An Impact Assessment of Agricultural Credit on Rural Farmers in Nigeria

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Abstract
In Nigeria, despite the fact that agriculture have significant contribution to the economy, it has not been given adequate attention as required. Data were collected from the primary sources and a total of 500 questionnaires were administered of which 300 copies were properly completed and retrieved. The study appraised the impact assessment of agricultural credit on rural farmers in Nigeria and generally discovered that much is yet to be done to boost agriculture by encouraging farmers via adequate agricultural credit without strings. The results also indicate that unregulated private money lenders (53.33%) constitute the major source of credit which is not healthy for an economy that is ready to grow. It was equally clear that the much needed banks in the rural areas are mainly found in the urban areas leaving the rural farmers without formal sources of credit. The major limitations or challenges in accessing agricultural credit as found in the report include; high interest rates, bureaucratic bottlenecks, late approval of loans, unnecessary request for guarantors and collateral. It was however recommended that the federal Government in collaboration with banks should create credit instruments and services that are tailored to the risk and cash flow patterns in the agricultural sector to avoid or reduce the level of the aforementioned challenges.
Key Words: Agricultural credit, Rural farmers, Credit risk

1.0 Introduction

Agriculture also called farming or husbandry is the rearing of animals and cultivation of land to produce food, biofuel and other products used to sustain life. Agriculture was the key development in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of civilization. The study of agriculture is known as agricultural science. The history of agriculture dates back thousands of years, and its development has been driven and defined by greatly different climates, cultures, and technologies.

Credit is considered as a catalyst that activates other factors of production and makes under-used capacities functional for increased production (Ijere, 1998). Thus farm credit plays a crucial role in agricultural and rural development as it enables farmers reap economies of scale, venture into new fields of production, employ new technologies and empower them to provide utilities for a widening market.

Agricultural credit is often seen as any of several credit vehicles used to finance agricultural transactions, including loans, notes, bills of exchange and bankers acceptances. These types of financing are adapted to the specific financial needs of farmers, which are determined by planting, harvesting and marketing cycles. Agricultural credit enhances productivity and promotes standard of living by breaking vicious cycle of poverty of small scale farmers. Adegeye and Ditto (1985) described agricultural credit as the process of obtaining control over the use of money, goods and services in the present in exchange for a promise to repay at a future date.

Ogunfowora et al (1972) reported that credit is not only needed for farming purposes, but also for family and consumption expenses; especially during the off season period. Credit has also been discovered to be a major constraint on the intensification of both large and small scale farming (Von – Prischike 1991).

Nigeria is blessed with lots of natural and human resources, yet, the citizens live in abject poverty for several known and unknown reasons. The country discovered oil in 1959 at Oloibiri in today's Bayelsa State, over fifty years ago, but over 70% of the country's earnings come from oil paying little or no attention to other sectors of the economy and that is why Nigeria is said to be suffering from the "Dutch Disease".

Over the years, government has been able to come up with policies, schemes and palliative measures to assist rural farmers in enhancing productivity. Some of these schemes include the agricultural credit guarantee scheme established in 1977, the agricultural credit support scheme, commercial agriculture credit scheme and the licensing of Micro Finance Banks.

This study takes a concise look into the impact assessment of agricultural credit on rural farmers in the six geo-political regions of Nigeria.

2.0 Review of Research Literature

The significant role of agriculture in nation building all over the world cannot be overemphasized. Agriculture is a major contributor to Nigeria's Gross Domestic Product and small-scale farmers play a dominant role in this contribution (Rahji and Fakayode 2009), but their productivity and growth are hindered by limited access to credit facilities (Odoemenem and Obinne 2010).

Enhancing Financial Innovations and Access (EFInA) programme in 2008 notes that 23 percent of the adult population in Nigeria has access to formal financial institutions, 24 percent to informal financial services, while 53 percent are financially excluded.

