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Poverty Alleviation Through Agricultural Projects: A Review Of The Concept Of The World Bank - Assisted Agricultural Development Projects In Nigeria

Iron and Steel Industry In Nigeria: Assessment Of Performance

BEHIND THE SCENE

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POVERTY ALLEVIATION THROUGH AGRICULTURAL PROJECTS: A REVIEW OF THE CONCEPT OF THE WORLD BANK ASSISTED AGRICULTURAL DEVELOPMENT PROJECTS IN NIGERIA.

1. INTRODUCTION

Fundamentally, poverty is a negative term denoting absence or lack of material wealth. Such absence, however, is seldom absolute and the term is usually employed to describe the much more frequent situation of insufficiency either in the possession of wealth or in the flow of income (Seligman and Johnson, 1933). Greenwald and Associates (1965), defined poverty as " a condition in which income is insufficient to meet subsistence needs. This implies that levels of living may be considerably lower than those that are deemed adequate standards of living. Thus the definition of poverty hinges on varying living and social standards. There have been many efforts to establish a classification of standards of living. The classification usually accepted comprise five fairly recongnisable levels: insufficiency, minimum subsistence, health and decency, comfort and luxury (Seligman and Johnson 1933). But these distinctions are fluid, hence it is difficult to measure poverty precisely. A definition of poverty must therefore be based upon comparative scales and standards of living. These become more complicated as the degree of social wealth increases and as economic and social contrasts multiply. Be that as it may, it is possible to identify approximately where poverty exists, by relating a comprehensive measure of income including non-monetary income, to the estimated budget needs of a family. For instance, basic to all other factors in the consideration of the poverty of wage earners is the prevailing wage level and the ex

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tent to which it fails to meet the cost of all the goods and services which make for a clean, healthy and satisfying existence. Thus, based on per capital house hold expenditure, 71 percent of Nigerian households were classified as poor, out of which 36 per cent were classified as core poor and about 35 percent moderately poor (FOS, 1996).

Poverty has a lot of detrimental effects hence it is a very undesirable condition. A sudden reduction in the level of economic well being creates fear, depression, despondency and suicides Persistent chronic poverty has been responsible for most revolutions. Comparative poverty causes envy, bitterness, self-depreciation of the ego and it is also mainly accountable for overvaluation of material goods as compared with intellectual and socials values. Futhermore, poverty is one of the greatest threats to the environment; particularly in sub-Saharan Africa in recent years. It has aggravated the rate of desertification, salination, poor sanitation and polluted water. Many choices that degrade the environment are made because of the imperative of immediate survival, not because of a lack of concern for the future. And this environmental damage reinforces poverty.

Thus poverty has both social and economic implications. And unless efforts are made to alleviate poverty, the condition is compounded and development will be impaired.

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Poverty cannot be alleviated through a short-term piecemeal approach (D'silva and Bysouth, 1992). Poverty alleviation does not simply mean short-term relief and the satisfaction of basic human needs, but also the development of strategies for increasing the long-term productive potential and therefore the incomes of the poor. In order to achieve this long -term goal, it is necessary to intergrade macro-economic policies, sector planning and sound project intervention.

In an Agrarian economy like Nigeria, agricultural projects constitute one of the major means available to governments for alleviating poverty. Since independence in 1960, the Nigerian government had launched various schemes, programmes and projects, primarily to increase agricultural output and improve the well-being of the masses. Most of them did not stand the test of time due to poor planning (Evbuomwan 1990). But the World Bank assisted Integrated Agricultural Development Projects (ADPs) launched in 1975 have been able to survive to date.

The objective of this paper is to appraise the ADP system using the "with or without" approach with the aim of making some suggestions that will enhance and sustain the ADP system as a strategy for poverty alleviation in Nigeria in the years ahead This paper is made up of four parts including this introduction. The rest of this paper is divided into three parts. In part two, some contemporary issues on poverty will be reviewed as a background to the analysis. Part three will be devoted to, the appraisal of the ADP system. The final part, will summaries and conclude the paper.

II A REVIEW OF SOME CONTEMPORARY ISSUES

2.1 What are the causes of Poverty?

All obstructions to the regular flow of income would certainly bring about poverty. At the micro-level for instance, factors such as death, illness, accident, old age and lack of employment of the head of the household are top on the list. These are complemented by lack of occupational training and excessive family size. Poverty may strike the independent farmer through such extraneous factors as fall in prices or increase of the burden of taxation or interest. Tenancy is another cause of impoverisation in the agricultural sector.

At the macro -level, Nigeria is classified as a low-income and severely indebted economy, and by implication a poor country (World Bank 1994). Nigeria's GDP growth rate has decelerated from 4.6. per cent in 1970-80 to 2.3 per cent in 1980-1992.

Meanwhile, Nigeria has the largest population in sub-Sahara Africa and its among the countries with the highest population growth rate in the world. From 64.7 million people in 1980, Nigeria's population increased to 95.2. Million in 1994 (CBN, 1995). In 1992, Nigeria's GNP per capital was estimated to be US$320 compared with an average of US$530 for Sub-Sahara Africa, US$2,490 tor middle-income countries, US$22,160 for High-income economies and a World average of US$4,280.

