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...EFFECTIVENESS OF SOCIAL CAPITAL FORMATION ...NG HOUSEHOLDS IN KAINJI LAKE BASIN, NIGERIA

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ABSTRACT

...mined the effectiveness of social capital formation on the livelihood of fisher ...g households in Kainji Lake Basin of Niger State. Multistage sampling ...employed in the selection of 290 respondents. The Specific objectives are to: ...the socio-economic characteristic of the respondents; ii. assess the level of ...awareness of social capital formation; iii. identify sources of information about ...capital formation, and iv. determine effect of social capital formation on fisher-folks ... Data were collected with questionnaire complemented with interview guide. ...ptive and inferential statistics was employed. Result showed that the mean age ...dents was 42 years; majority (95.2%) were male. More than half (59.2%) had no ...education, 93.7% were married. The mean year of cooperatives was 9 years. The ...of fishing experience was 22 years, and less than half (45.1%) were members of ...organization. Majority of fisher-folk household had high awareness on ...(78.6%) while bridging was (76.9%) with linking of (77.6%). Relatives, friends ...neighbours (59.7%), were the major sources of information available to the ...dents about fishing activities. The social capital formation on bonding relationships ...that (family members, friends and relatives, neighbours) involved closed tie ...among the fisher-folks was found to be effective, social capital formation on ...relationships that involved (social groups, organizations and associations within ...community) among the fisher-folks was also found to be effectives, social capital ...on linking that involves relationships (between community groups, ...dents/tenants association, governmental partnership) among the fisher-folks was found ...be effective in enhancing active participation in volunteers services, reciprocity and ...among various fisher-folks groups. Regression result shows that household size, ...erience, and income influenced the effectiveness of social capital formation. Therefore, ...conclusion the null hypothesis was rejected, while the alternative hypothesis was ...epted. There was high awareness of bonding, bridging and linking social capital by the ...pondents Therefore, there is need to promote social ties either horizontally or vertically ...order to access services that will enhance the economic well-being of the respondents.

...words: Network Social Capital formation

INTRODUCTION

Social capital is an important characteristic of a community, which can influence and be influence by the flow and stock of other capitals (Emery and Flora, 2006). Social capital is one of the five different types of capital (natural, physical, human, financial and social capital (Pretty, 2013). Social capital needed for households to develop sustainable livelihood strategies, consists of the networks and norms that govern the interactions among households and communities.

Social capital can be categorized into three types bonding, bridging and
boundaries between these social capitals vary across surrounding communities.
capital refers to the relations between homogenous groups or communities
conclusion needed for everyday living. Bridging social capital refers to the
and networks between groups and communities involving collaboration with
Linking social capital is the capacity of groups to gain access to resources, ide
from formal institutions beyond the community (Pretty, 2003). Social capital
social resources (network, membership of groups and relationship of trust,
institutions of society) upon which people draw knowledge, idea, information
pursuit of livelihoods.

Social capital describes circumstances in which individuals can use membership
networks to secure benefits, one can acquire social capital through purposeful
transform social capital into conventional economic gain. Social capital is an
individual that cannot be evaluated without knowledge of the society, in which
operates. The extent to which an individual has access to resources through
depends not only on the person's contact or association whom they know, but also
through common group membership, the strength of these connections, and
available to their connections. All these depend on individual fisher-folk choice.
social capital is in the person's social characteristics, which include social skills,
the size of his trademark that enable him to reap market and non-market returns from
with others. Thus, lack of power to enjoy these resources is due to their networking
reducing everyday due to migration and reductions in catch per unit effort in their
camp within the Lake basin. In general, the infrastructures in Lake Kainji are in dilapidated
most of the fishing villages lack electricity, good feeder road networks to farms and

The Specific objectives are to: i. describes the socio-economic characteristic of the
ii. assess the level of fisher-folk awareness of social capital formation; iii. identify
information about social capital formation, and iv. determine effect of social capital
fisher-folks.

Hypothesis

Ho_i: There is no significant relationship between the socio-economic characteristic of fisher-
and effectiveness of social capital formation in the study area.

METHODOLOGY

Study Area

Kainji Lake lies in the savannah region between latitude 9^0 30′ and 10^0 35′ N and
longitudes 40^0 20′ and 4^0 40′ E, and it was formed after the closure of the river Niger. The
Lake has about 5000 fishers, the whole Lake has about 286 fishing localities (villages
camps) spread along the shoreline and Island of Kainji Lake. The Lake is divided into three
strata by Nigerian/German Kainji Lake Fisheries Promotion Project I, II and III (Binyotubo
Obhahie, 2006). Kainji Lake areas comprises of Niger and Kebbi States.

