SOCIAL CAPITAL DIMENSIONS AND ITS IMPLICATIONS ON POVERTY STATUS OF RURAL FARM HOUSEHOLDS IN ABIA STATE, NIGERIA

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ABSTRACT
The study examined the influence of social capital dimensions on poverty status of rural farm households in Abia state, Nigeria. Multistage random sampling technique was employed in collecting data from two hundred and four (204) rural farm households in local institutions using structured interview schedule. The data were analyzed using descriptive statistics, poverty indices, and tobit regression model. The result of social capital dimensions revealed that households belong to at least two associations and had 32.4% index of membership density. The percentage heterogeneity and decision making index were 50.78% and 77.82% respectively while percentage meeting attendance index of the households was 25.05%. The percentage Cash and labour contribution index were low with values of 25.05% and 25.60% respectively. The result of the poverty indicators of the rural farm households in local institutions showed that the poverty line (mean monthly household expenditure) of the farm households was ₦16, 259.80 per month or ₦195, 117.60 per annum. The incidence of poverty otherwise called the head count ratio was 0.6863 while the coefficient of poverty gap (poverty depth) was 0.4458. The tobit regression result of the social capital factors influencing rural farm household poverty revealed that the coefficients of cash contribution index, heterogeneity index and decision making index were negative and significant at 1.0% alpha level while the coefficient of membership index was positive and significant at 10.0% risk level. In terms of policy, the autonomous local institutions should be integrated into the current poverty alleviation programme of the government and making them channels for loan delivery with a view to strengthening the financial capacity of its members as well as achieving the Millennium development goals of reducing poverty by half.

Keywords: *Social capital, poverty, local institutions, farm households*

INTRODUCTION
Poverty is a phenomenon, as old as the history of the world, but which in recent times has assumed multifarious dimensions. It is a rural dilemma and continues to be a persistent multi-dimensional complex (Ezeh *et al*, 2012). Most of the world's poor are rural-based, suggestive of traditional or primary societies, or people living in the countryside, which may be remote, or isolated by any imaginable geographical description. Rural poverty is common in most of the developing countries and makes up to 75% of the poor in many sub-Saharan countries (Amalu, 2005). In fact, in Nigeria, the state of rural poverty is no less alarming with very sharp deterioration in the living standard of the people (Oladipo *et al*, 2011). He observed that the number of rural people living below the poverty line in Nigeria grew by 54% from 2004 to 2010.

Various factors have been identified as being responsible for poverty in Nigeria. The report by the World Bank Poverty Task Force in 2002 identified the following as the major causes of poverty in Nigeria and other African countries viz: Inadequate access to employment

opportunities, Inadequate physical assets such as land and capital, minimal access to credit, inadequate access to means of supporting rural development in poor regions, Inadequate access to market, Low endowment of human capital, Lack of participation in the design of development programmes.The effort to alleviate poverty traditionally in Nigeria was based principally on natural capital, physical or produced capital, human capital and financial capital (Ismawan, 2000). Together they constitute the wealth of nations and form the basis of economic prosperity (Dercon and Krishnan, 2001). The missing link in these four types of capital is social capital.

This is a concept which Gillinson (2004) described as the value of local networks and the ways in which they make lives more productive. It is the stock of shared understanding, norms, rules and expectations that groups bring to a recurrent activity which produces a flow of future income (Gatzweiller, 2002). In the views of Putnam (2000), social capital is the connections between individuals (in a group relationship) and the norms of reciprocity and trustworthiness that arise from them. Social capital in local groups, which is viewed in terms of active and critical participation by group members in group activities, confers organizational ability, which in turn confers strength and empowerment which are pre-requisites for taking action (Akpabio, 2005).

Despite the multiplicity of views about social capital, the consensus is growing in literature that social capital stands for the ability of actors to secure benefits by virtue of membership in social networks, groups or other social structures. Two empirical presumptions underlie this concept are norms and networks which are empirically associated, and these have important economic consequences. The key feature of social capital is that it facilitates coordination and cooperation for the mutual benefit of the members of the association. The most encompassing view of social capital includes the social and political environment that enables norms to develop and shapes the social structure.

