

SOCIAL CAPITAL AND PUBLIC POLICY: CASE OF RURAL LIVELIHOODS

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ABSTRACT

The capacity of people's self-organization, social ties and solidarity is at the core of social capital. Social capital provides the means for accessing resources and support at vulnerable life cycles. Rich endowment of social capital allows people to produce and provide for one another outside the mechanism of the market. Social capital facilitates achievement of a broad range of major public objectives in the areas of health, education, rural economy, poverty reduction, and so on. Various policy documents in Kenya show that the improvement of rural livelihoods remains an important public policy objective. Yet the formulation of development policy in the country has not taken into account social capital and its effects on rural livelihoods, although it is a key form of national resource. This paper examines role of social capital as a process in facilitating improvement of rural livelihoods in Kenya, a matter of public policy. The paper uses primary data collected from a sample of 340 households from Nyeri district to achieve its objectives. Descriptive method in form of cross-tabulation is used to explore the nexus between social capital and livelihood sources and socioeconomic status of the households. Results show that social capital is an important factor in the livelihood diversification strategy of the households in the study area. Social capital enables households to diversify in main sources of livelihoods including crop production, livestock production and non-farm activities. The results further shows that investment in social capital can help households escape from poverty. The findings of the study are used to suggest policies for promoting formation of social capital as a mechanism for improving living conditions of rural households.

Keywords: Social capital, public policy, rural livelihoods, livelihood diversification strategy, rural development.

INTRODUCTION

Social capital can best be understood as a means or a process for accessing various forms of resources and support through networks of social relations. Outputs of social capital are often not monetized as social capital is not easily accounted for in monetary terms. Social capital enables households to generate livelihood sources that support non-monetary forms of exchange. The term livelihood refers to 'a means of living or survival'. It entails what people do in order to make a living, including the resources that provide people with capability to build a satisfactory living, the risk factors that people must consider in managing their resources, and the institutional and policy context that help or hinder people in their pursuit of a viable or improved living (Ellis and Freeman, 2005). A rural livelihood is a 'means to a living' for households or individuals in rural areas whereby the households and individuals direct attention to the ways of obtaining a living rather than to the net results in terms of income received (Ellis, 2000).

One of the key objectives of Kenya's public policy since independence in 1963 has been to improve the rural livelihood and welfare of the people as well as to reduce poverty and hunger. This policy objective is reflected in the country's rural development concept, which has remained focused on the transformation of the rural economy (Republic of Kenya [RoK], 1994,1995, 2008).In the rural context, public policy has focused on four broad strategies. These are strategies for increasing rural incomes, providing basic social services, reducing inequality in the distribution of rural incomes, and reducing imbalances in rural urban incomes and economic opportunities (Republic of Kenya: National Development Plans, various issues).

Rural Kenya comprises two major sectors, the rural farm sub-sector having agriculture as the key enterprise and the non-farm sub-sector made up of enterprises including the traditional economy, ownership of rural dwellings, fishing, forestry, and mining and quarrying, as well as the small-scale and micro enterprises in agro-processing, trading and manufacturing. The contribution of the rural sector in Kenya's national development remains crucial. It accommodates more than 60 percent of the total population, employs more than 70 percent of the total labour force, provides the bulk of foreign exchange earnings, and contributes directly to gross domestic product (GDP) at more than 30 percent of the total (RoK, 2005).

In spite of Kenya's efforts in transforming the rural economy and improving the well-being of the rural people, reducing their poverty and hunger, evidence shows a declining trend in the performance of the rural sector. For instance, the number of poor people in Kenya increased from 31 percent [or 3.7 million people] in 1972 to 46 percent [or 11.5 million people] in 1994, 50 percent [or 15.0 million people] in 1997, fell to 46 percent in 2005/2006 and 38 percent in 2013 (RoK, 2007; World Bank-AllAfrica.com, 2013). Manda et al. (2001) estimated that about 34.8 percent of the rural poor lived in extreme poverty so much that they could not meet their food needs even with their entire resources devoted to food.

