## Social Capital and Farming Household Welfare in Oyo State, Nigeria

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## Abstract

The study examined social capital and farming household's welfare in Oyo State, Nigeria. The study used descriptive statistics and regression analysis to analyze the welfare status of farming households in the study area, using primary data set obtained randomly from the representative households. It was also gathered that nature of employment, educational status, household size, marital status, and family type contributed to welfare level of the household either positively or negatively. Regression analysis showed that age of the respondents, marital status, and primary occupations were negative and significant determinants of welfare status. Labour contribution of the households to the association was positive and significant determinants of welfare status of farmers in the study area.

Keywords: Social capital, household welfare, primary occupation, farmers, regression analysis

## 1. Introduction

In recent times, farming household welfare has become a relevant issue to individuals, communities and the country (Grootaert, 1997). According to Serageldin (1996), there is a growing recognition that differences in economic outcomes at the levels of the individuals, households or state cannot be fully explained by differences in traditional inputs such as labour, land, physical and human capital. Growing attention is given to the role of social capital in affecting the well-being of households and the level of development of communities and nations. Social capital is an input in a household's or a nation's production function and has major implications for development policy and project design. It suggests that acquisition of human capital and establishment of physical infrastructure needs to be complemented by institutional development in order to reap the full benefits of the investments.

The promotion of social interaction among the poor farmers may need to complement the provision of seeds, fertilizer and other inputs. The rules, norms, obligations reciprocity and trust embedded in social relations, social structures and society's institutional arrangement which enables its members to achieve their individual and community objectives is what Woolcock (1998) termed as social capital. Portes (1998) refers to access to social capital as the ability of actors to secure benefits by virtue of membership in social networks or other social structures. The broad definition of social capital subsumes both social capital at the micro institutional levels and the rules and regulations governing economic interactions in the market place.

Grootaert et al (2002) investigated empirically the importance of social capital, in the form of local associations and networks, for the welfare of rural households in Burkina Faso. It draws on a unique database combining standard information on household welfare with multidimensional measures of social capital. The analysis finds that higher levels of social capital are associated with higher household per capita expenditures and better access to credit. The distribution of social capital was found to be more equal than that of other assets. Poor households and those who own little land obtain a higher return from social capital than other households.

Olawuyi and Oladele (2012) revealed that socio-economic characteristics such as age, age-squared and household size make significant contribution to percentage changes in household welfare, they further revealed that membership index, meeting attendance and labour contribution are statistically significant and are positively related to household welfare while heterogeneity index and cash contribution are also significant but negatively related to household welfare. The study concludes that social capital and its dimensions have effect on household welfare.

According to Ameen and Sulaiman (2006), sociologists and economists increasingly consider 'social capital' a valuable component in the asset endowment of households, improving productivity and enhancing economic well-being. Adepoju and Oni (2012) revealed that age of respondents; sex, education, marital status, household size and farming status make a significant contribution to changes in household welfare. Also, the decision making index and meeting attendance are statistically significant and both are positively and negatively related to household welfare, respectively. The study stressed further that the two stage least square reveal the exogeneity of social capital and that social capital is truly endogenous to household welfare due to non-linear interactions between social capital and unobservable variables.

Coleman (1990) in an attempt to shed more light on the concept of social capital and relative importance in poverty analysis opined that social capital is not a private property of any of the persons who benefit from it. Social capital adds a social dimension to the development equation that has been mostly ignored in economic exploration of determinants of poverty and household welfare. According to Knack (1999), social capital is a stock of asset identified as the networks, norms, and trust that facilitate co-ordination and co-operation for mutual benefit. Knack maintained that at the community level, social capital can be an important asset to reduce vulnerability or to increase opportunities; such networks are often given through creation of local institution or local association. On the other way round, this study will also focus on farming household's welfare. The direct opposite of this is poverty at the household level. Poverty connotes a living standard below the acceptable level. Famoriyo (1994) describes it as one of the most phenomenal, yet real and contentious issues that have confronted both theory of economics and its practitioners from the classical to the new Keynesian period. In the study of economics of poverty, economists were mainly preoccupied with aggregates in terms of economic growth rate and income distribution as well as economic development.

