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## **Relationship between Social Capital and Livelihood Enhancing Capitals among Smallholder Farmers in Uganda**

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### **Abstract**

Social capital is an important characteristic of a community and is one of the components of the asset pentagon of the sustainable livelihood framework. The study aimed at assessing the levels and dimensions of social capital and how social capital influences other livelihood capitals. A Cross-sectional survey of a random sample of 208 households was conducted in Masindi and Hoima Districts in Uganda to assess the current livelihood conditions and strategies for improving rural livelihoods. An Index of social capital was generated using density of group membership and three levels of social capital were generated i.e. high, medium and low. Two dimensions of social capital (bonding and bridging) were considered. Results showed that households with high and medium social capital had enhanced skills to solve problems, do research and bargain with middle men. Social capital empowered more women to participate in decision making, fostered asset base creation and use of natural resource management technologies. There was a significant difference between level of social capital and participation in collective farming. Households with high social capital rated highly the community level of trust, reciprocity, and women's confidence. However, there was no significant effect of social capital on household income. In conclusion, there was a positive relationship between level and dimension of social capital and access to livelihood assets implying that strengthening social capital is a powerful way to improve communities and requires consistent and effective approaches to build and reinforce the social and human capital

Key words: Relationship, social capital, livelihood capitals, smallholder farmers

### **Introduction**

Social capital is an important characteristic of a community which can influence and be influenced by the flow and stock of other capitals (Emery et al., 2006). Social capital is one of the capitals (social, human, financial, natural resource and physical capitals) of the asset pentagon of the sustainable livelihood framework (Carney, 1998). Pioneering scholars of social Capital (Bourdieu, 1985, Coleman, 1988 and Putman 1993) refer to it as a resource for action which is developed and accessed through membership in formal organisations. Putman (1995) defines social capital as the characteristics of social organisation, such as social networks, norms and social trust, which foster coordination and cooperation among community members, enabling them to act collectively for mutual benefits.

Pretty (2003) distinguished social capital into three dimensions i.e. bonding, bridging and linking. Pretty described bonding social capital as the relations between homogenous groups or communities which build social cohesion needed for everyday living. Bridging social capital refers to the structural relations

and networks between groups and communities involving coordination or collaboration with other groups, external associations, mechanisms of social support or information sharing across communities and groups (Narayan and Pritchett, 1999). Linking social capital is the capacity of groups to gain access to resources, ideas and information from formal institutions beyond the community (Pretty 2003).

Putman's (1993) seminal analysis of civic traditions in Italy focuses primarily on "horizontal" associations in which members relate to each other on an equal basis, but Coleman (1988) argued that social capital can include "vertical" associations as well, characterised by hierarchical relationships and unequal power distribution among members. Krishna (2002) argues that communities with high level of social capital produce superior outcomes in joint actions and communities with low social capital can be assisted to build up stocks of this resource, so that their performance will also improve over time. According to Coleman (1990), social capital is embedded in society rather than in any one individual but is given

value by the individuals and organizations that use it to further individual or collective interests.

The aim of the study was to assess the levels and dimensions of social capital and how social capital interacts with other livelihood capitals (human, financial, natural, cultural and physical). This interaction will provide an understanding of the critical role of social capital in spiralling-up other livelihood enhancing capitals. The paper examines the hypothesis that social capital improves household welfare and the research question addressed is how important is social capital in improving household welfare? In this study, social capital was defined as the social networks, norms, social trust which govern collaboration among community members to enable them perform collectively and effectively to realise mutual benefits. Elements defining social capital include group membership, mutual trust, leadership, reciprocity (exchanging gifts), participation in collective activities, cooperation, financial contribution and confidence to speak

#### **Methodology**

A cross-sectional survey was conducted in Masindi and Hoima Districts, which are located in the Western Region of Uganda between 1°22'-2° 20' N, 31° 22'-32° 23' E and 1° 00' N and 30° 30'-31° 45' E respectively. Masindi district lies at an altitude range of 621m to 1,158m above sea level and receives an average rainfall of about 1,304mm annually. Total population is 469,865 (50.1% males and 49.9% females) with agriculture as the core economic activity. Hoima District lies within an altitude range of 621m and 1,158m above sea level. Annual rainfall ranges between 700 and 1,000mm. Total population is 349,209 persons (50.4% males and 49.6% females) with agriculture as the core economic activity (NEMA 1997, Uganda Bureau of Statistics, 2004). Seven villages were selected based on project and non-project intervention from which a total of 208 households were randomly sampled using the lists of households in each village, Data was collected using individual interviews, aided by a semi-structured questionnaire. Data collected was coded, entered and analyzed using the Statistical database software called the Statistical Package for Social Scientists (SPSS) version 11. An index of social capital was generated based on density of group membership i.e. high (membership to more than 1 group), medium (membership to 1 group) and low (no group

membership). Two dimensions of social capital (bonding and bridging) were considered.

