, as small-scale subsistence farmers undertook substantial changes in their land use systems in response to effective demand and incentives.

Plantation versus Peasant Agriculture

To the credit of the colonial administration, plantation agriculture in the hands of foreign capitalists was severely discouraged in Nigeria. Land and Native Rights Ordinances of 1910 and 1917 prevented any enclave of overseas investors in large-scale commercial agriculture. Foreign firms invested instead in internal and external trading activities (Nwāfor, 1982).

The government's opposition to the development of plantations was based on fears that the indigenous labour force might be cruelly exploited, as in the case of West Indian plantations, as were those in other African states controlled by European imperialists. There was concern too at the possible displacement of small holders from their farm lands, and a conviction that peasant production could provide a secure 'sheet-anchor' against economic depression. In fact, some eight plantations were eventually established between 1930 and 1950 in southern Nigeria, specifically in the present day Delta and Cross River states. Government legislation was relaxed in light of some remarkable successes achieved by updated and more enlightened plantations elsewhere in the tropics. Devoted to rubber and oil palm, and managed largely by foreign companies, they were located in lightly populated areas around Warri, west of the Niger Delta, and north of Calabar in the southeast of the country (Udo, 1975).

In sum, the colonial development policy for Nigeria from 1900 to 1940 was export oriented, cautious and conservative. The policy of preserving land for small farmers played a major role in the organization of agricultural production. It has left a heritage of many millions of small holders or peasants producing, at one and the same time, food crops for home consumption and local trade, products for internal trade such as palm oil, kernel nuts and cattle, and (now dramatically reduced) export crops such as cocoa, cotton rubber, oil palm and groundnuts.

Agricultural Development between 1940 and 1960

With the outbreak of World War II, efforts were made to stimulate agricultural development in Nigeria. Among the measures promoted was the creation of marketing boards, to provide farmers with guaranteed minimum incomes and to stabilize the prices of major export crops. Revenues from these sales were used to finance government ventures into plantation type or estate agriculture, as well as infrastructural improvements. Research stations were established to enhance productivity of cash crops through disease control and development of improved varieties.

Resulting from these and other measures, there was a marked increase in export crop production, both during and following the war. Between 1940 and 1960, export of palm products, cocoa and groundnuts approximately doubled, while cotton exports increased by 300 percent, rubber by 2000 percent (Eicher and Liedholm, 1972).

Expansion of the land area under cash crops was largely responsible for the increased output, although biological research made a contribution, for example, isolation of the causes of black-pod and capsid diseases in cocoa. Experiments with chemical fertilizers were initiated in the early 1950's which further boosted and sustained productivity (Forrest, 1982).

Only token efforts were made at researching into domestic foodstuffs, and the country was to pay dearly for this in the post-independence years. Nevertheless, food crop output appeared to have kept pace with population growth (at around 2.3 percent) and food imports remained at a low level before 1950.

Plantations

The period 1950-1960 saw a remarkable rise in the number of large scale estates devoted to export crops. In all about 40 large-scale estates were established. In a radical departure from the agricultural policy which we noted earlier, numerous state organized plantations were now launched in southern Nigeria. According to Agboola (1979) there was a genuine desire to make a dramatic leap forward in agriculture and to get things moving faster than in the past. The key to agricultural modernization was thought to lie in the establishment of large production units and the use of mechanized equipment, with government (via Regional Development Corporations) marshalling the capital and managerial skills needed to ensure their success. Plantations were to bring about the hoped-for agricultural revolution,

considered essential if the economy was to be transformed (this was before the massive contributions of the petroleum industry to Nigeria's GNP).

While the 40 or more plantations created during this period may have survived to the present day, although much modified from their original design, their contribution to the overall productivity of the agricultural sector never fully matched the expectations of their proponents. Their shortcomings and failures may be attributed to a number of factors, environmental and socio-economic. Comparable constraints were to prevail in the early years of independence in the 1960's, when still more plantations were initiated, and have even endured and are operative at the present time.

Problems arose, for example, out of ignorance or from errors of judgment concerning the physical and social conditions; others were probably unavoidable in implementation of the projects by enthusiastic but untrained and inexperienced indigenous planners and technicians, who were in any case too few. From the environmental viewpoint, some of the planned plantations were in isolated locations (to avoid conflicting with areas of high density of rural population). As a result of their obscure locations, the inaccessible countryside hampered the field surveys needed for producing topographic, cadastral and soil maps. The field work was often carried out too hastily, with subsequent errors in identification and incorrect mapping of phenomena.