Sampling Techniques and Sample Size

The population of this study was the artisanal fishing households in fishing villages around
Kainji Lake areas in Niger and Kebbi States. Multistage sampling technique will be employed in

respondents for this study. In stage one, three Local Government Areas Agwara and Borgu) and two Local Government Areas (Ngaski and Yauri) will be elected from Niger and Kebbi States, respectively, because they made up of the Basin. Stage two involves proportionate sampling by 50% the fishing communities which are fifty-one (51) in total. In the third stage, the total registered fisher-folks engaged in fishing activities will be obtained from Niger and Kebbi States Statistics respectively as the sampling frame. Stage four involves sampling of fisher-folks out of the sample frame obtained in each fishing communities of the five Local Areas selected using Yamanne formula as adapted by Agu and Udoh (2012).

Fishing Communities and Sample Frame

States	LGAs	Fishing Communities (50%)	Sample Frame	SampleFisher-folks
	Magama	8 (4)	175	48
	Agwara	10 (5)	179	49
	Borgu	11 (6)	282	78
	Ngaski	12 (6)	264	73
	Yauri	10 (5)	152	42
	5	51 (26)	1052	290

Niger and Kebbi States Bureau of Statistics (2013)

of Data Analysis

collected were subjected to analysis using both descriptive and inferential statistics. The descriptive statistic involved; frequency distribution, percentages, mean and standard deviation, while the inferential statistic involved;, Pearson Product Moment Correlation (PPMC) and Chi-square.

$$r_{xy} = \frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{[n(\Sigma X^2) - (\Sigma X)^2][n(\Sigma Y^2) - (\Sigma Y)^2]}}$$

RESULTS AND DISCUSSION

Personal characteristics of the respondents

Age of the respondents

Table 2 revealed that the mean age of the respondents in the study area was 42 years. This findings indicated that they are still young, active and in their productive years where they can be actively participated in social capital formation. The younger respondents are, the more likely to involve in social capital formation due to their innovativeness and willingness to engage in new ideas that could change their status and economic livelihood. This finding is line with the assertion of Million and Belay (2004) that most active age farmers can easily key-in to new innovation and technology. Similarly, Ani (2007) stressed that the innovators are mostly in their active years.

Gender

Table 2. Majority (95.2%) of the respondents in the study area were males, while [illegible] respondents were females. This indicates that more males were engaged in fis[illegible] female. The male dominancy in this source of livelihood indicates the laborious [illegible] operations. This finding is in line with the work of Adeleke (2013) who posited [illegible] activities involve more males than females because of the strength, standard time [illegible] various risks of the fishing job.

Table 2: Distribution of Respondents according to their Socio-Economic Cha[illegible]

Variable	Frequency	Percentage
Age (years)		
< 30	34	11.7
31 – 40	94	32.4
41 – 50	109	37.6
51 – 60	44	15.2
> 60	9	3.1
Sex		
Male	276	95.2
Female	14	4.8
Education level		
Non-formal	172	59.3
Quranic	81	27.9
Primary	20	6.9
Secondary	17	5.9
Household (number)		
> 5	41	14.1
6 – 10	58	20.0
11 – 15	144	49.7
16 – 20	30	10.3
21 – 25	14	4.8
> 25	3	1.1
Experience		
< 10	48	16.6
11 – 20	109	37.6
21 – 30	65	22.4
31 – 40	58	20.0
> 40	10	3.4
Primary ooccupations		
Fishing	283	97.6
Trading	7	2.4
Secondary occupation		
Farming	85	29.3
Trading	14	4.8
Civil servant	55	19.0
Private	85	29.3
Craft	85	29.3
Ownership of canoe		
Yes	214	73.8
No	76	26.2

Sources: Field Survey, 2016

more than half (59.3%) of the respondents in the study area had non-formal
of the respondents had quranic education was under formal education.
respondents in the study area had primary education while 5.9% of the
secondary education. This implies that majority of the respondents in the study
acquired formal education. This development is unhealthy for social capital
the respondents in the study area as education enhanced the formation of social

Household Size

The mean household size of the respondents was 12 persons. This implies that the
in the study area have large household size. This finding agreed with Johnson (2009)
that farmers with large household are more likely to engaged in more income
activities such as social capital formation.

Fishing Experience.

showed that the mean fishing experience of the respondents in the study area was 22
This implies that the respondents in the study area had been involved in fishing activities
years. The number of years spent indicatee a practical knowledge acquired by the fisher-
fishing activities. This result agrees with the findings of Nwaru *et al*. (2006) who stated
the number of years spent in fish farming gives an indication of the practical knowledge
on how to cope with inhere rent fish production, processing and marketing problem.