There is thus the research need to examine the impact of and the financial market performance in terms of the spate of government intervention measures and how these have affected the credit access or constraint facing farm households in Nigeria. This is because the outcomes of the demand for credit depend on the lending practices of the credit agencies. Commercial banks concerned with losses from untimely repayment or default, seek to minimize these by choosing carefully the distribution of credit across farmers (Anderson, 1990). As a result, the lenders are faced with loss-minimizing credit distribution problem.

Agricultural household models (Singh et al; 1986; Sadonlet and de Janvry, 1995) suggest that farm credit is not only necessitated by the limitation of self finance, but also by uncertainty pertaining to the level of farm input and output and the time lag between input and output (Duong and Izumida, 2002).

A frequent cause of market failure is limited access to working capital/credit (Duong and Izumida, 2002). According to Swinnen and Gow (1999), access to agricultural credit has been severely constrained in developing countries. This is because of the imperfect and costly information problems encountered in the financial markets. Such problems are known to be sources of set back in agriculture (Stiglitz, 1993).

Abe (1982) asserted that non-institutional creditors accounts for 70 percent of the total credits received by Nigerian farming population. However, with the present situation in Nigeria, these sources could hardly meet the increasing demand for credit by farmers.

Ojo (2005) observed that the institutional lending system has failed to meet the objective for which they were set up. In his words, only 15 percent of the trading bank credit to agriculture has been covered. The major shortcomings of their transactions he observed are due to the inaccessibility of these funds to rural farmers as a result of the bureaucratic procedures and high service cost, which are very difficult for the farmers to meet.

According to Ojo (1998), one problem confronting small scale enterprises including that in agriculture is inadequate capital. It's obvious that agriculture is the mainstay of the people of the sub-saharan Africa. It has been established that about 70 percent of Nigeria population is engaged in agriculture (Obasi and Agu, 2000) while 90 percent of Nigeria total food production comes from small farms and 60 percent of the country's population earn their living from these small farms (Oluwatayo et al., 2008).

In Nigeria, credit has long been identified as a major input in the development of the agricultural sector (Balogun, 1990). It is a major factor necessary for technological transfer in traditional agriculture (Oyatoye, 1981).

Affordability of credit to peasant farmers is another key area of interest. One of the principal characteristics of informal credit as stated by Okojie et al (2010), and Anyanwu (2004) is the higher interest rates imposed on loans relative to those by the formal banking sector. But this applies more to the informal credit institutions (Money lenders).

According to Okojie et al (2010), the lack of bank accounts, collateral, and information regarding the procedure for accessing credits from banks limit peasant farmers and rural women's access to credit from formal institutions.

Adejobi and Atobatele (2008) suggested that loan default could limit access to credit, while Agnet (2004) asserted that the complex mechanism of commercial banking is least understood by the small-scale (peasant) farmers, and thus, limits their access. Rahji and Fakayode (2009) blamed the limitation on imperfect and costly information problems encountered in the financial markets; credit rationing policy; and banks perception of agricultural credit as a highly risky venture; while Philip et al (2009) stated that high interest rate and the short term nature of loans with fixed repayment periods do not suit annual cropping, and thus constitute a hindrance to credit access.

Adegbite (2009), citing Ezike (1984), Nweke and Onyia (2001), and Kodieche (2002), stated that financial lending institutions in Nigeira often shy away from giving loans to farmers because of the high cost of administering such loans and the perceived high default rates among farmers.

In spite of the importance of loan in agricultural production, its acquisition is fraught with a number of problems such as relying on money lenders, friends, relatives and contributions. The last hope for the small scale farmers then lies with the cooperative societies (Ijere, 1981). The cooperative has been identified to be a better channel of credit delivery to rural farmers than the NGOs in terms of its ability to sustain the loan delivery function (Alufohai, 2006).

Asogwa et al (2011) observed that high level of cost inefficiency is highly attributed to the low profitability that results from inadequate organization of farmers into collective farmers institutions that can provide opportunities for risk sharing and improved bargaining power.