Nigeria's major source of income is trade in primary commodities whose prices have reached their lowest level since the Great Depression's of the 1930s (UNDP, 1990). For instance, the price of cocoa which is the major agricultural export fell from a peak of US$3,790 per tonne in 1977 to US$1,438 per tonne in 1994 (Evbuomwan, 1996).

Similarly, the price of crude oil the major foreign exchange earner since mid 1970s dropped from US$35.8 per barrel in 1980 to US$16.2 in 1994 (CBN, 1995). On the other hand, the total external debt has grown from US$8,934 million in 1980 to US$30,959 million in 1992 (World Bank, 1994). With dwindling inflows and high debt burden economic development is constrained hence the growing trend of poverty in Nigeria like most third World Countries.

Life expectancy at birth in Nigeria is estimated to be 52 years compared with a world average of 66 years, while adult illiteracy rate is estimated to be 49 per cent compared with the world average of 35 per cent. Consumer expenditure on food constitute about 50 per cent compared with 18.1. per cent in the U.S.A. The estimates, of calorie and protein intake of 2147 kilo calorie and 43 grams per day respectively (Euromonitor, 1995) are below the Minimum requirements recommended by the Food and Agricultural Organisation of the United Nations (FAO). The prevalence of malnutrition in children under 5 years was estimated to be 35.7 per cent for Nigeria, compared with 13.9 per cent in Mexico and 27.1 per cent in Ghana.

2.1.1. A review of the Human Development Report

The Human Deveiopment Report (UNDP, 1990), emphasized the importance of studying the multidimensional aspects of poverty, (nutrition, life expectancy, literacy) rather than simply focusing upon income levels. In the face of continuing entrenched poverty, the Human Development Report (HDR) argues that greater emphasis must now be given to people and the choices that they are able to make. Given the choice, poor people would wish to:

(a) live a long and health life;
(b) receive education;
(c) have access to resources needed for a decent standard of living.

The HDR argues that the measurement of GNP per capita provides only a limited indication of the degree of human choice which exists in a society. Income is only a means to an end, it is the uses to which income is put that determine the level of human development, not the income per-se. From this perspective, human development is measured in this report not by the yard stick of income alone but by a more comprehensive index called the human development index (HDI), reflecting life expectancy, literacy and command over the resources to enjoy a decent standard of living. Since 1990, some forms of modifications have been added to the original index. A major adjustment on the HDI in 1994 is a drop of the assumption that the poverty level of industrial countries was an appropriate income target for developing countries (Arinze, 1995). For the 1994 HDI's, the threshold value has been taken to be the current average global value of real GDP per capita PPP$ (purchasing power parity dollars). The 1994 HDI emphasizes sufficiency rather than satiety. Also, in 1994 an adjustment was made in the way the three elements of longevity, knowledge (measured by a combination of adult literacy (two -thirds weight) and mean years of schooling (one-third weight , and finally standard of living (measured by purchasing power based on real GDP per capita adjusted for the local cost of living (purchasing power parity or PPP). In previous years, the minimum value of each dimension was set at the level of the poorest-performing country, and the maximum at that of the best-performing country. The HDI for any country was therefore always somewhere between that of the worst and the best performing country. However, the fact that maximums and minimums change every year made the above an inefficient yardstick as improvements in a country's performance cannot be reflected in the overall index. In an effort to improve on the compilation of the index, the historical performance of countries for the period 1960 to 1990 were taken and combined with projections to get a minimum and maximum as shown below.

Fixed maxima and minima:

	Minimum	Maximum
Life expectancy years	25	85
Adult literacy (%)	0	100
	7	
Mean schooling years of	0	15
Income (real GDP per capita in PPS)	200	40,000

In spite of the above, however, the underlying principle of the HDI remains the same. It is based on a country's position in relation to a final target expressed as a value between 0 and 1. Countries with an HDI between 0.5 are considered to have a low level of human development, those between 0.5 and 0.8. medium level and those above 0.8 a high level.

Based on the above method of determining minimum and maximum levels, the maximum values have increased and are now beyond the levels already attained by industrial countries. The minimum are also lower and this tends to increase all HDI values particularly those in the bottom category. Canada ranked highest with 0.932, Guinea ranked lowest with 0.191 while Nigeria ranked 139 out of 173 countries with an HDI of 0.348. The 1994 HDI really showed that high incomes do not necessarily mean a high human development profile, as countries such as Angola, Gabon, Guinea, Namibia, Saudi Arabia and the United Arab Emirates have incomes far ahead of their HDI ranking. This implies that they still have considerable potential for translating their incomes into improved well being for their people. On the other hand, countries like China, Columbia, Costa Rica, Cuba, Guyana, Madagascar and Srilanka, had HDI ranks far ahead of their income ranking, showing that they have made more judicious use of their income to improve the capabilities of their people.

