

Effect of Credit to Farmers and Agricultural Productivity in Nigeria

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ABSTRACT: In Nigeria, there has been a continuous decline in farmers access to credit facilities. This study examined the effect of farmers credit on agricultural productivity from 1981 to 2016 using data from World Bank Development Index (WDI). The result of the Ordinary Least Squares (OLS) estimation shows that agricultural bank credit ($\beta=0.667173$, $t=5.961095$ & $P<0.05$) exerts a significant positive effect on agricultural output. Bank lending rate ($\beta=1.094792$, $t=1.295874$ & $P>0.05$) and foreign exchange rate ($\beta=0.124297$, $t=0.437929$ & $P>0.05$) do not show a significant effect on agricultural output. It was submitted that bank credit has a significant positive effect on agricultural productivity in Nigeria. The need for government to promote savings and bank credit to farmers was recommended.

Keywords: Farmers, Credit, Agriculture, Productivity, Lending rate

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INTRODUCTION

Agriculture provides the greatest avenue for employment, income and food for the Nigerian populace. Essentially, Agriculture is composed of crop production, livestock, forestry, and fishing. It involves the production of food, feed, fibre and other goods by the systematic growing and harvesting of plants and animals (Iganiga & Unemhilin, 2011). Agriculture can be operated at a peasant small scale or large scale level. Peasant or small scale farming is defined as the cultivation of crops and rearing of animals on a small scale. Peasant farmers operate mainly in the rural environment of the country. They operate on very small holdings using mostly traditional methods because, their income is relatively low and the capacity to save is poor (Asogwa, Abu & Ochoche, 2014).

Credit plays a crucial role in facilitating the modernization of agriculture and in promoting the participation of farmers in the development process. Not only credit can eliminate financial constraints but it can provide the incentive to adopt new technologies that would otherwise be more slowly accepted (Mohsin, Ahmad & Anwar, 2011). Credit is the use of or possessing of funds and services without immediate payment. It can be in form of money borrowed or agricultural credit which includes trade credit and bank credit. Agricultural credit therefore can be in various forms for example seed, fertilizer with deferred payment, use of tractors, labours, storage facilities and so on. The term credit also means the capacity to borrow (Mgbakor, Patrick & Divine, 2014).

Farm credit is any of the several credit vehicles used to finance agricultural transactions, including loans, notes, bills of exchange and bankers acceptances. These types of financing are adapted for the specific financial needs of farmers, which are determined by planting, harvesting and marketing cycles. Short term credit finance operating expenses, intermediate-term credit is used for farm machinery and long term credit is used for real-estate financing (Adebayo & Adeola, 2008). It is an important financial support that farmers can get to bridge the gap between their income and expenditure on the field. It is an important instrument for enabling farmers to acquire command over the use of working capital for enhancing their productivity and income. Thus, credit is an essential ingredient in the growth strategy of the agricultural sector (Mohsin, Ahmad & Anwar, 2011).

Generally, farmers have unique characteristics; they have low income, fewer savings and substandard farming. In the case of the majority of farmers, their families leave behind a meagre surplus and mostly consume whatever they produce. They are unable to meet the gross requirements of finance for production and development purposes from their available resources. Unfavourable atmospheric conditions further aggravate the situation, thus rendering the farmers poorer and poorer (Mohsin, Ahmad & Anwar, 2011). In Nigeria, the agricultural sector has been an important component of the economy with peasant farmers producing over 90% of available food in the country and 70% of the labour force relying on this sector (Amao, Adebayo & Anyanwu, 2003). However, the country agriculture is made up of mainly peasant farmers and the majority of these farmers live in the rural area and operate at subsistence level with a landholding average of fewer than five hectares. Farmers are faced with the problems of low productivity, inadequate access to logistic support and input, crop infestations, pests and diseases and massive loss of crops and animals (Ijere, 1998).

In Nigeria agriculture is dominated by small scale farmers most of whom are rural-based, with a low level of education; poor access to useful information and market and lack access to credit finance. The inaccessibility of credit by these farmers hinders their acquisition of the required inputs to increase their output and this, in turn, limit

agricultural development by reducing farmers' output, expected income, savings and overall welfare of the farmers in Nigeria (Daveze, 2020). The enduring lack of credit access faced by these farmers has significant consequences for their household-level outcomes, as well as, technology adoption, agricultural productivity, food security, nutrition, health and overall welfare of the farmers' households (Eyo, 2018).