Boundary disputes arose or were provoked due to poor demarcation of the limits of the plantations. Crops failed on soils incorrectly recorded as suitable for specific plants; sections of cocoa estates in south eastern Nigeria failed to produce healthy trees despite the heavy costs involved in the initial establishment of the cocoa plants. Replanting to crops such as oil palm and coffee had to be undertaken. Marshy land or steep slopes within lands acquired for estates, unobserved during preliminary reconnaissance, subsequently came to light and reduced considerably the effective areas which could be planted to cash crops. Elsewhere, the inclusion of areas of soils exhausted from many years of overt farming under primitive techniques meant a costly rehabilitation programme before they could be utilized for commercial cropping. The isolation of many of the plantations also involved heavy expenditure on road construction, transportation, and the importation of essential supplies.

From the social viewpoint, the complex intricacies of land ownership patterns were on occasion not fully unraveled, and legal agreements were drawn up with villages which lacked authority to grant use of the entire land area being bought by the plantation planners. Bitter tenurial disputes with other groups resulted, leading to prolonged and expensive litigation. Where attention was given to the finer points of traditional tenure, estates with a distorted shape resulted, making their operation as a viable entity that much more difficult.

The remoteness of the plantations had a depressing effect on the morale of the workers, who were removed from easy contact with kith and kin and the familiar, casual life of the village and its limited but accustomed amenities. The regular daily stint of manual labour also took some getting used to after the less strenuous crop calendar of traditional agriculture. As already mentioned, there was a dearth of adequately trained supervisory staff and specialists for directing operations. Those who joined the services of the Regional Development Corporations also found their posting to a distant area a real hardship.

In addition, there were innumerable technical and agronomic problems related to the raising of the tree crops, the combating of diseases, and the processing of the harvested produce. And, after all the efforts of raising export crops such as cashew, citrus, cocoa, coconut, coffee, kenaf, oil palm and rubber, there were always the vagaries of the world market to contend with. Unpredictable fluctuations in the prices offered for tropical agricultural commodities occurred, as they continue to do to the present day, due to climatic variations, competitive production elsewhere, or the machinations of multi-national

companies. Dependence upon estate production of export crops to achieve the desired agricultural revolution therefore appears not to be the soundest strategy.

GROUP FARMING AND MECHANIZATION

An interesting though ultimately unsuccessful experiment to encourage small farmers to pool their resources of land and labour, in co-operative fashion, was carried out in south western Nigeria in the early 1950's. Group farms were established at a number of locations, among them Eruwa, Ikonifin and Shaki in present day Oyo state. The aim was to try and operate larger farm holdings than the traditional mini-plots of shifting and basic sedentary cultivator, and to use machinery to alleviate the tedious and exhausting tasks of manual labour in the fields. Initially successful group farms were established in the savanna zone to take advantage of easier clearance of bush to facilitate mechanization. Crops grown varied from maize, cotton and tobacco at Eruwa and Ikonifin to rice in swampy depressions around Shaki, and root crops in schemes under forest conditions further south. According to Agboola (1979) some of the schemes failed within a short period due to problems of bush clearance, creation of the groups, and difficulties over the amount of land and labour required for successful group farming operations. Others made early profits and persisted for some time, but since there was no significant breakthrough in higher crop yields or financial gains to individual farmers compared with those derived from peasant farming, enthusiasm eventually waned.

The concept of group farming was also associated with an abortive scheme: the Niger Agricultural Project (1949-54) which was located near Mokwa in the Niger River valley, northern Nigeria. The Mokwa scheme attempted to combine the scale advantages of plantation type agriculture with local labour for planting, weeding, and harvesting. Peasant settlers were to be recruited to tend approximately 10 hectares of land per family, in return for one third of the harvested crops. The main crops were to be groundnuts (for export to the vegetable oil deficient U.K.) and guinea corn for local consumption. An area of some 13,000 hectares was planned for but, in reality, just over 1215 hectares was the most cultivated in any one year (Baldwin, 1982).