2.2. What techniques and Strategies should be pursued in order to tangibly and irreversibly improve the quality of life of the poor?

After three decades of development, both developing countries and major development finance institutions are recognising that the strategies of economic growth (1960s), income redistribution (1970s) and economic adjustment (1980s) have failed to alleviate poverty (D'Silva and Bysouth, 1992). As stated by Quansah (1990), while reviewing the HDR of 1990, " Both the International Monetary Fund (IMF) and the World Bank would draw cold comfort from the findings, which shows structural adjustment programmes, recommended to most of the developing world, have increased the burden of poverty of recipient nation's and their people". Of particular reference are those aspects of the Structural Adjustment Programme (SAP) which emphasised cut in government spending. This objective was achieved often times at the expense of the masses who were laid off with no viable alternatives for income generation thus increasing the level of poverty (particularly in Sub-Saharan Africa).

2.2.1. The World Development Report

The World Development Report 1990 (WDR) considers the mechanism which Governments have at their disposal for overcoming poverty. Four measures are identified as having major potential to increase the incomes of the poor.

(a) increasing the demand, and therefore, the price for those factors of production that the poor own (e.g. their own labour);
(b) transferring physical assets to the poor (e.g. land);
(c) providing social services to the poor (e.g. education) and;
(d) transferring current income to the poor (e.g. through cash or food subsides)

Projects, the report noted are one instrument which Governments can use in order to implement these policies. The report went on to state that experience suggests that approaches that involve the poor in the design, implementation and evaluation of projects have been largely successful, particularly for the less complicated projects. Projects which have incorporated gender issues, as well as projects which make more and better use of human labour, were said to have also proven effective. The WDR notes that the major obstacle to alleviating poverty is not so much the availability of financial, human and capital resources. The main constrain is

lack of commitment among governments, individual and organisations to achieving the goal of an end to poverty.

According to D'silva and Bysouth (1002), macro-economic policies are necessary to achieve and sustain economic growth, in the absence of which it is difficult to maintain high welfare expenditures to help the poor. They also stated that agricultural projects constitute one of the means available to governments to alleviate poverty. But if projects are to achieve development goals the forward and backward linkages of the projects need to be considered carefully. In addition, off-farm, non-agricultural employment would be needed by the rural poor to supplement, or in some cases to substitute for, farm incomes.

They pointed out that the role of the public sector in poverty alleviation needs to be reconsidered. Their evidence from Asia indicated that ironically the increased involvement of government agencies in planning and implementing agriculture and rural development projects has undercut the abilities of many communities to carry out local development initiatives. At the same time, the failure of many government agencies to deliver services to the poor has resulted in a loss of faith among the poor in the capacity of governments to improve their quality of life.

III. A REVIEW OF THE AGRICULTURAL DEVELOPMENT PROJECTS (ADPS) STRATEGY

3.1. Introduction

Since 1974, the World Bank has assisted Nigeria with a series of Agricultural Development Projects which have gone through various phases (details of which will be discussed subsequently). Most of the ADP projects were designed at a time when the economic environment of Nigeria was very favourable for large-scale investments due to the high income from the country's oil resources. The oli"bonanza" began for the country in 1974 and lasted almost unchallenged until 1982. While the oil boom enabled the country to carry out large, capital-intensive investments, it adversely affected the agriculture sector. An overvalued Naira led to unfavourable prices for agricultural exports and encouraged the cheap import of food commodities. At the same time high wages in the non-agricultural sectors of the economy led to a widening wage rate/food crop price ratio, so that there was increased migration of rural people to the cities. Agricultural production stagnated and the increasing food demands of a population souring at a rate in excess of 3 per cent per annum were not met by national production. Between 1970 and 1982, the share of agriculture in GDP fell from 45 per cent to 27 per cent, while agricultures contribution to exports declined sharply from 70 per cent to a mere 2 per cent over the same period and food imports increased substantially. It was in this macro-economic environment and with an awareness of the deteriorating agricultural sector that the Federal Government (FGN) decided to use its oil revenue to strengthen the sector.

The FGN undertook several nationwide programmes to support the agricultural sector " Operation Feed the Nation", the "Green Revolution Programme" and the "National Accelerated Food Production Programme" were designed to improve sectorial performance. However,

these programmes had little impact, because of inefficient implementation. The initial efforts at improving the agricultural sector were focused largely on capital intensive ventures based on irrigation development and mechanized farming for the relatively small number of large-scale farms and plantation operators. The ADP concept, in contrast, directed its main thrust towards increased agricultural production in the small-holder community which comprise the bulk of the rural population.

3.2. Historical Context of ADP Development

The ADP approach was said to have been originally designed in East Africa, most prominently in Malawi. There, economic development in the rural areas had been promoted through a strategy which focused on the combination of improved technologies for food crops, enhanced delivery systems for agricultural extension and input supply, and improved infrastructure in a defined region of the country. A parastatal organisational structure with professional staff hired internationally was the prime mover for the implementation of this concept.