Nigeria's numerous smallholders on the aggregate make a substantial investment in addition to relying on informal funding which has proved inadequate. The basic agricultural funding problems remain poverty amongst peasant smallholders, because of their inability to access credit. This entraps them at a low equilibrium level, with factors and inputs beyond their purchasing power, while they are compelled to sell in times of surplus characterized with low prices to meet urgent family needs or enhance their agricultural activities such as storage, transport and processing facilities. It has been argued that an inadequate level of agricultural credit facilities is a major factor preventing the adoption of innovative technologies (Ater, 2013). The little efforts to encourage the farmers by the government, however, most times, do not get to the grass root, and when they are channelled to the grass root, only the farmers with political affiliation or loyalty are provided access. Sometimes, these credits get to false farmers who use them for non-agricultural activities, thereby making the effort of the government fruitless (Nwaeze, 2011).

The broad objective of this study is to investigate credit to farmers and economic growth in Nigeria. The specific objectives of the study are to:

- i. *analyse the trend of commercial bank credit to farmers and agricultural output,*
- ii. *estimate the effect of commercial banks' credit to farmers on agricultural output and*
- iii. *investigates the effect of interest rate on credit to farmers on agricultural productivity in Nigeria.*

This study will help farmers and farm management to forecast the future behaviour and performance of credit facilities accessible to farmers. The study will provide an insight into the government regulatory framework aimed at ensuring adequate availability of credit facilities to agricultural activities. This research will be significant to the government, ministry of agriculture and policymakers as empirical revelations from the effect of credit access on the output of farmers can be used as a reliable guide in designing agricultural policies and programmes needed to bring about efficient allocation of scarce resources among the sectors of the country.

This research will also be relevant to farmers as it will provide them with relevant information on the important role of external credit facilities in expanding their farming activities and products as well as improving their income through the expansion in their level of productivity. The study will also provide an invaluable source of reference material for future studies on farmers' access to credit and economic growth in Nigeria and the rest of the world.

THEORETICAL REVIEW

Agriculture provides the greatest avenue for employment, income and food for the Nigerian populace. Essentially, Agriculture is composed of crop production, livestock, forestry, and fishing. It involves the production of food, feed, fibre and other goods by the systematic growing and harvesting of plants and animals (Iganiga & Unemhilin, 2011). Agriculture can be operated at a peasant small scale or large scale level. Peasant or small scale farming is defined as the cultivation of crops and rearing of animals on a small scale. Peasant farmers operate mainly in the rural environment of the country. They operate on very small holdings using mostly traditional methods because,

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METHODOLOGY

The research design is the structure and strategy for investigating the relationship between the variables of the study. The study made use of an ex-post facto research design. An ex-post facto investigation seeks to reveal possible relationships by observing an existing condition or state of affairs and searching back in time for plausible contributing factors. In this study, the focus is to reveal the possible relationship between credit to farmers and economic growth in Nigeria as such the dependent variable is economic growth proxy by real gross domestic product (RGDP) while the independent variable is credit to farmers' proxy by agricultural credit in addition to other plausible contributory factors comprising of

In an attempt to investigate the effect of credit to farmers on agricultural productivity in Nigeria as set out in the objective of the study, this study adapted the model used in the study conducted by Nwokoro (2017) on the analysis of banks' credit and agricultural output in Nigeria where agricultural gross domestic product was the dependent variable while banks lending rate, foreign exchange rate, investment in agriculture, government expenditure on agriculture, banks credits to agriculture were the explanatory variables. This study adapted this model by making use of agricultural output as the dependent variable while commercial banks credits to agriculture, banks

lending rate and foreign exchange rate were the explanatory variables. The functional form of the model is stated as follows:

$$AOUT = F(ABCR, BLR, FREX) \quad (6)$$

The transformation of the functional relationship into an econometric model is presented in four endogenous variables:

$$AOUT = \beta_0 + \beta_1 ABCR + \beta_2 BLR + \beta_3 FREX + \epsilon \quad (7)$$

In each equation, β_0, \dots, β_4 are the intercept terms, while the disturbance terms are denoted by ϵ

Where: AOUT = Agricultural output; ABCR= Banks Credits to Agriculture; BLR = Banks lending rate; and FREX = Foreign Exchange Rate

The expected sign of the coefficients of the explanatory variables is summarized in terms of differentials as follows:

Banks credits to agriculture is expected to exert a positive effect on agricultural output in Nigeria i.e. $\frac{\partial AOUT}{\partial ABCR} > 0$; bank lending rate is expected to exert a positive effect on agricultural output in Nigeria i.e. $\frac{\partial AOUT}{\partial BLR} > 0$; and the foreign exchange rate is expected to exert a positive effect on agricultural output in Nigeria i.e. $\frac{\partial AOUT}{\partial FREX} > 0$

This is country-specific research and it focuses attention specifically on the Nigerian economy. This study makes use of annual time series data collected from the Central Bank of Nigeria Statistical Bulletin. The data covers the period of 28 years (1986-2016). The choice of the time frame is informed by the need to provide a broader scope for the analysis and to ensure that the study span through the periods of major institutional economic and financial policies geared towards the corrections of the structural imbalances in Nigeria such as bank consolidation and recapitalization in Nigeria.

The study used the Ordinary Least Squares (OLS) regression estimation technique in the analysis. The choice of OLS is because the technique remains a popular technique for estimating regressions. After all, it is easier than other alternative techniques including generalized method of moments (GMM) and maximum likelihood (ML) estimation. It is also probably always have all the computing power required. Another main reason why the OLS was selected is that OLS results have desirable characteristics. A desirable attribute of any estimator is for it to be a good predictor. Its numerical properties include the fact that the regression line always passes through the sample means of Y and X or the mean of the estimated (predicted) Y value is equal to the mean value of the actual Y ; the mean of the residuals is zero, or the residuals are uncorrelated with the predicted Y , or the residuals are uncorrelated with observed values of the independent variable e.t.c.

RESULTS

The result generated from the econometric estimation of the model facilitated through the use of econometric view (**E-VIEW 3.0**) is presented below:

Table 4.2 Regression Result

Variables	Coefficient	Std. Error	T-value	T-Prob
ABCR	0.667173	0.111921	5.961095	0.0000
BLR	1.094792	0.844829	1.295874	0.2024
FREX	0.124297	0.283829	0.437929	0.6638
Constant	0.860678	1.591383	0.540836	0.5916
DW	1.552			
R ²	0.75			

Table 4.3.1 shows that in terms of direction agricultural bank credit conforms to a priori expectation on the estimate. While bank lending rate and foreign exchange rate failed to conform to the prediction of economic theory on the estimates. This result suggests agricultural bank credit exerts a positive effect on agricultural output in Nigeria. The coefficient of agricultural bank credit AIOUT (0.667173) shows that a one per cent increase in agricultural bank credit will on average bring about approximately a 67% increase in agricultural output as a proxy by agricultural Gross Domestic Products in Nigeria. The coefficient of bank lending rate (1.094792) shows that a one per cent increase in bank lending rate will on average bring about approximately a 109% increase in agricultural output in Nigeria. The coefficient of the foreign exchange rate (0.124297) shows that a one per cent increase in the foreign exchange rate will on average bring about approximately a 12% increase in agricultural output in Nigeria.

The above result shows that, agricultural bank credit ($\beta=0.667173$, $t=5.961095$ & $P<0.05$) exerts a significant positive effect on agricultural output in Nigeria. Bank lending rate ($\beta=1.094792$, $t=1.295874$ & $P>0.05$) and foreign exchange rate ($\beta=0.124297$, $t=0.437929$ & $P>0.05$) do not have a significant effect on agricultural output in Nigeria. By and large, agricultural bank credit has a significant effect on agricultural output in Nigeria. The explanatory variables explained the variation in the behaviour of the dependent variables adequately. This is evident in the high value of R² (0.75) which shows that the explanatory variables accounted for at least 75% of the variation in agricultural output in Nigeria. The Durbin Watson statistics from the regression analysis is 1.551533 which can be approximated to two indicates that in the model there exist no autocorrelation.

