

Effect of Social Capital and Access to Microcredit on Productivity of Arable Crop Farmers in Kwara State, Nigeria

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Abstract: *This study examined the effects of social capital and access to micro credit on productivity of arable crop farmers in Kwara State, Nigeria. A multistage sampling technique was employed for the collection of data from 150 households in two local government areas (LGAs) of the state using probability proportionate to size of the LGAs. Data analyses were carried out using descriptive statistics, and regression analysis. Average age of farmers stood at 45±11.9 years, household size of 6.0±3.1 with 84 percent been educated. Different credit sources available to farmers were banks, cooperative societies, local money lenders, government agency, friends and family in decreasing order of importance. Analysis of social capital and access to credit on the arable crop farmers' productivity revealed that active participation in decision making and credit time lag actually decreased productivity. Moreover, result of the existence of bi-directional causality with the aid of instrumental variable showed improvement in the adjusted R² from 0.2015 to 0.238 compared to the use of aggregate social capital index. The study concludes that social capital and access to credit have positive influence on productivity and is an important factor in improving the income of members of local institution.*

Keywords: *Arable crop farmers, Credit access, Kwara State, Productivity, Social capital.*

I. Introduction

Agriculture is considered by many as the “key driver for mass poverty reduction and rural development for most of the developing world” [1]. An important feature of the agricultural sector is its ability to directly meet tangible, basic human needs. In Africa, this sector's connection to development is undisputed. For many African economies, agriculture is the largest contributor to the economic base and is typically also its largest employer. A foundational key to most developing, industrializing economies is an efficient and productive agricultural sector. A crucial economic challenge facing Africa is rooted in this sector's underdevelopment. Its failure was, and continues to be, related to the “failure to invest in the productivity of its farmers” [2].

It is generally agreed among researchers and policy makers that the poor rural households in developing countries lack adequate access to credit. This lack of adequate access to credit is believed, according to [3], to have significant negative consequence for various aggregate and household - level outcomes, including; technology adoption, agricultural productivity, food security, nutrition, health and overall household welfare. The availability of credit allows both greater consumption and greater purchased input use, and thus increases welfare of the farmers [4]. The availability of microcredit, broadly defined as the provision of financial services such as savings and credit to the poor household is a necessary but not sufficient condition for rapid poverty reduction.

Nevertheless, microcredit can play an important role. One element of an effective strategy for poverty reduction is to promote the productive use of farm inputs. This can be done by creating opportunities for raising agricultural productivity among small and marginal farmers. Microcredit is particularly relevant to increasing productivity of rural economy, especially agriculture. In an environment where economic growth is occurring, microcredit also has the capacity to transmit the benefits of growth more rapidly and more equitably through the informal sector. It is well documented that for many small scale farmers, lack of access to financial services is a critical constraint to the establishment or expansion of viable agricultural enterprises. Microcredit may enable small and marginal farmers purchase the inputs they need to increase their productivity, as well as financing a range of activities adding value to agricultural output.

Social capital, which is defined by [5], stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures, is becoming a critical factor (input) in understanding differences in economic outcome. As social interactions intensify, and as social links and social arrangements improves and diversify, social capital also increases. On the other hand, social capital decreases when social interaction is suppressed, causing the disintegration of social links and the petrification of social arrangements. This perspective allows researchers and analyst to treat social capital in much the same way as human or financial capital, i.e. development resource that can grow, diminish, or totally consumed.

Arable crop farmers like other farmers and small scale enterprise are often plagued with the problem of inadequate capital to run their enterprises which may be as a result of the informal nature of their businesses. Statistics attest that the demand for microfinance financial services remain largely unmet [6,7&8]. This will

undermine the first Millennium Development Goal (MDG) on the eradication of extreme poverty and one of the reasons is incomplete information equilibrium in the markets [9]. Social Capital is vital for starting-ups and growing of firms and entrepreneurs. One of the factors contributing to informational uncertainties includes inability of the poor to provide credit on the basis of social collateral through which the social networks to which they belong replace physical collateral. Most farmers in Nigeria operate on a small scale. The government in an attempt to boost agricultural production had set up various financial houses to make loan available to farmers in 2006 fiscal year. Farmers in the rural area find it difficult to access this credit due to lack of access [10].