A number of farmers come together with common (unifying) interest of improving their occupational operations and hence livelihood and form a group or institution within their village or community levels. The motivation and the unifying interest amongst members in such group suggest like-mindedness and potential to work for and even help each other absorb variability in personal income and other economic shocks.

Many of these traditional institutions and groups are social, others are economic while yet a good number serve both social and economic purposes in livelihood of their members. When the groups are social groups, they help in creating social capital which among other assets include; institutional identity, relationships within, members' attitudes, and values that govern interactions among them as a people. These contribute to economic and social development of the communities (Grootaert and Van Bastelaer, 2002). In the culture of some local institutions found in the eastern part of the country, they are characterized by some social dimensions like provision of food, healthcare services, credit facilities and day-care/primary education for children of members (Okeke *et al*, 2008). Within these communities abound cooperative groups, religious groups, mutual associations groups, Age grade groups and Fadama groups. The economic groups concern themselves with their mutual interest that revolve around solving problems of primary production and marketing of whatever is their products and services.

There is growing evidence that social capital can have an impact on development outcomes – growth, equity, and poverty alleviation. Associations and institutions provide an informal

framework to organize information sharing, coordination of activities, and collective decision-making. There is growing evidence that social capital is an element for sustainable development due to the role it plays in managing risks, shocks and opportunities. It therefore holds strong position to confront poverty and vulnerability, resolve disputes (Schafft and Brown, 2000) and share beneficial information (Rauch and Casella, 2003), crucial to understanding economic performance, reduces transaction costs, provides contract enforcement, enables credit constrained households access to funds, fosters adoption of new production technologies and more importantly, provides avenues for risk sharing (Isham, 2002).

Studies in Nigeria have shown that the poor derive more benefits from their membership of local associations compared with public instituted organizations. Besides, the effectiveness of the different organizations in alleviating poverty is well documented (World Bank/DFID, 2000). This study therefore aimed at achieving the following specific objectives: to describe the socioeconomic characteristics of rural farm households that are members of local institutions in Abia state, Nigeria; to examine the dimensions of Social capital in the study area; establish poverty profile (poverty incidence, poverty gap) of rural farm households in local institutions in the study area.; determine social capital factors affecting rural farm household poverty in the study area.

METHODOLOGY

The study was conducted in Abia state, Nigeria. The state is located within the Southeastern Nigeria and lies between longitudes 04^0 45' and 06^0 07' East of the Greenwich Meridianand Latitudes 07^0 00' and 08^0 10' North of the equator. The State is one of the Community Poverty Reduction Programme (CPRP) states, equipped with young and vibrant population who are largely homogeneous in socio psychological characteristics with a lot of farmers and local organizations and very strong in terms of popular grassroots organizations. Abia state is divided into 17 administrative blocks called Local Government Areas, which is grouped into three (3) agricultural zones namely, Ohafia, Umuahia and Aba zones. Its population stood at about 2,883,999 persons with a relatively high density of 580 persons per square kilometer (NPC, 2006). Agriculture is the dominant economic activity and main source of employment in the state providing employment and income for more than 70.0 per cent of the population. The people are predominantly farmers and have the potentials for the production of agricultural produce and products such as palm oil, cassava, vegetables, palm kernel, yam, rice and also engage in food processing (ABSG, 1992). The state has distinct wet and dry seasons, which characterize its humid tropical climate, with the dry season extending from November to March. The state has an annual mean temperature of about 27^0-30^0c and a relative humidity ranging from 70% to 80%, with January to march as the hottest months (ASEPA, 1996).