Primary Occupation

shows Further more majority (97.6%) of the respondents in the study area were
This indicates that majority of the respondents in the study area were fishermen
could be due to the fact that they live along the riverine area. More than one quarter
of the respondents indicated farming as their secondary occupation, while 29.3% were
More so, 19.0% of the respondents in the study area were civil servants, while 4.8% of
respondents were traders. This findings show that most of the respondents have secondary
occupations and this could negatively affect their involvement in social capital formation in the
study area

Ownership of Canoe

The result in Table 2 revealed that majority (73.8%) of the respondents in the study area owned
canoe for fishing activities.This implies that majority of the respondent owned their personal
canoe for fishing activities in the study area. This could enhance social capital formation as most
of the respondents will be able to generate income which will in turn raise their social status.

Cooperatives Membership

Table 3 revealed that about 43.1% of the respondents belong to cooperative societies, while
56.9% did not belong to cooperative societies. This implies that most of the respondents did not
belong in cooperative societies which could have a negative effect on the social capital formation
in the study area.

Analysis of Effectiveness of Social Capital Formation among Fishing Households

Year Membership of Cooperatives

The table 3 show that more than half (53.4%) of the respondents had been into cooperative within the ranges of 1 – 10 years, while 23.1% had been into cooperative within the ranges of 11 – 20 years and few (1.4%) of the respondents had been into cooperative for more than 20 years with the mean years of 8.5 years. The number of years spent in cooperative is expected to boost farmers knowledge and enhance their involvement in social capital formation.

Table 3: Distribution of Respondents according to Institutional Variables Accessed

Variable	Frequency	Percentage	Mean
Cooperative (access)			
Yes	125	43.1	
No	165	56.9	
Cooperative (years)			
1-10	155	53.4	8.5
11-20	67	23.1	
>20	4	1.4	
Cooperative (number)			
None	165	56.9	
Two	110	37.9	
Three	2	0.7	
Four	2	0.7	
Five	11	3.8	
Cooperative (meeting)			
None	38	13.1	
Weekly	190	65.5	
Monthly	50	17.2	
Bi-monthly	1	0.4	
Quaterly	11	3.8	
Cooperative (benefit)			
Access to loan	144	49.7	
Purchase of fishing tools	154	53.1	
Market of fishing product	101	34.1	
Extension (contact)			
Yes	172	59.3	
No	118	40.7	
Extension (number)			
1 – 2 times	27	9.3	
3 – 4 times	135	46.6	
> 4	11	3.8	
Credit (access)			
Yes	149	51.4	
No	141	48.6	
Credit (constraints)			
High interest rate	97	33.4	
Insufficient credit	77	26.6	
Collateral security	1	0.3	
Delaying in getting credit	46	15.9	

Source: Field Survey, 2016

...in Table 3, more than half (51.4%) of the respondents in the study area had access to ...redit is a catalyst for increased agricultural production and technology adoption ...fishing technologies. Availability of credit becomes imperative for improving and ...income. Akudungu *et al.* (2012) stressed post-harvest loss among farmer was ...lack of access to credit that will bring about affordable technologies.

...of respondents according to sources of information

...Table 4, majority (70.0%) of the respondents in the study area listen to radio agricultural ...everyday. More than half (51.4%) of the respondents in the study area revealed that ...agriculture programmes on television few times.This implies that radio is the ...mean of being exposed to agricultural programmes in fishing activities in the study ...is in agreement with Oyeyinka *et al.* (2014) who posited that radio is very important ...of communication in a rural communities because of the value attributed to it as it ...little spending than the other mass media such as television.

...majority (97.6%) of the respondents in the study area indicated that access to ...had effect on their fishing activities, while few (2.4%) of the respondents indicated ...no effect on their fishing activities. Meanwhile, area in which the respondents access ...includes fish marketing (92.4%), fish processing (90.0%), fish catch (73.8%) and ...vation (72.8%). This implies that information on fishing activities are very relevant in ...fishing activities in the study area. According to Adimoral (2012), information needs of ...fisher – folks encompasses agricultural credits, planning and forecasting, availability of ...and prices.

...ness of social capital formation by the respondents

...result in Table 4 revealed that majority (78.6%) of the respondents in the study area had high ...ness of bonding social capital formation in promoting livelihood of fisher-folks, while ...% of the respondents had fair awareness of bonding social capital, while few (7.9%) of the ...ndents had no awareness of bonding social capital in promoting livelihood. Based on mean ...value of 2.71, it therefore implies that there was high awareness of bonding social capital ...ation in promoting livelihood of fisher-folks in the study area. Bonding social capital ...is seen as bond or relationship that connect each member of a community which ...olves principle and norms such as trust and cooperation among each member to help cope ...unfavourable conditions (Aldrich, 2012). Due to similarity within the group, livelihood ...ities could easily be enhanced among members.