The government of Nigeria over the years came up with several palliative schemes to resolve some of the challenges faced by farmers, these include:

i. Agricultural Credit Guarantee Scheme
ii. Agricultural Credit Support Scheme and
iii. Agriculture credit Scheme amongst others.

2.1 Agricultural Credit Guarantee Scheme Fund (ACGSF)

The Agricultural Credit Guarantee Scheme Fund (ACGSF) was established by Decree No. 20 0f of 1977, and started operations in April 1978. Its original share capital and paid up capital were One Hundred Million naira (₦100 million) and ₦85.6 million, respectively. The Federal Government holds 60 percent and the Central Bank of Nigeria, 40 percent of the shares. The capital base of the scheme was increased to ₦3 billion in March, 2001. The fund guarantees credit facilities extended to farmers by banks up to 75 percent of the amount in default net of any security realized.

The fund is managed by the Central Bank of Nigeria, which handles the day to day operations of the scheme. The guidelines stipulate the eligible enterprises for which guarantees could be issued under the scheme. Between 1978 and 1989 when the government stipulated lending quotas for banks under the scheme, there was consistent increase in the lending portfolios of banks to agriculture, but after the deregulation of the financial system, banks started shying away by reducing their loans to the sector due to the perceived risk.

In order to reverse the declining trend several innovations and products were introduced under the scheme such as:

i. The Self-Help Group Linkage Banking
ii. Trust Fund Model and
iii. Interest Draw Back

The Self-Help Group Linkage Programme was launched under the Agricultural Credit Guarantee Scheme (ACGS) in 1991 and became operational in 1992. Under the programme, farmers were encouraged to form themselves into groups of between 5 to 15 on the basis of common purpose. The groups are encouraged to undertake regular savings with a partner bank of their choice. After operating such savings for six months, they could then apply to the partner bank for loan. The amount saved provides part cash security for loans to saving groups.

Bank loans to the groups are normally in multiples of the balance in their savings account at the time of the application for loan. The group savings security would not be drawn until the loans are fully repaid. The aim of the Self-Help Group Linkage Banking is to inculcate the culture of savings and banking habit in group members as well as enable them to build up resources for financing their farm projects without recourse to bank borrowing on the long run.

The Trust Fund Model is a framework for enhancing credit supply to the agricultural and rural sectors of the economy. Under the model, oil companies, state/local governments and Non-Governmental Organizations (NGOs) place funds in trust with lending banks to augment the small group-savings of the farmers as security for agricultural loans.

The Trust Fund secure 25 percent or more of the intended loans of the prospective borrowers, the farmers' savings secure another 25 percent while the Agricultural Credit Guarantee Scheme Fund guarantees 75 percent of the remaining 50 percent, thereby leaving the lending bank with a risk exposure of only 12.5 percent. Sometimes, the state government taking cognizance of the low capacity of the poor farmers in the state, may decide to increase its stake beyond 25 percent in order to assist the rural farmers who may be unable to muster sufficient savings to qualify for a meaningful amount of loan.

The Interest Drawback Programme (IDP) was developed as an interest rate management framework under the Agricultural Credit Guarantee Scheme Fund to reduce effective borrowing rates without the complication of introducing dual interest rate regime or contradicting the existing deregulation policy of the government. Under the Interest Drawback Programme, farmers will borrow from lending banks at market – determined rates but the programme will provide interest rebate of a determined percentage to them where the loans are repaid as and when due. The Interest Drawback has an authorized capital fund of about two billion naira (₦2.0 billion). The Interest Drawback framework is funded jointly by the Federal Government of Nigeria and the Central Bank of Nigeria in the ratio of 60:40. It is regarded as a dedicated fund for interest drawback on agricultural loans or IDP fund and separated from the Agricultural Credit Guarantee Scheme fund capital.