The project's failure may again be attributed to both environmental and socio-economic problems. According to Baldwin (1970), a basic difficulty was the haste with which the project was started ('haste makes waste'; 'festina lente' - 'make haste slowly'); there were no preliminary surveys or feasibility studies to test which areas would be suited to which crops under local conditions. The most profitable crop to be grown at Mokwa was potentially guinea corn, rather than groundnuts, although there was no great demand for this cereal in the project area. Another problem was the slow pace and costly nature of bush clearance, with many machines breaking down due to compaction of the soil and a tangle of tree roots beneath the surface. There was limited knowledge of the economics of mechanization best suited to the region, or of the type of social environment in which the settlers might be willing to work and live. During the project's short life, farmers at Mokwa had little time to satisfy themselves that the new methods were better than earlier, time tested techniques; the demonstration effect was therefore minimal. The scheme was eventually abandoned with serious financial losses after a mere five years.

Post-independence Agricultural Development

With Nigeria's independence in 1960 came a fresh determination to modernize agriculture on the part of the new political leaders. Increased output of export crops and diversification of the agricultural economy, were considered essential in order to finance the country's development schemes and to counter mounting social and economic problems arising from out-migration from the rural areas and urban employment. The unwillingness of educated youths to be involved in farming was a particular target of programmes

designed to encourage young people to remain on the land in the 1960s and 70s. Thus, the Farm Settlement strategy of pre-independence era was vigorously pursued. It was also a major intention of government at that time to reverse the alarming, declining trends in agricultural productivity (Tables 1 and 2). By 1980, a dynamic new programme under the name 'Green

Revolution': a politically-fetching slogan which was repeated daily in the press (on radio and television) was announced. The 'Green Revolution' strategy had two main components: the Agricultural Development Projects (ADPs) and the River Basin Development Authorities (RBDAs).

Table 1: Cash crop purchases by Commodity Boards, 1979-81 (Metric tonnes)

Crop	1979	1980	1981	Difference between 1979 and 1981
Groundnuts	18,281	31,082	4,458	-75.7%
Cocoa	144,309	107,202	70,481	-51.2%
Cottonseed	117,399	80,931	75,733	-35.5%
Palm				
Kernels	230,762	189,139	151,466	-34.4%
Rubber	21,140	21,230	16,243	-23.2%

Source: *Financial Times*, 30th November, 1982

Table 2: Exports (Million Naira) and Percentage of Total Export Value

Selected Exports	1979	1980	1981
Agric. Products (including Forest Products)	468.0 (4.3%)	340.1 (2.4%)	113.2 (1.1%)
Oil	10,166.8 (93.8%)	13,523.0 (96.1%)	10,280.3 (98.2%)

Source: *The Times*, 3rd March 1983 and Central Bank of Nigeria

FARM SETTLEMENTS

The farm settlement scheme represented a new organizational approach to farming and rural settlement in Nigeria. The settlements were large state - planned and supervised co-operative farms modeled after the Israeli *moshavim*, that is, an estate system of commercial agriculture in which the labour force or settlers, instead of being merely paid workers as on an orthodox plantation, had land holdings and homes of their own within the Farm Settlement. They contributed their labour to large blocks of cash crops (e.g. citrus, cocoa, oil palm and rubber), in return for a financial share in the processing and overseas marketing of the produce, while on smaller plots of land they grew staple foodstuffs for subsistence and local exchange.

The agricultural land was of two types. Large blocks of land suitable for tree crops were subdivided into individual holdings of five to six hectares and managed under technical supervision. In addition to the settlers' share of the plantation hectares, each farm family had approximately one hectare of compound land for the production of subsistence food crops, specialized cash crops such as vegetables and pineapples, and the rearing of small livestock and poultry. Part of this was in the vicinity of the homestead and the remainder was located in the immediate environs of the village. The food crops were produced on an approved rotational pattern, under intensive cropping and fertilizing techniques, and surpluses could be disposed of for cash in the markets of the settlement and beyond.

One of the initial objectives of the farm settlement was to induce young educated persons to take up modern, scientific farming as a lucrative and satisfying way of earning a living. With many thousands of unemployed school leavers requiring work, it was hoped that the scheme would lure some of them at least into farming and lessen the risk of disgruntled youths turning to politically destabilizing activities, such as political thuggery and youth militancy.

A major problem that affected the scheme was paucity of funds to initiate and run the farms due largely to declining prices for export commodities in the 1960s and partly due to lack of political will. Additionally, distortion of shape and reduction in optimum size were commonplace, adversely affecting the spatial arrangement of crop areas.

Agricultural Development Projects (ADPs)

The agricultural development projects (ADP's) were designed in the 1970s as a strategy to assist small farmers with farm inputs and information on modern techniques of cultivation. They are still in existence today and are supported intellectually and financially by World Bank loans of 50 percent or more of anticipated expenditure.