Thus, a perceived alternative for raising financial capital needed for transforming the available natural resources in this area to physical assets is through the construction of social capital. This includes benefit accrued to individual by virtue of membership and participation in groups and group activities [11]. It has now become pertinent to examine the effects of social capital and access to microcredit on productivity among arable crop farmers in Kwara state, Nigeria. In order to achieve this, the study attempts to answer the following research questions;

- does social capital and access to credit positively affect arable crop farmers' productivity?
- is there any bi-causal relationship between social capital and productivity of arable crop farmers?

The study of social capital as an input in understanding differences in economic outcome is very topical and has been addressed by many scholars in Nigeria and elsewhere. In Nigeria studies like [12,13,14,15,16] have empirically shown that social capital as an input, has positive effect on the standard of living but none has ever addressed the issue of productivity. Studies have also been carried out to assess agricultural productivity and its driver in Nigeria, which include: [17,18,19,20] to mention but a few, none has ever addressed productivity within the context of social capital and micro credit. This study will therefore answer the above research questions by;

- determining whether social capital and access to credit positively affect arable crop farmers' productivity in the study area.
- examining if there is a bi-causal relationship between social capital and productivity of arable crop farmers.

[21] examined the contribution of social capital to Banana/Plantain production in Irewole Local Government Area of Osun State, using a multistage sampling technique to select 110 respondents for the study. Chi square analysis shows that gender, marital status, age, religion, household size, farm size and years of experience were all statistically significant ($P < 0.05$) contributions of social capital, while the result of regression analysis shows that age, education status, farm size and household size make significant contribution to farmers' income. The study therefore recommends encouragement of social capital to complement the scarce financial capital, available human and physical capital for enhanced food production.

[15] examined the determinants of credit access and bi-causal relationship between social capital and credit access among cocoa farming households in Osun State, Nigeria. Using a multistage sampling procedure, one hundred and fifty respondents were selected. Result of descriptive statistics and tobit regression revealed an average household size of 8, belonging to at least three associations with an average age of 56. The mean credit amount accessible to a farmer was found to be ₦ 70,692, with 64% having access to credit. Cocoa farming households have meeting attendance index of 75.52% and decision making index of 6.40% in the association. Index of heterogeneity has 56.30% in the association, while cash and labour contribution were 15.04% and 12.23% respectively, with aggregate social capital index of 25.81%. A unit increase in social capital would increase credit access by 0.36%. A unit increase in household size would decrease credit access by 0.99% while unit increase in years of experience, amount of credit requested, availability of collateral and cash contribution in association increases credit access. Social capital was truly exogenous to credit access with no reverse causality. The study concludes that social capital positively affects credit access, though poor decision making and cash contribution in association however affected their credit access.

[16] examined the effect of social capital on access to credit among cassava farming households (CFHs) in Ogun State, Nigeria. One hundred and twenty CFHs were surveyed using a multi-stage sampling technique. Social capital dimensions considered are density of membership index, cash contribution index, labour index, decision making index, meeting attendance index, and heterogeneity index and the obtained indices were 49.5%, 35.5%, 51%, 57.3%, 55.1%, and 48.3% respectively. Some 44.2% and 35% of respondents' sourced capital from personal savings and rotating savings & credit associations respectively, the mean credit granted represents 45.5% of CFHs' credit needs. Logistic regression analysis of access to credit revealed that increasing values of decision making index, age, and payback period correspond to increasing odds of having access to credit. Conversely, increasing values of heterogeneity index and household size correspond to decreasing odds of having access to credit. Policy directed at investment in social capital development that enhances access to credit is recommended.

II. Material and Methods

2.1 Area of Study

The study was carried out in Kwara state (North-Central Nigeria), it lies between Longitude 8⁰ 30' North and Latitude 5⁰ 00' East and it is bounded in the west by Benin Republic, in the North by Niger State, Kogi State to the East and Ekiti, Osun and Oyo States to the South. The State has a land mass of 32,500km² with an estimated population of 2,371,089 [22] made up four major ethnic groups (Yoruba, Nupe, Fulani and Baruba) which spread across sixteen local government areas. There are two main seasons, the dry and wet seasons with an intervening cold and dry harmattan period usually experienced from December to January. The natural vegetation consists of broadly rainforest and wooded savannah. The landforms consist of undulating hills, valleys and plains which are traversed by the Niger River and its tributaries. Annual rainfall ranges from 1000-1500mm while average temperature ranges between 30⁰C and 35⁰C. With this climatic pattern and sizeable expanse of arable and rich fertile soil, the vegetation which is mainly wooded savannah is well suited for the cultivation of a wide variety of food crops like yam, cassava, maize, beans, rice, sugarcane, fruits and vegetables.