A trend analysis of the loan repayment performance of the Agricultural Credit Guarantee Scheme fund over the years show that the Interest Drawback Programme has impacted positively on the operations of the scheme as it induced clients to repay on time.

2.2 Agricultural Credit Support Scheme (ACSS)

The Agricultural Credit Support Scheme (ACSS) is an initiative of the Federal Government and the Central Bank of Nigeria with the active support and participation of the bankers committee. The scheme has a prescribed fund of Fifty billion naira (₦50 billion) and ACSS was introduced to enable farmers exploit the untapped potentials of Nigeria's agricultural sector, reduce inflation, lower the cost of agricultural production (i.e food items), generate surplus for export, increase Nigerians foreign earnings as well as diversify its revenue base. At the national level, the scheme operates through a Central Implementation committee (CIC) while at the Federal Capital Territory (FCT) and state levels, the scheme operates through state Implementation Committees (SICs) instituted to ensure that the objectives of the scheme is realized without hindrance. To access loans under the Agricultural Credit Support Scheme (ACSS), applicants (practicing farmers and agro-allied entrepreneur with means) are encouraged to approach their banks for loan through the respective state chapters of farmers associations and state Implementation Committees. However, large scale farmers are allowed under the scheme to apply directly to the banks in accordance with the guidelines.

ACSS funds are disbursed to peasant farmers and agro-allied entrepreneurs at a single digit interest rate of 8.0 percent. At the commencement of the project support, banks will grant loans to qualified applicants at 14.0

percent interest rate. Applicants who pay back their facilities on scheduled are to enjoy a rebate of 6.0 percent, thus reducing the effective rate of interest to be paid by farmers to 8.0 percent

2.3 Commercial Agriculture credit Scheme (CACS)

As part of its developmental role the Central Bank of Nigeria (CBN) in collaboration with the Federal Ministry of Agriculture and Water Resources (FMA & WR) established the Commercial Agriculture Credit Scheme (CACS) in 2009 to provide finance for the country's agricultural value chain (production, processing, storage and marketing). Increased production arising from the intervention would moderate inflationary pressures and assist the bank to achieve its goal of price stability in the country.

The primary objectives of the scheme are to:

i. Fast-Track the development of the agricultural sector of the Nigerian economy by providing credit facilities to large scale commercial farmers at a single digit interest rate.
ii. Enhance national food security by increasing food supply and effecting lower agricultural produce and products prices, thereby promoting low food inflation.
iii. Reduce the cost of credit in agricultural production to enable farmers exploit the untapped potentials of the sector; and
iv. Increase output, generate employment, diversify Nigeria's revenue base, raise the level of foreign exchange earnings and provide input for manufacturing and processing on a sustainable basis.

The scheme which is a sub – component of the Federal Government of Nigeria's Commercial Agriculture Development Programme (CADP) is financed through a two hundred billion naira (₦200 billion) bond raised by the Debt Management Office (DMO). Loans to eligible entities under the scheme are disbursed at a maximum interest of 9 percent. The subsidy arising from this stipulated rate and the market rate on all loans granted, and the administrative expenses of the Scheme are bored by the Central Bank of Nigeria (CBN).

The Central Bank of Nigeria and the Federal Ministry of Agriculture and Water Resources jointly ensure that the scheme is implemented successfully. This is achieved through the Project Steering Committee (PSC) comprising the Honourable (Chairman), the Governor of the Central Bank of Nigeria, Representatives of the Federal Ministry of Finance and Commercial Farmers, respectively and the programme coordinator of the Commercial Agriculture Development Programme. The day – to – day implementation of the scheme is undertaken by a Technical Implementation Committee (TIC) made up of the Director of Development Finance Department, CBN as the Chairman, Head of Agricultural Credit Support Division, CBN and a consulting group as members, and the programme coordinator of the Commercial Agriculture Development Programme of the Federal Government as the Secretary.