LITERATURE REVIEW

Strategies for transforming rural economies

For many years, growth strategy was the dominant strategy for rural development and improvement of rural welfare which focused on the increased output of the small farm. Ellis (2000) has criticized this strategy in that it tended to neglect the diverse dimensions of rural livelihoods other than success at farming. Besides the growth strategy, other processes and strategies such as agro-industrialization processes (United Nations Food and Agricultural Organization – FAO, 1997) and processes/strategies of creation of rural entrepreneurial economies and communities (Flora, et al. 2002; Lafourcade, 2002; Barr 2000a).that have become popular in transforming rural economies (i.e., transforming agriculture and rural communities). Putnam (1993a,b) and Upholf (1986, 1997) emphasize that rural communities depend on social capital to manage risk. Republic of Kenya (1997) gave special emphasis on the agro-industrialization strategy.

Individuals and households in rural communities are differentiated by their resources, incomes and social status. Their livelihoods are shaped by local institutions such as local customs and land tenure rules regarding access to common property resources, and social relations as well as economic opportunities. In their livelihood strategies, rural households and individuals direct

attention to links between resources and options that they possess in pursuit of alternative activities that can generate the income levels required for survival (Ellis, 2000).

In most developing countries, Kenya included, rural households adopt intricate and diverse livelihood strategies. According to Ellis (2000), diversification is an important strategy for achieving survival and reflects the socio-economic dimensions of households. It is an important aspect for policy prescriptions about rural household income levels, farm productivity and rural poverty reduction. Under the diversification strategy, rural households that are endowed with social capital will promote rural development and their welfare in terms of increased social changes as well as political and cultural changes (Ellis, 2000).

Concepts of social capital

The idea of social capital dates as far back as 18th century as an important factor that could guide economic activity (Woolcock, 1998). The concept of social capital has been popularized especially in the prominent studies of Bourdieu (1986), Coleman (1988, 1990) and Putnam (1993a, 1993b, 1995). Bourdieu (1986) defines social capital in terms of social networks and connections and posits that social capital provides potential support and access to resources. Coleman (1988, 1990) contends that social capital is a resource in terms of social structure of families and communities and helps actors to achieve their objectives and interests. Putnam (1993a, 1993b, 1995) defines social capital as a key characteristic of communities where the theory of social capital is crucial for policies of grassroots participation, community development and empowerment. Other researchers including Helliwell and Putnam (1995) and Krishna and Uphoff (1999) define social capital as a community level public good that may be embedded in society rather than in any one individual and is given value by actors including individuals, institutions and organizations who use it to further their individual or collective interests. As a public good, social capital has direct implications for the optimality of its production level. Like other public goods, it is under produced because of incomplete collective internalization of the positive externalities inherent in its production (Grootaert and Bastelaer, 2002a).

North (1990) refers to institutions as including formal rules, conventions, and informal codes of behavior that can be a constraint in human interaction. Examples of institutions include laws (e.g., criminal law), land tenure arrangements (e.g., property rights), the way markets work in practice, i.e., the market as an institution. The role of an institution is to reduce uncertainty by establishing a stable structure for human interaction. Organizations are groups of individuals bound up by some common purpose to achieve objectives, e.g., government agencies (e.g., police force, ministry of agriculture, etc), administrative bodies (e.g., local government), NGOs, associations (e.g., farmers associations), private firms (North, 1990).

Forms of social capital

Coleman (1988) and Fox and Gershman (2001) distinguish the functional role of social capital as entailing (a) obligations, expectations and trustworthiness of structures; (b) information channels; (c) norms and effective sanctions; (d) local horizontal social capital which constitutes the building block for grassroots action; (e) the scaled-up horizontally and vertically linked social capital which plays a critical role in terms of generating bargaining power among actors

taking into account freedom of association and participatory policy interactions; and (f) the inter-sectoral social capital created and consolidated between diverse coalition partnerships of national and international actors and enhances the enabling environment for grassroots social capital on the ground.