This basic concept was transferred to Nigeria in 1974 with the establishment of the first three enclave projects in the northern part of the country (Funtua, Gusau and Gombe ADPS). The chosen project regions were agro-ecologically favourable areas in the otherwise semi-arid north, and were located in the domain of several Local Government Council (LGCs) of the three nothern states of Bauchi (Gombe), Kaduna (Funtua) and Sokoto (Gusau). The development approach focused on simple improved packages for some of the major food crops such as maize, sorghum and millet, combined with improvements in the extension service, the input supply system, the rural road network and village water supply.Semi-autonomous organisations, called PMUs, were created for the implementation of these improvement packages, while executive committees of representatives of the different state government institutions were to guarantee the adherence to the Governments' general development policies.

The apparent success of these early projects prompted both the FGN and the World Bank to quickly replicate the ADP model in other states. From 1975 to 1980, the number of projects grew from the original three to a total of nine enclave projects. A federal entity titled Agricultural Projects Monitoring, Evaluation and Planning Unit (APMEPU) was established in 1975 to support the ADPs. By the end of the 1970s, there was mounting pressure to expand the programme: first, both the state governments and the FGN were interested in enlarging the original enclave approach to encompass whole states; and second, many states which had not yet benefited from an ADP wanted to be included in the investment and support programmes.

Since the World Bank considered that it was unable to financially support such as enlarged nation-wide programme, the FGN decided to promote an Accelerated Development Area (ADA) programme which was based on the ADP concept but with a somewhat simpler design. The FGN expected that it would be able to use oil revenues to finance the extension of the ADA concept to all states which had not yet benefited from an ADP. In March 1982, the FGN decided to cancel the ADA program due to funding constraints imposed by declining oil revenues. Only the three ADAs which had already begun (Imo, Borno, Gongola) were carried through. A decision was taken to accelerate the appraisal process of the ADPs by using Federal Government resources to establish a number of projects which will be grouped together and jointly financed by the Federal Government, State Government concerned and the World Bank. As a result, the first multi-state ADP (MSADP-1) comprising seven states, Anambra, Bendel, Benue, Cross River, Imo, Ogun and Plateau were launched in the later part of 1985 and 1986. These projects relied on local manpower resources and were simpler in design with focus on major crops. Following the success of these first MSADP projects, the second multi-state ADP project was launched. MSADP -II project covered Gongola, Kwara and Niger States. The lessons learnt from earlier projects were taken into account in the design of the third MSADP projects later established. The third MSADP include Oyo, Ondo Lagos and Rivers,

and the project incorporated support for fisheries in these maritime states.

Projects like Borno, Kaduna, Katsina, and Abuja were also operational but without World Bank loan. Thus, by 1988, the entire country was covered by the ADP system with benefits spread to all local government areas in each state.

In August 1990 when the loan for the first set of statewide ADPs terminated, an agricultural development fund (ADF) was conceived to fund these projects. After reappraisal, of the ADF loan by the World Bank it was split into National Agricultural Technology Support Project (NATSP) and the National Fadama Development project (NFDP). Both loans became effective in 1992. The NATSP provides assistance for adoption and dissemination in Bauchi, Kano and Sokoto States. It is designed to support the improvement of both upland and irrigation farming and extension on-farm adaptive research and overall project management under Fadama Development Projects. The NFDP provides fuhds for Fadama Development in Nigeria by concentrating on irrigation with the use of ground water in already cultivated fadamas.

3.3 Objectives of the ADPs

Basically all ADPs had one objective in common: to increase food production and thus farm incomes for the majority of the rural households in the defined project region, thus improving the standard of living and welfare of the farming population.Ultimately , poverty level is reduced.

Components

The project design of all ADPs encompassed four major areas:
- farm and crop development
- civil works/infrastructure development
-institutional support and training
-technical assistance through long-term and short-term constituencies

3.3.1. The Farm and Crop Development Component

It was meant to introduce simple improved agricultural practices and improved seeds for the basic food crops (maize, sorghum, millet, rice, yam, cassava, groundnut, and cowpea), through applied research, an improved extension system and a more efficient system of input procurement and distribution. Fertilizer was the key input to enhance production; the ADPs were to ensure the local availability of fertilizer to farmers and to inform them of its production benefits while a heavy subsidy policy would make it's use financially attractive. The provision of improved seeds was to be supported by enlarged and improved seed multiplication services based on project farms for the production of foundation seeds, with out growers for seed multiplication. This package (which was complemented by the construction of feeder roads and other infrastructure) was typically called the Basic Service package (BSP). In addition to this, all projects extended an Advanced Service Package (ASP): in the case of some Southern ADPs, this consisted of a minimum tillage scheme combined with the promotion of tractor hire services, while in the northern ADPs it was mainly focused on the promotion of irrigated agriculture in the so-called "fadama" areas. Land Use Planning (LUP) unit were to collect base data on the land potential, offer advisory services to needy clients on development opportunities, and identify areas in need for the implementation of soil conservation measures. Furthermore, the LUPs were to assist in the identification of sites for Farmer Service Centres, road alignments, forestry plantations, fadama lands and other project-related activities. In addition to this common farm and crop development package, the northern projects included some other components: for Bauchi, a cattle fattening scheme was proposed, while the Kano project included both a work-bull promotion scheme and the establishment of forest nurseries. In the maritime states fishery development packages

were included.