The study adopted a multistage random sampling technique in the selection of LGA's, local institutions and farm households. In the first stage, two Local Government Areas were selected randomly from each of the three agricultural zones of the state, thus giving a total of six LGA's. The second stage involved a random selection of two communities from each of the Local Government Areas, giving a total of 12 communities. From each of the chosen communities, a list of farmers' organization was obtained from the village secretaries who were the key informants. These formed the sampling frames for the farmers association from which samples of two farmers' organization were randomly selected in each of the selected communities, thus

giving a total of 24 farmers' organization. The last stage of sampling involved the random selection of ten farm households in each of selected farmers organization. In all, a grand total of two hundred and forty (240) households were sampled for the study, however, 204 respondents' interview schedules were found usable for analysis.

study employed primary data for its analysis which elicited information on membership to local groups/institutions, status/position of participating member(s) in the groups/institutions, benefits (income) of members from groups/institutions, consumption expenditure, contribution of members to groups/institutions. Six enumerators who administered the questionnaire by personal interview method were consistently used in generation of this information, two for each agricultural zone collecting the same data from the same farm households using the same semi-structured questionnaire.

The data collected were analyzed both descriptively and inferentially. Descriptive statistics such as frequencies, means, tables and percentages was used to analyze the socioeconomic profiles of the rural farm households in local institutions and their social capital dimensions. Per-capita poverty indicators were used to draw conclusion on poverty incidence while Tobit regression analysis was carried out to determine the factors affecting rural farm household poverty.

The following specifications were used to determine poverty level according to Ezeh and Anyiro (2013).

$H = q/n$ …… (1)

Where:

H = the head count ratio

q = numbers of rural farm household living below the poverty line

n = the total number of rural farm households

The poverty gap will be calculated as

$I = \{(Z-Y)/Z\}$ ……..(2)

Where

I = the poverty gap

Z = the poverty line using the mean household expenditure

Y = the average income of rural poor farm household.

Tobit regression analysis was conceptualized in order to determine the factors affecting rural farm household poverty (objective v). The full model, which was developed by Tobin (1958), is expressed below (equation 3), following Mcdonald and Moffit (1980) and as adopted by Adejobi (2004) and Omonona *et al*., (2006). The Tobit model originates from the work of Tobin (1958) and has been extensively used by economist to measure the effect of changes in the explanatory variables on the probability of being poor and the depth or intensity of poverty (McDonald & Moffit, 1980). The Tobit model was used to determine the impact of the explanatory variables on the probability of being poor. The model assumes that many variables have a lower (or upper) limit and take on this limiting value for a substantial number of respondents. For the remaining respondent, the variables take on a wide range of values above (or below) the limit. The model measures not only probability that a farmer is poor but also the intensity of poverty.

The model is expressed based on Tobin (1958).
$yi = Yi^* = Xi\beta + ei$ …….(3)
$yi = 0$ if $Yi^* \leq 0$ (i.e. $Z < I$) $yi = Yi^*$ if $Yi^* > 0$ (i.e. $Z > I$)
$i = 1, 2 \ldots\ldots\ldots n$

Where, yi is the limited dependent variable. It is discrete, when the households are not poor and continuous, when they are poor.
Y_i^* is the poverty severity (depth of household poverty) defined as $(Z-Y_i)/Z$) and
Z is the poverty line,
I_i is the mean household food expenditure per adult equivalent in Naira (₦).
X_i is a vector of explanatory variables/independent variables,
β is a vector of unknown coefficients and
ei is an independently distributed error term.

Following the Tobit decomposition framework suggested by McDonald and Moffit (1980), the Tobit model can be further disaggregated to determine the effect of a change in the value of the ith variable on change in the probability of a household being in poverty and the expected depth of the poverty. For it can be shown that:

$E(Vi) = F(Z)\ E\ (Vi^*)$, ……(4)

where E(Vi*) is the expected value of Vi for those households that are already poor, and F is the cumulative normal distribution function at Z, where Z is Xβ/δ. The effect of a change in the level of any of the household characteristics (represented by the independent variable Xi), on the poverty level of a household was decomposed into two, by differentiating equation (4) with respect to the specific household characteristic (Xi) That is:
$\partial E(Vi)/\partial Xi. = F(Z)\{\partial E(Vi^*)/\partial Xi\} + E(Vi^*)\ \{\partial F(Z)/\partial Xi\}$ ……..(5)

The β coefficient is interpreted as the combination of (1) the change in *yi* of those above the limit, weighted by the probability of being above the limit; and (2) the change in the probability of being above the limit, weighted by the expected value of *yi* if above. Balogun *et al* (2011) recommended reporting both the marginal effects on the latent dependent variable (*y**) and the expected value for y for uncensored observations. In the first case, the reported Tobit coefficients indicate how a one unit change in an independent variable alters the latent dependent variable. In the second case, the reported Tobit coefficients indicate how a one unit change in an independent variable affects uncensored observation.