Commercial Agriculture Credit Scheme is operated in two tranches of one hundred billion naira (₦100 billion) each. The first phase of the tranche ran from May to December, 2009, while the second tranch commenced in February, 2010.

3.0 MATERIALS AND METHOD

Nigeria is made up of six geological regions i.e North West, North East, North Central, South West, South East and South South. The sampling frame for this study consist of rural farmers from each of these regions to access the impact of agricultural credit on their productivity.

3.1 Sources of Data Collection

The data were collected mainly from primary sources. Data were collected through the use of structured questionnaire, copies of which were administered on the 500 rural farmers selected for the study.

3.2 Method of Data Analysis

Descriptive statistics, simple percentages, ratios and proportions were used for data presentation and analysis. A total of 500 sets of questionnaires were forwarded to rural farmers in the six geopolitical regions of Nigeria but a total of 300 questionnaires were correctly completed, retrieved and analysed.

4.0 Data Presentation, Results and Discussions

The table below is a collection of the results obtained from the questionnaires administered and retrieved for analysis.

Table 1: Demographic Profile of the Respondents

CATEGORY	NO.	PERCENTAGE (%)
Gender		
Male	180	60
Female	120	40
Region		
South South	21	7
South West	30	10
South East	19	6.33
North East	40	13.33
North Central	160	53.33
North West	30	10
Age		
25 years or less	90	30
26 – 35 years	100	33.33
36 – 45 years	65	21.66
46 years and above	45	15
Marital Status		
Single	60	20
Married	150	50
Divorced	50	16.66
Separated	40	13.33
Highest Educational Qualification		
No formal Education	90	30
Primary Education	130	43.33
Secondary Education	60	20
Tertiary Education	20	6.67

Source: Researcher's field survey, 2013

As can be seen in table 1 above, most respondents (60%) are male. Majority of the respondents (53.33%) are from the north-central region while another 33.33% are in the age bracket of 26 to 35 years. A total of 50% of the respondents are married. As regards their education, the vast majority of the respondents (43.33%) has certificate of primary education as highest qualification.

Table 2: Awareness of Federal Government Agricultural Credit Schemes

RESPONDENTS	NO.	PERCENTAGE (%)
YES	100	33.33
NO	200	66.67
Total	**300**	**100**

Source: Researcher's Field Survey, 2013

Table 2 above appraised the level of awareness of respondents about the various Federal Government Agricultural Credit Schemes like the Agricultural Credit Guarantee Scheme (ACGS), Agriculture Credit Support Scheme (ACSS) and Commercial Agriculture Credit Scheme amongst others. 33.33% of the respondents are aware of the various schemes while 66.67% were ignorant of the available government agricultural credit schemes. This is not a perfect signal for a country of over 160 million people willing to attain greatness via agriculture. Government must endeavour to embark on continuous media and rural extension activities to combat this menace

Table 3: Access to Quick Agricultural Loans

RESPONDENTS	NO.	PERCENTAGE (%)
YES	0	0
NO	300	100
Total	**300**	**100**

Source: Researcher's Field Survey, 2013

The researchers survey report in table 3 above attest that none of the 300 (100%) respondents ever had quick access to agricultural loans as desired. This pose a serious threat to productivity because crops are seasonal and when credit is unnecessarily delayed, cultivation and planting is equally delayed and rain cum other climatic factors wait for no one.

Commercial banks, microfinance banks and other financial institutions must restructure their conditionalities where necessary to meet the needs of rural farmers towards maximum productivity.

