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FINANCING AGRICULTURE FOR SUSTAINABLE ECONOMIC DEVELOPMENT



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ABSTRACT

Nigeria's agriculture is diverse, presenting various opportunities. It includes four sub-sectors, namely; crop, livestock, fishery and forestry. The crop sub-sector accounts for about 90.0 per cent of agricultural production in Nigeria, followed by the livestock sub-sector which contributes about 7.0 per cent. Fishing activities contribute about 2.0 per cent and forestry activities account for about 1.0 per cent. However, Nigeria remains a food-deficit country blessed as it is with abundant agro-ecological resources and diversity. As reported by the Food and Agricultural Organization of the United Nations (FAO), the number of people undernourished has been on the increase, from 8.7 per cent of total population in 2007-09 to 11.2 percent in 2012-2014. This is because adequate attention has not been given to the agricultural sector, particularly after the discovery of oil in commercial quantities in the country. For instance, the proportion of government total recurrent and capital expenditure allocated to the agricultural sector between 1981 and 2014 has been less than 3.0

per cent compared with the 25 per cent recommended by the FAO, and the minimum of 10 per cent recommended by the African Union. Similarly, the agricultural sector's share of total commercial banks sectoral allocation of loans and advances to the economy declined from the height of 19.6 percent attained in 1996 to 3.7 per cent in 2014. Meanwhile the Bank of Agriculture set up to focus on financing the sector has been plagued by inadequate capital and poor management. Other funding initiatives put in place to assist the agricultural sector have not been very successful as well due to the peculiar nature of agricultural production in Nigeria and hence, the preference for financing of commerce by financial institutions. It is therefore recommended that more financial resources be strategically directed at the agricultural sector for sustainable development of the Nigerian economy in view of the traditional role of agriculture in a developing economy.

1. INTRODUCTION

Economic development is a process whereby an economy's real national income increases over a long period of time. The term economic development also refers to achievement by poor countries of higher levels of real per capita income and improved conditions of living for their people. That is an environment more like those prevailing in developed countries (Ojo, 2010). Sustainable development is

defined as development that meets the need of the present without compromising the ability of future generations to meet their own needs (Akatugba and Ogisi, 2005). The principles that govern sustainable development are:

- (i) the principle of intergenerational equity- which advocates the necessity to preserve nature for the benefit of future generations;
- (ii) the principle of sustainable

use- which implies that natural resources should be exploited in a sustainable or prudent or rational or wise or appropriate manner;

- (iii) the principle of equitable or intra-generational equity- acknowledges that the use by one sector must take account of other sectors; and,
- (iv) the principle of integration- suggests that the environmental

consideration be integrated into economic or other development plan, programmes, and projects, and the developmental needs are taken into account in applying environmental objectives.

These principles are not mutually exclusive as there is the likelihood for them to overlap. The fundamental truth is that economic development and environmental protection are integrally related and interdependent. Both are necessary and desirable to maintain as well as improve the quality of human life.

From the foregoing, it is very clear that, while, maintaining development is a problem for rich countries, accelerating development is an even more pressing matter for poor countries if sustainable economic development must be achieved.

Funding consists of the financial resources required to transform the ideas of an entrepreneur into a viable project. It can take the form of loans, equity capital, venture capital, working capital or any other form (Raji, 2000). The role of finance in economic development is widely acknowledged in this literature. It is argued that financial intermediation through the banking system plays a pivotal role in economic development by affecting the allocation of savings, thereby improving productivity, technical change and rate of economic growth. However, credit –constrained groups such as small scale

traditionally risk-appraised by lenders as the lower end of the credit market often face discrimination from formal credit purveyors, resulting in stringent credit rationing and high risk-premium charges, even if they secure credit. The repressive circumstance derives from their inability to pledge the traditional favoured securities such as mortgages, land, sterling shares or gilt-edged to back up credit proposals. (Evbomwan, 2014). This is why it is important to pay particular attention to the financing needs of the Nigerian agricultural economy, which is dominated by small holders who are often discriminated against by formal financial institutions though they produce the bulk of food consumed in the country and other agricultural commodities exported to earn foreign exchange. This is the subject of this paper as the title implies.

The rest of this paper is divided into four sections including this introductory section. The next section will enunciate the role of agriculture in economic development, highlighting the Nigerian agricultural development policies and strategies put in place to achieve them with specific emphasis on the financing initiatives. The third section will review in details the various financing programmes and their effect on the sector and the nation as a whole. The last section will summarise the paper and make suggestions where necessary for better financing of the Nigerian agricultural sector for sustainable economic

development.

2. ROLE OF AGRICULTURE IN ECONOMIC DEVELOPMENT

The consensus in literature is that increased agricultural productivity is a vital pre-requisite for rapid economic growth and development (Evbomwan, 2004). Sustainability in agricultural development could be defined as the ability of the agricultural system to maintain a well-defined level of performance over time, and if required, to enhance that output without damaging the essential ecological integrity of the system (CBN, 2003). Among the roles conventionally ascribed to the agricultural sector in a growing economy are those of:

- (i) Providing adequate food for an increasing population;
- (ii) Supplying raw materials to a growing industrial sector;
- (iii) Constituting the major source of employment;
- (iv) Earning foreign exchange through commodity export; and
- (v) Providing market for the products of the industrial sector.