#### 2. Problem Statement

It is no longer news that the Nigerian poverty situation has continued to increase by the day despite that the country is blessed with abundant human and material resources. This situation presents a paradox and has been captioned "poverty in the midst of plenty" because the country is rich and the people are poor. (World Bank, 1996). Several detailed poverty profiles have been constructed based on income/expenditure approach. But Federal Office of Statistics (FOS) (1999) revealed at the incidence of poverty in Nigeria increased sharply from 27.2 percent in 1980 to 46.3% in 11985 and from 42.7 percent in 1992 to 65.6 Percent in 1996 while there was a decrease in the present incidence from 46.3 percent in 1985 to 42.7 percent in 1992. These various incidences of poverty translated to 17.7 million poor persons in 1980, 34.7 million in 1985 and not minding the drop in incidence between 1985 and 1992, about 39 million people were poor in 1992. In 1996, however, about 67 million people were poor and based on the present economic circumstance; the incidence and the population in poverty must have risen beyond the 65.6 percent and 67 million people respectively.

Essentially, the incidence of poverty is higher among farming households in rural areas. The following listed below are the characteristics of farming households in rural Nigeria according to the research project work conducted by Adeniran (2000) on analysis of poverty among different occupational groups in Akinyele Local Government Area of Oyo State, Nigeria: Lack of access to social services and human development. Limited access to land, capital and education, lower health status and entitlements that those in higher income. Low level of literacy especially in terms of level and quality attained. Limited access to health services of all kinds.

And this is more pronounced among rural households than urban households with less than 30 percent in rural areas as compared to 78 percent in urban areas. They have food security problem (lack of access or entitlements with which to produce, buy or exchange sufficient food for a healthy active life. The children and the pregnant women of the poor household are usually under nourished and malnourished. The poor household earns low income because of the reduced agricultural productivity caused by continual cultivation of their natural resource base.

## 3. Methodology

The study area is Kajola Local Government Area (L.G.A.) of Oyo State. It is situated in the northern part of Oyo State. It shares boundary with Iwajowa LGA to the West, Iseying LGA to the East and Itesiwaju LGA to the North of Oyo State. According to 1991 census by National Population Commission (NPC), the population of Kajola Local Government was recorded to be 100,000. The primary occupation of most people in the area is farming with secondary occupations in the area of trading, food processing, barbing, carpentry etc. There are a lot of civil servants in the area who are also farmers. The data for this study is of primary origin. The data were collected through a general household survey with the aid of structured questionnaires. The sampling procedure used for this study is a two-stage sampling method. First, the list of villages in the local government was obtained from the Local Government Secretariat from where a random selection of 5 villages was done. These villages are Ilua, Isemi-Ile, Ilore, Ayetoro-Oke, Ilaji-Oke and Iwere-Oke. From each of these villages, a list of all the farming households belonging to Local Level Institutions (LLI) was obtained from where 30 representative farming households were selected randomly. The information obtained from these households are those on both quantifiable and unquantifiable factors like income household expenditure patters. These factors include household size, household monthly expenditure on various consumer basic needs, occupation, source of income, age, sex, association, activity of the household members in the institution, household contribution to the institution and membership access to associational assets.

The analytical techniques employed in the analysis of this study include multiple regression analysis and simple descriptive statistics. Simple descriptive statistics include frequencies, tables, means and standard deviation. The approach used in this study is based on the classification of poor and non-poor household in relation to the level of their monthly per capita expenditure. It as then corrected for household size by dividing each household monthly total per capita expenditure by the household size.

Per capita expenditure (PCE) = <u>Total Household monthly expenditure</u>

Household size

Mean per capita expenditure is calculated by:

- = <u>Total per capita expenditure for all households</u>
  - Total number of household
- Y = Per capita expenditure (dependent variable)
- $X_1$  = homogeneity index (identifies 2 associations that were rated according to the same occupation, same religion, same gender, same age, same income level, same level of education)
- $X_2$  = Meeting attendance index (measures the average number of times from which the household members attended group meeting in percentage).
- $X_3$  = Cash contribution (Amount paid in naira per annum by the household to the associations).
- $X_4$  = Labour contribution (Number of days of work given to the association to labour for it).
- $X_5$  = Community orientation (measures whether the roots of the association is in the community or externally imposed, D = 1 if yes, 0 if otherwise).
- $X_6$  = Decision making index (participation of the household in decision making activity of the group measured by being active or not active, D = 1, if active 0 if otherwise)
- $X_7 =$  Age of the household head in years.
- $X_8 =$  Sex of the household head (D = 1 if male, 0 if female).
- $X_9 =$  Marital status of household head (D = 1 if married, 0 if single).
- $X_{10}$  = Primary education of household head (D = 1 if house head has primary education, 0 if otherwise.
- $X_{11}$  = Secondary education of household heads (D = 1 if the household head has secondary education, 0 if otherwise).
- $X_{12}$  = NCE/polytechnic education of household head (D=I if he/she has NCE/polytechnic education, 0 if otherwise).
- $X_{13}$  = University education of the household head (D = 1 if he/she has university education, 0 if otherwise).
- $X_{14} =$  Family type (D = 1 if monogamous, 0 if otherwise)
- $X_{15}$  = Nature of employment of household head (D = 1 if self-employed, 0 if otherwise).
- $X_{16}$  = Primary occupation of household head (D = 1 if farming, 0 if otherwise).

The following 4 functional forms were also tried on per capita expenditure as an indication of household welfare to get the one that best fit the data.

Linear:  $Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + \dots b_nX_n + ei$ Exponential:  $LnY = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + \dots b_nX_n + ei$ Double log:  $LnY = 1nb0 + b_11nX_1 + b_21nX_2 + b_31nX_3 + \dots b_n1nX_n + ei$ Semi log:  $Y = 1nb_0 + b_11nX_1 + b_21nX_2 + b_31nX_3 + \dots b_n1nX_n + ei$ 

The equation that best fit the data was chosen based on the economic, statistical and econometric criteria. Some of these are R-square (co-efficient of determination) values, t-values, F-ratios and standard errors.

#### 4.0 Results and Discussion

#### 4.1 Socio-economic Characteristics and Social Capital Dimensions

The socio-economic characteristics of the respondents in relation to the social capital dimensions are presented below.

#### 4.1.1 Age, sex and Marital Status of Respondents and their Social Capital Dimensions

Table 1 showed that majority of the respondents were middle aged, 20-40 years age group. It was revealed that this group has the highest per capita expenditure. The PCE decreases as the age of the household head increases. It was observed that as the age of the household head increases, the homogeneity within the local group increases. The meeting attendance index of the older classes is higher than those of the younger ones. This may be due to the fact that younger people do not have much time to attend meetings as the elderly ones. Likewise, decision making index increases among the ages 20-40 years and 65 years and above. The annual cash contribution of those households headed by persons aged 65 and above is more to the association than household headed by younger people. The labour contribution of the older household headed people is the highest because they can give more time to labour for the association to drive more benefit to improve their household welfare status. The average per capita expenditure of the female were more than that of the male. This reflects that female-headed households had higher welfare than male-headed households. It was also revealed that persons in female headed households had a higher tendency to belong to local level institutions (LLIs) that were made up of people with identical characteristics than their male counterparts. Their homogenous natures were due to their similarity in religion, age group, income group and educational level. The table also showed that persons belonging to male and female-headed households participated almost equally in associational life despite that those in male headed households participated in decision making than their female counterparts.

This is in contrast with the findings of Adepoju and Oni (2012) where male participated more than their female counterparts. This may be due to larger number of the male than female in their institution especially when it comes to making suggestions that were important in the association. The result of the average annual contribution of the male-headed households to the association showed that it is more than that of the female headed household due to support from their spouses. The labour contributions revealed that both male and female were the same averagely in days. The results showed that majority of the respondents were married. It was also obtained that average per capita expenditure of the married households was less than that of the single due to the large size of the married households. It is observed that members of the household headed by married persons had higher meeting attendance, decision making index, cash contribution and labour contribution and were more likely to belong to local level institutions with little characteristics among members. The homogeneity index of the married showed that it was higher than the single due to similarity in occupation, sex, age group, income group, religion and educational qualification.