The ADPs are very large projects covering areas ranging from 4000 sq. km. to 7500 sq. km., with each project involving a 'critical mass' of some 60,000 to 90,000 farm families. By 1984, eleven ADPs had been established covering almost a third of the country and influencing the lives of over two million rural inhabitants. As at today, the ADPs have been replicated in all the states of the federation bringing the number to 36 nationwide.

The integrated rural development concept visualizes supplying a complete agricultural 'package' to farmers to encourage greater productivity. It aims to deliver as close to farmers as possible a whole range of services. These include competent extension staff, subsidized input supplies (e.g. seed, seed dressings, fertilizers, and other chemicals), attractive credit facilities, better water supplies through boreholes and dams, improved road and communication systems, favourable commodity prices and efficient marketing arrangements.

Under the ADP strategy, agro-service centres were to be located in such a way that farmers should not travel more than ten kilometers to reach a centre. The extension strategy of the ADPs is supposedly based on the diffusion of innovation model, with receptive 'progressive' farmers being instructed in new techniques. The intention being that they will then provide

a demonstration ('over the fence') effect for other, traditional farmers living around them. Eventually co-operation in mutual efforts to achieve higher yields from the land will hopefully appear. However, a 1982 survey of the ADPs indicated that a formidable constraint to the modernization of agriculture in Nigeria using the ADPs is the persistence of anachronistic work and settlement patterns in Nigeria's rural areas. The survey also noted that agricultural instructors and extension staff tended to concentrate on large-scale and progressive farmers, largely ignoring the traditional small farmers, a trend which the survey considered to be disturbing because it ran contrary to the philosophy of 'Green Revolution'.

River Basin Development Authorities (RBDAs).

A second element of the "Green Revolution" programme was the River Basin Development Authorities initiated in the Third National Development Plan period. At inception, eleven RBDAs were operational. The inclusion of social and economic aspects of rural development in the franchise of the authorities (besides food production) was a sensible step, since agro-technical planning alone could be incapable of bringing about the desired changes in rural economies and societies.

Being physical and socio-economically definable units, river basins provide convenient planning regions for rural development, as experience elsewhere in the world has shown. Agriculture is obviously a prime consumer of river basin resources, and water management through irrigation and flood control is an important concern in enhanced productivity systems. Provision of water in central and northern Nigeria, where precipitation is perennially deficient and drought increasingly common, is vital to intensified cropping and improved stocking capacity of grazing lands. Water is also needed during the dry season in southern parts of the country, and even during the August "little dry season". Controlling soil erosion and conservation measures such as contour bunding and watershed afforestation are equally critical in the humid states of southern Nigeria.

The RBDAs have broad responsibility for the development of dams, irrigation schemes, water supply, flood control, pollution control and resettlement. It is worthy of note that most of the irrigation projects, as one would expect, are in the far north and the middle belt. In the north, normal rains are so scarce and uncertain that, for multiple cropping or even single annual crops, supplementary water is needed on a perennial basis. In the Middle Belt, irrigation may not be needed for a single annual crop such as cotton or groundnuts but, if several crops a year are planned, or with crops such as sugar cane which takes a full 12 months to mature, then supplementary irrigation water is a necessity.

The river basins have been plagued by several problems. Firstly, costly civil construction work means that there have been very high development costs per hectare so that even under optimistic assumptions regarding cropping intensity and yields, marginal, zero, or even negative economic rates of return are to be expected, as has been the case since the 1980s. Most of the basin authorities were sited on river-rain land with irregular topography and soils which differ considerably in texture within short distances. Preparing such environments for cultivation is usually beyond the capacity of most participating farmers. Mid-stream changes in engineering and civil design of some of the schemes (due to insufficient and hasty initial preparations) also affected the smooth functioning of some of the River Basin Authorities with respect to agronomic, managerial and organizational aspects.

Possible reasons for the failure of past agricultural projects in Nigeria

No simple explanation is possible (or should be expected) for the dismal performance of past agricultural projects in Nigeria. The reasons responsible for the failure of past agricultural projects in Nigeria are as many and varied as the agricultural projects themselves. As pointed out earlier, colonial policies on agriculture in Nigeria were clearly

governed by the selfish interest of exploiting raw materials and foodstuffs in British colonies to service British industries and people. There were no genuine efforts to develop Nigerian agriculture for long-term sustainability and benefit of the citizens. The colonial policies were designed for colonial benefits and they collapsed with the end of British colonialism of Nigeria in 1960.