In Nigeria, agriculture has traditionally been described as the mainstay of the economy. The following are the specific objectives of the Agricultural Policy:

- (a) Attainment of self-sufficiency in basic food items, particularly commodities which consume considerable shares of Nigeria's foreign exchange;
- (b) Increased production of

agricultural raw materials to meet the growing needs of an expanding industrial sector;

(c) Increased export earnings, enhanced by further processing of agricultural produce and adding value;

(d) Modernization of agricultural production, processing, storage and distribution, through the infusion of improved technology and management so that the sector can be more responsive to various demands of a developing economy;

(e) Creation of more rural employment opportunities by engaging in further improvement and maintenance of rural infrastructural facilities;

(f) Improvement in the quality of life of rural dwellers through the provision of social amenities such as potable water and improved health and educational facilities; and

(g) Continuous protection of agricultural land resources from drought, desert encroachment, soil erosion and flood.

Agro-based industries in Nigeria can be categorised broadly into two. First are the large-scale agro-allied industries such as textile, brewery, flour, soap, sugar, sawmill and plywood, leather and feed manufacturing industries which depend, to a large extent, on primary agricultural commodities as major inputs. The second group are classified as agro-processing industries, as they transform primary agricultural commodities into preservable and marketable

forms. These include; rice milling, cassava processing, grains/flour milling, cocoa processing and vegetable oil milling, among others.

The agro-based industrial policy of the country is derived from the overall industrial development policy. Its specific objectives are to:

(a) Provide greater employment opportunities;

(b) Increase private sector participation in the manufacturing sector among others.

These specific objectives of the industrial sector policy, under which the agro-based industries are classified, are not significantly different from those for the agricultural sector. They are actually, mutually reinforcing.

Various strategies were put in place to facilitate the attainment of these objectives among which was formal credit delivery as it is generally agreed among researchers and policy makers that poor rural households in developing countries lack adequate access to credit. This lack of adequate access to credit is in turn believed to have significant negative consequences for various aggregates and household level outcomes, including technology adoption, agricultural productivity, food security, nutrition, health, and overall household welfare by which economic development is measured.

3. A REVIEW OF GOVERNMENT AGRICULTURAL FINANCING INITIATIVES

In the bid to increase farmers' access to credit and hence stimulate increased agricultural output, the Central Bank of Nigeria through its Monetary Policy (before its abrogation in 1996), prescribed that not less than 15 per cent of commercial and 10 per cent of merchant banks' credit be granted to agricultural activities. The banks were also to allow grace periods on agricultural loans: one year for small-scale peasant farming, four years for cash crop farming, five years for medium and large-scale mechanized farming and seven years for ranching.

Similarly, the CBN through its Policy Guidelines, promoted small-scale enterprises (under which most agricultural enterprises are classified), by directing that with effect from April, 30, 1970 credit to indigenous borrowers was to be at least 35 per cent of commercial and merchant banks' total loans and advances. Until the deregulation of the financial industry in 1996, non-compliance attracted stiff penalties, while shortfalls (the undisbursed amount) were forwarded to the National Bank for Commerce and Industry (NBCI) for on-lending to small-scale businesses.

In the same vein, to encourage banking habit nationwide and channel funds into rural development (agricultural production activities take place mostly in the rural areas in Nigeria), the CBN introduced the Rural Banking Scheme in June 1977 in three phases –

1977-1980, 1980-1985 and 1st August, 1985 through 31st July, 1989. As at end June, 1992, 765 of the 766 branches stipulated by the CBN had been opened. In addition, the CBN stipulated that not less than 50 per cent of the deposits mobilized from the rural areas be advanced as credit to rural borrowers to solve the problem of inadequacy of credit to rural-based small-scale industries in view of the fact that rural financing is a veritable tool for poverty alleviation.

In addition, specific credit initiatives have been instituted by the Nigerian government towards promoting agricultural sector development in Nigeria (CBN Briefs, various issues). These include the following:

- (1) The establishment of the Nigerian Agricultural and Cooperative Bank (NACB) in 1972;
- (2) The Agricultural Credit Guarantee Scheme Fund (ACGSF) in 1977;
- (3) The Commercial Agriculture Credit Scheme (CACS) in 2009; and
- (4) The Nigerian Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) in 2010.

Apart from the above listed specific agricultural sector financing initiatives, there were other financing initiatives which were targeted at the real sector as a whole of which the agricultural sector is also a beneficiary. These include the establishment of:

- (a) The Nigerian Industrial and Development Bank (NIDB)

in 1964 to harness local and foreign skills and local and foreign private capital in the development of new industries and the expansion of existing ones;

- (b) The Nigerian Bank for Commerce and Industry (NBCI) was established by Decree 22 of May 1973 and charge with the function of providing equity capital funds by way of loans to small and medium scale industries;

- (c) The National Economic Reconstruction Fund (NERFUND) was set up by Decree No. 25 of 1988 as a funding mechanism aimed at bridging the gap in the provision of local and foreign funds to small and medium scale enterprises;

- (d) People's Bank of Nigeria (PBN) was established by the Federal Government in 1988 to meet the credit needs of small borrowers who could not satisfy the stringent collateral requirements normally demanded by conventional banks;

- (e) Community Banks (CBs) were established in 1990 with the objective of providing effective financial services for the rural areas as well as micro-enterprises in the urban centres;

- (f) The Nigerian Export-Import Bank (NEXIM) was established by Decree 38 of 1991 to manage a number of credit facilities introduced specifically to boost Nigeria's non-oil

export sector (which have been mainly agricultural commodities);

- (g) The Small and Medium Equity Investment Scheme (SMEIS) was initiated by the Banker's Committee in 1999, aimed at ensuring assistance to micro, small and medium scale enterprises in the form of equity participation, project packaging/monitoring, advisory services and nurturing of specific industries to maturity by banks;

- (h) Bank of Industry (BOI) which is an amalgam of former NIDB, NBCI and NNERFUND was set up in 2000 principally to provide credit to the industrial sector (which also include agro-industries); and

- (i) The Microfinance Banks (MFBs) established in 2006 to replace the community banks. They mobilize deposits mainly from the low income group and extend small loans to people, businesses, and organizations.