Age (Years)	Frequency	Percentage	Average per capita Expenditure	Homogeneity Index	Meeting attendance Index	Decision making Index	Annual Cash contribution	Annual Labour Contribution
20-40	83	55.3	5379.2	87.2	56.5	47.1	28290	6
41-64	60	40.0	2631.8	90.3	59.7	46.2	23031	7
≥65	7	4.7	170.6	92.9	58.2	47.0	31310	9
Sex								
Female	43	28.7	6186.9	90.5	57.8	44.0	20553.5	7
Male	107	71.3	3309.1	87.7	57.9	47.8	28497.9	7
Marital Status								
Married	116	77.3	3109.2	89.2	58.2	48.7	27.8	6
Single	34	22.7	337.2	86.2	56.8	40.2	1.2	9

Table 1:	<b>Distribution</b>	of Respondents Ag	e, Sex and I	Marital Status ar	nd Social Ca	pital Dimensions
			/			

Source; Field Survey, 2012

# 4.1.2 Educational Level, Household Size and Family Type of Respondents and their Social Capital Dimensions

Education was one of those factors that influence the respondents' participation in the local level institution. The education of the respondents showed the degree of benefit derivable from the institution. Moreover table 2 showed that, majority of the respondents had college of education/Polytechnic education. It is also indicated that per capita expenditure increases as the education level increases among the people in the association. Homogeneity index was discovered to be highest among non-formally educated people in the association. This indicated that their number of education could be responsible for this attribute. Meeting attendance index was evident to be highest among the University educated respondents who know the value of their constancy at the associational meeting as a result of the acquired education. Generally, meeting attendance index was seen to be higher among the respondent with at least secondary and above educational qualification. Also, it was visible that decision making index increases as the educational qualification increases down the table. This is because educational attainment is pivotal to making a reasonable decision among the local level institutional members. The higher your participation in decision making, the more access you have to associational benefits to increase your welfare status. The results revealed as well that households with higher education gave more cash contribution to the association than labour contribution. While households with no formal and primary education gave more labour contribution than cash contribution to compensate for low cash contribution to the association thereby enhancing household welfare too.

Majority of the respondents had 1-5 (54.7%) individuals. Their per capita expenditure showed that as their household size increases, their per capita expenditure averagely decreases which automatically reduces their welfare status. It is equally evident that homogeneity index is highest among the household with smallest number of household size in the association. Although, it was generally high but it reduced as we move down the table. This was likely due to their religion and use of family planning techniques that were common to these ones. It was observed from table 5 that meeting attendance index was highest among the households with the smallest household size and decreases as the household size increases. This may be due to a lot diverted attention of the household heads to many things in the household as a result of large family size. It was also revealed that households with smallest number of individual participated more in decision making than households with larger family size. It was seen as well that households with smallest size contributed more cash and less labour to the association than households with larger size who contributed less cash and more labour to enhance their household welfare. Table 2 showed that majority of the respondents was monogamous in family type. The per capita expenditure of monogamous respondents was higher than the polygamous respondents. This was because of the smaller family size as a result of one wife which increases their welfare status and per capita expenditure as a proxy for household monthly income of the households. In the same vain, the higher the number of wives, the more the children and the lesser the per capita expenditure as a result of larger household size which automatically decreases their welfare status. The homogeneity index of the monogamous respondents is higher than that of polygamous respondents. This may be because of their differences in religion. It is revealed also that meeting attendance index is higher among monogamous group in the association than polygamous group. This means that monogamous household heads were more regular in associational meeting due to their less attention to their small family size than polygamous household heads.

The monogamous group partake more in the decision making than the polygamous group according to table 6. It was observed that the monogamous group gave more cash contribution and less labour to their local level institution than polygamous respondents. This may be due to their varied expenses in the family as a result of the differences in size of their family.

Table 2: Distribution of Respondent's Educational Level, Household Size and Family Type and Their
Social Capital Dimensions

