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Enhancing Credit Flow to the Agricultural Sector: The Case of Central Bank of Nigeria's Commercial Agriculture Credit Scheme (CACS)

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Abstract

Following the economic downturn of 2008/2009, the Commercial Agriculture Credit Scheme (CACS) was introduced to promote commercial agriculture and to complement other existing special initiatives of the Central Bank of Nigeria. After 3 years of its operation, the sum of N175.525 billion has been disbursed to 222 projects/ promoters. The distribution of the fund disbursed showed that 68% went to the processing segment of the value chain while 29% went to the production segment. While the CACS was found to be contingent to an increase in bank lending to the agricultural sector in Nigeria, there seem to be no significant effect of the fund on agricultural sector growth rate. It was therefore recommended that the 7 year tenor of the Scheme be extended and the need to set milestones (Specific targets and timelines) for deliverables like the right quantum of funds to be deployed, expected increase in flow of credit to agriculture, number of jobs to be created, expected growth rate in agricultural sector GDP etc. The need to build the capacity of bank staff and value chain actors and invocation of sanctions on erring banks to discourage infractions cannot be overemphasized.

Introduction

Agriculture in Nigeria accounts for 38.54% of the Gross Domestic Product and is the most important sector of the economy from the standpoint of rural employment, provision of food and export earnings in spite of the discovery of oil (Jama'are, 2000). The sector constituted the major source of foreign revenue prior to the discovery of oil in commercial quantity. Then Nigeria was reckoned with the production and export of groundnut, cocoa, rubber and other agricultural crops. The discovery of oil and large scale exploration in the 1970s turned the tide against the agricultural sector in favour of the oil sector (Efobi and Osabuohen, 2011). For instance, as at 2011, oil accounted for 96.4% of export earnings (CBN, 2011).

Despite this seemingly high revenue from the oil sector, the paradoxical reality is that more than 60 percent of the population is engaged in Agriculture, (Ajayeoba, 2010). The huge employment opportunity and the quest towards diversification of the revenue source by the Federal Government led to a shift of attention towards the informal and agricultural sector.

Some of the government sponsored programmes included the establishment of development finance institutions and credit schemes like the Agricultural Development Programmes (1975); National Directorate of Employment (1987); The Nigerian Agricultural Insurance Company (1987), Nigeria Export-Import Bank (1991), the National Poverty Eradication Programme (2001), Bank of Agriculture (2010) etc. These schemes and institutions were typically hinged on enhancing credit flow for real sector activities in view of the significance of credit to agriculture which with astute utilization leads to increased incomes across the value chain.

The Central Bank of Nigeria (CBN) has been involved in the design and implementation of various schemes and programmes aimed at addressing the problem of limited access to credit by large, medium and small-scale producers. These range from such monetary policy instruments as financial regulation with variants of credit quota and interest ceiling up to the era of deregulation and finally the establishment of schemes like the Agricultural Credit Guarantee Scheme (1978), Interest Drawback Programme (2003), and the Agricultural Credit Support Scheme (2005).

Following the economic downturn of 2008/2009, the CBN in conjunction with the Federal Ministry of Agriculture and Rural Development (FMARD) launched the Commercial Agriculture Credit Scheme (CACS) in March 2009 to promote commercial agriculture and to complement other existing initiatives of the CBN. After 3 years of its operation, there have been divergent views on its performance and efficacy as an intervention scheme. It is therefore pertinent to take a cursory look at the performance of the scheme since its inception.

The objectives of the paper are;

i) To track and assess performance of CACS since inception in 2009

ii) To identify problems/challenges affecting performance of the scheme

iii) To raise implications for better performance and impact of the scheme on the agricultural economy.

This paper is divided into four (4) sections. Section 1 provides a general introduction as well as the objectives of the paper. Section 2 introduces CACS and highlights the performance of the Scheme based on banks' and State Governments' participation further delving into a distribution of accessed funds by value chain. Section 3 discusses effects of CACS on banks' lending to agricultural sector and growth rate. Section 5 reviews the pre and post implementation challenges of the Scheme. Section 6 concludes and draws implications for implications for better performance and impact of the scheme on the agricultural economy.