In the rest of this section, an attempt will be made to appraise government financial initiatives specifically directed at the agricultural sector.

3.1 The Nigerian Agricultural and Cooperative Bank (NACB) now Bank of Agriculture (BOA)

As mentioned earlier, the NACB was established in 1972 to assist in financing viable agricultural projects and thus enhance the level and quality of agricultural production. It sourced funds

from government subventions; credit shortfall on agricultural loans through the CBN and loans from international finance institutions such as the International Bank for Reconstruction and Development (IBRD), African Development Bank (ADB), European Investment Bank, and the International Fund for Agricultural Development (IFAD). Available statistics indicated that loan disbursement by the NACB has been very uneven and in some years loans were not disbursed at all. In 1980 for instance, the bank disbursed the sum of N28.6 million for various categories of lending to agriculture, it rose to N71.1 million in 1981, and dropped to N22.5 million in 1983. By 1985, loan disbursement increased significantly to N318.7 million and peaked at N6,104.20 in 1994 and dropped drastically to N415.20 million in the following year. There were no records of loan disbursement from 1999 to 2001. Due to NACB's unimpressive performance in the late 1990s, it was merged with the Peoples Bank of Nigeria (PBN), and the Family Economic Advancement Programme (FEAP) and re-named Nigerian Agricultural Co-operative and Rural Development Bank (NACRDB), jointly owned by the Federal Ministry of Finance Incorporated (MOFI) and the CBN with shareholding ratio of 60 and 40 per cent respectively. On the successful completion of the restructuring programme, the Board of Directors approved appropriate credit guidelines

for the bank. Consequently, Nigerian Agricultural Co-operative and Rural Development Bank (NACRDB) embarked upon a full-scale loan approvals and disbursements to empower its clientele and give financial succour to the agricultural sector. However, significant improvement has not been witnessed in its loan disbursement pattern in recent years either. The sum of N727 million was disbursed in 2003, loan disbursement declined to N107 million in 2004 and started rising again and peaked at N1,338.29 million, much lower than the peak attained in 1994. Since 2008 no record of loan disbursement was obtained (Evbuomwan, 2014). A major constraint facing the bank is high cost of overheads as well as paucity of loanable funds to service its numerous clients who are highly desirous of benefitting from the credit schemes being operated by the Bank for the promotion of their income generating activities. The Nigerian Agricultural Co-operative and Rural Development Bank (NACRDB) was renamed Bank of Agriculture (BOA) in 2010. The BOA is yet to achieve viability and self-sustainability with its very low asset base which constituted only 5.8 per cent of the total assets of the six reporting development finance institutions reported in the CBN 2014 Annual Report.

3.2 The Agricultural Credit Guarantee Scheme Fund (ACGSF)

The Agricultural Credit

Guarantee Scheme Fund (ACGSF) was established in 1977 and it took off in April, 1978 under the management of the CBN, while a Board of Directors was constituted for policy making. The scheme was designed to encourage banks to increase lending to the agriculture sector by providing some form of guarantee against risks inherent in agricultural lending. In case of default, the lending banks are expected to exhaust all legal means of loan recovery, including realisation of any security pledged for loan, before the ACGSF pays 75 per cent of guaranteed loans in default.

The authorized capital of the Fund which had remained at N100.0 million from inception was reviewed upward to N3.0 billion in 1999. In other to take account of inflation and high cost of inputs, the loan limit under the scheme was raised from N5,000.00 to N20,000.00 for unsecured loans, and from N100,000.00 to N500,000.00 for secured loans to individuals, as well as from N1.0 million to N5.0 million for corporate borrowers.

The value of loans guaranteed under the scheme grew from N35,642.4 thousand in 1981 to N11,441,978.8 thousand in 2015, while the number of beneficiaries grew from 1,295 in 1981 to 69, 436 in 2015. Cumulatively, the ACGSF has serviced a total of 998,908 beneficiaries from inception to end December, 2015 with the sum of N95,833,582.60 thousand. A breakdown of the number of beneficiaries and

value of loan indicated that, small borrowers of N5,000.00 and below, constituted 225,613 or 22.6 per cent of the number of beneficiaries who together shared N771,709.60 or 0.8 per cent of total amount disbursed under the ACGSF. On the other hand, large borrowers of above N100,000 were 212,665 in number and they took up N68,515,959.30 thousand or 71.5 per cent of total amount (Table 1). Thus, while the least borrower received an average of N3,420.50, the highest borrower got an average of N322,191.99 under the ACGSF over the years, which is quite instructive in terms of investment and working capital structure in the sector. Analysis of the distribution of loans guaranteed by purpose under the ACGSF show that food crops (grains, roots and tubers) farmers dominated, accounting for over 60 per cent, while cash crops, livestock, fishery, mixed farming and others farmers account for less than 40 per cent of the beneficiaries. ACGSF does not fund the value chain, and very few deposit money banks are involved.

3.3 The Commercial Agricultural Credit Scheme (CACs)

The Commercial Agricultural Credit Scheme (CACs) was established in 2009 to finance large ticket projects along the agricultural value chain. It is administered at a single digit interest rate of 9 per cent to beneficiaries. State Governments, including the FCT can access a maximum of

N1.0 billion each for on lending to farmers' cooperatives or other areas of their agricultural intervention. The Scheme is managed by the CBN.

