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Credit Constraints and Poverty among Nigerian Farming Households

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Abstract: This study examined credit constraint and poverty among the smallholder rural farming households in Southwest Nigeria. Primary data was randomly collected using structured questionnaire from 300 smallholder farmers in the study area. Data was analyzed using descriptive statistics, Probit Regression Model, the Foster, Greer and Thorbecke in 1984 class of poverty measures (FGT) and the Logit Regression Model. The result shows that majority (69%) of the respondents are credit constrained and this has a positive influence on their poverty status as about 71% of the credit constrained households fall below the poverty line compared to about 45% of their unconstrained counterparts. Among the constrained 37.86% are core poor and 32.52% are moderately poor while 29.61% are non-poor compared to 17.02, 27.66 and 55.32% for core poor, moderately poor and non-poor, respectively among their unconstrained counterparts. Gender, age, level of education, off-farm income source and membership of farmers' association are variables that significantly influenced both credit constraint condition and poverty of the farmers while age, farm size and credit constraint influenced only poverty status of rural households in Southwest Nigeria. This study concludes that improvement in credit access among the farming households, especially the credit constraint is imperative for poverty alleviation. Gender differences with respect to credit constraint should be critically checked. Extending credit to women will not only accelerate production but also improve rural livelihood and reduce poverty.

Key words: Credit, constraint, rural finance, poverty, farming households, Southwest, Nigeria

INTRODUCTION

Agriculture remains a significant sector in Nigeria's economy despite the extensive role of the oil sector in the economy. It is the economic mainstay of the majority of households in Nigeria. It contributes about 45% of the GDP, employs two-third of total labour force and provides livelihood for over 90% of the rural population. The sector is dominated by smallholder farmers accounting for over 90% of the total output while more than half of the farmers produce only food crops (IFAD, 2001). Farming population comprises predominantly of resource-poor peasants, cultivating an average of about 2 ha of land usually on scattered holdings with rudimentary farming system, low capitalization and declining productivity resulting to high food insecurity and poverty (Ogundari and Ojo, 2007).

Credit plays a very crucial role in agricultural development and the rural economy as a whole. It has been recognized as one of the components of financial services considered fundamental in all production units (Dicken, 2007). Credit for the smallholder, especially in agriculture is increasingly gaining relevance in many parts of the world as a deliberate response to the needs of numerous entrepreneurs with limited capital base in the sector (IFAD, 2001). In Nigeria, the present government advocates the transformation of smallholder agriculture from subsistence to commercial and thus requires the availability of adequate capital. Traditionally, capital for investment in agriculture comes from two main sources which are: personal savings of the farmer and farm credit. Credit could either be formal (such as banks and co-operatives) or informal for example; traditional money lenders, pawnbrokers and trade specific lenders (Chauhan, 1990).

According to Von Pischke and Adams (1980), credit is an important resource in the further expansion of farm business to which poor rural households lack access thereby contributing negatively to agricultural productivity, income generation and household welfare. Credit accessibility makes it possible to purchase the necessary inputs needed for production and maximizes output from the given resources. However, credit accessibility can either be constrained or unconstrained. Credit access will only be effective for the credit constrained as a lack of access to credit may not necessarily imply an unmet credit need. In the same way, the marginal contribution of credit is likely to be high in households that have a larger binding credit constraint than in those that are less constrained.

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A household is said to be constrained if it cannot borrow as much as it wants that is a good indicator of some level of credit constraint is the gap between the demand and supply of credit that is the wider the gap, the greater the credit constraint level (Nagarajan *et al*., 1998).

Problem statement: Despite that 80% of Nigeria's population lives in rural areas and majority is involved in agricultural activities, there are no efforts to facilitate credit to farmers which is crucial in rapid development of this dominant section of the population. Agricultural productivity and growth are hindered by limited access to credit facilities; only few farmers have access to rural credit (Odoemenem and Obinne, 2010).