The Nigerian civil war which lasted from 1967 to 1970 certainly dislocated infrastructure and led to the destruction and abandonment of major plantations and cash crops. Environmental conditions too, since independence have not been the most benign. Severe droughts in 1972/73, 1983/84 and the early 1990s in northern Nigeria similarly impacted negatively on crop and livestock productions. These recurrent droughts did not only reduce crop yields but also diminished the ability of peasant farmers to return to optimal production, since the frequency of occurrence of droughts did not allow for recovery period as used to be the case before independence. It therefore increased the vulnerability of peasant farmers to future environmental hazards.

Post-independence agricultural policies also witnessed a variety of misconceived agricultural projects, inadequate incentive schemes and support services, culminating in a cumulative effect of declining production through the years. In general, appraisal planning of earlier schemes was lacking in detail and appreciation of local conditions. Several projects were wholly unrealistic while a failure to face up to key social, organizational, and dry season nutritional issues bordered on irresponsibility on the part of policy formulators and operators. Perhaps the greatest weakness of earlier projects was their failure to appreciate the indigenous farming system. With the benefit of hindsight, it would have been better for the projects to have tried to work with and improve the indigenous system than to have attempted to substitute a less productive one based on inappropriate sole crop technology.

But the oil boom was probably the most important factor behind the debacle in agriculture, disrupting rural life in a variety of ways. It accelerated the migration of people from villages to the towns in search of employment, especially in trading and construction: funded by the 'spin-off' of oil money to entrepreneurs among the Nigerian elite. This 'Dick Whittington' syndrome led to an unprecedented urban growth and drained the rural areas of their young work force, with the result that the average Nigerian farmer is today well over 40 years of age. Many farmers today are elderly and physically ailing.

Declining standards in management and public administration also contributed to the collapse in agriculture. The oil boom years tended to create an attitude of financial indiscipline in Nigeria, prompting an 'unbridled quest for quick enrichment' with associated moral laxity in the form of bribery, corruption and rampant frauds. The squandering of oil wealth by corrupt politicians, government officials and businessmen meant that vast sums of money earmarked for agricultural development never reached their intended beneficiaries: the millions of small holder peasant farmers across the country. The commercial climate was such that trading and hanky-panky involving backhanders from government contracts became the generally perceived way of making a fortune. Producing agricultural crops came to be seen as a fool's game. It should be noted that many expatriates and representatives of foreign companies in Nigeria were also involved in fraudulent practices and corrupt business dealings. Resentment over the blatant misdirection of funds could only have a negative impact on the attitudes of rural residents towards government strategies for advancing agriculture.

The proliferation of departments at Federal and State levels, with an associated expansion in urban-based bureaucrats and constraining rules and regulations, has not helped matters. The federal Ministry of Agriculture alone (apart from the 36 state Ministries and related bodies) has some 11 separate departments with such titles as agriculture, agricultural land resources, agricultural planning, rural

development, agricultural co-operatives, fertilizers, livestock, fisheries, forestry and so forth. There are another 11 so called parastatal organizations at the national level: produce boards and production companies for commodities such as root crops, grains, beverages, groundnuts, palm produce, cocoa, cotton, rubber and livestock. An appreciation of the needs and aspirations of peasant farmers tends to get lost in the usual schedule of government officials in the distant towns, submerged in political maneuvering, in struggles for influence and power, and in the daily routine of endless meetings and social obligations.

Finally, Nigeria's high export earnings from the oil boom made it feasible to import food from abroad. Rice and wheat became near staples, complementing cassava, yam and millets. Keeping the Nigerian currency (the naira) at an artificially high exchange rate compounded the problems of the farmers and acted as a further disincentive, making food imports unnaturally cheap and the payment of realistic prices for export crops by marketing boards an uneconomic proposition. The farmers, both peasant and commercial, were in effect being taxed by the government: another reason why there was such a dramatic exodus from the rural areas. In summary, most efforts at agricultural modernization in the past failed because they did not demonstrate to the farmers that mechanization and large-scale agricultural operations were more profitable than peasant agriculture.

CONCLUSION

This article has reviewed the thrust of agricultural development programmes during the colonial and post colonial eras. During the period, numerous agricultural policies were formulated and pursued with the common goal of achieving an increased output of export crops, supplying raw materials for value-adding industries, diversifying agricultural products, meeting national food requirements, and providing gainful, satisfying employment for rural populations, especially young people. The study has also noted the numerous efforts made by various agencies and governments at different times to bring about changes in Nigerian farming methods. Regrettably, majority of the efforts appear to have ended in failure or they fell far short of expectations as they failed to convince the peasant farmer as to their superiority over peasant cultivation.