Available data indicate that, from inception in 2009 to September, 2015, the sum of N310.845 billion was released to the economy under the CACS in respect of 396 projects. This represents an average of N784,962.12 per project. A total of 30 State Governments together with the FCT have accessed the sum of N51.0 billion from CACS funds from inception to September, 2015. Special focus is on seven commodities, namely, rice, wheat, sugar, fish, dairy, oil palm and cotton, which together received about 70 per cent of CACS funds. Analysis of number of projects financed under CACS by value chain showed that agricultural production accounted for about 88 per cent while processors accounted for the balance. It is reported that from inception in 2009 to September 2015, 1,131,600 jobs have been created. A major challenge is the slow implementation of projects by State Governments as well as poor monitoring of projects by some participating banks (Development Finance Department, CBN, 2015).

3.4 The Nigerian Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL)

The Central Bank of Nigeria established the Nigeria Incentive-based Risk Sharing System for Agricultural Lending (NIRSAL) in 2010, following an agreement with the Alliance for

a Green Revolution in Africa (AGRA), to address the weakness of existing agricultural financing schemes (Eluhalwe, 2010). It was an innovative mechanism for unlocking finance to serve the needs of all farmers, particularly smallholder farmers, agro-processors, agribusinesses as input suppliers in the agricultural value-chain. The aim was to provide farmers with affordable financial products while reducing the risk of loans to farmers offered by the financial institutions. The scheme would build the capacity of banks to lend to agriculture, deploy risk sharing instruments to lower risks of lending, and develop a rating scheme for banks based on their commitment to lending to the agricultural sector. On the completion of the framework in 2011, the scheme was formally launched. The five major components of NIRSAL are:

(i) Risk Sharing Facility: This will support the deployment of different risk sharing instruments to reduce the risk of lending by commercial banks to agriculture. This will include first-loss and shared-loss arrangements, depending on the volume of lending, the part of the value-chain that the bank wants to lend to, the term of lending and the type of bank, experience and capacity for agricultural lending.

(ii) Insurance Component (IC): This will identify existing insurable risks, existing solutions for coverage/assist in the development of such solutions and link such products to the loan provided by the banks to loan beneficiaries.

(iii) Technical Assistance Facility (TAF): This is to be used to support banks that have clearly demonstrated interest and verifiable commitment to entry into smallholder agricultural lending. The risk sharing fund and the technical assistance facility will be blended for banks to share risks and build capacity of banks to lend and build delivery platforms in support of agricultural lending. The technical assistance facility will also be used to build the capacity of smallholder farmers and assist them in managing market and financial activities.

(iv) Bank Incentive Mechanism (BIM): Banks that lend significantly to agriculture will be further incentivized. This will be done through lower guarantee fees for the use of the RSF and access to further capital for agricultural lending at a lower rate from the Central Bank to be able to lend more.

(v) Agricultural Bank Rating System (ABRS): This will be done by reputable independent parties to rate banks based on their performance in agricultural lending and impacts of the lending on food security, rural employment and incomes. The independently-developed rating scheme will be used to differentiate banks. Banks with higher ratings will be further incentivized through the BIM to do more lending to the agricultural sector. The system will also have a dedicated monitoring and evaluation system to track impacts and effectiveness.

Selection of Commodity and Financial Value Chains for NIRSAL

After due diligence, ten agricultural value-chains were selected for the country namely: cassava, cotton, fisheries, maize, fruits, oil palm, poultry, rice, soya beans and tomatoes.

NIRSAL is intended to strategically re-engineer Nigeria's agricultural finance landscape, decompose all existing initiatives into NIRSAL's five core components that will unlock the financing challenges of the country's agricultural sector.

Highlights of Achievements of the NIRSAL

In 2013, the Board of the Central Bank of Nigeria approved N75.0 billion Seed Fund for NIRSAL, under a redeemable debenture with a coupon of 1.0 per cent.

As at end September 2015, the cumulative number/value of credit risk guarantees (CRGs) issued by NIRSAL stood at two hundred and forty seven (247) projects valued at N21.673 billion. Analysis of the CRGs by activity indicated that agro-processing projects accounted for 69.9 per cent, while livestock production, crop production and input distribution projects accounted for 15.6, 10.4 and 4.1 per cent, respectively. In addition, N300.516 million was paid as interest drawback to deserving beneficiaries. NIRSAL has also guaranteed N39.487 billion to 207 agro-dealers, under the Growth Enhancement Scheme of the Federal Ministry of Agriculture

and Rural Development from inception to date. Cumulatively, total GES IDP paid to date stood at N439.084 million for 91 projects.

Challenges of NIRSAL

Among the challenges of NIRSAL are;

- (i) Validity of information provided by counter parties for Credit Risk Guarantee, and
- (ii) Low public awareness and poor perception of NIRSAL.
- (iii) Non-payment of 50 per cent by Federal Ministry of Agriculture and Rural Development under the GES input supply scheme has triggered claim settlement by Counter parties.
- (iv) Delay in recruitment of substantive Managing Director and other supporting staff.

Going forward, the operators would want to ensure that guarantees are extended only to projects with fixed value chains. In addition, Credit Guarantee (CG) will now be issued on Face Value as against First Loss following the revision of the NIRSAL's Guidelines in May 2014.