Conceptual Framework and Literature Review

Agricultural credit, is the sum total of the arrangements through which inputs in cash and kind are made available to farmers or producers who repay such inputs in the form stated in the repayment schedule with due interest. Credit is the back bone for any business and more so for agriculture which has traditionally been a nonmonetary activity for the rural population in developing countries. Agriculture as a sector depends more on credit than any other sector of the economy because of the seasonal variations in the farmers returns and a changing trend from subsistence to commercial farming. The introduction of easy and cheap credit therefore represents the quickest way for boosting agricultural production (Mahmood et al, 2009).

The need for credit in agriculture in developing economies is evident in the works of several scholars. Oshuntogun (1978) reported that unless production credit is made available on such suitable terms, majority of the farmers will be seriously handicapped in adopting new profitable technology. Also, Stephen (1989) recognized credit or finance as one of the necessary pre-requisite to the development of agriculture. He pointed out that agricultural credit encompasses all loans and advances granted borrowers whether beneficiaries of some agricultural reforms or some other ones to finance and service production activity relating to agriculture. Furthermore, Anthony (2010) in his study concluded that in the Nigerian economy, agricultural credit is an effective instrument for counter-cyclical agricultural output, non-oil export and GDP stabilization.

In most developing countries, credit is the pivot on which agricultural development rests. It is often used to stimulate agricultural development in the desired direction. Cheap credit to farmers is a means of increasing their investment capacity and ameliorating the vicious cycle of poverty in which peasant farmers often find themselves (Okorie and Iheanacho, 1992). The need for providing agricultural credit to farmers is universal. Even in highly developed countries of the world, credit has been an important instrument not only for fostering agricultural development, but also for improving efficiency and production. In developing countries such as Nigeria, where the bulk of the farmers produce at subsistence level, there is need to inject capital into agriculture in order to increase production per farm worker and per hectare (Jekanyinfa, 1981). Studies by Polycarp (2006) and Efobi and Osabuohen (2011) on the Agricultural Credit Guarantee Scheme Fund (ACGSF) all inferred on the significant role of credit on farming household income and the agricultural economy at large.

In spite of the recognition of the dominant role of credit to agriculture in Nigeria, financial access in rural Nigeria where farmers predominate has however, remained largely far and apart with a high level of financial exclusion. It has been estimated that 74% of Nigeria's total population are unbanked with rural population accounting for about 86% of the total (EFInA's, 2008). Agricultural credit market is undeveloped with the predominance of such informal players such as credit unions, cooperatives and self-help groups. This development poses a serious challenge on sustainable development of agricultural credit administration in Nigeria. Presently, the agricultural sector of Nigeria accounts for only 1.55% of total lending even though the sector accounts for over 35.9% of the country's GDP (CBN 2010[1]).

Efforts to stimulate credit to the Agricultural sector in Nigeria have in the past been concentrated on small scale farmers. These include the establishment of institutions such as the Bank of Agriculture (BOA), the Bank of Industry (BOI) and Nigerian Agricultural Insurance Corporation (NAIC). In addition the Central Bank of Nigeria established the Agricultural Credit Guarantee Scheme Fund, ACGSF (1977) and the Interest Drawback Programme, IDP (2003) all with a view addressing the problem of limited access to credit by small-scale producers. However, following the crippling effect of the global economic crises of 2008, attention was focused on commercial farming with the primary objective of transforming and enhancing large scale agricultural projects for contribution to economic growth and development in Nigeria.

According to Poulton et al (2008), commercial agriculture refers to "production primarily for market". In other words, it is not dependent on scale of production or related to particular types of crops. A simple but useful organising idea for thinking about experience with commercial agriculture (what contributes to success? what constrains expansion? how can policy promote commercial agriculture?) is that of returns to investment. As with other commercial activity, supply chain actors will engage in commercial agriculture if the returns to investment are superior to those available from alternative activities.