...ding social capital is different from bridging in the sense that relationship is within social ...groups, social class, race, religion or other important socio-demographic or socio-economic ...acteristics and sometime completely exclusive. The bonding/bridging distinction can be ...made in relation to a range of relationship and network characteristics. This is in consonance to ...Babaei *et al.* (2012) who posited that bonding social capital is considered a foundation from ...which to establish bridging and linking ties among groups.

Table 4: Distribution of Respondents according to Sources of Information

Variable	Frequency	Percentage
Information source*		
Relatives, friends and neighbours	173	59.7
Community bulletin board	39	13.4
Local market	125	43.1
Community or local newspaper	56	19.3
Radio	130	44.8
Television	11	3.8
Group or association	134	46.2
Extension agents	101	34.8
Internet	8	2.8
Listening to radio on agriculture programmme		
Every day	203	70.0
Few times	64	22.1
Once a week	14	4.8
Once bi-weekly	3	1.1
Watching television programme on agriculture		
Every day	99	34.1
Few times	149	51.4
Once a week	27	9.3
Once bi-weekly	12	4.1
Never	3	1.1
Effect of infomation on fishing activities		
Yes	283	97.6
No	7	2.4
Types of information*		
Fish catch	214	73.8
Processing	261	90.0
Marketing	268	92.4
Fish preservation	211	72.8

Source: Field Survey, 2016 ***multiple responses**

Table 5: Level of Awareness of Social Capital Formation in Promoting Livelihood Diversification

Awareness	HA (3)	FA (2)	NA (1)	WS	WM	Remark
Bonding social capital	228 (78.6)	39 (13.5)	23 (7.9)	785	2.71	High
Bridging social capital	223 (76.9)	40 (13.8)	27 (9.3)	776	2.68	High
Linking social capital	225 (77.9)	45 (15.5)	20 (6.9)	785	2.71	High

Source: Field Survey, 2016

Note: **HA = Highly Aware, FA = Fairly Aware and NA = Not Aware,** Mean score of ≥ 2.00 **implies High, while < 2.00 implies Low. Numbers in parenthesis are the percentages**

Also, majority (76.9%) of the respondents in the study area had high awareness of bridging social capital in promoting livelihood (Table 5), it therefore implies that there was high awareness of bridging social capital formation in promoting livelihood of the fisher-folks in the

It facilitates external assets that can benefit members of groups and broader social identities (Wetterberg, 2004). In terms of linking, majority (77.6%) of the in the study area had high awareness of linking social capital with mean score value it therefore implies that there was high awareness of linking social capital formation in livelihood of the fisher-folks in the study area. Generally, the findings revealed that the respondents in the study area had high awareness of bonding, bridging and linking which could positively influence their involvement in social capital formation for livelihood. This is in agreement with the work of Aldrich (2012) who posited that with high level of bonding, bridging and linking social capital are inherently more than those with only one type or none.

capital formation of the respondents

revealed the distribution of respondents based on different social group formation in the area. It revealed that 24.1% of the respondents belong to Aldaji fishermen social group, by 23.4% of the respondents who belongs to Yunna fishermen association and 22.8% to Monnai fisheries multipurpose. Fisher-folks groups, such as associations or cooperatives create social relations that enable individuals to achieve goals that individuals are able to achieve. They benefit from economies of scale when sharing information on how to resource inputs, and rely on help of one another to meet the needs of friends or people can trust. Membership into fisher-folks groups further enables individuals to have access to capacity building such as training and study tours, and to information pertaining to new technologies. This is in agreement with a priori expectation. Ofuoku and Urang (2009) observed that farmers subscribe to various farmers' groups to access extension services, credit, exchange of ideas/experiences and cheap inputs. More frequent contact with other farmers made the these farmers have great influence on their thoughts and attitude towards farmers' self-help group

The groups or other local-level community with formal or informal structures shape norms, such as extent of trust, abiding by bylaws, settling conflicts, cooperation among members, giving gifts or exchanging items, as well as the extent of financial contributions toward group activities or collective community problems. However, small groups are more cohesive than large groups as they tend to have high performance goals making them to be more productive. The farmers' sources of information' determine the decision they take. according to Agbamu (2006), sources of information and acquired knowledge from those sources constitute the bedrock on which farmers base their decisions