3.5 Commercial Banks Loans And Advances To The Agricultural Sector

Commercial banks loans and advances to the agricultural sector grew from N590.6 million in 1981 to N478,900 million in 2014. These constituted 6.9 and 3.7 per cent of total credit to the economy in the respective periods (Table 2). On average between 1981 and 2014, the agricultural sector attracted 8.9 per cent of total

loans and advances by the commercial bank to the Nigerian economy, which is rather small considering the fact that the agricultural sector contributes about a quarter of Nigeria's gross domestic product (GDP), and provides livelihood for over 70 per cent of the population who produce over 90 per cent of the food consumed in the country.

Similarly, the proportion of commercial banks loans to small scale enterprises has dwindled from 27.04 percent in 1992 to 0.14 per cent in 2014 due to banks' preference for lending to large scale businesses (Table 3).

In addition, analysis of weighted average deposit and

lending rates of commercial banks in Nigeria between 1981 and 2014 showed that savings rate averaged 7.76 per cent while prime and maximum lending rates averaged 17.64 per cent and 21.04 per cent respectively, which obviously does not favour the agricultural sector (Table 4).

Finally, distribution of commercial bank's branches in Nigeria between 1981 and 2004, before the bank consolidation exercise, revealed that about 70 per cent were in the urban areas, while the rural areas where farmers reside had only 30 per cent of bank branches, which further constrain their access to credit. Lagos which is a typical

urban city for instance, have over 1,500 bank branches, while typical agricultural states such as Ebonyi, Zamfara and Taraba have just 30 bank branches each (Tables 5a and 5b).

3.6 Sectoral Distribution of Loans and Advances by Microfinance Banks

Sectoral distribution of loans and advances by Microfinance banks in Nigeria between 2009 and 2014 also indicated that agriculture was disenfranchised as it garnered an average of N5,465.07 million which constituted only 6.9 per cent of total loans while commerce got the lion's share of N39,814.19 or 52.47 per cent (Table 6 and fig. 1).

Sectoral Distribution of Loans and Advances by Microfinance Banks in Nigeria, 2009-2014 (%)



Fig. 1.

3.7 Federal Government Expenditure on Agriculture

Available statistics indicated that between 1981 and 2014, Federal Government recurrent expenditure in the agricultural sector averaged N12.98 billion, which represented a paltry 1.4 per cent of total recurrent expenditure. However, the

capital allocation to the agricultural sector could not be obtained as it was lumped under capital expenditure to the economic sectors which is made up of four sectors, namely; agriculture, construction, transport and communication and other economic sectors. These four

sectors together received an average of N161.3 billion between 1981 and 2014, which represented 39.4 per cent of total capital expenditure by the Federal Government. A deduction from the fact that the Federal Government recurrent expenditure on the agricultural

sector which is available is only 17.3 per cent of economic sector recurrent expenditure between 1981 and 2014, one can conclude then that both recurrent and capital expenditure by the Federal Government for the agricultural sector was less than 10 per cent on average between 1981 and 2014 (Table 7). More importantly total capital expenditure by the Federal Government is less than 5.0 per cent of the nations' GDP. This certainly cannot support sustainable economic development.

4. PERFORMANCE OF THE AGRICULTURAL SECTOR

Nigeria's agriculture is diverse, presenting various opportunities. It includes four sub-sectors, namely; crop, livestock, fishery and forestry. The crop sub-sector is the largest. Available statistics from the National Bureau of Statistics (NBS) in 2016, revealed that the crop sub-sector accounted for 89.5 per cent of agricultural sector contribution to the GDP. The livestock sub-sector followed with 7.2 per cent and the fishery sub-sector contributed 2.3 per cent. The forestry sub-sector contributes the least at 1.1 per cent. These four sub-sectors together contributed an average of 21.2 per cent to total GDP between 1981 and 2015 (Table 8).

4.1 The Crop Sub-sector

The crop sub-sector is further divided into staple food crops and other crops. Crops classified as staple crops are: maize, millet, sorghum, rice, wheat, acha, cowpea,

cassava, potatoes, yam, cocoyam, plantain and vegetables. The Other crops are: melon, peanut, sesame, soyabean, cotton, oil palm, cocoa, rubber, sugarcane, kolanut, ginger, cashew, pineapple and palm produce. Available data from the CBN 2013 and 2014 Annual Reports indicated that between 2009 and 2014 an average of 142,483.81 million hectares was planted with staple crops, from which an average of 165,096.17 thousand tonnes was harvested. Cassava is the highest contributor to staples output with 57,189.10 thousand tonnes, followed by yam which contributed 40,151.86 thousand tonnes. Other major contributors are, maize, sorghum, millet, vegetables, cowpea and rice (Appendix I).

The other crops occupied 10,300.5 million hectares from which an average of 13,709.47 thousand tonnes were harvested. Peanut contributed most to other crops output with 5,086.7 thousand tonnes, followed by sugarcane with 3,353.95 thousand tonnes and soyabean with 2,313.3 thousand tonnes. Other significant contributors are cotton, rubber, oil palm and cocoa (Appendix II).

4.2 Livestock sub-sector

The livestock sub-sector constitute the following: poultry, goat meat, mutton, beef, pork, milk, and eggs. Average output between 2009 and 2014 was 4,805.63 thousand tonnes. The highest contributor was milk with 1,807.72 thousand tonnes. It was followed by eggs with 827.23 thousand tonnes. Other

major contributors were goat meat, mutton and beef with 782.18, 726.98 and 380.24 thousand tonnes respectively (Appendix III).