According to EFInA (2008), 23% of the adult population in Nigeria have access to formal financial institutions, 24% to informal financial services while 53% are financially excluded. Rural credit is a temporary substitute for personal savings which catalyses the process of agricultural production and productivity. To boost agricultural production and productivity farmers have to use improved agricultural technologies, however the adoption of these technologies is relatively expensive and small holder farmers cannot afford to self finance it. As a result, the use of agricultural technologies is very low (Klein *et al*., 1999).

Credit has direct effect on agricultural production and the problem of credit constraint has been revealed as the major cause of low agricultural productivity. This has been alleged to be the critical factor accounting for rural poverty (Iqbal, 1986; Omonona *et al*., 2005). In Nigeria, poverty is especially severe and more concentrated in the rural areas where the main occupation is farming (World Bank, 2007). According to the NLSS Report in 2011, 73.2% of the rural population are described poor compared to 61.8% in the urban area. In the Southwest, the poverty incidence stood at 49.8% in 2010 with Ogun State having the highest incidence (69%) in the zone (NBS, 2011). There are evidences that the farming households are poorer among the rural poor. For instance, Olaniyan and Bankole (2005) and Federal Office of Statistics (1999) revealed that the incidence of poverty was 72.3 and 64.4% in 1996 and 2004, respectively for Nigerian farming households while it was 58.0 and 59.2% for their non-farming counterparts, respectively.

It is interesting to note that credit has been advocated as a poverty alleviation measure (Boomgard, 1989). It enhances the capacity for investment resulting to increased output and income which ultimately leads to improvement in welfare, food security and poverty alleviation among the farming households. Limited availability of credit services has undermined rural income activities due to lack of capital for investment as credit is a necessary input in the various aspects of farm operations. In Nigeria, as in most developing countries, lack of credit facilities has been regarded as the major constraint farmers face when they try to improve their economic activities and/or living conditions (Agbor, 2004; Binswanger *et al*., 1993). However, even when available, credit is difficult to access by farmers in the rural area despite that it is an essential input in production. Peradventure farmers are fortunate enough to have access to credit; there is a wide gap between the amount requested and the amount granted.

Therefore, this study will provide useful information on the credit constraint status of smallholder farming households, factors influencing their credit constraint conditions and the correlates of poverty among smallholder farming households in Nigeria.

Objectives of the study: The main objective of the study is to examine the credit constraint condition and rural poverty among smallholders farming households in Southwest Nigeria. The specific objectives are to:

- Examine the credit status of the smallholder farming households in Southwest, Nigeria
- Determine the factors influencing credit constraint condition of smallholder farming households
- Estimate the poverty status of the smallholder farming households
- Determine the correlates of poverty among the smallholder farming households

MATERIALS AND METHODS

Area of study: This study was carried out in Southwest Nigeria. Southwest is one of the six geopolitical zones in Nigeria. It falls on latitude 6° to the North and latitude 4° to the South while it is marked by longitude 4° to the West and 6° to the East. It is bounded in the North by Kogi and Kwara States in the East by Edo and Delta States in the South by Atlantic Ocean and in the West by Republic of Benin. The climate is equatorial with distinct wet (rainy) and dry seasons with relatively high humidity. The dry season lasts from November to March while the wet season starts from April and ends in October. The mean annual rainfall is 1480 mm with a mean monthly temperature range of 18-24°C during the rainy season and 30-35°C in the dry season. Southwest Nigeria covers approximately an area of 114,271 km^2 that is approximately 12% of Nigeria's total land mass and the vegetation is typically rainforest. The total population is 27,581,992 as at 2006 and the people are predominantly farmers. The

climate in the zone favours the cultivation of crops like maize, yam, cassava, millet, rice, plantain, cocoa, kola nut, coffee, palm produce, cashew, etc. The zone comprises six states namely: Ekiti, Lagos, Ogun, Ondo, Osun and Oyo States.