Table 4: Source of Credit

RESPONDENTS	NO.	PERCENTAGE (%)
Bank of Agriculture	10	3.33
Commercial Banks	0	0
Microfinance Banks	10	3.33
Cooperative Society	20	6.67
Private money lenders	160	53.33
Savings	60	20
Friends	40	13.33
Total	300	100

Source: Researcher's Field Survey, 2013

The result of the analysis in table 4 indicates that private money lenders constitute the major source of credit (53.33%). 3.33% is gotten from Bank of Agriculture and it's obviously a low percentage considering their unique agricultural financing mandate compared to other financial institutions. Microfinance bank loans available to the respondents is 3.33% and most of this microfinance banks with rural dwelling mandates are not found in the rural areas, instead you find them in the cities servicing urban dwellers against their statutory mandate. Government through the various regulatory agencies should ensure that financial institutions of every kind adhere to its operational mandate strictly.

Table 5: Challenges in Accessing Agricultural Credit from formal Sources

RESPONDENTS	NO.	PERCENTAGE (%)
High Interest Rate	20	6.67%
Bureaucratic bottlenecks	30	10
Late Approval	130	43.33
Guarantor	20	6.67
Collateral	50	16.67
No. banks in our locality or village	30	10
Lack of Awareness	20	6.67
Total	**300**	**100**

Source: Researcher's field survey, 2013

Table 5 outlines the various challenges faced by respondents in accessing agricultural credit from formal sources. 43.33% of the respondents affirmed that late approval of loans constitute the major challenge in the entire race. Most times you receive approval for the loan applied months after the planting seasons has expired and you are required to repay an unnecessary loan.

The repayment period and structure is another major challenge. Banks should understand that cropping is seasonal and depends on several climatic conditions and must endeavour to fast track the loan processing turnaround time in the best interest of rural farmers.

Other challenges include banks demand for collateral representing 16.67% of their responses, lack of banks in their rural areas (10%) and several other limitations like bureaucratic bottlenecks representing 10% of their responses.

Table 6: Challenges in Accessing agricultural Credit from Informal Sources

RESPONDENTS	NO.	PERCENTAGE (%)
Inadequate credits	70	23.33
High Interest rate	160	53.33
Guarantor	20	6.67
Sentiments	50	16.67
Total	**300**	**100**

Source: Researcher's Field Survey, 2013

Table 6 above is an array of challenges encountered by rural farmers in accessing agricultural credit from the informal sources. 53.33% reiterated that high interest rate constitute their major challenge since the informal sources (mainly private money lenders) are unregulated and not monitored by any government institution. 16.67% of the respondents believe that the limited funds are often availed based on sentiments i.e you must be in the good books of the private money lenders to be able to access credit. The issue of providing guarantor and inadequate credit is not left out constituting 6.67% and 23.33% respectively.

Table 7: Adequacy of Agricultural credit obtained

RESPONDENTS	NO.	PERCENTAGE (%)
YES	0	0
NO	300	100
Total	**300**	**100**

Source: Researcher's Field Survey, 2013

Table 7 above presents the respondents experience about the adequacy of agricultural credit obtained if any and 100% of the respondents confirmed that funding is grossly inadequate.

Government must realize that the role of agriculture in nation building cannot be overemphasized and as such should be given adequate attention during national planning.

5.0 Conclusion

It is a natural fact that without food and raw materials for our industries no other sector of the economy can thrive. Nigerian rural farmers and farmers generally should be given adequate financial environment to excel. They should be laws accompanied with monitoring and evaluation that will enable the various financial institutions live up to their statutory mandates towards agricultural excellence. Banks should open up branches in rural areas and avoid unnecessary stringent credit conditionalities that will discourage farmers from borrowing.

The specialized banks should endeavour to create credit instruments and services that are tailored to the risks and cash flow patterns in the agricultural sector. There are tremendous opportunities for commercial banks and other stakeholders in the finance industry to initiate much needed overhaul of the agricultural financial lending system.

Banks in Nigeria should recognize the importance and value of increasing their agricultural loan portfolios and be committed to developing innovative financial instruments that will effectively deploy much needed capital to this potentially lucrative sector. There is need to take a multi-faceted approach in solving the problem in the agricultural sector. Government must create an enabling environment by working with the private sector to develop programs and services that will reduce the perceived and real risks associated with agricultural lending in order to encourage banks to lend.