The propagation of these programmes required a re-organisation of the existing field services. For that purpose the projects were to set projects extension services based on the principles of the Training and Visit (T & V) system. This involved the transfer of agricultural extension personnel of the state Ministry of Agriculture and Natural Resources (MANR), and in some cases from LGSs, to one single administrative and technical authority-the Extension Section of the ADP. Village extension agents (VEAs) were to be used solely for extension. Loan recovery and input distribution were to be handled by other specialised staff. Mobilities of the extension section was to be improved by providing adequate transport (cars for project and Zonal co-ordinators, and motorbikes for VEAs and their supervisors).

3.3.2. Civil Works/Infrastructure Development

In the civil works and rural infrastructure components, all projects included the provision of feeder roads, the construction of Farmer Service Centres (FSC) for input supply in the rural areas, and the establishment of project offices and staff houses. With the exception of IADP, all projects included the improvement of rural water supply through well construction and small dams. In additions, BSADP was to provide a number of improved agricultural storage facilities. Every ADP except ONADEP expressly stated the need for training of LGC staff with regard to construction and maintenance of rural infrastructure.

3.3.3. Institutional Support and Training

The main institution building components of the project were directed at establishing or enhancing the capacity of the ADPs themselves to implement the development programs under the policy guidance and supervision of committees representing the state ministries. Provision were also made, however, for training of staff of local government council (LGC) and all projects were to establish or strengthen the state-owned input supply companies (FASCOMs) which would manage and service the FSCs. In some cases cooperatives were to be supported.

3.3.4. Consultancies

The ADPs relied very heavily on expatriate consultants support in executive/functional position at the on set. The rationale given for the unprecedented level of expatriate recruitment for the ADPs was that the programmes were large, food production had to be increased quickly, and Nigerian professionals who could manage and implement such programmes were either not available or could not be attracted into government service. However, this view changed later, with the establishment of the MSADPs, which were managed by indigenous personnel.

3.4. PROJECT OUTCOME

The outcome of the projects can be appropriately analysed under agricultural impact, infrastructural development and institutional improvements.

3.4.1. Agricultural Impact

The projects planned to achieve production increases largely through crop yield increases by the use of improved technology and increased production inputs. Result of the trend analysis carried out on the area and yield data for 1982-1991 for Bauchi, Kano, Sokoto, Ilorin and Oyo North ADPs indicated that yields increased in millet in BSADP, rice in KNADP, cotton in BSADP, Cassava in BSADP, IADP and ONADEP, yam in ONADEP; and Cowpeas in ONADEP (World Bank, 1993).

On the average yields have increased for all the major crops in Nigeria since inception of the ADPs compared with the period before the establishment of the ADPs. (Table 1). This is inconsonance with the extensive extension coverage by the ADPs. Between 1991 and 1995 alone, a total number of 36,012,000 farm families were covered, while 1,139,700 Special Plot for Agricultural Training (SPAT) plots were

established, and 8,894 on -farm/ station trials were carried out (Table 2). Although there were some sole cropping of maize in more favoured areas, the projects had virtually negligible impact on changing the traditional mixed/relay crop system in the projects. This system has obvious advantages in allowing farmers to reduce production risks in the relatively difficult production environment, and hence any widespread adoption of a different system would have had to include not only increased production potential but comparable risks aversion characteristic. Such an alternative system has yet to be developed.

Regarding specific development programmes destined to have an agricultural production impact, the fadama development program was successful in the northern ADPs. All projects exceeded the set targets significantly in fadama development, and gained ample engineering know-how which encouraged the extension of the program under the National Fadama Project. The technical problems with regard to tubewell, washbore and pump installation have been mastered satisfactorily and local mechanics are carrying out standard repairs and maintenance on the pumps and irrigation equipment. The crop production aspects of the programme receive the attention of the extension service and the MTRMs with regard to the provision of seeds, the application of fertilizer and the husbandry methods of the traditional crops grown in the fadama areas (mostly high value vegetable crops and wheat). Output of these have significantly increased, and raised the income of the beneficiaries. A further impact of fadama land development is that it has created income opportunities for casual labourers in the surrounding areas, so that the benefits of this development are not just limited to the group of farmers who have access to the fadama land.

The fadama development, however, is not without problems. There is already a seasonal glut in the major seasonal crops of onions, tomatoes and garlic in most fadama areas, so that there is important land use-crop marketing issue which has not been addressed. Other concerns include negative ecological aspects and the conflicting interests of crop farmers and herders who traditionally graze fadama lands.

3.4.2. Infrastructural Development Impact

3.4.2.1. Roads The roads which have been rehabilitated or newly constructed through the ADPs in rural areas in Nigeria constitute approximately one sixth of the tertiary road network in the states or parts of the states concerned. The program was a massive undertaking and has significantly improved accessibility to large areas of the respective states. For instance from 1991 to 1995 alone a total of 3, 147.8 km and 5,826.2km of roads were constructed and rehabilitated respectively by all ADPs (Table 2).