Sources of data: This study was based on primary data collected through the use of structured questionnaire from a cross-section of smallholder farming household heads. Data collected included demographic characteristics of the household heads; socio-economic, living standard and farm-specific variables as well as expenditure variables.

Sampling procedure: A multistage sampling technique was used to select representative smallholder farming households for the study. The 1st stage involved the random selection of two states (Ondo and Ogun State) from the six states in the Southwest zone. In the 2nd stage, 4 agro-ecological zones (two from each state) were selected while in the 3rd stage, two Local Government Areas (LGAs) each were selected from the four agro-ecological zones. The 4th stage involved random selection of four villages from each LGA. In the final stage, ten farming households were randomly selected from each village. Therefore, a total of 320 smallholder farming households were sampled but as a result of inappropriate completion of twenty questionnaires, a total of 300 farming households were used for the study.

Analytical technique: Various analytical techniques such as descriptive, Probit regression model, the Foster *et al.* (1984) class of poverty measures (FGT) and the logistic regression model were used in this study. The descriptive statistics included frequency, means, percentages, tables and standard deviation.

The Probit Regression Model: Probit Regression Model was used to determine factors influencing credit constraint condition of farming households. If Y_i is the random variable (dichotomous), it can then be assumed that Y_i takes on the values 0 or 1, where 0 denotes the non-occurrence of the event in question and 1 denotes the occurrence. If X_1,....., X_n are characteristics to be related to occurrence of this outcome then the model specifies that the conditional probability of event (i.e., Y = 1) given the values of X_1,.....,X_n is as follows:

$$P(Y) = 1/[1 + \exp - (\alpha - \Sigma\beta_i X_i) \quad (1)$$

Where:

Y_i = 1 if success, i.e., respondent has access to credit

Y_i = 0 if failure, i.e., if respondent did not have access to credit

α = Constant term

X_i = Independent variable

β = Coefficient for independent variable

The independent variables specified as determinants of credit constraint condition are: X_1 = Gender (1 = male, 0 otherwise), X_2 = Age (years), X_3 = Marital status (1 = Married, 0 otherwise), X_4 = Household size (number), X_5 = Main occupation (1 = farming, 0 otherwise) X_6 = Off-farm activities (1 = yes, 0 otherwise), X_7 = Membership of farmers' group (1 = Yes, 0 otherwise), X_8 = Years of cassava farming experience (years), X_9 = Land area cultivated, X_{10} = Years of education.

The FGT poverty measure: The FGT poverty measure was used to analyze poverty level of the farming households. The FGT is presented:

$$P_\alpha = \frac{1}{n}\sum_{i=1}^{q}\left[\frac{Z - y}{Z}\right]^\alpha \quad (2)$$

Where:

Z = The poverty line defined as 2/3 of mean annual per capita expenditure

Y = The annual per capita expenditure poverty indicator/welfare index per capita

q = The number of poor households in the population of size n

α = The degree of poverty aversion

Here $\alpha = 0$ is the Headcount index (P_0) measuring the incidence of poverty (proportion of the total population of a given group that is poor, based on poverty line). $\alpha = 1$ is the poverty gap index measuring the depth of poverty that is on average how far the poor is from the poverty line; $\alpha = 2$ is the squared poverty gap measuring the severity of poverty among households that is the depth of poverty and inequality among the poor.

The poverty line: This is a pre-determined and well defined standard of income or value of consumption. In the study, the line was based on the expenditure of the households. Two-third of the mean per capita expenditure was used as the poverty line. The Mean Per Capita Household Expenditure (MPCHE) was obtained by dividing the total of all individual household per capita expenditure by the number of households surveyed:

$$\text{Per Capita Expenditure (PCE)} = \frac{\text{Total expenditure}}{\text{Household size}} \quad (3)$$

While Mean per Capita Household Expenditures (MPCHE) are:

$$MPCHE = \frac{\text{Total household PCE}}{\text{Total number of households}} \quad (4)$$

The categorization of the poverty line is given as:

- Extreme poor; those spending <1/3 of MPCHE
- Moderately poor; those spending <2/3 of MPCHE
- Non-poor; those spending >2/3 of MPCHE

The Logistic Regression Model: In order to explore the correlates of poverty with the variables thought to be important in explaining poverty, a Logistic Model was estimated with dependent variable being the dichotomous variable of whether the household is poor (1) or not poor (0).