DISCUSSION

The study found out that agricultural bank credit ($\beta=0.667173$, $t=5.961095$ & $P<0.05$) exerts a significant positive effect on agricultural output in Nigeria. Bank lending rate ($\beta=1.094792$, $t=1.295874$ & $P>0.05$) and foreign exchange rate ($\beta=0.124297$, $t=0.437929$ & $P>0.05$) do not have a significant effect on agricultural output in Nigeria. The findings in this study supported the result of Emecheta & Ibe (2014) on the impact of bank credit on economic growth in Nigeria applying the reduced form of vector autoregressive technique using time series data from 1960 to 2011. The major finding in the study was that there is a significant positive relationship

between bank credit to the private sector, broad money and economic growth. The past values of all the variables were significant in predicting their current values. This result implies that the bank consolidation and recapitalization exercise was a welcome development and further steps should be taken to ensure the stability of the banking sector. It was also in line with Okoni & Nathan (2014) on the impacts of commercial bank credit on Nigeria industrial subsectors between 1972 and 2012. The results of estimation indicate the following: commercial bank credits impacted positively and significantly on the manufacturing sub-sector in Nigeria, commercial bank credits to mining and quarry is a positive and significant determinant of the current year Mining and Quarry output in Nigeria, previous year bank credits to real estate and construction is a positive determinant of the current year real estate and construction output, bank credits to manufacturing, mining and quarry as well as bank credits to real estate and construction correlated positively with aggregate industrial output with bank credits to real estate and construction having a significant impact on industrial output. The interest rate was not an important determinant of industrial sector and industrial sub-sectors outputs, the exchange rate is a negative and significant determinant of industrial sector's outputs in Nigeria. These results point to the conclusion that increasing bank credits to the industrial sector is indispensable in stimulating industrial sector growth in Nigeria

CONCLUSIONS AND RECOMMENDATIONS

This study examined bank credit agricultural output in Nigeria from 1981 to 2016. From the result, it can be concluded that bank credit has a significant positive effect on agricultural sector output in Nigeria. Among the inference that can be deduced from the result is that, despite the low level of credit available to farmers in Nigeria in comparison with international standards, the level of bank credit has proved to be productive. This is based on the significant positive impact that agricultural bank credit exerts on agricultural output. On the other hand, exchange rate and bank lending rate have proved to have an insignificant impact on agricultural output which may be as a result of effective monetary policy management. The exchange rate and bank lending rate has been supportive of agricultural output growth. Based on the above-stated findings from the investigation carried out, the study makes the following recommendations.

- 1) The policy thrust of the government should focus on return to agriculture, the adoption and implementation of a comprehensive energy policy, with stable electricity as a critical factor,
- 2) There is a need for government to pursue financial sector development to promote savings and bank credit.
- 3) There should be a determined effort by the monetary authorities to bridge the widening gap existing between the lending rate and savings rate so that the people will be fully motivated to save in a bid to generate needed loanable funds for investment in Nigeria.

FURTHER STUDY

Future research on farm credit in Nigeria can improve on this work by investigating the effect of all the various forms of farm credit introduced by the government on agricultural productivity in Nigeria.

REFERENCES

- Adebayo, O.O, & Adeola R.G. (2008) Sources and Uses of Agricultural Credit by Small Scale Farmers in Surulere Local Government Area of Oyo State. *Anthropologist*. 2008;10(4):313–314.
- Adekoya, O.A (2014). The patterns and determinants of agricultural credit use among farm households in Oyo State, Nigeria, *Asian Economic and Financial Review*, 4(10): 1290-1297
- Adeyinka, A.J., Daniel, A.A & Olukotun, G.A (2014). An assessment of the contributions of commercial banks to agricultural financing in the Nigerian economy. *International Journal of Advanced Academic Research*, 1(2), 1-11
- Akanni, O. F., Ojo, O., Oyetoki, A. O., Asunlegan, O. A., Salako, B. A., & Jatto, K. A. (2017). Impact of cooperative societies on rural farming in Ido local government area of Oyo State, Nigeria. *Direct Research Journal of Agriculture and Food Science*, 1(2), 1-11
- Akinwale, S.O & Obagunwa, O.T (2019). A VECM approach towards the effect of bank credit on economic growth: Empirical evidence for Nigeria. *European Scientific Journal*, 15(19), 1-15
- Ali, B. M., Agbo, F. U., Ukwuaba, I. C. & Chiemela, C. J. (2017). The effects of interest rates on access to agro-credit by farmers in Kaduna state, Nigeria. *African Journal of Agricultural Research*, 12(43), 3160-3168, 26