Educational	Frequency	Percentage	Average per	Homogeneity	Meeting	Decision	Annual Cash	Annual
Level			capita	Index	attendance	making	contribution	Labour
University	29	25.2	4020.0	00 7	65 1	Index 50	20575	
University	30	23.3	4929.9	00.2	05.1	30	30373	7
NCF/Poly	72	48.0	46327	48.0	60.5	88 1	26924	6
Itel/I oly	12	40.0	4032.7	40.0	00.5	00.1	20724	0
Secondary	17	11.3	4353.5	87.7	60.4	46.3	26452	7
~~~~j								
Primary	8	5.3	3795.5	90.6	57.8	45.4	20316	8
-								
Non-formal	15	10.1	18271.0	90.6	55.2	34.2	14100	12
Household								
size								
1-5	82	54.7	4059.3	88.7	59.0	50.6	30400	5
6-10	57	38.0	3055.4	88.5	57.9	48.3	24700	6
11-15	9	6.0	3021.6	87.1	53.1	44.5	22200	7
16-30	2	1.3	2203.3	86.1	40.7	33.2	7000	11
Family type								
Monogamy	84	56.0	4685.4	88.6	59.5	47.4	26785	6
Polygamy	66	44.0	3654.3	88.4	55.8	46.0	25600	8

Source: Field Survey, 2012

#### 4.1.3 Employment Status and Primary Occupation of Respondents and their Social Capital Dimensions

The majority of the respondents were salary earners. Table 3 showed that the per capita expenditure of the salaried earners was higher than self-employed. This was because of the regular source of income of the salaried earners. It was observed that homogeneity index of the salaried respondent was higher than that of self-employed which may be due to the almost the same educational qualification of the salaried respondents. It was evident that self-employed households were more regular in attending meeting than the salaried households. This was because of the flexible nature of the timing of self-employed households which made them to be at all the meetings called for whether impromptu or normal which on the other side did not permit the salaried households to do so at any time. It was equally shown that self-employed households participated more in decision making of the association than salaried households, which was due to the regularity, and availability of the self-employed workers at virtually all the meetings called for. This made their decision making index higher than the salaried households were gathered to contribute more cash and less labour to the association, self-employed households were always around to work because of the nature of their job.

Table 3 showed that the majority of the respondents were non-farmers but were members of the local level institutions who had farming as secondary occupation. It was also revealed that non-farming households which comprised traders, salaried workers and artisans had higher per capita expenditure than farmers. It was also revealed that homogeneity index of the farmers were higher than those of the farming occupation which was because of the same occupational nature of the farmers while this was so in non-farming because of the heterogeneous nature of their occupation. It could be seen as well that farmers had higher meeting attendance index than non-farmers in their association. This was so because of the self-employed nature of their operation, in which their union meetings were scheduled as convenient when virtually all the farmers may likely attend. This finding corroborated the findings of Okunmadewa et al, (2005). The contrast was the case for non-farming occupation which was heterogeneous in nature in that their meeting days and time may not always favour the salaried workers thereby decreasing the general meeting attendance index of the non-farming occupation. It was equally evident that decision making index of the non-farmers were higher than the farmers in the association.

This was because of the relatively higher educational attainment of the salaried workers who participated more in decision making activity of the group This findings corroborated the findings of Yusuf (2008).

Nature of employment	Frequency	Percentage	Average per capita expenditure	Homogeneity Index	Meeting attendance Index	Decision making Index	Annual Cash contribution	Annual Labour Contribution
Salaried	98	65.3	4504.7	88.7	57.0	46.1	28081	6
Self-	52	34.7	3380.1	87.9	59.4	48.1	25314	7
Employed								
Primary								
Occupation								
Farming	26	82.7	2258.2	89.8	58.0	46.5	25022	8
Non-	124	17.3	4566.6	88.3	53.8	47.5	31250	6
Farming								

Cable 3 Distribution of Respondent's Employment Status and Primary Occupation and Their Social	
Capital Dimensions	

Source: Field Survey, 2012.

#### 4.2. Frequency Distribution of Social Capital Dimensions

This section presents the frequency distribution of farming households on the basis of social capital dimension in the study area