If Y_i is the random variable (dichotomous), it can then be assumed that Y_i takes on the values 0 or 1 where 0 denotes the non-occurrence of the event in question and 1 denotes the occurrence. If X_1,....., X_n are characteristics to be related to occurrence of this outcome then the logistic model specifies that the conditional probability of event (i.e., Y = 1) given the values of X_1,.....,X_n is as follows:

$$P(Y) = 1/[1 + \exp - (\alpha - \Sigma\beta_i X_i) \quad (5)$$

In order to linearize the right hand side a logit transformation was applied by taking logarithm of both sides, therefore researchers have:

$$\text{Logit } P(Y) = \alpha + \Sigma\beta_i X_i \quad (6)$$

Where:

Y_i = 1 if success, i.e., if household is poor
Y_i = 0 if failure, i.e., if household is not poor
α = Constant term
X_i = Independent variable
β = Logistic coefficient for independent variable

The independent variables considered important in the analysis are: X_1 = Gender (1 = Male, 0 otherwise), X_2 = Age (years), X_3 = Household size (number), X_4 = Primary occupation (1 = Farming, 0 otherwise) X_5 = Off-farm income (1 = Yes, 0 otherwise), X_6 = Membership of farmers' group (1 = yes, 0 otherwise), X_7 = Credit constraint (1 = yes, 0 otherwise), X_8 = Crop yield (ton/ha), X_9 = Land area cultivated, X_{10} = Years of education.

RESULTS AND DISCUSSION

Socio-economic and demographic characteristics of the respondents: Table 1 shows the socio-economic and demographic characteristics of the respondents. From Table 1, most of the farmers are male constituting 69.33% of the respondents interviewed while 30.67% are female. This implies that majority of the farmers are male in the study area. The mean age of the respondents was 44.63. The distribution of age showed that most farmers (66%) fall within the age group of 30 and 49 indicating that most of the farmers in the study area are still in their productive age.

About 53% of the farmers in the study area had no formal education, 31.33% had primary education while 13.33% had secondary education and only 2% of the farmers had a post secondary education. This implies that the farmers in the study area had low literacy level which may have effect on their credit constraint condition. About 72% of the farmers in the study area are married with a mean household size of about 9 people per family. About 76.67% of the farming households had 5-12 persons in their households. The mean years of farming experience is 16.83 years. About 41% of the farmers in the study area had between 11 and 20 years of farming experience. Table 1 also revealed that 84.67% of the farming households had contact with extension agents.

The credit status of the respondents: Table 2 shows the credit status of the farming households in the study area.

Table 1: Socio-economic characteristics of the respondents

Variables	Frequency	Percentage	Mean±SD
Gender			
Male	208	69.33	
Female	92	30.67	
Age			44.63±11.39
<30	26	8.67	
30-39	68	22.67	
40-49	130	43.33	
50-59	48	16	
≥60	28	9.33	
Education			
No formal	160	53.34	
Primary	94	31.33	
Secondary	40	13.33	
Post secondary	6	2	
Household size			8.58±1.94
1-4	60	20	
5-8	122	40.66	
9-12	93	31	
>12	25	8.33	
Years of experience			
0- 10	108	36	16.83±123.45
11-20	122	40.67	
>20	70	23.33	
Extension agent contact			
No	46	15.33	
Yes	254	84.67	

Field study, 2011; SD = Standard Deviation

Table 2: The credit status of the respondents

Credit status	Frequency	Percentage
Southwest		
Constrained	206.0	68.67
Unconstrained	94.0	31.33
Ogun State		
Constrained	107.0	71.33
Unconstrained	43.0	28.67
Ondo State		
Constrained	99.0	66.00
Unconstrained	51.0	34.00

Field study, 2011

From Table 2, about 69% of the farming households in Southwestern Nigeria are credit constrained while about 31% are unconstrained. Comparing the two states involved in the study, Ogun State is more credit constrained with 71.33% of the farming household being constrained compared to 66% of the households in Ondo State. This implies that majority of the farming households in the Southwest Nigeria are credit constrained.