- Amao JO, Adebayo O.O, & Anaynwuyi, E. (2003). Analysis of factors affecting income generation among farmers' group in Ilorin East local government area of Kwara state of Nigeria. *International Journal of Economic and Development Issues*, 3(1), 20-31
- Asogwa, B. C., Abu, O. & Ochoche, G.E (2014). Analysis of peasant farmers' access to agricultural credit in Benue State Nigeria. *British Journal of Economics, Management and Trade*, 4(10), 1525-1543
- Asogwa, B. C., Abu, O. & Ochoche, G. E. (2014). Analysis of peasant farmers' access to agricultural credit in Benue State, Nigeria. *British Journal of Economics, Management & Trade* 4(10): 1525-1543, 2014
- Ater, P.J. (2003). Loan Delinquency in Benue State Small scale agricultural on-lending scheme: A case study of Vandeikya L.G.A Nigeria. *Journal of Rural Economy and Society*, 1(2), 1-13
- Ayegba, O., Adeyinka, A.J., Daniel, A.A & Olukotun, G.A (2014). An impact assessment of agricultural credit on rural farmers in Nigeria. *Research Journal of Finance and Accounting*, 4(18), 11-31
- Baiyegunhi, L.J.S & Fraser, G. C. G (2014). Smallholder farmers' access to credit in the Amathole District Municipality, Eastern Cape Province, South Africa. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 115(2), 79-89
- Byaruhanga, I. (2013). Credit terms, credit accessibility and performance of agricultural cooperatives in Rwanda. *Journal of Emerging Issues in Economics, Finance and Banking (Jeiefb)*, 1(6), 1-11
- David, E.I. (2016). Regionalising loan repayment capacity of smallholder cooperative farmers in Nigeria: Exploring South-South Nigeria. *Journal of Biology, Agriculture And Healthcare*, 3(7), 176-181
- Drisu, M., Okpo, B.R & Sharomo, D.H. (2019). The determinants of rural farmers decision to obtain commercial banks' credit in Etsako, Edo State, *Transatlantic Journal of Rural Research*, 1(2), 1-11
- Ekwere, G.E. & Edem, I.D. (2014). Evaluation of agricultural credit facility in agricultural production and rural development. *Global Journal of Human-Social*, 14(3), 1-11
- Elizabeth, N.J., Sunday, B.A. & Terver, N.T. (2016). Gender analysis of access to credit by rural small scale farmers in Benue State Nigeria, *American International Journal Of Social Science*, 2(6), 70-82
- Etunim, L.I. (2020). Examination of acquisition and utilization of credits by Maize Farmers in Delta State, Nigeria. *Global Journal of Agricultural Research*, 8(4), 17-38
- Evbuomwan, G.O., Ikpi, A.E., Okoruwa, V.O. and Akinyosoye, V.O (2015). Sources of finance for micro, small and medium enterprises in Nigeria. *International Farm Management Congress*, 1(1), 1-11
- Filli, F. B., Onu, J. I., Adebayo, E. F., And Tizhe, I (2015) Factors Influencing Credits Access Among Small Scale Fish Farmers In Adamawa State, Nigeria, *Journal Of Agricultural Economics, Environment And Social Sciences* 1(1):46–55
- Gurmessa, N.E (2017) Smallholders' Access To And Demand For Credit And Influencing Factors: Policy And Research Implications For Ethiopia, *Journal Of Business & Economic Policy* Vol. 4, No. 3, 48
- Ibrahim, S.S And Aliero, H.M (2015) An Analysis Of Farmers' Access To Formal Credit In The Rural Areas Of Nigeria, *African Journal Of Agricultural Research* Vol. 7(47), Pp. 6249-6253