For agribusiness, a critical question is whether the returns to capital expected from a particular commercial agriculture investment are comparable to those available from other sectors (other crops, non-agricultural opportunities) or, in some cases, from investment in the same crop in other countries. Large-scale investors are looking for a return on investment above a certain threshold level. This is the principal consideration for investment in import substituting enterprises or those primarily supplying regional markets. Where a crop is intended primarily for export, an international investor may additionally consider the returns from investing in Nigeria as opposed to within other countries. This leads us into consideration of whether a country offers "world class" agricultural production opportunities, and hence of where its comparative advantage lies. Focusing on returns to investment for agribusiness also helps us to think about what constrains large-scale commercial agricultural development and thus what policy can do to better promote such agriculture on the continent (ibid).

In respect of the social impacts of commercial agriculture, country case studies by the World Bank (2009) revealed that the following factors are critical; the macroeconomic environment, the land-tenure system and distribution of land holdings, the divergence between import-parity and export-parity prices,, the flexibility of domestic marketing systems , the extent to which agricultural services reach small-scale farmers and women farmers, the capacity and the willingness of the national and local governments to tap some of the growth from commercial agriculture to finance public investments in health and education and the degree to which growth contributes to the political and social integration of previously isolated regions within the country.

The Commercial Agriculture Credit Scheme (CACS)

According to the World Bank (2009), reducing poverty in Africa will depend largely on stimulating agricultural growth for the foreseeable future. This is because a powerful driver of growth is commercial agriculture which can develop along a number of pathways. In line with this, the Central Bank of Nigeria (CBN) in collaboration with the Federal Ministry of Agriculture and Water Resources (FMA&WR), established the Commercial Agricultural Credit Scheme (CACS) in March 2009 for Promoting Commercial agricultural enterprises in Nigeria.

Objectives of the Scheme

According to CBN and FMARD (2010), CACS was established to achieve the following objectives:

i) To fast track development of the agricultural sector of the Nigeria economy by providing credit facilities to commercial agricultural enterprises at single digit interest rate.

ii) To enhance national food security by increasing food supply and effecting lower agricultural produce and product prices, thereby promoting low food inflation.

iii) To reduce the cost of credit in agricultural production to enable farmers exploit the potentials of the sector.

iv) To increase output, generate employment, diversify the revenue base, increase foreign exchange earnings and provide input for industrial sector on a sustainable basis.

Funding

CACS was funded through a 3-year tenured N200 Billion Federal Government of Nigeria's Bond raised by the Debt Management Office (DMO). Under the Scheme, rebates on the interest component of the loans and the administrative expenses are fully borne by the CBN. The CBN releases CACS funds at single digit interest rate to participating deposit money banks (DMBs) upon confirmation of completion of due diligence and submission of application forms on behalf of prospective beneficiaries (CBN and FMANR 2010).

As a consequence, the CACS funds are released to eligible applicant DMBs by the CBN at zero per cent. The DMBs in turn, are allowed to disburse the released CACS funds to their clients (i. e. private/project promoters and State Governments) at a maximum interest rate (all inclusive) of 9.0 per cent. Banks bear all the lending risks and as such are to ensure the recovery of the fund.

Performance of CACS

The Commercial Agriculture Credit Scheme was established to extend credit to agriculture across the entire agriculture value chain. Under the scheme private promoters as well as State Governments can apply for a maximum sum of N2.0 billion and N1.0 billion respectively. The CACS guidelines also allow States who have judiciously utilized the initial N1.0 billion to seek for additional funding.

1. Performance of CACS by Banks

The success or otherwise of any financial support scheme is to a large extent a function of bank participation. This is because banks in their traditional role are instruments of financial intermediation through which financial resources (credit) move from surplus to deficit areas. As at March, 2012, 18 Nigerian banks namely; Access Bank Plc, Fidelity Bank Plc, First Bank of Nigeria Plc, Guaranty Trust Bank Plc, Ecobank Plc, Skye Bank Plc, Stanbic IBTC Bank Plc, Union Bank of Nigeria Plc, United Bank for Africa Plc, Unity Bank Plc, Zenith Bank Plc, Diamond Bank Plc, Sterling Bank Plc, Citibank Limited, Wema Bank Plc, Mainstream Bank Plc, Enterprise Bank Plc and First City Monument Bank Plc are participating under the Scheme. This implies 81.8 per cent participation out of the 22 licensed commercial banks in Nigeria.