References

1. Abe, S. T. (1982). Nigerian farmers and their Finance Problems. Bullon Magazine, 7,4.
2. Adegbite, D. A (2009). Repayment Performance of Beneficiaries of Ogun State Agricultural and Multipurpose Credit Agency (OSAMCA) in Ogun State, Nigeria (2004 – 2007). American – European Journal of Sustainable Agriculture 3(i): 117 – 125.
3. Adejobi, O. and J. T. Atobatele (2008). An analysis of loan delinquency among small-scale farmers in Southwestern Nigeria: Application of Logit and Loan Performance Indices. East African Agricultural and forestry Journal 74 (3).

4. Adegeye, A. J., and J. S. Ditto (1985). Essentials of Agricultural Economics. Impact Publishers Nigeria Limited, Ibadan.
5. Agnet (2004). Making Farm Credit Work for the Small Scale farmers (www.agnet.org/library)
6. Akinwunmi, Adesina. (2012). CIBN Annual Lecture Held in Lagos Nigeria. Thisday Newspaper, November 15, pp.48.
7. Alufohai, G. O. (2006). Sustainability of Farm Credit Delivery by Cooperatives and NGO's in Edo and Delta State, Nigeria. Proceedings of the 39th Conference of Agricultural Society of Nigeria (ASN) held at the University of Benin, Benin City, Nigeria, 9th – 13th October, pp. 300 – 303.
8. Anderson, J. (1990). "Does Regulation Improve Small Farmers access to Brazilian Rural Credit". Journal of Development Economics, 33, pp 67 – 87.
9. Anyanwu, C. M. (2004). Microfinance Institutions in Nigeria: Policy, Practice, and Potentials. Paper presented at the G24 Workshop on "Constraints to Growth in Sub – Saharan Africa," Pretoria, South Africa, November 29 – 30.
10. Asogwa, B. C. and J. C. Umeh, and S. T. Penda (2011). Analysis of Economic Efficiency of Nigerian Small Farmers: A Parametric Frontier Approach. Journal of Economics 2(2). Pp. 89 – 98.
11. Badiru I. O (2010). Review of Small Farmers Access to Agricultural Credit in Nigeria. International Food Policy Research Institute. Series No. 25.
12. Balogun, E. D. (1990). Banking and Credit Facilities for Integrated Rural Development; Paper presented at the National Seminar on Rural Development Policy in Nigeria, Sheraton Hotel, Abuja.
13. Duong, P. B. and Izumida, Y. (2002). Rural Development Finance in Vietnam, A Micro Econometric Analysis of Household Surveys. World Development, 30 (2), pp 319 – 335.
14. EFInA (Enhancing Financial Innovations and Access) (2008). Access to financial Services in Nigeria. www.efina.org.ng
15. Federal Government of Nigeria (2008). Enhancing Financial Innovation and Access (EFInA)
16. Ijere, M. O. (1981). The Prospect of Employment Creation Through Cooperatives in Nigeria. Nigeria Journal of Rural Development and Cooperative Studies, 2: 77 – 78.
17. Ijere, M. O. (1998). Agricultural Credit and Economic Development. In: Ijere MO; Okorie, A (eds) Readings in Agricultural finance, Longman, Lagos, pp 4 – 9.
18. International Cooperative Alliance (1995). Report of the Centennial Congress of the ICA, Geneva, Switzerland, October.
19. Obasi, F. C. and S. E. Agu (2000). Economics of Small Scale Rice Farmers under Different Production Systems in South Eastern Nigeria. Journal of Agriculture, Business and Rural Development, 1, pp.2
20. Odoemenem, I. U and C.P.O, Obinne (2010). Assessing the Factors Influencing the Utilization of Improved Cereal Crop Production Technologies by Small Scale Farmers In Nigeria. Indian Jo urnal of Science and Technology. 3(1), pp. 180 – 183.
21. Ogunfowora, O; and S. M. Essang, and S. O. Olayide (1972). Capital and Credit in Nigerian Agricultural Development. Nigerian Rural Development Study paper No. 6, University of Ibadan, Ibadan, Nigeria.
22. Ojo, J. A. T (2005). Central Banking and Financial Sector Management in Nigeria; An Outsider view. In: Fakiyesi, O. O. and S. O. Akano (Eds), Issues in Money, Finance and Economic Management in Nigeria (Essays in Honour of Professor Obasanmi Olakankpo), pp.35 – 98.
23. Ojo, M.O (1998). Some Implications of Government Economic Policies for the Financing and Development of Agriculture in Nigeria, pp 16 – 26 in Readings in Agricultural Finance, A. Okorie and M. O. Ijere (eds) Lagos: Longman.
24. Okojie, C. A. and Monye – Emina and K. Eghafona, and G. Osaghae and J. O. Ehiakhamen (2010). Institutional Environment and Access to Microfinance by Self – employed Women in the rural areas of Edo State. NSSP brief No. 14. Washington, D. C: International Food Policy Research Institute.
25. Okwoche, V. A, Asogwa, B. C and Obinne, P. (2012). Evaluation of Agricultural Credit Utilization by cooperative Farmers in Benue State of Nigeria. European journal of Economics, Finance and Administrative Science. Issues 47, pp.1 – 3.