4.3 Fishery Sub-sector

The fishery sub-sector is made up of the artisanal coastal and brackish water catches; the artisanal inland rivers and lakes catches; fish farming (aquaculture) and the industrial (trawling) coastal fish and shrimps. An average of 840.55 thousand tonnes of fish was produced between 2009 and 2014. The highest contributor was the artisanal coastal and brackish water catches with 331.11 thousand tonnes, followed closely by the artisanal inland rivers and lakes catches with 315.42 thousand tonnes. Fish farming came third with 123.78 thousand tonnes and the balance of 66.58 thousand tonnes was from industrial (trawling) coastal fish and shrimps (Appendix III).

4.4 Forestry Sub-sector

The forestry sub-sector include the Roundwood, sawn wood, wood based panel as well as the paper and paper products. This sub-sectors contributed an average of 180,425.17 thousand cubic meters of various forestry products between 2009 and 2014, the bulk of which was Roundwood at 175,296.23 thousand cubic meters (Appendix III). Sawn wood followed at a distance with 3,757.68 thousand cubic meters and wood based panel at 255.57 thousand metric tonnes. The average output of paper and paper products was 44.67 thousand metric tonnes.

4.5 Crop Yields and Growth Rates

Average yield of maize in Nigeria between 2009 and 2014 was 1,834.9 kg/ha, while rice yield was 394.4 kg/ha. Though, maize yield recorded an average growth rate of 6.0 per cent, rice on the other hand suffered a substantial decline in yield of 23.0 per cent. Other crops that suffered decline in

yield were; wheat (3.0 per cent), acha (1.0 per cent), cassava (3.0 per cent), vegetables (2.0 per cent), oil palm (2.0 per cent), sugarcane (4.0 per cent) and pineapple (2.0 per cent) (Appendix IV). From appendices I and II, it can be seen that all the crops recorded output growth rate of between 3 to 7 per cent on the average between 2009 and 2014, which imply that the

output growth was mainly due to more hectares being cropped, with the exception of maize and sorghum which recorded decline in area planted. The fact that these two crops still recorded high yield growth rate means there is improvement in planting materials/technology though Nigeria's cereal yield is still lower than those of South Africa, China, and USA (Fig.2).

Fig. 2: Fertilizer Consumption and Cereal Yield in Selected Countries in 2010-2014

Country	Fertilizer Consumption(kg/ha)	Cereal Yield(kg/ha)
USA	131.1	7,340
UK	234.4	6,630
Indonesia	194.8	5,058
China	647.6	5,891
South Africa	62.0	3,725
Zambia	18.1	2,532
Kenya	44.3	1,727
Nigeria	4.8	1,537
Ghana	34.9	1,689

Source: World Bank, 2015

In the livestock sub-sector, poultry recorded the highest growth rate of 9.0 per cent between 2009 and 2014. In the fishery sub-sector, it was fish farming with 12.0 per cent average output growth rate, while sawn wood recorded the highest growth rate of 14 per

cent in the forestry sub-sector, though they also recorded the least average output (Appendix III).

4.6 Food Security Situation in Nigeria

Various food security indicators point to the fact that Nigeria is

far from being completely food secured. Average value of food production and average supply of protein from animal origin are still very low in Nigeria compared to World figures (Fig.3 and 4).

Fig. 3: Average value of Food Production (\$/caput)

Regions	2005-07	2006-08	2007-09	2008-10	2009-11	2010-12
World	284	290	295	298	301	303
Developing Countries	242	249	253	257	261	265
North Africa	230	235	239	243	245	245
Sub-saharan Africa	157	158	157	160	160	164
Nigeria	220	218	203	200	195	202
Developed Countries	463	469	478	481	481	476

Source: Food and Agricultural Organization of the United Nation, 2015

It can be seen from Fig 3 that average value of food production per caput in Nigeria has declined by 8.18 percent between 2005-07 and 2010-12 compared with increases of 6.69 and 9.50 per cent during

the same period in the World and in Developing countries respectively. Similarly, fig 4 reveals that average supply of dietary protein from animal origin is abysmally low in Nigeria. At 10 grams per caput

per day in 2009-11, it is about one-third of the World's figure, one-sixth of that of Developed countries and a quarter of that of Developing countries.

Fig 4: Average Supply of Protein from Animal Origin (gr/caput/day)

Regions	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
World	29	30	30	31	31	31
Developing Countries	22	22	23	24	24	25
North Africa	21	22	22	23	23	24
Sub-Saharan Africa	12	12	12	12	12	13
Nigeria	9	10	10	10	10	10
Developed Countries	60	61	61	61	61	60

Source: Food and Agricultural Organization of the United Nation, 2015

Most of our dietary energy is still obtained from cereals, roots and tubers (Fig. 5), and this has adverse nutritional implications on the populace.

Fig 5: Share of Dietary Energy Supply from Cereals, Roots and Tubers (kcal/caput/day)

Region	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
World	54	53	53	52	52	52
Developing Countries	59	58	57	57	57	56
North Africa	62	62	61	61	61	61
Sub-Saharan Africa	64	64	64	64	64	64
Nigeria	63	63	64	64	65	65
Developed Countries	33	32	32	32	32	32

Source: Food and Agricultural Organization of the United Nation, 2015

Most disturbing is the fact that prevalence of food inadequacy which declined marginally from 10.0 percent to 9.8 percent between 2007-09 and 2008-10, rose to 11.2 percent in 2012-14, consequently, number of people undernourished has

been on the increase, from 8.7 per cent of total population in 2007-09 to 11.2 percent in 2012-2014 (FAO, 2015).