Factors affecting credit constraint condition of the farming households: Table 3 shows the results of the Probit Model employed in determining the factors affecting the credit constraint condition of the farming households in the study area. The result showed that out of the 10 variables included in the model, only 5 variables significantly influenced the credit constraint condition of the farmers. These include: Gender, age, level of education, off-farm income source and membership of farmers' association. The marginal probability indicates the effect of one unit change in the independent variable on the probability that the farming households will be credit constrained.

The gender of the farming household head was found to significantly influence credit constrained condition at 5% level of significance. The coefficient of the gender variable is 0.0929 but negative. This implies that males are associated with reduced level of credit constraint condition compared to their female counterpart. Another significant variable is age. Age was significant at 10% with a coefficient of 0.0029. This indicates that the older the farmers become the higher the likelihood of being credit constraint. This might be due to the fact that the younger farmers are more agile, innovative to new technologies and income generating activities. A unit increase in the age of the farmer will increase the probability of being credit constraint by 0.0029.

Education was found to be statistically significant at 1% with a negative value of 0.0197; 1% increase in the educational status will decrease the probability of the farmer being credit constraint by 1.97%. Off farm income is also significant at 10% but with a negative coefficient. This implies that 1% increase in off-farm income will decrease the probability of the farmer being credit constraint by 11.76%. In the same vein, membership of farmers' group has a negative coefficient and statistically significant at 5%. This implies that being a member of farmers' group reduces the probability of being credit constraint.

Table 3: Determinants of credit constraint condition among farming households

Variables	Estimated coefficient	Marginal probability
Sex	-0.1354	0.0310
Age	0.0029	0.0734
Marital status	0.1569	0.2042
Household size	0.0262	0.3381
Level of education	-0.0197	0.0064
Primary occupation	0.0323	0.1458
Off-farm income	-0.1176	0.0643
Farmers' group membership	-0.0205	0.0790
Years of farming experience	-0.1364	0.3134
Farm size	0.0097	0.6311
Constant	-0.6597	0.0783

Field study, 2011

Table 4: Household monthly expenditure profile among farming households

Items	Mean monthly expenditure	Percentage of total expenditure
Food	14248.53	53.6
Clothing and footwear	2286.14	8.6
Health and medicare	1275.99	4.8
Education	850.66	3.2
Fuel and Lightning	1594.98	6.0
Remittances	1701.32	6.4
Transportation	1834.23	6.9
Rent	1249.40	4.7
Others	1541.82	5.8
Total expenditure	26583.07	100.0
Mean Per Capita Household Expenditure (MPCHHE)	4743.49	
Moderate poverty line (2/3 MPCHHE)	3162.33	
Extreme poverty line (1/3 MPCHHE)	1581.16	

Field study, 2011

Household poverty status: The summary statistics of the households' monthly expenditure profile on food and non-food items is as shown in Table 4. Household per capita expenditure was used as proxy for income to overcome the possibility of overstated or understated income (Shaffer, 1998). From Table 4, food which is a basic necessity represents 53.6% of the total mean per capita expenditure. Clothing is next in priority, followed by transportation while education accounted for the least percentage of household expenditure. The poverty line as specified in the methodology was used to define the poverty status and classify the farmers into poor and non-poor groups. The mean monthly per capita household expenditure was ₦4743.49 (Nigerian Naira) while the moderate poverty line was ₦3162.33 and the core/extreme poverty threshold was put at N1581.16.