Effects of social capital

Social capital has profound impact, positive or negative, in many different areas of human life and development (Aker, 2007; Productivity Commission of Australia, 2003; Rose, 2002; Grootaert and Bastelar, 2002a; 2002b; Woolcock, 2001; Grootaert, 2001; Narayan and Pritchett, 1999). The authors show that social capital results in direct income gains and more widespread and efficient services delivery; affects the provision of services in both urban and rural areas; transforms the prospects for agricultural development; influences the expansion of private enterprises; improves the management of common resources; helps improve education; and can prevent conflict. More generally, social capital enhances welfare and helps to alleviate poverty for individuals, households, communities, and even countries as a whole (Grootaert and Bastelar, 2002b; Aker, 2007).

Social capital and public policy

Social capital has important role for public policy. Beneficial consequences of social capital are important from the perspective of policy evaluation. In the environment where social capital may lead to unproductive or immoral behavior policymakers can focus on influencing social structures rather than their consequences. Durlauf and Fafchamps (2004) contend that social capital has an important role as a determinant of socioeconomic outcomes. The authors argue that it is important to know the conditions under which social capital generates beneficial outcomes to be able to orient policy. UKONS (2001) reviews main issues surrounding policy implications of social capital and shows that social capital relates well with outcomes which are important to policymakers such as economic growth, social exclusion, better health and well-being. In the context of local level institutions, social capital can play an important role in poverty and inequality reduction, promotion of equitable development, rural decentralization and community prosperity (Donnelly-Roark, et al. (2001)). In the rural decentralization model, local people get an opportunity to integrate their local level institutions (i.e., social capital) into legal, economic, and administrative framework, which in turn, shape the institutional environment (Donnelley-Roark, et al. (2001)). A local level development strategy is critical for local capacity mobilization and improvement where local organizations including public organizations, non-governmental organizations, community development organizations, cooperatives, and so on, act as catalysts for local level development initiatives (Alila, 1993).

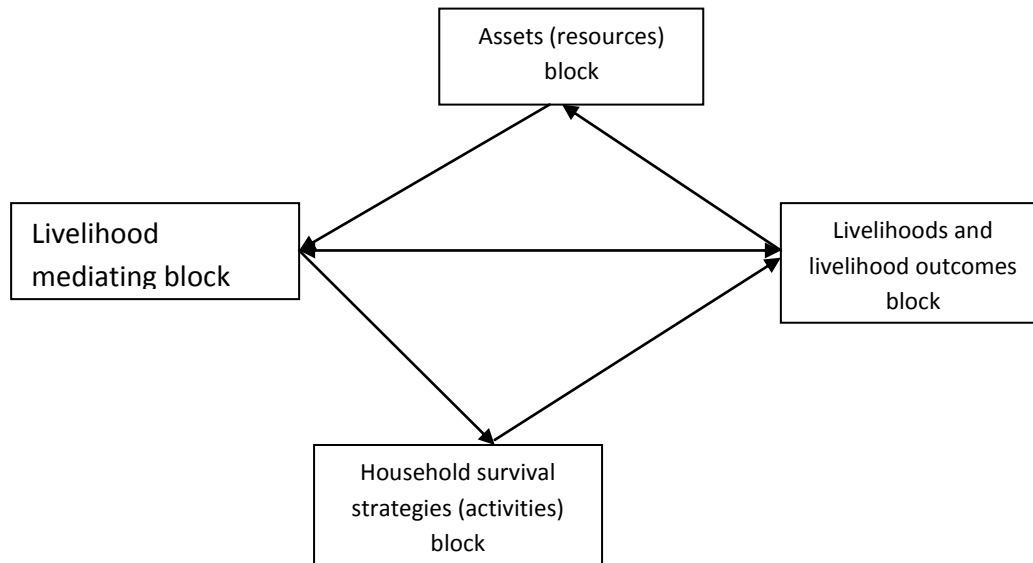
METHODOLOGY

Conceptual framework

The conceptual framework of the study is a modification of Ellis' (2000) rural livelihoods framework. Through social capital in terms of networks of social relations, households are enabled to access resources and support. The study uses the basic economic model of utility maximization subject to a budget constraint (Nicholson, 1991) to explain the behavior of rural