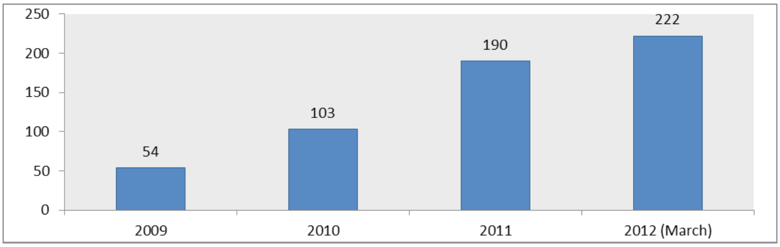
Cumulatively, the CBN has as at March 31, 2012 released the sum of N175.525 billion for disbursement to 222 projects/promoters (inclusive of 29 State Governments) as shown in Table 1 and figures 1& 2. This is funds are released to banks on first come-first served basis after they have conducted their due diligence. This is because the banks bear the credit risk to all CBN exposures under CACS.

Table 1: Summary of Banks' lending under CACS (N' Billions) as at March 31, 2012

Financing Bank		Projects	Amount released to Banks (₦'Bn)
1	Access Bank Nigeria Plc	10 (4.5)	10.256 (5.8)
2	Fidelity Bank Plc	8 (3.6)	7.575 (4.3)
3	First Bank of Nigeria	56 (25.2)	18.973 (10.8)
4	Guaranty Trust Bank Plc	8 (3.6)	5.55 (3.2)
5	Eco Bank Plc	5 (2.3)	2.67 (1.5)
6	Skye Bank Plc	7 (3.2)	9.217 (5.3)
7	Stanbic IBTC	19 (8.6)	11.162 (6.4)
8	Union Bank Plc	20 (9.0)	18.043 (10.3)
9	United Bank for Africa Plc	34 (15.3)	39.757 (22.7)
10	Unity Bank Plc	19 (8.6)	16.775 (9.6)
11	Zenith Bank Plc	16 (7.2)	23.755 (13.5)
12	Citibank	1 (0.5)	1.5 (0.9)
13	Diamond Bank Plc	6 (2.7)	1.9 (1.1)
14	Sterling Bank Plc	9 (4.1)	4.759 (2.7)
15	Mainstreet Bank	1 (0.5)	2 (1.1)
16	Wema Bank Plc	4 (1.8)	0.715 (0.4)
17	Enterprise Bank	1 (0.5)	0.335 (0.2)
18	First City Monument Bank Plc	2 (0.9)	0.583 (0.3)
	Total	**222**	**175.525**

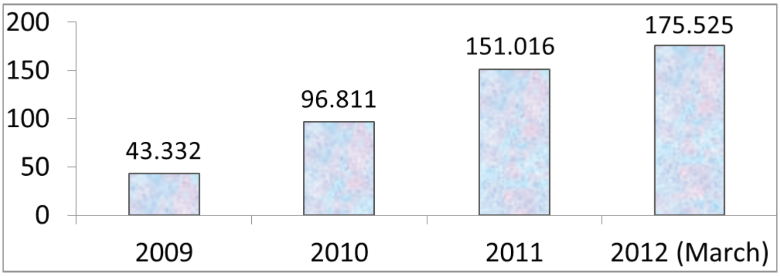
Source: www.cbn.gov.ng. (Figures in parenthesis are percentages)

Figure 1: Number of Projects participating Under (CACS) – 2009 to March, 2012



Source: www.cbn.gov.ng.