In the Tobit regression analysis used, only poor households were considered. Hence, the dependent variable measures the intensity of poverty among farm households in the study area. The values of this dependent variable ranged between 0 and 1 and the farther away the value is from 0, the worse the poverty situation. The Explanatory (social capital) Variables include:

S_1 = Meeting attendance of households to associations (%)
S_2 = Decision making index (%)
S_3 = Membership density of households in association (%)

S_4 = Cash contribution index of households to associations (%)

S_5 = Labour contribution index of households to associations (%)

S_6 = Heterogeneity index of associations (%)

Description and measurement of social capital indices

This study focused on six of the social capital indices adopted by Grootaert, (1999) and Yusuf, (2008). The social capital (SC) variables used include: density of membership, heterogeneity index, labour contribution, cash contribution, meeting attendance index and decision making index. The measurement of each is as described below.

a) Density of membership: This was measured by the number of active household membership in existing associations. A complete inventory of all associations was made at local level institutions; each household was given that inventory and asked which associations they are members. In other words, the proportion of membership of associations by individuals was found and rescaled to 100.

b) Heterogeneity index: The questionnaire identified the three most important associations for each household. For those associations, a number of supplementary questions were asked including about the internal homogeneity of the group. This was rated according to twelve criteria: neighborhood, kin group, same occupation, same economic status, same religion, same political, gender, same age, same level of education, cultural practices, belief and trust. Hence, for each of the factors a yes response was coded 2 while no was coded 1 (Lawal *et al* 2009). A maximum score of 24 for each association represents the highest level of heterogeneity. The score of the three associations was averaged for each household by dividing by maximum score 72 to obtain the index. The resulting index was then multiplied 100 (whereby a zero value represents complete homogeneity and 100 correspond to the highest heterogeneity).

c) Decision making index: It has been argued that associations, which follow a democratic pattern of decision-making, are more effective than others. The questionnaire asked association members to evaluate subjectively whether they were "very active" "active" or "not very active" "passive" "very passive" or not participating in the group's decision making. These responses were scaled from 4 to 0, respectively and averaged across the three most important groups in each household. The summation was calculated from subjective responses from the households' members on their rating in participation in decision making in three important associations to them. The responses was averaged across the three associations and multiplied by 100 for each household.

d) Cash contribution index: This was achieved by taking records of payment of membership dues and other contributions. The summation of the total cash contributed to the various associations, which the household belong was calculated. The actual contribution for each household was rescaled by dividing the amount by the maximum fee in the data and multiplying the resultant fraction by 100.

e) Labour Contribution index: This is the number of days that individual members belonging to institution claimed to have worked for their institutions. This represents total numbers of man-hour's days worked by household members. This was be also rescaled to 100 using the same method of cash contribution.

f) Meeting attendance index: This index was measured by finding the number of times members of association actually met as a group over a period of time This was obtained by summing up of attendance of the household members at meeting and relating it to the number of scheduled meetings of the associations. The value was multiplied by 100.