2.2 Sampling technique and data collection method

Multistage sampling procedure was employed to obtain relevant data from arable crop farmers in the area. The first stage was the random selection of two local government areas in the state; the second stage was the random selection of three villages from each of the local government areas, while the last stage was the selection of arable crop farmers from the local government based on probability proportion to sizes. The proportionality factor used in the selection is stated as follows:

$$X_i = n/N * 200 \dots\dots\dots(1)$$

Where n= number of farmers in a particular local government area

N= Total number of farmers in the two local government areas

In all, a total of two hundred (200) farmers were interviewed. However, only one hundred and fifty have meaningful response for analyses.

Table 1: Sampling procedure for the selection of farmers

LGAs	Villages	Population of arable farming household	No of questionnaire distributed	No of questionnaire retrieved and completely filled
Ekiti	Abuja	175	84	68
	Etan			
Irepodun	Ibare/ Eruku	251	116	82
	Owode			
	Olomi			
	Ijan/ Agbamu	426	200	150

Source: Field survey February 2012

Primary data collected from arable crop farmers with the aid of well-structured questionnaire includes demographic characteristics, social capital variables, type and sources of credit characteristics etc.

2.3 Method of data analyses

The analytical tools employed include: multiple regression (Ordinary least square regression and two stage least square regression).

2.3.1 Ordinary Least Square model

This was used in estimating the effect of social capital and access to microcredit on productivity of arable crop farmers. In relating social capital and access to microcredit to arable crop farmers' productivity, the customary or conventional model of household economic behaviour under constrained utility maximization relates the level of farmer productivity directly to the exogenous assets endowments of the household and variables describing the social and economic environment in which the farmer's make decision. In this study, a multiple regression model (Cobb Douglas functional form) that relates different crop yields to the household, credit and social capital variables is presented as shown in equation 2 below:

$$\ln P_i = a + \hat{X}_i + gQC_i + bSC_i + u_i \dots\dots\dots(2)$$

Where P = arable crop farmer's productivity measured as value of crop per hectare following [23,24].

a = intercept or regression constant

X_i = vector of household characteristics

QC_i = vector of household credit variables

SC_i= vector of social capital variables

u= error terms

the explanatory variables were in line with [15,25,26,16]

Socioeconomic variables

X₁ = Sex of crop farmers (1=Male; 0 = Female)

X₂ = Age of arable crop farmers (years)

X₃ = Household size (number)

X₄ = Years of formal education (years)

X₅ = Marital status (1= married; 0= otherwise)

X₆ = Farming experience of arable crop farmer (years)

X₇ = Farm size (hectare)

Microcredit variables

X₈ = Interest on loan (%)

X₉ = Time lag (week)

Social capital index

X₁₀ = Meeting attendance index of household to association (%)

X₁₁ = Decision making index (%)

X₁₂ = Density of membership in association (%)

X₁₃ = Cash contribution index of household to association (%)

X₁₄ = Labour contribution index of household to association (%)

X₁₅ = Heterogeneity index of association (%)

2.3.2 Two-Stage Least Squares Regression (2SLS)

Two-stage least squares regression (2SLS) is a method of extending regression to cover models which violate ordinary least squares (OLS) regression's assumption of recursivity, specifically models where the researcher must assume that the disturbance term of the dependent variable is correlated with the cause(s) of the independent variable(s). Following literature on social capital [27,13,26,28], a two-stage least square regression was used to establish a bi-causal relationship between social capital and productivity. The method of instrumental variable was used, these are variables that are determinant of social capital but not farmers' profitability (nor are they determined by farmers' productivity). Variables which have been used in social capital literature [25] include trust, length of household residency in the community, charity contribution and membership in religious organization.

A structural model of the effect of social capital on productivity is defined in the equation below:

$$X_1 = \alpha_0 + \alpha_1 X_2 + \alpha_2 n_1 + \dots + \alpha_{nk-1} n_{k-1} + \mu_i \dots \dots \dots (3)$$

where:

X₁ = Level of productivity

X₂ = Explanatory variables for social capital

n₁ = Vector of exogenous variables

n_k is a variable not in (3) but exogenous

μ_i is the error term

Therefore a reduced form model for social capital (X₂) is specified as follows:

$$X_2 = \pi_0 + \pi_1 n_1 + \dots + \pi_{k-1} n_{k-1} + \pi_{2k} + V_2 \dots \dots \dots (4)$$

The variables x₁ and x₂ are endogenous variables to be determined within the model while the explanatory variables are both the exogenous and endogenous variables included in the model.