#### 4.2.1. Homogeneity and Meeting Attendance Index

The homogeneity and meeting attendance index frequency distribution is presented in table 4 The study showed that majority of the respondents were in 80-89 homogeneity index class which showed that this happened as a result of the same educational attainment, religion, occupation, age group, income group. The mean of the homogeneity index of the associations was 88.9, which confirmed the high level of similarity and communality in these associations. The generally high average homogeneity index revealed that most of the sampled households belong to local level institutions whose membership was almost homogeneous with age, sex etc. The majority of the respondents had 50-59 of meeting attendance while the mean of the meeting attendance showed that it was 57.8 which was within the majority's range. It indicated that more than half of the respondents attended associational meeting on a regular basis while others absented themselves from the meeting due to one or two reasons.

Homogeneity Index	Frequency	Percentage	
70-79	32	21.3	
80-89	43	28.7	
90-00	67	447	
100	8	5.3	
Mean 88.5	150	100.0	
Meeting Attendance Index			
Less than 40	12	8.0	
40-49	20	13.3	
50-59	58	38.7	
60-69	36	24	
70-79	6	4.0	
80-89	12	8.0	
90-99	4	2.7	
100	2	1.33	
Mean 57.8	150	100.0	

Source: Field Survey, 2012

#### 4.2.2. Decision Making and Annual Cash Index

Table 5 showed decision making and annual cash index distribution. The decision making index of the majority of the respondent was within the group less than 40 with an average of 46.8.

This indicated that less than average numbers of the respondents were active in the decision making activities of the associations. Table 5 further showed the annual cash contribution frequency distribution of the respondents. It was revealed that majority of the respondents contributed less than  $\aleph10$ , 000 to their association annually. The average cash contributed annually by the households to the local level institutions was given as  $\aleph26$ , 273 which may likely increase as their income and education increases. This also revealed the interest of the people in the association. The amount of cash contribution was a reflection of the level of commitment of members or the extent of functionality of the organizations cost and benefits derivable by the members.

Decision Making Index	Frequency	Percentage	
Less than 40	75	50.0	
40-49	0	0.0	
50-59	37	24.7	
60-69	31	20.7	
70-79	0	0.0	
80-89	6	4.0	
90-99	0	0.0	
100	1	0.6	
Mean 46.8	150	100.0	
Cash Contribution			
Less than 10,000	49	32.7	
10,000-20,000	39	26.0	
21,000-50,000	40	26.7	
Above 50,000	22	14.6	
Mean 26273	150	100.00	

Fable 5:	Decision	Making a	nd Annual	Cash Index	Frequency	v Distribution

Source: Field Survey, 2012.

#### 4.2.3. Annual Labour Contribution and Community Orientation Distribution

Table 6 showed the annual labour contribution and community orientation frequency distribution of the members of the association. The study revealed that majority of the members had no labour contribution to the association probably because of their education, religion, cash contribution to the group. It was seen that the mean labour contribution was 7 days annually. It was also possible that such organizations or local level institutions may not require much labour contribution but rather cash contribution. Table 6 further showed the frequency distribution of the community orientation of the membership associations. Majority of the respondents belong to the organizations that were not initiated by the community while one fourth of the respondents had their associations rooted in the community.

Labour Contribution (days)	Frequency	Percentage
No contribution	86	57.3
Less than 20	50	33.3
20-52	14	9.4
Mean 7	150	100.0
Community Orientation		
0	132	88.0
1	18	12.0
Total	150	100.0

<b>Table 6: Annual Labour Contribution and</b>	community orientation Frequen	y Distribution
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Source: Field Survey, 2012.

#### 4.3 Result of the Regression Analysis

The result of the analysis of the determinants of the effects of social capital on the welfare status is presented in the table 7. Y is the per capita expenditure, which was used as the proxy for household welfare. The co-efficient of multiple determinations ( $\mathbb{R}^2$ ) was 0.285 Indicating that 28.5% of the total variation in per capita expenditure was explained by the explanatory variables in the model.