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary and Conclusions

This paper set out to review the financial initiatives directed at the agricultural sector in Nigeria over the years in the bid to grow the sector and attain sustainable economic development in Nigeria. In the introductory section the concept of sustainable

development and financing/funding were explained. The second section highlighted the role of agriculture in economic development and reviewed the Nigerian agricultural development policies and strategies put in place to achieve them. In section three, a detailed review of the various financing programmes directed at the agricultural sector over the years was undertaken. The performance of the agricultural sector was examined in section four. This last section will summarise and conclude the paper and make suggestions where necessary for better financing of the Nigerian agricultural sector for sustainable economic development.

Available information in this paper reveal that the level of funding that the agricultural sector had received over the years have not been adequate. Both the government and the financial institutions in the country have not given the agricultural sector adequate attention, despite the importance of this sector. Government recurrent and capital expenditure allocated to the agricultural sector have been consistently low, while the financial institutions have given preference to commerce to the detriment of the agricultural sector. The Bank of Agriculture have not been very efficient and the traditional problems confronting the agricultural sector in Nigeria have not helped matters. Consequently, the Nigerian agricultural sector have not been able perform its assigned roles in economic

development sustainably. In the light of the above the following recommendations are put forward to enable the agricultural sector contribute to sustainable economic development in Nigeria.

5.2 Recommendations

Nigerian agriculture has high potential but actualizing it depends on concerted efforts to address the major challenges confronting the sector which include among others; access to finance particularly, by small scale farmers who currently dominate the sector. Below are some suggestions for consideration:

(1) In order to improve farmer's access to credit, modern approaches to agribusiness finance need to be embraced hence the need to develop more agricultural value chains to cover the array of crops, livestock, fishery and forestry possibilities in Nigeria. In recent times financial institutions are more interested in financing various actors along the value chain. Emphasis is more on cash flow rather than collateral. Risk mitigating factors such as warehouse receipts system, commodity exchange development, crop insurance and guarantee funds are useful. These new approaches must be embraced in Nigeria to achieve success in agricultural financing and put the nation on the part of sustainable development. Taking the value chain approach, the World Bank has estimated that Africa's agribusiness market will reach

US\$1trillion in 2030. This estimate does not include auxiliary industries that will arise from the expansion of the sector.

(2) There is an urgent need to expand substantially the domestic supply of modern farm inputs such as fertilizers, improved seeds, agro-chemicals, irrigation pumps, improved livestock and fishery inputs, etc. through public/private sector partnership so as to achieve the desirable growth in consumption and yields. In this vein, there is the urgent need to rehabilitate the agricultural research system through a preparation of a national research plan, increased and stable funding, proper co-ordination and guidance of research efforts, strengthening the linkages between research institutes with national universities and international/regional research centres as well as adequate training of both research scientists and technical support staff in specialized skills to be able to guide farmers properly. This should be supplemented with improved extension service delivery to farmers to create awareness and assure effective use of improved inputs. Universal adoption of training and visit approach and increased use of women in extension service would be very beneficial in view of the fact that a lot of women are very active in the sector. The emphasis should be to provide farmers with regular, systematic and up-to-date advice on resource management and on the cropping, livestock and

fishing practices best suited to each area.

(3) The need for adequate infrastructure to drive agricultural growth cannot be over emphasised. Adequate rural road network for quick evacuation of inputs and output, power for processing and storage including cold chain to increase value addition and improve shelf life

and irrigation facilities to assure year round production and income, are prerequisites.

(4) Fostering an enabling environment that gives bigger role to the private sector, including co-operatives and grass root organizations is germane. This calls for stabilization of exchange rates, trade policies, investing in infrastructure and public

goods, tax incentives, etc., which can induce reasonable profit margins and stimulate growth and make the sector attractive. Farmers must be developed to make farming a business in whatever scale of enterprise of their choice. They must be financially literate so as to be able to access and efficiently use credit and avail themselves of other sources of funds like the capital market.

REFERENCES

- Akatugba, A. M. and O. D. Ogisi (2005): Sustainable Environment and Agricultural Development in Nigeria: A consideration of Legal Issues. **Proceedings of the Farm Management Association of Nigeria (FAMAN) 19th Annual Conference, 18th to 20th October, 2005, Asaba, Delta State, Nigeria.**
- Central Bank of Nigeria, Research Department (1994-2013): **CBN Briefs**. Various Issues
- Central Bank of Nigeria, Research Department (2003): **Contemporary Economic Policy Issues**. CBN Research Department, Lagos.
- Central Bank of Nigeria (2015): **Statistical Bulletin, December, 2015**, Abuja
- Central Bank of Nigeria (2014): **Annual Report and Statement of Accounts for 2014**, Abuja
- Evbuomwan, G. O. (2004): **Financing Agri-Business in Nigeria: Challenges and Prospects** Proceedings of the African Farm Management Association (AFMA), 7th Biennial Congress, 19th to 21st, October, 2004, Abuja, Nigeria.
- Evbuomwan, G. O. 2014. **Effect of Institutional Financing on Micro, Small and Medium Enterprises in Nigeria**. PhD. Thesis. Department of Agricultural Economics, University of Ibadan, Ibadan, Nigeria. Pp xiv + 142.
- Federal Ministry of Agriculture (2001): **The New Agricultural Policy for Nigeria, 2001**. Abuja.
- Food and Agricultural Organization of the United Nations (2015): **World Food Outlook, Nigeria Country Report**, Rome, Italy.
- National Bureau of Statistics (2016): **Nigeria's Gross Domestic Product, First Quarter, 2016**, April, 2016. Abuja.
- Ojo, J.A.T. 2010. **The Nigerian maladapted financial system-reforming tasks and Development dilemma**. Lagos: the CIBN press Ltd.
- Paul N. Eluhaiwe (2010): The Central Bank of Nigeria Partnership with Alliance for Green Revolution in Africa (AGRA): Conceptual Issues, Operations and Prospects for Food Security in Nigeria. **Central Bank of Nigeria Economic and Financial Review, Vol. 48, No. 4**, December 2010.
- Raji, M.A. (2000): **Equity participation, productivity and loan default factors in externally-Funded agro and non-agro allied enterprises in Nigeria**. PhD. Thesis Dept of Agric-Economics, University of Ibadan. Pp xvii + 148.
- The World Bank (2015): **World Development Indicators, April 2015**, Washington DC.