The explanatory variables which were in line with [26]:

X₁ = Sex (Male 1, 0 otherwise)

X₂ = Age (Years)

X₃ = Marital status (married 1, 0 otherwise)

X₄ = Household size (number)

X₅ = Years of formal education (years)

X₆ = Farming experience (years)

X₇ = Farm size (hectares)

X₈ = Interest charged (%)

X₉ = Time lag (Weeks)

S₁ = Aggregate social capital (%)

III. Results and Discussion

3.1 Socioeconomic Characteristics of the farmers

As shown in Table 2, the age of arable crop farmers in relation to different sources of microcredit in the study area were presented. The Table shows that majority of the farmers (33.3%) were within the age bracket of 41-50 years, 7% were equal to or less than thirty 30 years of age, while 32.7%, 16.7% and 10.7% were in the age group 31-40 years, 51-60 and above 60 years respectively. However, the mean age which tallies with [13,16] were 45 ± 11.9 years. This is an indication that a greater percentage of sampled farmers were in their active age. The fact that friends and family offers the highest percentage of credit access to farmers in the age range 31-40 is as a result of the informal nature of the credit source with little or no bureaucratic procedure. The Table reveals that almost half (48%) of the sampled farmers have household sizes of 4-9 members. Moreover, 38.0% of the sampled farmers have household size 1-3, while only 14% have household size greater than nine (>9) members. Average household size was found to be 6.0 ± 3.1 and is in agreement with [13,16]. The implication of this is that as the size of household increases, more members were made available for family labour thereby curtailing expenses on hired labour, it also reduces time wasting in looking for hired labour.

The level of educational attainment of an individual may indicate productivity potential in both farming and non-farming enterprises [29]. The more educated an individual is, the more effective and efficient he/she is in both farming and non-farming enterprises and the more the income earned. The number of years of formal education is known to influence the attitude, value exposure and opportunities of individual. The result of educational status of arable crop farmers in Table 2 reveals that 42.0% of the farmers completed tertiary education, 31.3% completed secondary education, and 16.0% had no formal education, while 10.7% completed primary school. Educational level with respect to credit access reveals that with the exception of local money lenders, farmers with tertiary education have highest percentage of credit access. This will be so because the ability of writing application, meeting other paper requirement and been able to provide collateral will not constitute a serious problem. The fact that 42% of arable crop farmers have tertiary education is in contrast to findings of [13,15,16].

Gender of arable crop farmers was presented in Table 2. The result shows that majority of the farmers (73.3%) were male headed while the rest (26.7%) were female headed. However, result shows that female headed households have their majority benefiting from cooperative societies (27.8) and the least from governmental agency (15.4%) credit sources. The result shows the part linear nature of African societies that give men more access to the properties that can be pledged for more than women. The table also reveals that 87.3% of the arable crop farmers were married and have more access to formal credit sources (Bank 83%, cooperative societies 91.7 and Government agencies 92.3 while 12.7% were single with more access to informal credit sources (local money lender 86.7% and friends and family 88.9%). Cultural practices and socio-economic environment contribute to making married people to be tagged responsible and so respected in society.

Table 2: Socio economic characteristics of food crop farmers in the study area.

Variables	Bank (%)	Cooperatives (%)	Government agency (%)	Local money lenders (%)	Friends and Family (%)	Pooled (%)
Age						
≤30	8.5	8.3	0	6.7	0	6.7
31-40	37.3	27.3	53.9	16.6	55.5	32.7
41-50	25.4	41.7	30.8	43.3	11.1	33.3
51-60	15.3	14.0	7.7	23.3	22.2	16.7
>60	13.7	8.3	7.7	10.0	11.1	10.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean	46.0	44.9	42.9	46.5	45.2	45.6
SD	13.0	11.2	10.0	11.7	12.6	11.9
Minimum	23.0	25.0	30.0	25.0	34.0	23.0
Maximum	76.0	76.0	69.0	76.0	64.0	76.0
Household size						
1-3	37.3	41.7	53.9	33.3	22.2	38.0
4-9	44.1	58.3	38.5	43.3	66.7	48.0
>9	18.7	0.0	7.6	23.3	11.1	14.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean	6.9	5.9	5.7	7.3	6.9	6.7
SD	3.3	2.0	3.0	3.8	2.4	3.1
Minimum	1.0	1.0	2.0	1	3.0	1.0
Maximum	18.0	9.0	13.0	18.0	10.0	18.0
Education level						
Non formal	15.2	16.7	7.7	20.0	0.0	16.0
Primary	11.9	5.6	7.7	13.3	22.3	10.7
Secondary	27.1	33.3	30.8	40.0	33.3	31.3
Tertiary	45.8	44.4	53.8	26.7	44.4	42.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean	10.4	10.3	9.7	9.1	9.7	10.0
SD	5.4	5.6	5.6	5.7	5.0	5.5
Minimum	0.0	0.0	0.0	0.0	2.0	0.0
Maximum	16.0	17.0	16.0	18.0	15.0	18.0