Figure 2: Value of funds (N'billion) Disbursed by Banks Under CACS 2009 to March, 2012

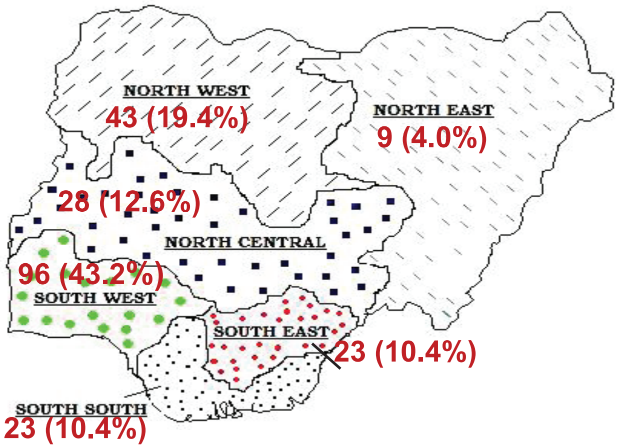


Source: www.cbn.gov.ng.

2 Performance of CACS by Geo-political Zones of Nigeria

A distribution of the performance of CACS according to number of projects within the six geo-political regions of Nigeria showed that the south west region had the highest number of projects with 96 representing 43.2% of the total. This was followed by the northwest and north-central regions which recorded 43 (19.4%) and 28 (12.6%) respectively. The south-south and south-east regions each had 23 (10.4%) while the north-east region had the least with 9 (4.0%) of the projects. Presented on figure 3, is the pictorial representation of the observed performance:

Figure 3: Distribution of projects Financed by under CACS by Geographical Regions (March 2012)



Source: www.cbn.gov.ng.

3. States' Participation under CACS

In a bid to further broaden the scope of participation under the Scheme, the CACS Guidelines allow State Governments to access funds for on-lending to farmers' cooperatives within their areas of coverage as well as enable them finance other areas of agricultural interventions of interest within their various States. As a consequence, all interested State Governments were required to issue Irrevocable Standing Payment Orders (ISPOs) to their financing DMBs. The State Governments were also required to either establish an agency or use an existing structure to facilitate the deployment of all CACS funds in their States. Participating States are also expected to have appropriate functional structures including cooperatives that must be at least 6 (six) months old and must meet the bank's lending requirements among others (CBN and FMAWR, 2010).

From inception to in 2009 to March 2012 twenty nine State Governments namely; Anambra, Enugu, Sokoto, Plateau, Cross River, Gombe, Kwara, Niger, Bayelsa, FCT, Bauchi and Kogi. Others include Nasarawa, Ondo, Zamfara, Akwa Ibom, Edo, Ogun, Kano, Adamawa, Kebbi, Rivers, Taraba, Delta, Imo, Benue, Osun, Ekiti and Abia. These States accessed a total of N37.0 billion for on-lending to co-operative farmers and unions in their various States. This represents 78.38 per cent out of the 36 States and the Federal Capital Territory (FCT).

4. Performance of CACS by Value Chain

Agriculture as a business and source of livelihood covers a broad spectrum of value adding operations. This value chains represent mechanisms that allow producers, processors, buyers, and sellers — separated by time and space — to gradually add value to products and services as they pass from one segment of production and transformation in the chain to the next till reaching the final consumer. The CACS scheme was established to promote commercial agricultural activities with a focus on key agricultural value chain activities such as production, processing, storage and farm input supplies. Data collected from CACS projects revealed that out of the N86.362 billion released to project promoters, 68% (N58.72 billion) was disbursed projects that specialize in the processing segment of the value chain while 29% (N25.04 billion)of the funds went to the production segment. On the other hand, only 3% of the funds disbursed (N2.6 billion) went to projects in the marketing segment. It is obvious that that projects specializing in processing constitute the dominant beneficiaries of CACS funds (table 2 and figure 4).