The co-efficient of explanatory variable  $X_4$  (labour contribution) was positive and significant at 5 percent level. It indicated that the more labour contribution to the association, the more the household head has access to the benefit from the association to improve the welfare condition of the household thereby reducing the effect of poverty on the household, The co- efficient of explanatory variable  $X_7$  (age) was negative and significant at 1 percent level. It showed that as age increases, per capita expenditure decreases by \$135.15. This may be as a result of the increase in the number of the households which increases household head responsibilities thereby decreases the welfare level as the household head increases in age. The co-efficient of explanatory variable  $X_9$  (marital status) was negative and significant at 10 percent level. It showed that as the number of household increases by \$2272.93. This indicated that single marital status enhances improved household welfare status while married have decreased household welfare status as a result of increase in number of households. The co-efficient of explanatory variable  $X_{15}$  (primary occupation) was negative and significant at 5 percent level.

#### 4.4 Regression Result Analysis

The result of the analysis as the determinants of the effects of social capital on welfare is presented in table 7 below:

Functional Constant Ho		Homogeneity	Meeting	Cash	Labour		Commun	nity	Decision	Age Sex		Marital		Primary
Linear	Term	Index	Attendance	Contribution	1 contribution		Orientation		making			Stat	us	Education
		$X_1$	Index	$X_3$	$X_4$		$X_5$		Index	$X_7$	$X_8$	$X_9$		$X_{10}$
			$X_2$						$X_6$					
Linear 14105.77		- 15.267	0.900	12.439	84.800		-452.902		-22.194	-132.151 -1503		950 -2272.931		1001.907
	(5238.84)	(49.82)	(19.10)	(15.096)	(39.043)**		(1284.066)		(24.024)	(39.243)*** (937.51		b) (1332.79)*		(2052.551)
Double log	14.466	-0.431	0.035844	0.07858	0.07856		-0.0244		•0.265	-1.058 -0.157		-0.288		0235
	(3.826)	(0.805)	(0.121)	(0.068)	(0.056)	(0.056)		(0.234)		(0.281)*** (1171)		(0.245)		(0.371)
Semi Log	9.658	-0.00420	0.001948	0.003072	0.6992		-0.0585		-0.00635	-0.0261 -0.158		-0.364		0.192
	(0.955)	(0.009)	(0.003)	(0.003)	(0.007)	(0.007)			(0.004)	(0.07)***	(0.171)	(0.2	43)	(0.374)
Exponential	14105.77	-15.267	0.900	12.439	84.800		-452.902	2	-22.194	-135.151	-1503.95	50 -227	2.931	1001.907
	(5238.84)	(49.821)	(19.102)	(15.096)	(39.043)**		(128.066	5)	(124.024)	(39243)***	(937.5 1*	) (133	32.79)*	(2052.551)
Functional Forms		Secondary	NCE/Pe	oly Univ	ersity	y Family		Nat	ture of	Occupat	ion	$\mathbb{R}^2$	$R^{-2}$	F
		Education	Education Ed		ation Typ		e 1	Employment		t				
		$X_{11}$	$X_{12}$	X <sub>13</sub>		X <sub>14</sub>		X <sub>15</sub>		X16				
Linear		-148.709	-468.70	-80.5	03	79.9	9.930 14		9.44?	-2568.210		0.285	$0.^{1}99$	3.310
		(785.837)	(1622.1	18) (1690	).607)	(964	1.341)	(12)	80.29^1	(323.498	8)**			
Double Log		0.158	0.148	0.251	0.251		07596 0.2		09	-0.510		0.302	0.218	3.595
		(0.322)	(0.293)	(0.30	3)	(0.1)	75)	(0.2	230)	(0.237)*	*			
Semi Log		0.115	0.153	0.229	0.229		8990	01	1 99	-0.469		0.320	O.S3	8 3.905
U		(0.326)	(0.296)	(0.30	8)	(0.1)	76)	(02	33)	(0.241)*	*			
Exponential		-148 709	-468 701		-80 503		30	1449 449		-2568 210 (		0 295	0210	3 483
Laponenti		(1785.837	) (1622.1	18) (1690	).607)	(964	.341)	(12	80.293)	(1323.49	98)**	0.275	5210	5.105
-		`	, , ,	, ``						·	,			

Table 7: Determinants of the Impact of Social Capital Variables on Welfare

Source: Field Survey, 2012. \*\*\* - Significant at 1 Percent, \*\* - Significant at 5 Percent, \* - Significant at 10 Percent. Values in Parenthesis are the standard errors.

By considering those criteria for selecting the lead equation, the linear function gave the best fit as the lead equation.

The lead equation is presented below:

 $\begin{array}{l} Y = 14105.773 - 15.267X_1 + 0,900X_2 + 12.439X_3 + 84.800X_4 - 452.902X_5 \\ (5238.845) & (49.821) & (19.102) & (15.096) & (39.043) & (1284.066) \\ -22.194X_6 - 135.151X_7 - 150.950X_8 - 2272.931X_9 + 1001.907X_{10} - 148.709X_{11} \\ (24.024) & (39.243) & (937.516) & (2052.551) & (1785.837) & (1622.118) \\ -468.701X_{12} - 80503X_{13} + 79.930X_{14} + 1449.449X_{15} - 2568.20X_{16} \\ (1690.607) & (1352.792) & (964.341) & (1280.299) & (1323.498) \end{array}$ 

 $R^2 = 0.285$ ,  $R^{-2} = 0.199$  Figures in parentheses are standard errors of estimates.