RESULTS AND DISCUSSION

Socio-economic characteristics of respondents

The socio-economic characteristics of the rural farm households in local organization are shown in Table 1. The table shows that 52.0 percent of the rural household heads in local networks were male while 48.0% of them were females. This implies that male headed farm households were more interested in membership of local level institutions and possessed the ability to form social capital than female headed households. This result is in consonance with Christoforou (2005) that women headed households tend to have significantly lower membership and levels of overall civic participation in social networks than males. The mean age of rural farm households was 40.79 years. This is an indication that the farm households involved in informal social networks in the study area were mostly middle aged that were within the active productive work force. Majority (90.7%) of the rural farm households in local institutions were literate possessing divers formal educational levels that ranged from primary school education to tertiary school education with a mean household size of 3.79 persons. This presupposed that educated households will generally appreciate the need to engage more in social networks in order to receive and evaluate information for business improvement and productivity (Ajagbe *et al.,* 2007). The result also shows that the mean number of years spent in local institutions by the sample households was 23.12 years. This indicates a relatively high membership experience in social networks in the study area. It has been reported that higher social capital benefits accrue to individuals with a relatively longer period of local organization affiliation (Akpabio, 2008). It may be noted that individuals do not affiliate without expectations of some social, psychological or material rewards. The mean annual income of the farm households in local institutions was ₦39,479.41. The relatively low income status of the rural farm households has implication for household welfare, expenditures as well as their cash contribution to their associations. The mean monthly household expenditure of farm households in local organizations in the study area was ₦16,259.80. This significantly low proportion of household expenditures on consumption and production outlets suggest and underscore the insidious and endemic nature of poverty often engulfing most rural households in Nigeria. Low expenditure and by extension low investment in agriculture result in low output and by extension low income and invariably the food sufficiency gap widens (Ezeh and Anyiro, 2013).

Dimensions of Social Capital in Abia State

Six dimensions of social capital indices among the farm households in Abia state, Nigeria were identified and studied. These are: cash contribution index; labour contribution index; decision-making index; meeting attendance index; heterogeneity index and percentage of members of household belonging to local level institutions (density of membership). The summary statistics for each of these dimensions is presented in Table 2. The table shows that each farm household belongs to an average of 3.24 associations and has mean percentage membership density of 32.4 percent. This indicates a relatively low index of membership to different local institutions. This may not be unconnected with the fact that majority of the households are into farming activities which may not necessitates that they belong to various occupational associations in order to promote their business and protect their interest. The level of heterogeneity of group to which households belong was rated according to twelve criteria; neighourhood, kin group, occupation, economic status, religion, political group, gender, age, education, cultural practice, belief and trust (Lawal *et al*, 2009). The percentage mean heterogeneity index (50.78%) as shown in the

Table (2) indicates moderate level of diversity of membership of associations to which household belong in the state. This is because as pointed out by some authors (Okunmadewa *et al*., 2005), heterogeneity can enhance flow of information (especially, credit information) as people of diverse background come together in group. Table 2 further revealed that meetings were less frequent in the study area occurring on the average of 14.6 times in a year with meeting attendance average of 12.02 times yearly. The average percentage meeting attendance index was 25.05%. This has implication on information dissemination. Further, the dissemination of information to members can only be easier when members of associations attend meetings.

Cash contributions are made by households to their associations. Part of this savings are used for general running of the association and loaned as micro credit to members who signify interest in loan. The average annual contribution of members in different local association was ₦36357.35. Of the maximum 100 score, the cash contribution scores averaged 10.59%.These contributions include payment of membership dues, marriage levy, burial, levy, project/ development levy, among others. Given the low cash contribution index to different association, most farm households would seem not to partake in these associations for economic gains. Also, the average number of days which the farm households worked for their association per year was 7.68 days, with an average percentage labour contribution index of 25.60% obtained by members of local institutions in the study area which appears to be relatively low. The low labour contribution of farm household could be attributed to their moderate household size which has implication on labour supply. This result compares favourably with Ajani and Tijani (2009) and has implications on the sustainability of these institutions.

The study evaluated subjectively whether the respondents were "very active", "active", "passive", "very passive" and not participating in the group's decision making. The table shows that the percentage index of participation in decision making averaged 77.82% in the area. Meanwhile, It has been reported (Balogun *et al*, 2011) that associations which follow a democratic pattern of decision making are more effective than others.