26. Oluwatayo, A. B, Sekumade, A. and S. A. Adesoji (2008). Resource Use Efficiency of Maize farmers in Rural Nigeria: Evidence from Ekiti State, Nigeria. World Journal of Agricultural Science. 4(i), pp. 91 – 99.
27. Oyatoye, E. T. O (1981) Financing Small Scale Farmers: A change of Strategy, In: Edordu (Ed), Agricultural Credit and Finance in Nigeria, Problems and Prospects. Proceedings of a Seminar Organized by the Central Bank of Nigeria, April 27 – 30.
28. Phillip, D; Nkonya. E, Pender. J and O. A. Oni (2009). Constraints to Increasing Agricultural Productivity in Nigeria: A review. Nigeria Strategy Support Program (NSSP) Background paper No. NSSP006.
29. Rahji, M. A. Y; and S. A. Fakayode (2009). A Multinomial Logit analysis of Agricultural Credit Rationing by Commercial Banks in Nigeria. International Research Journal of Finance and Economics 24,91. www.eurojournals.com/finance
30. Sadonlet, E. and de Janvary, A. (1995). Qualitative Development Policy Analysis. Baltimore, and London: The John Hopkins University Press.
31. Singh et al (1986). Agricultural Household Models: Extension Application and Policy, London. The John Hopkins University Press.
32. Stiglitz, J. (1993). "Incentives Organisational Structures and Contractual Choice in the Reform of Socialist Agriculture" in Beaverman, A; Brooks K, Csaki. C. (Eds). The Agricultural Transition in Central and Eastern Europe and former USSR. World Bank, Washington, D. C.
33. Swinnen, J. F. M; and Gow, H. R. (1999). "Agricultural Credit Problems and Policies during the Transition to a Market Economy in Central and Eastern Europe" Food Policy, 24 pp 21 – 47.
34. Von – Pischike, J. D. (1991). A Critical Survey of Approaches to the role of Credit in Small – holder development. Discussion paper, Institute for Development Studies, University of Nairobi.
35. World Bank (1998). Framework for World Bank Group Support for the Development of Micro, Small Enterprises and Rural Finance in Sub-Saharan Africa, Washington, D.C.
36. www.cenbank.org/Development finance
37. www.cenbank.org/publications
38. www.en.wikipedia.org/Agriculture retrieved 14/11/12.
39. www.firstbanknigeria.com/Agricultural Financing
40. www.smedan.gov.ng