#### 5. Conclusion and Recommendation

From the study, it has been observed that welfare level of the respondents in the area is significantly influenced by the socio-economic characteristics of the respondents like age, marital status, educational status, household size, nature of employment and primary occupation which in turn dictated per capital expenditure which was used to determine the welfare status of the study area. It was observed that members of local level institution have access to loans, education, durable materials, land, and animals in order to improve welfare status as they pay annual associational dues to the association. Based on the findings of this study, it was established that social capital dimensions like homogeneity index, meeting attendance index, community orientation, annual cash contribution and annual labour contribution were characteristics of local level institutions which were related to per capita expenditure that was in turn related to welfare level of the respondents belonging to local level institutions in the area. Therefore, the following measures are recommended in order to improve the welfare status of the households in the study area with the aid of social capital.

(1) Facilitate enabling environments that foster the strengthening of social capital in the country. (2) Large family size should be discouraged through education and measures like birth control or family planning through local level organizations and institutions. (3) Members of the institutions who are not educated should be encouraged and mandated to go to evening classes training from the association. (4) Farmers should be encouraged to participate more actively in decision making activities of the association so as to enable them to benefit more from the assets of the association. (5) Local level association with community orientation should be allowed to emerge from the area rather than institution with external orientation simply because institution with community orientation enhances community development and improvement of household welfare. (6) Single male household should be discouraged from going into polygamous family type as it reduces per capita expenditure of the household schould stick to monogamous family type as it enhances better welfare status. (7) Married households should stick to monogamous family type as it enhances better welfare status of the households due to reduced family size with high per capita expenditure.

## 6. References

- Adeniran (2000): "A Project Titled Analysis of Poverty among different\_Occupational Groups: A Case Study of Akinyele Local Government\_Area of Oyo State". Pg. 18-19.
- Adepoju A.A and Oni O.A (2012); Investigating Endogeneity Effects of Social Capital on Household Welfare in Nigeria: A Control Function Approach. Quarterly Journal of International Agriculture. 51(1) 73-96.
- Ameen, F. And Sulaiman, M. (2006): Social Capital and Economic Well-being. CFPR Working Paper Series No. 15, Aga Khan Foundation Canada.
- Coleman, J. (1990) "Social Capital in the Creation of Human Capital". American Journal of Sociology 94 (supplement) 595-5120.
- FOS (1999): "Poverty Profile for Nigeria 1980-1996". Federal Office of Statistics, Abuja, Nigeria.
- Famoriyo, S. (1996): "Reducing Poverty Through Promoting Rural Development Nigeria". A Revelation. A paper presented at the 10th Anniversary of the Conference of Farm Management Association of Nigeria, Jos, 1996.
- Grootaert, C. (1997) "social Capital: The Missing Link?" Expanding the Welfare of Wealth Indicators of Environmentally sustainable Development, Washington DC, World Bank.
- Grootaert, C., Oh, G.T and Swamy, A. (2002): Social Capital, Household Welfare and Poverty in Burkina Faso. *Journal of African Economies*, 11 (1), Pp. 4-38.
- Knack, S. (1999) "Social Capital, Growth and Poverty: A Survey and Extensions". Social Capital Initiative Working paper, social Development Department. Washington D.C: World Bank.
- National Population Commission 1991
- OKUNMADEWA, F V., S.A. YUSUF and B.T. OMONONA (2005): Social Capital and Poverty in Nigeria. Draft Final Report submitted to African Economic Research Consortium (AERC), Kenya.
- Olawuyi S.O and Oladele S.E (2012); Social capital and Rural Households welfare in Surulere LGA of Oyo State, Nigeria. Interdisplinary Journal of Contemporary Research in Business. 3(11) 388-405
- Portes A. (1998); "Social Capital: Its origins and Application in Modern Sociology". Annual Review of Sociology 24: 1-24
- Serageldin, I. (1996) "Sustainability as Opportunity and the Problem of Social Capital" Brown Journal of World Affairs 3(2): 187-203.
- Woolcock, M. (1998) "Social Capital and Economic Development Towards a Theoretical Synthesis and Policy Framework". *Theory and Society* 27(2), 151-208.
- World Bank, (1996) "Indonesia-Dimensions of Growth". Country Department III, East Asia Pacific region, Report No. 15383-IND, Washington, D. C.
- YUSUF, S.A. (2008): Social Capital and Household Welfare in Kwara State, Nigeria. Journal of Human Ecol. 23 (3): 219-229.