APPENDIX I**Average Estimated Output and Growth Rate of Staple Crops in Nigeria (2009-2014)**

Crop	–	Growth Rate(%)	Area Planted(M'ha)	Growth Rate(%)
Staple Crops	165,096.17	4.0	142,483.81	10.0
Maize	15,474.65	5.0	8,460.84	-1.0
Millet	10,512.39	4.0	6,086.02	1.0
Sorghum	14,862.16	4.0	9,324.98	-1.0
Rice	5,828.47	4.0	36,706.48	202.0
Wheat	84.47	4.0	19.15	7.0
Acha	141.18	4.0	255.95	5.0
Cowpea	6,654.39	5.0	12,215.85	4.0
Cassava	57,189.10	5.0	292.39	9.0
Potatoes	2,416.63	5.0	4,079.54	4.0
Yam	40,151.86	4.0	57,360.31	3.0
Cocoyam	3,638.91	3.0	140.95	2.0
Plantain	1,796.79	5.0	1,712.05	5.0
Vegetables	7,605.89	4.0	1.0	5.0

Source: Computed from Central Bank of Nigeria Annual Report & Statement of Account, 2014.

APPENDIX II**Average Estimated Output and Growth Rate of Other Crops in Nigeria (2009-2014)**

Crop	Output('000tonnes)	Growth Rate(%)	Area Planted(M'ha)	Growth Rate(%)
Other Crops	13,709.47	5.0	10,300.5	4.0
Melon	755.8	6.0	466.04	5.0
Peanut	5,086.7	5.0	4,015.17	3.0
Sesame	181.2	5.0	93.12	3.0
Soyabean	2,313.3	6.0	2,967.22	4.0
Cotton	815.47	3.0	981.28	4.0
Oil Palm	330.86	7.0	119.85	9.0
Cocoa	322.79	6.0	1,242.52	4.0
Rubber	354.73	5.0	5.76	5.0
Sugarcane	3,353.95	5.0	184.35	11.0
Kolanut	118.53	7.0	131.70	3.0
Ginger	126.78	5.0	10.32	5.0
Cashew	31.10	6.0	6.75	3.0
Pineapple	5.28	7.0	1.75	9.0
Palm Produce	6.28	6.0	5.71	5.0

Source: Computed from Central Bank of Nigeria Annual Report & Statement of Account, 2014.

APPENDIX III**Average Estimated Output and Growth Rate of Livestock, Fishery and Forestry Products in Nigeria (2009-2014)**

Agricultural Commodity	Output	Growth Rate(%)
-	4,805.63	6.0
Poultry	178.18	9.0
Goat meat	782.18	5.0
Mutton	726.98	6.0
Beef	380.24	7.0
Pork	92.33	5.0
Milk	1,807.72	6.0
Eggs	827.23	6.0
Fishery Sub-sector('000tonnes)	840.55	7.0
Artisanal Coastal and Brackish Water Catches	331.11	6.0
Artisanal Inland Rivers and Lakes Catches	315.42	7.0
Fish Farming	123.78	12.0
Industrial(Trawling) Coastal Fish and Shrimps	66.58	6.0
Forestry Sub -sector ('000 cu. Meters)	180,425.17	5.0
Roundwood	175,296.23	5.0
Sawnwood	3,757.68	14.0
Wood Based Panel	255.57	1.0
---	44.67	12.0

Source: Computed from Central Bank of Nigeria Annual Report and Statement of Account, 2014.

APPENDIX IV**Average Estimated Yield per Hectare of Major Crops in Nigeria (2009-2014)**

Crop	Yield(kg/ha)	Growth Rate(%)
Maize	1,834.9	6.0
Millet	1,726.9	3.0
Sorghum	1,595.6	5.0
Rice	394.4	-23.0
Wheat	4,431.9	-3.0
Acha	553.0	-1.0
Cowpea	544.2	1.0
Cassava	19,257.2	-3.0
Potatoes	8,255.5	1.0
Yam	9,338.5	1.0
Cocoyam	63.4	1.0
Plantain	12,746.1	0.0
Vegetables	4,453.9	-2.0
Melon	1,618.5	1.0
Peanut	1,265.7	1.0
Sesame	1,943.5	1.0
Soyabean	777.6	3.0
Cotton	831.7	0.0
Oil Palm	2,773.5	-2.0
Cocoa	259.2	2.0
Rubber	61,586.5	0.0
Sugarcane	18,464.8	-4.0
Kolanut	897.3	3.0
Ginger	12,298.11	0.0
Cashew	4,595.3	2.0
Pineapple	3,037.2	-2.0
Palm Produce	1,098.4	1.0

Source: Computed from Central Bank of Nigeria Annual Report & Statement of Account, 2014.