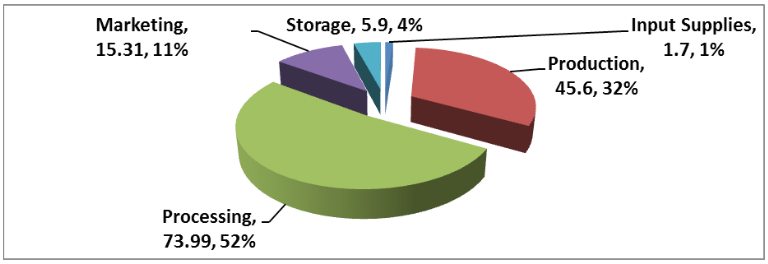
The analysis of a number of projects financed under CACS by value chain showed that out of the 195 CACS private sector sponsored projects; production accounted for 47% and dominated the activities funded while processing accounted for 39%. These activities were distantly followed by marketing, storage and input supplies which registered 8%, 5.9% and 1.0% respectively. With regards to the value of funds released, processing accounted for 52% followed by production which accounted for 45.6% of the value of enterprises financed. These were followed by marketing, storage and input supplies which registered 15.31%, 5.9 and 1% (table 5, figure 4).

Table 2: Analysis of CACS Financed Projects by Value Chain (March 2012)

Category	Number (%) of Projects	Value {N'billions and %}
Input Supplies	1 (1%)	1.7 (1%)
Production	90 (47%)	45.6 {32%}
Processing	76 (39%)	73.99 {52%}
Marketing	16 (8.0%)	15.31 {11%}
Storage	10 (5.0%)	5.9 {4%}
Total	**193**	**142.5**

Source: www.cbn.gov.ng.

Figure 4: Banks' lending under CACS by Value Chain (March 2012)



Source: www.cbn.gov.ng.

Effects of CACS on Bank Credit to Agriculture

CACS commenced in 2009 with DMBs accessing N43.332 billion. This value increased to N96.811 billion in 2010 and N151.016 billion in 2011 (figure 5). During the period 2009-2011, bank lending to the agricultural sector also exhibited a rising trend from 1.4% to 2.1%. From figure 6, bank credit to agriculture stagnated at 1.4% from 2008 to 2009 i.e. prior to the commencement of CACS. However, an improvement was recorded in 2010 and 2011 with bank lending to agriculture increasing to1.7% and 2.1% respectively (figure 6). It is evident that bank lending to agriculture remained unchanged at 1.4% from 2008 to 2009 prior to the implementation of CACS. However, as CACS became operational (2009 to 2011) lending to agricultural sector surge from 1.7% to 2.1%. From this outcome, it could be inferred that CACS was contingent to the increase recorded in bank credit to the agricultural sector. This was further confirmed by a strong positive correlation of 0.89.

Figure 5: Disbursement under CACS (2009 – 2011)

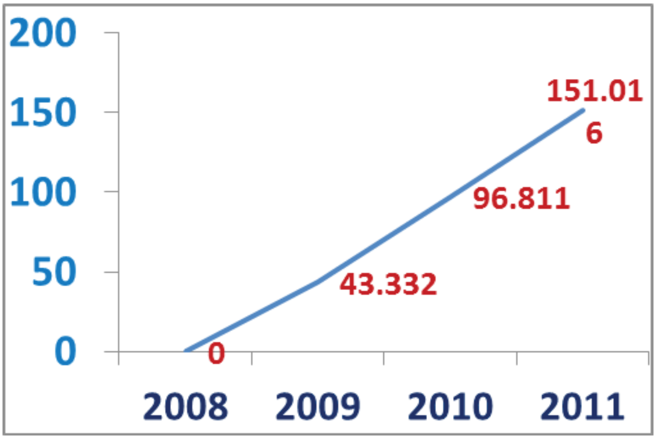
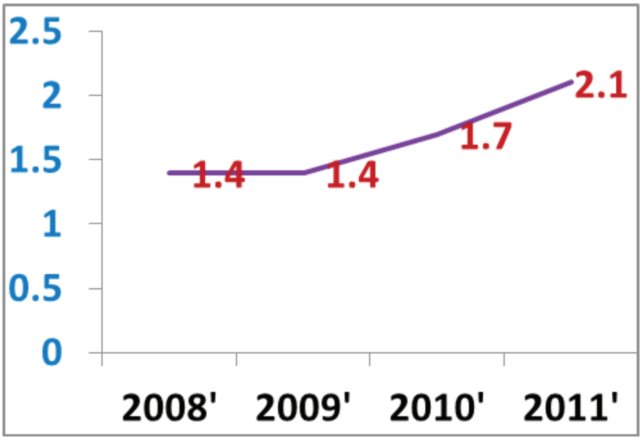