Sex						
Male	72.9	72.2	84.6	73.3	77.8	73.3
Female	27.1	27.8	15.4	26.7	22.2	26.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Marital status						
Married	83.0	91.7	92.3	13.3	11.1	87.3
Otherwise	17.0	8.3	7.7	86.7	88.9	12.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Field survey February 2012

3.2 Effect of social capital and access to credit on productivity of arable crop farmers

Table 3 shows the effect of social capital and access to credit on productivity of arable crop farmers in the study area. The basic model in the first column reveals that 18.6% of the variations in productivity of arable crop farmers were explained by socio-economic/demographic, credit and social capital variables. Age and household size significantly affect productivity at $p < 0.01$ and $p < 0.1$ respectively, a unit increase in age increases productivity by 0.86%. Implying that, as farmers advances in age, his/her experience increases and there is tendency for him/her to adopt technology that will increase production output. In the case of household size, large household being engaged in non-farming activities, significantly reduce the household productivity as they will eat into the resources that would have been put into agricultural production. This is in agreement with [13,14].

In the second column of the table, the multiplicative social capital variable was introduced. The inclusion of this variable led to slight improvement in the adjusted R^2 . Along with the socioeconomic/demographic variables, aggregate social capital index significantly influences arable crop farmers' productivity. The variables that significantly affect arable cropfarmers' productivity were household size ($p < 0.01$) credit time lag ($p < 0.1$) and aggregate social capital variables ($p < 0.1$). An increase in household size reduces farmers' productivity by 7.8% while a unit increase in credit time lag decreases farmers' productivity by 0.14. At mean social capital index of 16.22, the coefficient of the variables shows that a unit increase in social capital would increase farmers' productivity by 0.92 percent. [30] and [31] observed that social capital enhances productivity among crop farmers in the humid forest, dry savannah, and moist savannah agro ecological zones of Nigeria. This is likely due to the fact that social capital tends to promote membership welfare and reduce conflict which is important in enhancing productivity of farming household.

The third column of table 3 reveals the inclusion of six additive social capital variables. These are: density of household index, decision making index, cash contribution index, labour contribution index, meeting attendance and heterogeneity index. This new model has a better explanatory power as reflected in the adjusted R^2 of 0.253. This disaggregation shows that the effect of socio economic/demographic, social capital and credit access variables on productivity were traceable to household size ($p < 0.01$) decision making index ($p < 0.1$) and labour contribution index ($p < 0.01$). Result shows that active participation in decision making actually decreases arable crop farmers' productivity. Thus, high level of commitment to association can reduce productivity of farmers if the time he/she supposed to attend to farming activities were spent attending to association's matters. An additional member to household resulted in 7.7% reduction in farmers' productivity. This is the case when the additional member is not contributing to the labour need of arable crop farmers.

Table 3: Effects of social capital and access to microcredit on productivity of arable crop farmers