Despite the rural roads being highly valued by the benefiting populations, they have not had desired effect on the LGCs or on the attitude of the beneficiaries towards road maintenance and its associated costs. The beneficiaries consider the ADPs, the constructors of the roads, to be responsible also for their maintenance. This has resulted in the ADPs attempting to maintain "their roads" as long as funds were available hence in recent years (1994 and 1995) with dwindling resources they have not maintained roads (table 2). It is precisely in this field that cooperation with the LGCs would have been beneficial as this work would have been within the technical means and the financial capacity of the LGCs.

3.4.2.2. Rural Water Supply

This program was impressive and exceeded its targets in most ADPs by an impressive margin. Between 1991 and 1995 a total of 28,987.7 water points (earth dams, tubewells, washbores and boreholes) were constructed

(Table 2). Their benefits would be realised in an improved level of human health and economic benefits, in time saved in water collection by rural women.

Maintenance of boreholes and wells with villager participation has not been problematical. On the other hand, neither the beneficiaries nor the local water boards have been willing to participate (physically or through payment of a water fee or tax) in the relatively complex and costly maintenance of the filtration treatment and distribution system associated with dam water, storage. In Oyo North, these parties consider the scheme as "ADP projects" in which they were not consulted or involved.

For the dam storage which had a stock water objective, in Bauchi and Sokoto, insufficient account was taken of traditional cattle routes from Niger so that often full use is not made of the investments. The possibilities offered in fish culture in these water supplies have not been fully exploited.

3.4.3. Institutional Development

3.4.3.1. Manpower Development

One of the most positive aspects of the ADPs was in human resource development. This was especially so in project staff, and to a much less extent in special target groups (pump attendants, etc). Between 1991 and 1995 a total number of 179,026 people were trained (table 2).

3.4.3.2. Commercial Services

The FASCOMs have generally not been able to develop into viable commercial organisations. This was partly attributed to their obligation to handle fertilizer distribution without a profit margin and to refinance its transport costs to FSCs, often without reimbursement. However, Ondo, Oyo and Lagos states established Agricultural input supply companies (AISC) from their commercial services programme in recent years because they were given a free hand to operate (privatisation).

3.4.3.3. Cooperative Groups

The BSADP support for the CFA cooperative credit scheme and the loan-in-kind scheme for cooperatives in Oyo had favourable results. In both cases focus was on organised groups rather than individuals, and on market-conformity in the pricing of the services provided. With the group-orientation, targeting was made possible, social control worked against defaulting, and delivery of services became less costly for the respective organisations ADP and CFA as certain functions were provided by the cooperatives themselves. With the near market-conformity in pricing, the sustainability of services provided could be guaranteed, thus also working toward broader social and economic impact and enhanced equity.

The group formation concept within the WIA and other beneficiary user's association has enabled these groups to embark on laudable projects which benefited them as individuals, groups as well as the community. A total of 12097 women in agricultural groups (WIA) were formed between 1992 and 1995 (Table 2) See the implementation Completion Reports of the various phases of the ADPs for further details on the project outcome.

3.5. FINDINGS AND ISSUES

Where adoption of technology promoted or facilitated by the projects (e.g. in improved seed, crop husbandry measures, post-harvest practices) has led to increased productivity, in most cases this impact could be expected to continue in the near/medium term. There is some concern, however, about the long-term sustainability of the traditional mixed/relay cropping system in Nigeria due to the increasing challenge of the "striga" weed problem. Similarly, intensive development of the fadama has nematode and other pest challenges, and is faced also with emerging marketing problems, both of which indicate a need for diversification into additional high value crops. These types of farming system problems have to be ad-

equately addressed by the agricultural research institutions.

While the sustainability of the rural water supply investments look secure, this is not the case with the road and building infrastructure investments because of lack of a system for necessary upkeep and maintenance.

The ADPs appear to have strong support to continue as agricultural development implementing agents in the states. This however, has not been translated into support in budgetary funding, so that most ADPs have experienced serious funding constraints when Bank loan support decline.

The constrained budget situation gives some priority to a critical review of the respective roles and functions of the regular state ministry departments and the ADPs. This is necessary to ensure the most cost-effective services and to minimize overlapping functions and wastage of scarce budgetary resources.

One option would but to restrict the role of the ADPs to needed functions which cannot be done efficiently by the private sector, by organisations representing beneficiaries, by non-government organsations or by the regular state or federal departments. This would involve for instance the shedding of components such as seed multiplication to the National seed service, tractor services and input supply to the private sector, credit to credit institutions. Functions should include implementation of services functions which are considered critical to development such as revamped, cost-effective in-house extension services, monitoring the states development programs, and a strong emphasis on the socio-organisational aspects of development. Essential to this restructuring would be the retention of a semi-autonomous status by the ADPs and a limited number of well-qualified staff receiving a benefit package which is superior to regular state civil service employers to achieve high performance in these specialised functions.