Today, it is widely agreed that further modifications to traditional farming systems are inevitable, in an effort to feed Nigeria's burgeoning population of over 140 million. Essential improvements in agricultural techniques require a firm alteration of customary concepts of land use and tenure, necessitating the ultimate abandonment of many former practices. But to achieve modernization without completely disrupting rural societies is at the heart of the matter. In many ways Nigerian farmers are already a long suffering people; it would be fatal to regard their interest in the future as marginal or indefinitely pliable.

The study concludes that the extent to which future agricultural programmes learn from the mistakes of their predecessors will be of immense assistance in designing functional, acceptable and sustainable methods of cultivation that are based not only on modern knowledge, but with substantial traditional and local content.

REFERENCES

- Agbooba, S. E., 1979. *An Agricultural Atlas of Nigeria*. Oxford University Press.
- Baldwin, K. D. S., 1970. "The Mokwa land settlement Scheme", in Eicher, C.K. and Liedholm, C. (eds), *Growth and Development of the Nigerian Economy* (Michigan State University Press).
- Berry, S. S., 1979. *Cocoa, custom and Socio-Economic Change in Rural Western Nigeria*. Lotham Publishers, Lagos.
- Ekpoh, I. J., 1999. Rainfall and Peasant Agriculture in Northern Nigeria. *Global Journal of Pure and Applied Science*, 5, (1): pp123-128.
- Ekpoh, I.J., 2004. Climate Change and Tropical Agriculture in the 21st Century. *Journal of Applied Social Sciences*, 4, (1): 151-159.
- Eicher, C. K. and Liedholm, C., 1970. "The Colonial Period" in Eicher, C.K. and Liedholm, C. (eds.), *Growth and Development of the Nigerian Economy*. Michigan State University Press, pp. 1-5.
- Floyd, B. N., 1969. *Eastern Nigeria: A Geographical Review*. Macmillan.
- Floyd, B. N. and Ekpoh, I.J., 2004. *Man and Environment: Crop production in Tropical Africa*. St. Paul's Printing and Publishing Company, Calabar, Nigeria.
- Floyd, B. N., 1985. "Agricultural development in Nigeria: Problems and prospects". Paper presented to International Conference on Management of Rural Resources: Problems and Politics. Univ. of Guelph, Canada.
- Forrest, T., 1982. "Agricultural policies in Nigeria", in Heyer, J., Roberts, P. and Williams, G. (eds), *Rural Development in Tropical Africa*. Oxford University Press. pp. 222-258.
- Helleiner, G. K., 1966. *Peasant Agriculture, Government and Economic Growth in Nigeria*. Richard D. Irwin, Inc., Homewood, Illinois.
- Holman, M., 1984. "Agriculture. Drive to boost food output", *Financial Times*, Jan. 23rd p. XIV.
- Morrison, G., 1983. "Nigeria: the green revolution. A special report", *The Times*, 3rd March.
- Nwafor, J., 1982. *Major cash crops and Plantations*; in Barbour, K. M. et al., (1982), *Nigeria in Maps*. Hodder and Stoughton, pp. 76-7.
- Olayide, S. O., Eweka J. and Bello-Osagie, V. E. eds, 1980. *Nigerian Small Farmers: Problems and Prospects in Integrated Rural Development*. Centre for Agricultural and Rural Development, University of Ibadan.
- Oluwasanmi, H. A., 1966. *Agriculture and Nigerian Economic Development* Oxford University Press.
- Schultz, T.W., 1964. *Transforming Traditional Agriculture*. Yale University Press.
- (Lynn, C.W., 1949. *Agricultural Extension and Advisory Work*, with special reference to the Colonies, Colonial Office Pub. (241): p. 104.)
- Udo, R. K., 1970. *Geographical Regions of Nigeria*. Heinemann.
- Udo, R. K., 1975. *Migrant Tenant Farmers of Nigeria*, African University press.
- United Nations, 1969. *Agricultural Development in Nigeria*. Food and Agric. Organization, Rome.
- Van Apeldoorn, G. J., 1981. *Perspective on Drought and Famine in Nigeria*. G. Allen and Unwin, London.
- Wells, J. C., 1974. *Agricultural Policy and Economic Growth in Nigeria 1962-1968*. Oxford University Press.