Poverty Profile of the Rural Farm Households in Local Institutions

The poverty indicators of the rural farm households in local institutions in Abia State are shown in Table 3 and it revealed that the poverty line (mean monthly household expenditure) of the farm households was ₦16, 259.80 per month or ₦ 195,117.60 per annum. The incidence of poverty otherwise called the head count ratio (Ezeh *et al.*, 2012) shows that the poverty incidence for rural farm households was 0.6863. This implies that 68.63% of the rural farm households in the study area were poor because their income fell short of the mean household expenditure used as poverty line. This result compared favourably with Oguobi (2012) that obtained 62.5% respectively for rural farm households in Abia State Nigeria.

The poverty gap (poverty depth) also known as the income short fall allows for the assessment of the depth of poverty among the rural farm households in local institutions in the study area. Table 3 shows that the poverty gap was 0.4458. This implies that the poor rural farm households in local institutions require 48.58% of the poverty line to get out of poverty. This amounts to ₦7, 899.01 per rural farm household per month or ₦94, 788.13 per annum. This result corroborates with Ezeh *et al* (2012) that obtained a poverty gap index of 0.46 and 0.48 for male and female Fadama 1 farmers respectively in Abia state.

Social Capital Factors Affecting Rural Farm Household Poverty Status

The tobit regression analysis result of social capital factors affecting rural farm household poverty in Abia State is presented in Table 4. Out of the 6 social capital variables included in the model, four of them had significant coefficients. These are; cash contribution index, heterogeneity index, membership index and decision making index. A positive sign on a parameter indicates that the higher values of the variable, the higher the likelihood of poverty. Similarly, a negative value of the coefficient implies the higher value of the variables would decrease the probability of households' poverty.

In line with Grootaert *et al* (2002), the extent of poverty is indirectly related to the level of cash contribution. With a coefficient (-0.1091971) of cash contribution index which was negative and significant at 1.0% probability level, it therefore implies that a unit rise in cash contribution score would induce a very low improvement in per capital expenditure. This is contrary to a priori expectation. It is expected that those households whose cash contribution to their various local level institutions is small would have the highest poverty incidence, depth and severity. It is those households that have higher levels of income that can make large amount of cash contribution to their local level institutions. Hence, those individuals in these households are not likely to be poor. However, the higher the amount of cash contribution made to the association, the higher the chances of obtaining micro credit with minimal interest amount, and hence, improvement in investment opportunities which leads to increase in households income and poverty reduction (Ajani and Tijani, 2009).

The decomposition of poverty based on the level of diversity of membership of associations (heterogeneity index) shows a marked difference. The coefficient (-1.081519) of heterogeneity index was negative and significant at 99.0% confidence level. This implies that poverty is higher for those households that have lower level of diversity of membership of associations than those households with high heterogeneity index. Also, the result shows that diversity of membership of associations is associated with a 1.08% decrease in probability of being poor. Heterogeneity of association can be a source of information for improved welfare status. This result compares favourably with Okunmadewa *et al*., (2005) who also obtained a negative effect of heterogeneity index on poverty levels of households in local level institutions in Nigeria.

The coefficient (0.1870382) of Membership density of households in association was positive and statistically significant at 10.0% alpha level. It shows that an increase in membership of association by farm households will increase the probability of being poor. This result is at variance with *a priori* expectations and may be connected to the fact that higher membership in associations may reduce households' welfare and likelihood to obtain micro credit needed to alleviate poverty. Contrary to the view of Yusuf (2006), additional membership of farm households in associations leads to improved welfare and poverty reduction.

In line with Yusuf (2008), the coefficient (-0.9685) of decision making index of the farm households was negative and statistically significant at 1.0% probability level. The decision making index of the households in the local level institutions shows that those households with higher decision-making index have lower poverty than those households with high (more than 50 percent) index for decision-making. The magnitude of the decrease in poverty level as a result of a unit change in decision making index of farm households is 0.97 percent This result is in

consonance with *a priori* expectation and *Okunmadewa et al (2005)* that households with very high decision-making index are likely to be most-committed to the course of the local level institutions, and as for those with very low value of decision-making index, they seem not to be committed to the activities of their local level institutions, and hence, lower social capital, leading to reduction in their welfare and increased poverty.