A changed view on the ADP system may necessitate some redefinition of the FACU and APMEU structure as well. From a practical view point the fusion of both institutions may be a better option for effectiveness and efficiency in their responsibility of evaluating the encompassing performance quality of the ADPs.

IV SUMMARY AND CONCLUSION

This paper has attempted to articulate some contemporary issues in poverty with a view to appraising the effectiveness of the World Bank assisted agricultural development projects in poverty alleviation in Nigeria . The human development report emphasised the importance of studying the multidimensional aspects of poverty; (nutrition, life expectancy, literacy) rather than simply focusing upon income levels. Given the choice, poor people the report stated; would wish to live a long and healthy life; receive education and have access to resources needed for a decent standard of living. The World Development Report on the other hand considers the mechanisms which governments have at their disposal for overcoming poverty. Four measures are identified as having major potential to increase the incomes of the poor.

These are (a) increasing the demand, and therefore, the price for those factors of production that the poor own (e.g. their own labour); transferring physical assets to the poor (e.g land); providing social services to the poor (e.g. education) and; transferring current income to the poor (e.g. through cash or food subsidies). Projects, the report noted are one instrument which governments can use in order to implement these policies.

A review of the concept of the World Bank assisted agricultural development projects in Nigeria from 1975 to 1995 revealed that the objective of the ADPs and the strategies adopted were inconsonance with what is contained in both the HDR and WDR.

Basically, all ADPs had one objective in common; to increase food production and thus farm

incomes for the majority of the rural households in the defined project region, thus improving the standard of living and welfare of the farming population. This was to be provided through farm and crop development programmes and services, rural infrastructure institution building, human resources development, and substantial technical assistance.

A review of the implementation completion reports of the various phases of the ADP system from enclaves in the 1970s to statewide in the 1980s and multistate/subsector programme in the 1990s revealed that the ADPs have contributed significantly to improvement in the living standards of the rural populations, as measured by qualitative indicators like educational attainments, occupational status, water supply, ownership of farm assets and livestock, transportation measures, and roads, sources and use of farm inputs and credit. Farmers were quite responsive to the various useful innovations extended to them, and this has had a positive impact on production and farm income and consequently on poverty reduction.

The ADP concept has put the rural small holder sector at the center of government agricultural development strategy. Considering the fact that agriculture consitutes about 40 per cent of Nigeria's GDP, employs almost three-quarters of Nigerians and is yet to be substantially modernized, the ADP system should be sustained so as to continue to reap the two fold benefit of developing the agricultural sector and alleviating poverty in the rural sector.

That the World Bank loan has terminated does not mean the ADP system should be terminated. The loan has put in place the basic structure and institutions necessary for delivery of critical services to the smallholder farmers for increased agricultural production in all the states of the federation. With some reorganisation at the state and federal levels and committed funding the ADPs are sustainable. The policy of deduction of state contributions at source should be continued and should be extended to local governments. And for effectiveness they should continue to be autonomous. Bad experiences in the past which tend to hamper efficiency should be avoided. For instance, frequent changes in state government political leadership and ADP management staff affected decision making down the scale resulting in delays during project implementation.

The low level of remuneration has increased the rate of turnover of staff especially in the infrastructural and monitoring and evaluation departments where attractive opportunities are available in the private sector for these staff.

The programmed involvement of the local governments and benefiting communities in rural roads maintenance should be effectively implemented in all states. Finally, the privatisation of farm inputs supply should be implemented in all states as well. The experiences of Ondo, Lagos and Oyo States have proved that agricultural inputs supply companies perform better if they are privatised.

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TABLE 1
NIGERIA'S GROSS DOMESTIC PRODUCT AT 1984 FACTOR COST, 1970–1992
(₦' Billion)

	1960–69	1970–74	1975–79	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992[1]
Annual Total GDP	26.8	58.2	73.7	73.2	70.4	70.2	66.4	63.0	68.9	71.1	70.7	79.8	83.5	90.4	94.5	98.4
Annual Growth Rates of:																
Total GDP	3.8	8.8	2.3	4.1	2.8	-0.2	-3.8	-3.4	5.9	2.2	-0.3	7.0	7.4	8.3	4.4	4.3
Agriculture	1.7	4.3	-2.7	1.6	1.9	0.6	-0.1	-1.2	4.0	2.6	-1.0	2.9	5.1	4.1	4.3	3.0
Manufacturing	10.1	0.9	-1.6	1.5	1.1	0.9	-2.3	-0.6	1.0	-0.2	0.3	0.8	1.6	7.0	7.3	7.5
Crude Oil	84.8	3.2	7.2	-2.1	-6.2	-1.1	0.3	1.1	0.8	-0.6	-1.0	0.7	15.0	5.6	8.6	0.8
Others	5.3	0.4	-0.6	-1.7	-0.4	0.2	-1.7	0.7	5.8	1.8	-1.7	4.4	7 5	12.7	3.5	6.2
% Share in Total GDP Of:																
Agriculture	58.7	33.2	30.2	30.8	34.7	35.8	37.7	37.8	40.3	42.7	41.5	41.5	40.6	39.0	39.0	38.5
Manufacturing	6.1	2.5	5.0	8.1	9.9	11.2	8.4	7.8	8.6	8.0	8.4	8.7	8.2	8.2	8.3	8.6
Crude Oil	1.6	17.4	24.3	22.0	14.0	12.5	12.8	15.2	15.1	13.8	12.5	12.3	13.2	12.8	12.4	12.9
Others	33.6	46.9	40.5	39.2	41.4	40.6	41.2	39.2	36.0	35.5	37.5	37.5	38.0	39.9	40.3	40.0

[1] Provisional estimates.