Figure 6: Bank Credit to the Agric. sector (2009 – 2011)



Source: central bank of Nigeria. Annual Reports and Statement of Accounts (various issues)

Effects of CACS on Agricultural Sector Growth Rate

Bank lending to agriculture increased with the advent of CACS, however, a somewhat paradoxical trend was exhibited with respect to agricultural sector growth rate. This was because even though the sum of 151.016 billion was injected into the agricultural sector from 2009 to 2011 the growth rate of the agricultural sector plummeted from 6.3% in 2008 to 5.8% in 2009. A further decline was also recorded in 2010 and 2011 with agricultural sector growth rate dipping to 5.7 and 5.64% respectively (figure 6).

The seemingly continual decline in agricultural sector GDP growth rate does not imply that CACS did not impacted on the agricultural sector from 2009 to 2011. Rather, the following are among the reasons why the effect of CACS was on agricultural sector GDP growth rate were not apparently noticeable in the period 2009 to 2011.

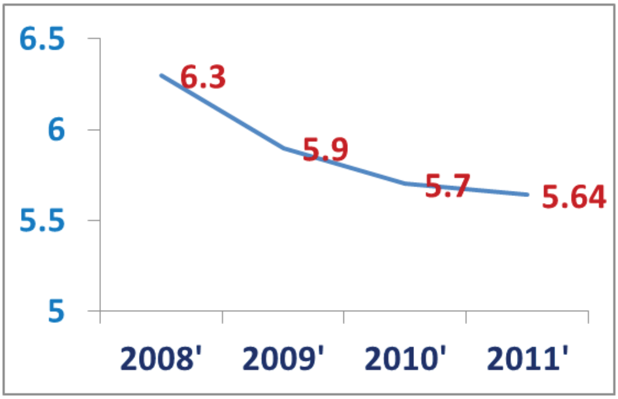
i) Nigerian Agriculture is a large sector (38.54% GDP) dominated by small holder farmers while CACS is targeted towards commercial farms.

ii) Projects have different cash conversion cycles

iii) Some projects were yet to fully deploy the funds due to delayed imports, poor management, non-disbursement by banks etc

iv) Short-run effects may be misleading due to slowness of effects to trickle down.

Figure 7: Agric. Sector Growth Rate (2008 – 2011)



Source: Central Bank of Nigeria. Annual Reports and Statement of Accounts (various issues)

Challenges of the Commercial Agriculture Credit Scheme

CACS is faced by some challenges which include pre-implementation inactions and post implementation limitations. These include:

1. There was no ex ante baseline study to identify number, spread and financial needs of would-be beneficiaries.
2. No capacity building for executors of the Scheme.
3. No seminars/consultations with stakeholders before take-off of the scheme.
4. Technical capacity of banks was not taken into cognizance
5. Delayed take-off due to non-clarity of implementation modalities. There was frequent review of the Guidelines by Federal Ministry of Agriculture and Natural Resources.
6. Monitoring by banks below optimal levels
7. Infractions by banks (non-disbursement and diversion of funds)
8. CACS Guidelines silent about insurance cover for projects.
9. There is no leverage going on as banks are not lending from their balance sheets under CACS.

Implications for Improved Performance of CACS

While the CACS has shown to have significant effect on Nigeria's agriculture sector, the outcomes still remain short term wins rather than sustainable transformation whereby the financial services sector is adequately lending to agriculture. The following are recommendations to enhance the performance of CACS and make it more responsive to the needs of the Nigerian Agricultural Sector.

i) The need to incorporate an insurance component into the CACS Guidelines to cover all sections of the value chain that are financed under CACS.

ii) Capacity building for bank staff and value chain actors on agricultural financing.

iii) An adequate monitoring framework should be designed and implemented

iv) A road showing specific targets and timelines should be earmarked.

v) Sanctions for erring banks should be stepped-up to discourage infractions.