#### **Results and discussion**

##### *Household characteristics*

Of the households interviewed, 38% had low, 51% had medium and 11% had high social capital. All the households had an average age of household head of 45 years and 35 years for their spouses. Majority of the households interviewed were married and male headed although 17.5% and 14.2% of the households with low and medium level of social capital were widowed, and others were single and divorced. The households were similar in terms of education levels whereby households with low (58.8%), medium (59.4%) and high (59.1%) level of social capital had attained primarily education. Few households of low (22.5%), medium (28.3%) and high (27.3%) social capital had attained secondary education and very few of these households had completed high school certificate (3%, 2.8% and 4.2% respectively). However, (13.5%) of the households with low social capital lacked formal education compared to those with medium (8.5%) and high (9.1%) level of social capital who lacked formal education. All the households with high social capital (100%) held positions in the groups they belonged to and 49.1% of those with medium social capital were committee members.

Results showed a significant difference in human capital among households with high, medium and low social capital (Table 2) Households with medium and high social capital expressed enhanced problem solving skills, had increased ability to help other farmers solve their agricultural problems, increased capacity to do research to test different technologies and bargain with middlemen for better prices. The increase in knowledge and skills is attributed to the interactions within and between the existing networks which facilitate knowledge and information sharing which is further enhanced by bonding and bridging social capital. This makes social capital a framework which supports learning through the horizontal and vertical interactions in the networks.

Social capital played a role in facilitating joint decision making (Fig. 1) by empowering more women to participate in making decisions over land, keeping money, going to market, deciding on what to sell, borrowing money and use of money. In contrast, in households with low social capital more men and

women made decisions independently. This indicates that enhanced social capital creates a condition of reduced tension, increased trust and confidence among household members.

A significant number of households with high level of social capital (13.6%) used agroforestry trees and shrubs as natural resource conservation technologies unlike households with medium (7.5%) and low (1.3%) social capital ( $P$ -value=0.047). There was a significant difference among level of social capital and use of soil erosion control measures like grass strips and trenches with 52.8%, 22.7% and 38.8% of the households with medium, high and low social capital using the technologies ( $P$ =0.016). This implies that households belonging to groups have avenues through which they can easily access and share natural resource management technologies through bonding and bridging social capital. This is in agreement with the findings from the study conducted by Sanginga *et al.*, 2007 whereby two dimensions of social capital: norms and sanctions or byelaws, and number of collective action events were positively and significantly related to adoption of agro forestry innovations.

This study revealed that in bridging social capital households participated in community activities like cleaning wells, roads and joint farming. However, there was a significant difference in level of social capital and participation in collective farming ( $P$ =0.001) with more households in medium (33%) and high (27.3%) social capital participating in the activity and only 10% of households with low social capital participating in the activity. On average households with high social capital participated frequently (6 times) in collective farming than those with medium and low social capital who on average participated once over a period of 6 months. This implies that belonging to a group builds one's culture to work collectively and use resources available to achieve desired objectives. Ruud (2000) and Pretty (2003) asserted that mutually agreed norms and sanctions or bye-laws build the confidence of community members to invest in collective activities knowing that others will do so and create some level of trust and lubricate cooperation and social obligation.

Social capital fostered asset base with households of high social capital accumulating more assets like household assets (clothing, beddings, chairs), hard assets (bicycles, motor cycles, radios and mobile

phones), agricultural tools (hoes, axes, spraying pumps and wheelbarrow) and livestock (Fig 1). Belonging to internally heterogeneous groups and participating actively in them is linked to higher asset accumulation.

Analysis of the relationship between income and the levels of social capital (Table 1) revealed that the difference between the means was not statistically significant at 5% level of significance ( $P$ =0.360). Holland (1998) however, argues that economies in transition, or those with high levels of inequality, may be especially prone to the "dark side of social capital" and may be trapped in a syndrome of distrust, in which cronyism and corruption can flourish, which is most likely the case in this study. There was a significant difference in the way households assessed the extent of bonding and bridging among community members in terms of trust, reciprocity and women's confidence (Fig 2). These community aspects were rated excellent by households with high level of social capital and average by households with low and medium level of social capital (trust ( $P$ =0.001), reciprocity ( $P$ =0.002) and women's ability to speak in public ( $P$ =0.05)) This shows the quality of the social processes and relationships within which learning interactions take place which in turn influence the quality of the learning outcomes in collaborative processes. This enables households to commit themselves to each other and hence knit the social fabric for mutual benefits.

### Conclusion

Social capital supports learning through interaction, and requires the formation of networking paths that are both horizontal and vertical. In such collaborative processes, the relationships within which learning interactions take place influence the learning outcomes. Social capital plays an important role in fostering the social networks and information exchange needed to achieve collective action and in sustaining a social and institutional environment that is ready to adapt and change. Strengthening social capital is a powerful way to improve communities and requires consistent and effective approaches to build and reinforce the social and human capital.

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**Table 2:** Assessment of human capital

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**References**

Bourdieu, P. 1985. The forms of capital. Pages 8-21 in J. Richardson, editor. Handbook of theory and research for sociology of education. Green wood Press, City, Connecticut, USA.