Overall, the model posted a Pseudo R^2 value of 0.1286, log Pseudo likelihood value of -184.84767 and a goodness of fit wald chi-square value of 11.78 which is statistically significant at 1.0% level.

CONCLUSION

Based on the empirical evidence emanating from both descriptive and inferential statistics employed for this study, the following conclusions can be drawn on the findings: Six dimensions of social capital were examined. These are: the percentage of members of the household belonging to local level institution, cash contribution index, heterogeneity index, labour contribution index and decision making index. Households belong to at least two associations. Average household size was less than 4.0 members with 50.78% and 77.82% index of heterogeneity and participation in decision making process respectively. Cash and labour contribution index was surprisingly low with value of 25.05% and 25.60% respectively. Many farm household members (68.63%) of local institutions had their members living below poverty line which would have been higher than what was obtained in the study area without social capital intervention. Their poverty status was significantly influenced by social capital factors such as cash contribution index, heterogeneity index, membership index and decision making index. Therefore, policy makers interested in improving the living conditions of households are advised to consider promoting social capital through group as one relevant ingredient to achieve the Millennium development goals of reducing poverty by half. In terms of policy, the autonomous local institutions should be integrated into the current poverty alleviation programme of the Government. Their performance in finance-related and productive activities can be enhanced if they are linked up with basic skill acquisition schemes under the poverty reduction programmes of both the federal and state governments.

Table 1: Socioeconomics of rural farm households in local institutions in Abia State Nigeria

Variables	**Mean**
Age (years)	40.79
Household size (number)	3.79
Number of Years spent in local institution	23.12
Annual Income (₦)	39,374
Monthly expenditure (₦)	16,259.80
Gender of household head	**Percentage**
Male	48.0
Female	52.0
Education level	**Percentage**
No formal education	9.3
Primary education	21.67
Secondary education	27.5
Tertiary education	41.7

Source: Field Survey data, 2013:
Note 1 USD = ₦160

Table 2: Social capital Dimension in Abia State, Nigeria

Social Capital indices	**% Mean**	**% Minimum**	**% Maximum**	**Standard Deviation**
Density of Membership	32.3529	10	90	13.9441
Decision Making Index	77.81863	0	100	19.8488
Heterogeneity Index	50.7761	8.3333	91.6667	14.6482
Meeting Attendance Index	25.0409	0	100	20.5449
Cash Contribution Index	10.5916	0.4	100	14.4073
Labour Contribution Index	25.6046	0	100	22.9756

Source: Computation from field survey data, 2013

Table 3: Poverty Indicators of Rural farm households in local institutions in Abia State, Nigeria

Poverty indicators	**Values**
Mean monthly income (₦)	39479.41
Mean monthly expenditure (₦)	16259.80
Poverty line (₦)	16259.80
Poverty incidence	0.6863
Poverty gap (Poverty Depth)	0.4458

Source: Field Survey Data, 2013; 1 USD = ₦160

Table 4: Tobit regression coefficients of social capital factors affecting rural household poverty in Abia State, Nigeria

Variable	Estimated coefficients	Standard errors	Z-ratios	P>|z|
Constant	3.032868***	0.8053723	3.77	0.000
Membership density of households in association	0.1870382*	0.1234517	1.52	0.131
Meeting attendance of household to association	-0.0739789	.0581957	-1.27	0.205
Decision making index	-0.9685***	0.1765003	-5.49	0.000
Cash contribution index	-0.109197***	0.0400201	-2.73	0.007
Labour contribution index	-0.0623073	0.0496002	-1.26	0.211
Heterogeneity index	-1.081519***	0.2352646	-4.60	0.000
Number of observations at one:	142			
Number of observations at zero:	62			
Log Pseudo likelihood:	-184.84767			
Wald chi^2(19)	11.78***			
Pseudo R^2	0.1286			

Source: Field Survey data, 2013.
*** Significant at 1.0% level

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