- Ijere MO. (1998) Role of Government in Credit Administration. Proceedings of Agricultural Finance, Longman, Lagos. 1998;10-15.
- Ita,A.J., Owui, H.O., Dunsin,O.M&Ita,R.I (2020) Commercial Banks Lending And The Growth Of Agricultural Sector In Nigeria, Iiard International Journal Of Banking And Finance Research, Vol 6. No. 3
- Kolade KB, Fakoya EO. (2011) Impact of farm credit on farmers socio-economic status in Ogun State, Nigeria. Journal of Social Science. 2011;26(1):67–71.
- Kuye, O.O (2015) Determinants Of Loan Default And Repayment Rates By Cassava Farmers In South-South Nigeria: A Case Study Of Bank Of Agriculture And First Bank Of Nigeria, European Journal Of Agriculture And Forestry Research, Vol.3, No.4, Pp.48-57
- Mgbakor, M.N., Patrick O. U And Divine, O. N (2014)Sources Of Agricultural Credit To Small-Scale Farmers In Ezeagu Local Government Area Of Enugu State, Nigeria, Iosr Journal Of Agriculture And Veterinary Science, Volume 7, Issue 8 Ver. I, Pp 01-08
- Mgbenka, R.N And Mbah, E.N (2016) A Review Of Smallholder Farming In Nigeria: Need For Transformation, International Journal Of Agricultural Extension And Rural Development Studies Vol.3, No.2, Pp.43-54
- Mohsin, A.Q., Ahmad, S. and Anwar, A. (2011) Impact of Supervised Agricultural Credit on Farm Income in the Barani Areas of Punjab, Pakistan Journal of Social Sciences, Vol. 31, No. 2 (December 2011), pp. 241-250
- Moruf, O (2017) Evaluation Of The Nigerian Microfinance Banks Credit Administration On Small And Medium Scale Enterprises Operations, International Review Of Management And Business Research Vol. 2 Issue.2
- Mudi JA. (2007) Credit Acquisition and Utilization by Small – Scale Farmers, unpublished HND project submitted to the Department of Agricultural Extension and Management, College of Agriculture, Yandev, Benue State; 2007
- Mukasa, A.N., Simpasa, A.M And Salami, A.O (2016)Credit Constraints And Farm Productivity: Micro-Level Evidence From Smallholder Farmers In Ethiopia, Working Paper No. 247
- Musabanganji, E., Karangwa, A and Lebailly, P (2015)Determinants Of Access To Agricultural Credits For Small Scale Farmers In The Southern Province Of Rwanda, Sixth International Scientific Agricultural Symposium
- Nadvi K, Barrientos S.(2004) Industrial Clusters And Poverty Reduction: Towards a methodology for poverty and social impact assessment of cluster development initiatives. Institute of Development Studies, University of Sussex, United Kingdom. 2004;67.
- Ndife, C. F (2020) Impact Of Central Bank Of Nigeria Development Financing On The Growth Of The Agricultural Sector Of The Nigerian Economy, Iosr Journal Of Business And Management, Volume 22, Issue 6. Ser. Vii, Pp 64-69
- Nwandu, P.I (2021) Analysis Of The Accessibility Of Formal Credits To Rural Women Farmers In Delta State, Nigeria, Dutse Journal Of Pure And Applied Sciences (Dujopas), Vol. 7 No. 1
- Nwude, E.C & Anyalechi, K.C (2017)The Impact Of Microfinance On Rural Economic Growth: The Nigerian Experience, International Journal Of Economics And Financial Issues | Vol 8 • Issue 4 • 27
- Okoro, F.N And Nwali, N (2013) Agricultural Funding And Challenges Of Deposit Money Banks In Nigeria, Arabian Journal Of Business And Management

- Orok, A.B And Ayim, S.A (2017)The Impact Of Agricultural Credit Guarantee Scheme Fund On Agricultural Sector Development In Nigeria, *International Review Of Management And Business Research* Vol. 6 Issue.3
- Owusu, S (2017) Effect Of Access To Credit On Agricultural Productivity: Evidence From Cassava Farmers In The Afigya-Kwabre District Of Ghana, *International Journal Of Innovative Research In Social Sciences & Strategic Management Techniques | Ijirssmt* Vol. 4, No. 2
- Udoh, E.J (2008) Estimation Of Loan Default Among Beneficiaries Of A State Government Owned Agricultural Loan Scheme, Nigeria, *Journal Of Central European Agriculture* Vol 9, No 2
- Uremadu, S.O., Ariwa, F.O &Uremaduc.E.D. (2017).impact of government agricultural expenditure on agricultural productivity in Nigeria. *Current investigations in agriculture and current research*, 4(11), 1-12
- Uturu, C.O.A & Oriaku, B.N. (2011). Access to and investment of formal microcredit by smallholder farmers in Abia State, Nigeria. A case study of ABSU microfinance bank,*The Journal of Agricultural Sciences*, 6(2), 1-11
- Yusuf, S.A., Amao, J.O & Olawale, O.T. (2016). Effects of microcredit on small scale enterprises in Osun State, Nigeria. *American International Journal of Contemporary Research*, 4(6), 1-11
- Zakaria M., Jun W., & Khan M.F. (2019): Impact of financial development on agricultural productivity in South Asia. *Agricultural Economics-Czech*, 65: 232–239.