References

Ajayeoba, A. 2010. Concerning Food Security in Nigeria. West Africa Insight, December 2010. http://westafricainsight.org/articles/PDF/81

Anthony, E. Agricultural Credit and Economic Growth in Nigeria: An Empirical Analysis. Business and Economics Journal, Volume 2010: BEJ-14 (http://astonjournals.com/bej).

CBN, 2010. Financial Stability Report. Maiden Edition June 2010. Central Bank of Nigeria, Abuja (83 pp)

CBN 2011. Economic report for the half year of 2011. Central Bank of Nigeria, Abuja Nigeria (116 pp).

CBN and FMANR, 2010. Guidelines for the Commercial Agriculture Credit Scheme. Central Bank of Nigeria and the Federal Ministry of Agriculture and Natural Resources. (9 pp)

EFInA, 2008. Access to Finance in Nigeria - Results from EFInA's 2008 Survey of Nigerian Adult Population. Enhancing Financial Innovation & Access. www.efina.org.ng

Efobi, U.R. and Osabuohien, E.S. 2011. Assessment of the role of Agricultural Credit

Guarantee Scheme Fund in promoting non-oil export in Nigeria. Paper presented at the International Conference on 'Economic Development in Africa. Centre for the Study of African Economies (CSAE), Oxford University, United Kingdom, March 19-21, 2011.

Hartwich, F. Kormawa, P., Bisallah, I.D., Odufote, B.O. and Polycarp, I.M., 2010. Unleashing Agricultural Development in Nigeria through Value Chain Financing. Report on Study on Commodity Value Chains in Nigeria for NIRSAL. United Nations Industrial Development Organization, Vienna, Austria (2010).

Jekanyinfa, A.O., 1981. The role of government in Agricultural Finance. In proceedings

of A seminar by CBN on Agricultural Credit and Finance in Nigeria: Problems and

Prospects.

Mahmood, A.H. Khalid, M. and Kouser, S. 2009. The Role of Agricultural Credit in the Growth of Livestock Sector: A Case Study of Faisalabad. Pakistan Veterinary Journal 29(2): 81-84.

Okorie, A. and Iheanacho A.C., 1992. Agricultural loan recovery strategies in a developing economy: A case study of Imo State, Nigeria. Beitv landwirtsch vet med 30 (1992) H.2.

Oshuntogun, A. (1978). The impact of cooperative credit on farm income and the efficiency of resource allocation in peasant agriculture: A case study from three States of Nigeria. African Journal of Agricultural Sciences 5(2) 77-89.

Oyeyinka, R. A., 2002. Impact of (NACRDB) Smallholder Direct Loan Scheme on Farmers in Oyo State Nigeria, Ph.D. Thesis of Department of Agricultural Extension and Rural Development, University of Ibadan.

Polycarp, I.M., 2006. The Effect of the Agricultural Credit Guarantee Scheme on Household Income and Consumption in Adamawa State, Nigeria. Unpublished Ph.D Thesis, Department of Agricultural Economics, University of Maiduguri, Nigeria.

Poulton, C., Tyler, G., Hazell, P., Dorward, A., Kydd, J. and Stockbridge, M., 2008. Commercial Agriculture in Africa: Lessons from Success and Failure. Background paper for the Competitive Commercial Agriculture in Sub–Saharan Africa (CCAA) Study. World Bank and the Food and Agriculture Organization (FAO).

Stephen, N.M., 1989. Agricultural and Industrial Economics for A level Students. Gaskiya Cooperation, Zaria, Nigeria.

World Bank, 2009. Awakening Africa's Sleeping Giant: Prospects for Commercial Agriculture in the Guinea Savannah Zone and Beyond. The International Bank for Reconstruction and Development (The World Bank), Washington D.C. USA