Variables	Basic		Multiplicative		Additive	
	coefficient	T-stat	coefficient	T-stat	coefficient	T-stat
Constant	4.7907	19.31***	4.9214	19.31	4.9282	13.78***
Sex	-0.0539	-0.54	-0.0407	-0.41	-0.0439	-0.43
Age	0.0086	1.80*	0.0075	1.58	0.0059	1.23
Marital status	-0.2060	-1.50	-0.2034	-1.49	-0.1799	-1.28
Household size	-0.0824	-4.92***	-0.0778	-4.64***	-0.0772	-4.59***
Years of formal education	0.0068	0.80	0.0085	1.00	-0.0007	-0.08
Farming experience	-0.0057	-0.90	-0.0045	-0.71	-0.0039	-0.63
Farm size	0.0255	0.75	0.0214	0.64	0.0360	1.09
Interest rate charged	0.0071	1.26	0.0078	1.38	0.0049	0.87
Time lag	-0.0121	-1.48	-0.138	-1.69*	-0.0119	-1.43
Social capital index			0.0092	1.93*		
Density of membership index					-0.0020	-0.94
Decision making index					-0.0049	-1.73*
Cash contribution index					0.0013	0.58
Labour contribution index					0.0063	3.26***
Meeting attendance					0.0063	0.22

index			
Heterogeneity index			0.0008
Number of observation	150	150	150
F- Statistic	4.78	4.76	4.37
R ²	0.235	0.2551	0.3285
Adjusted R ²	0.1858	0.2015	0.2533

Figures in parenthesis are t- values ***Significant at 1% and ** Significant at 5% and * significant at 10%

Source: Computed from field survey data 2012

3.3 Social capital and Household Productivity: Any Reverse Relationship?

Table 4 shows the result of existence of bi-directional causality with the aid of an instrumental variable. Using aggregate social capital index in Table 3, the social capital index was replaced by an instrumental variable index of trust. The result shows an improvement in the adjusted R² from 0.2015 to 0.238 without and with instrumental variables respectively. Furthermore, the instrumental variable model led to higher coefficient (0.0155) for the social capital index than in the OLS method where it was 0.0092. A reverse causality could have been accepted if there is no improvement or reduction in R² as well as reduction/lack of improvement in the instrumental variable. Since, there is improvement on both counts, one can infer the absence of significant reverse causality and thus confirms the exogeneity of social capital. A one unit increase in the level of instrumented social capital led to 1.55 percent increase in productivity of households. This is 0.63 percentage point higher than the value recorded for the OLS estimation. Other significant variables were household size p<0.01 and credit time lag at p<0.05 with improvement in their coefficients.

Table 4: Social capital: Instrumental variable estimation

Variables	Social capital without	Social capital with
	Instrument	instrument
	Coefficient	Coefficient
Constant	4.9214(19.31)***	5.7959(7.68)***
Sex	-0.0407(-0.41)	-0.0919(-0.69)
Age	0.0075(1.58)	0.0006(0.22)
Marital status	-0.2034 (-1.49)	-0.0981(-0.51)
Household size	-0.0778(-4.64)***	-0.0917(-4.04)***
Years of formal education	0.0085 (1.00)	0.0007(0.06)
Farming experience	-0.0045(-0.71)	-0.0239 (-1.61)
Farm size	0.0214(0.64)	0.0836(1.42)
Interest rate charged	0.0078(1.38)	0.0001(0.02)
Time lag	-0.138 (-1.69)*	-0.0174(-2.02)**
Social capital	-0.0092 (1.93)*	-0.0155(2.47)**
Number of observation	150	150
F- Statistic	4.76	3.46
R ²	0.2551	0.2764
Adjusted R ²	0.2015	0.238

Figures in parenthesis are t- values ***Significant at 1% and ** Significant at 5% and * significant at 10%

Source: Computed from field survey data 2012

IV. Conclusion and Recommendations

Provision of microcredit on a sustainable basis for the poor and low income groups in Nigeria is important in order to achieve the Millennium Development Goal of halving poverty. However, the size of the un-served market by existing financial institutions is large and one of the reasons adduced for this is incomplete information equilibrium in credit markets, which can be bridged by social capital due to its peer screening effects, peer monitoring effects and the peer collateral effects. The study proved that aggregate social capital index significantly affects the probability of members of networks obtaining micro credit. Disaggregating the social capital index, the variables that significantly influence probability of obtaining micro credit includes decision making index and labour contribution index.

The test of reverse causality between social capital and household productivity with the aid of instrumental variable estimation technique indicates that the direct effect of social capital on productivity outweighs the reverse effect in the explanation of the correlation between the two variables.

Education is seen to be a veritable tool in access to micro credit; therefore adult literacy should be encouraged among the farmers. The study reveals that credit time lag decreases access and hence productivity of farmers in the study area, it is therefore recommended that both private and government organization be involved in timely release of credit.

Social capital significantly influences the amount of credit available from different sources to arable crop farmers' productivity. It is therefore recommended that policy makers interested in improving the living condition of households should promote social capital.

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