Profile of poverty among farming households: Table 5 shows the distribution of farmers falling into each of the

Table 5: Poverty profile of the respondents

	Non poor		Moderately poor		Core poor	
Credit status	Frequency	%	Frequency	%	Frequency	%
All						
Constrained	60	29.61	68	32.52	78	37.86
Unconstrained	52	55.32	26	27.66	16	17.02
Ogun						
Constrained	23	21.50	40	37.38	44	41.12
Unconstrained	22	51.16	13	30.24	8	18.60
Ondo						
Constrained	27	27.27	32	32.32	40	40.40
Unconstrained	30	58.82	15	29.41	6	11.77

Field study, 2011

mutually exclusive welfare groupings. In Southwest Nigeria, about 45% of the credit unconstrained households fall below the poverty line compared to about 71% of their constrained counterparts. Among the constrained farmers, 37.86% are core poor and 32.52% are moderately poor while 29.61% are non-poor compared to 17.02, 27.66 and 55.32% for core poor, moderately poor and non-poor, respectively among their unconstrained counterparts. In Ogun State, 48.84% of the credit unconstrained households are poor compared to 73.50% of their constrained counterparts while in Ondo State, 39.21% of the unconstrained households are poor compared to 72.72% of their constrained households counterparts. This implies that credit constraint increases poverty.

The correlates of poverty: Table 6 presents the correlates of poverty in the study area. Gender, age, household size, educational level, off-farm income source, farm size and credit constraint were identified to be significant in explaining poverty status of the households.

The age of the farmer is significant at 1% and has a negative sign. This implies that the older the farmer, the lower his probability of being poor. This may be attributed to the lower dependency ratios whereby the dependants tend to search for lucrative off-farm jobs as the household head is aging. The coefficient is 0.0178 which means that a unit increase in age of the farmer will reduce the likelihood of poverty by 0.0178. Gender of the household head is positively significant at 5%. This implies that being a female-headed household increases the probability of being poor.

Education is significant at 5% with a negative sign. This implies that the more educated a farmer is, the less the likelihood of being poor, this is due to the fact that education enlightens the farmer with regards to farming activities. The farming household's size increases poverty significantly at 5%. A farming household with large size have high level of poverty. A unit increase in the household size will increase the probability of being poor significantly by 0.0610.

Table 6: The correlates of poverty among farming households

Variables	Coefficient	Standard error
Sex	0.6575**	0.2758
Age	-0.0178***	0.00147
Household size	0.0610**	0.0276
Education	-0.3290**	0.1329
Primary occupation	0.0151	0.0837
Off farm income	-0.1889*	0.0972
Farmers' group membership	-0.1128	0.2773
Farm size	-0.3308**	0.1410
Credit constraint	0.0154**	0.0069
Yield	-0.0013	0.0018
Constant	-0.1209**	0.0496

Field study, 2011; *, **, *** represent 10, 5 and 1%, respectively

Having off-farm income source reduces the likelihood of being poor significantly at 10%. The result shows that off farm income source reduces the likelihood of being poor by 0.1889. Finally, the regression coefficient of credit constraint condition is 0.0154 and its significant at 5%, this implies that being credit constraint increases the likelihood of being poor by 0.0154.

CONCLUSION

This study examined credit constraint condition and rural poverty among small holder farming households in Southwest Nigeria. The study revealed that majority of the respondents are credit constrained and the farming households' credit constraint condition is significantly influenced by gender, age, level of education, off-farm income source and membership of association. Poverty incidence is higher among the credit constrained households compared with their unconstrained counterparts and poverty is significantly influenced by gender, age, level of education, household size, level of education, off-farm income source, membership of association, farm size and credit constraint.

RECOMMENDATIONS

Based on the findings of this study, the following are recommended: Factors that significantly influenced credit constraint condition such as education, membership of association and participation in off-farm activities should be encouraged among the farming households.