Source: Compiled from Federal Office of Statistics *Annual Abstract of Statistics*

TABLE 2

OPERATIONAL DATA ON AGRICULTURAL DEVELOPMENT PROJECTS (ADPs)

	1991 (1)	1992 (2)	1993 1/ (3)	1994 1/ (4)	1995 1/ (5)	Percentage Change Over Preceeding Years (6) 1992	(7) 1993	(8) 1994	(9) 1995
Sources of Fund (=N='million)	448.0	1,217.5	1,493.5	2,119.7	2,100.4	171.8	22.7	41.9	-0.9
(a) IBRD/IFAD	241.9	804.7	951.7	1,375.0	1,327.7	232.7	18.3	44.5	-3.4
(b) Federal	68.0	80.0	134.9	135.2	106.3	17.6	68.6	0.2	-21.4
(c) State	129.8	296.0	363.8	561.2	593.6	128.0	22.9	54.3	5.8
(d) Others	8.3	36.8	43.1	48.4	72.8	342.5	17.2	12.2	50.5
Infrastructure									
(a) Roads (KM)									
(I) Constructed	197.0	1,014.5	1,204.7	631.5	100.1	415.0	18.8	-47.6	- 84.1
(Ii) Maintained	1,949.0	3,498.8	1,387.9	-	-	127.7	-60.3	-100.0	-
(iii) Rehabilitated	601,0	2,277.7	1,078.9	1,655.2	213.4	279.0	-52.6	-	-
(b) Earth Dams, Tubewells, Boreholes and Washbores (No.)	5,190.0	5,523.0	325.7	8,108.0	9,841.0	6.4	-94.1	2389.4	21.4
(c) Farm Service Centre Store (No.)	383.0	722.0	562.0	505.0	577.0	88.5	-22.2	-10.1	14.3
(d) Fish Ponds (No.)	-	279.0	260.0	779.0	221.0	-	-6.8	199.6	-71.6
(e) Irrigation Development (Ha.)	7,658.0	2,786.0	36,617.0	34,510.0	3,440.3	-63.6	1214.3	-5,8	-90.0
Farm Inputs Supplied									
(a) Fertilizer ('000 tonnes)	344.7	1,410.0	331.9	208.7	522.0	53.2	-76.5	-76.1	150.1
(b) Seed ('000 Tonnes)	-	1.4	12.9	47.2	113.4	-	821.4	265.9	140.3
(c) Root/Tubers (bundles)	-	9,353.0	26,088,0	1,304.6	9,064.0	-	178.9	-95.0	594.8
(d) Liquid Agrochemicals ('000 Litres)	769.7	803.5	110	69	98.4	-60.6	-63.8	-37.3	42.6
(e) Solid Agrochemicals (tonnes)	-	384.3	28.0	38.4	31.4	-	-92.7	37.1	-18.2
(f) Pumps (No.)	6,052.0	5,758.0	2,042.0	1,882.0	3,760.0	-7.0	-64.5	-7.8	99.8
(g) Ox - Ridges (No)	-	6,269.0	5,249.0	5,904.0	4,535.0	-	-16.3	12.5	-23.2
(h) Other Farm Implements (No)	-	16,995.0	6,389.0	852.0	4,985.0	-	-62.4	-86.7	485.1
Extension and Training									
(a) Farm Families covered ('000)	4,764.0	6,090.5	5,823.7	11,522.5	7,811.3	27.8	-4.4	97.9	-32.2
(b) Extension Agents (no)	-	7,804.0	6,412.0	7,027.0	6,617.0	-	-17.8	9.6	-5.8
(c) SPAT 3/. Plots established ('000)	90.6	286.9	277.7	228.2	250.3	216.7	-3.2	-17.8	9.7
(d)On farm / station Trials (No)	-	2,620.0	2,558.0	1,911.0	1,805.0	-	-2.4	-25.3	-5.5
(e) Women in Agriculture group established (No)	-	3,301.0	2,721.0	2,074.0	4,001.0	-	-17.6	-23.8	92.9
(f) No Trained (No)	159,000.0	6,526.0	4,481.0	4,498.0	4,521.0	-95.9	-31.3	0.4	0.5

1/ Revised
2/ Special Plot for Agricultural Training (SPAT)
Source: Central Bank of Nigeria National Agricultural Survey.