Carney, D. 1998. Sustainable Rural Livelihoods: What Contribution Can We Make? Department for International Development, London

Coleman, J.S. 1988. "Social Capital in the Creations of Human Capital," American Journal of Sociology, 94, pp.95-121.

Coleman, J.S. 1990. Foundations of Social Theory, Cambridge, Mass.: Harvard University press.

Emery, M and C. Flora. 2006. Spiraling-Up: Mapping Community Transformation with Community Capitals Framework.

Holland, J. 1998. Does social capital matter? The case of Albania. IDS Bulletin 29(3): 65-71.

Krishna, A. (2002): Active Social capital: Tracing the

Narayan, D. and L. Pritchett. 1999. "Cents and Sociability: Household Income and Social Capital in Rural Tanzania," Economic Development and Cultural Change, 47(4), pp.871-897.

Pretty, J. 2003. Social capital and the collective management of resources. Science 32: 1912-1914.

Putnam, R. D. 1993. Making democracy work. Civic traditions in modern Italy. Princeton NJ, Princeton University Press.

Putnam, R. D. 1995. Bowling alone: America's declining social capital. The Journal of Democracy 6(1): 65-78.

Ruud M.A. 2000. Live longer and prosper: Collective action, social capital and social vision. Ecol Econ 34 (234): 131-144.

Sanginga, P., R. N. Kamugisha and A.M.Martin. 2007. Conflicts management, social capital and adoption of agro forestry technologies: empirical findings from the highlands of south-western Uganda.

NEMA 1997: District Environment Profiles

Uganda Bureau of Statistics, 2004. Report on the agricultural module, piggy-backed onto the population and housing Census, 2002/03.

**Table 1:** Average household income

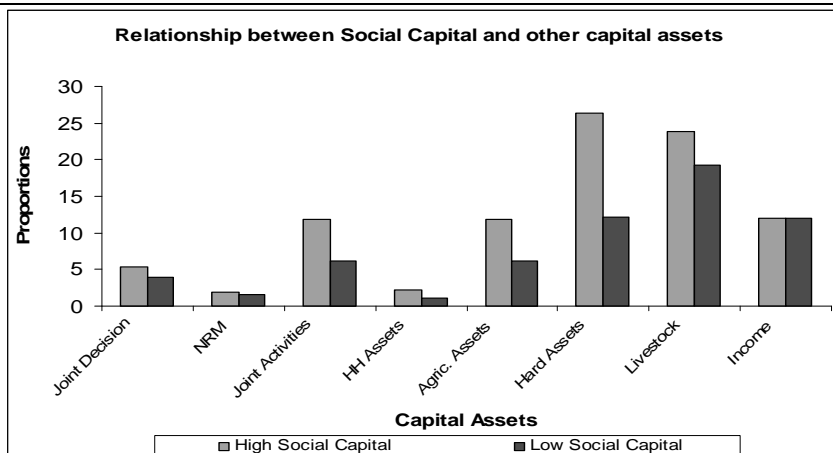
Categories of social capital	N	Average income	Average highest income	Average lowest income
High	22	124045	189227	41909
Medium	106	99650	168339	35273
Low	80	124828	192975	52018

(P-value=0.05, t-value=0.360)

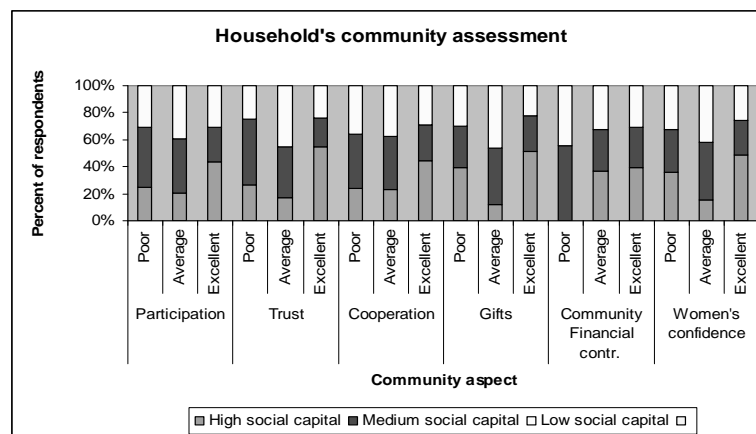
roots of Development and Democracy, N.Y: Columbia University Press.

UBOS, Entebbe.

Aspect	High social capital	Medium social capital	Low social capital	P-value
Problem solving skills				0.008*
Poor	4.5	15.1	27.5	
Average	50.0	45.3	55.0	
Excellent	45.5	34.0	12.5	
Do research				0.001*
Poor	45.5	37.7	68.8	
Average	40.9	37.7	20.0	
Excellent	13.6	19.8	5.0	
Bargain with middle men				0.028*
Poor	31.8	6.6	6.3	
Average	27.3	39.6	36.3	
Excellent	40.9	48.1	51.3	



**Figure 1:** The relationship between Social capital and other capital assets



**Figure 2:** Assessment of bonding and bridging in households' communities