Gender differences with respect to credit constraint should be critically checked. Extending credit to women will not only accelerate production in agricultural sector but also, improve rural livelihood and reduce poverty.

Women should be encouraged to form their own credit and saving groups and take new viable economic forms of income generation.

Factors that significantly influenced poverty negatively such as education, membership of association and participation in off-farm activities should be encouraged among the farming households.

The government in collaboration with various Non-Governmental Organisations (NGOs) should consider the possibility of establishing a specialised credit institution to cater for specific credit and saving needs of the small holder farmers.

REFERENCES

Agbor, R.A., 2004. An impact assessment of cameroon gatsby trust Micro-credit Scheme in the Mile Four District, Cameroon. Report of International Project Management for NGOs, Participants Learning, December, 2004, Sweden.

Binswanger, H.P., S.R. Khandker and M. Rosenzweig, 1993. How infrastructures and financial institutions affect agricultural output and investments in India. J. Dev. Econ., 4: 337-366.

Boomgard, J.J., 1989. Taking stock of A.I.D Micro-enterprise portfolios: Synthesis Report. Development Alternatives and Robert R. Nathan Associates, Washington, D.C.

Chauhan, B.R., 1990. Rural-Urban Articulations. A.C. Brothers, Etawah, Uttar Pradesh, India.

Dicken, P., 2007. Global Shift: Mapping the Changing Contours of the World Economy. 5th Edn., SAGE Publications Inc., London, California, New Delhi.

EFInA, 2008. Access to financial services in Nigeria: Key findings. National Survey, Enhancing Financial Innovation and Access, EFInA, Lagos, Nigeria.

Federal Office of Statistics, 1999. Poverty Profile for Nigeria, 1980-1986. Federal Office of Statistics, Lagos, Nigeria.

Foster, J., J. Greer and E. Thorbecke, 1984. A class of decomposable poverty measures. Econometrica, 52: 761-766.

IFAD, 2001. Rural Poverty Report 2001: The Challenge of Ending Rural Poverty. IFAD by Oxford University Press, New York, USA., ISBN-13: 9780199245079, Pages: 266.

Iqbal, F., 1986. The Demand and Supply of Funds Among Agricultural Households in India. In: Agicultural Households Models: Extensions, Applications and Policy, Squire, S.L. and J. Strauss (Eds.). John Hopkins University Press, Baltimore.

Klein, B., R.L. Meyer, A. Hannig, J. Burnett and M. Fiebig, 1999. Better practices in agricultural lending. FAO, GTZ Agricultural Finance Revisited (AFR) No. 3. Rome.

NBS, 2011. Nigeria poverty profile 2010 report. http://reliefweb.int/report/nigeria/nigeria-poverty-profile-2010-report.

Nagarajan, G., R.L. Meyer and L.J. Hushak, 1998. Demand for agricultural loans: A theoretical and econometric analysis of the philippine credit market. Savings Dev., 22: 349-363.

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 J. Sci. Technol., 3: 180-183.

Ogundari, K. and S.O. Ojo, 2007. Economic efficiency of small scale food crop production in Nigeria: A stochastic frontier approach. J. Soc. Sci., 14: 123-130.

Olaniyan, O. and A. Bankole, 2005. Human capital, capabilities and poverty in rural Nigeria. Being an Interim Research Report Submitted to the African Economic Research Consortium (AERC), Nairobi for the Second Phase Collaborative Poverty Research Project.

Shaffer, P., 1998. Gender, poverty and deprivation: Evidence from rebublic of guinea. World Dev., 26: 2119-2135.

Von Pischke, J.D. and D.W. Adams, 1980. Fungibility and the design and evaluation of agricultural credit projects. Am. J. Agric. Econ., 62: 719-726.

World Bank, 2007. World development report 2008: Agriculture for development. World Bank, Washington, D.C., http://www.ukfg.org.uk/docs/wdr2008.pdf.