households in their attempts to improve their well-being. The rural household is assumed to maximize utility by participating in a diverse portfolio of resources and activities that produce the livelihood outcomes. The rural livelihoods framework comprises four blocks, (a) the asset (resources) block, (b) the livelihood mediating processes block or the conditioning factors block, (c) the livelihood strategies and activities block, and (d) the outcomes/effects block. The connection between social capital, the livelihood process of a rural household, and other forms of capital is illustrated in Figure 1 adopted from Ellis (2000).

Figure 1: A Framework of Rural Livelihoods



Source: Author's formulation based on Ellis (2000)

Different types of resources are categorized and distinguished between five capital types as natural capital, physical capital, human capital, financial capital and social capital. The resources block is the basic building block upon which households are able to undertake production, engage in labor markets, and participate in exchange with other households.

The livelihood-mediating-processes-block encompasses agencies that inhibit or facilitate the exercise of capabilities and choices by individuals and households. The mediating processes are either transforming processes when they comprise social norms and structures such as social relations, institutions and organizations of which households are part or vulnerable processes when they comprise conditions and trends such as politics, climate, social differentiation, and so on, inhibit exercise of capabilities and choices facing households.

The household-survival-strategies-block is characterized by coping strategies and adapting behaviors of the rural household for its survival, made possible by the interaction of resources and opportunities accessible to the household. Two categories of activities that form potential components of a livelihood strategy are the natural resource (NR)-based activities and the non-natural resource (NNR)-based activities. NR-based activities include activities such as collection

or gathering; cultivation of food and non-food; livestock keeping and pasturing; non-farm activities such as brick making, weaving, thatching and so on. NNR-based activities include activities such as rural trade activities and other non-farm activities such as wage work, remittances from urban and international sources and other transfers such as pension. The livelihood-outcomes-block is characterized by some combination of attributes related to the level and stability of rural household income as well as access of the household to social services and basic needs including education, health, water, shelter, and so on.

Principal factor analysis

In this study, principal factor analysis (PFA), one of the multivariate data analysis techniques, is applied to summarize the data and obtain a reduced number of social capital factors. Various survey questions and variables from each of the social capital types are combined using PFA to generate the respective indices of social capital including the aggregate. Thus indicators are generated for groups and networks, trust and solidarity, collective action and cooperation, social cohesion and inclusion, and empowerment and political action as well as an aggregate measure of social capital. PFA is used to transform the observed variables into scores in the following manner:

$$\text{Score} = \alpha_{11}x_1 + \alpha_{12}x_2 + \alpha_{13}x_3 + \dots + \alpha_{1p}x_p = \sum_{i=1}^p \alpha_{1i}x_i \quad (1)$$

where, α_{1i} 's are standardized scoring coefficients (weights) for the first respondent and the i^{th} social capital variable to be determined from the data and the x_i 's are standardized z-scores of an appropriate subset of p observable social capital variables. The resulting scores are summed over all relevant items to provide an index reflecting individual attitudes (views). An index is a single number calculated from a set of quantities. In this study the common interpretation of an index as being a single value that captures the information from several variables (quantities) in one composite variable, is retained. The index takes the form:

$$\text{Index} = \alpha_{11}x_1 + \alpha_{12}x_2 + \dots + \alpha_{1p}x_p + \alpha_{21}x_1 + \alpha_{22}x_2 + \dots + \alpha_{2p}x_p + \dots + \alpha_{k1}x_1 + \alpha_{k2}x_2 + \dots + \alpha_{kp}x_p = \sum_{j=1}^k \sum_{i=1}^p \alpha_{ji} x_i \quad (2)$$

for $i = 1$ to 5 and $j = 1$ to 340

where

p = the 5^{th} social capital dimension

k = the 340^{th} household

$\alpha_{ji}x_i$'s = the values (scores) of the latent factor, x .

The decision on the optimal number of factors to extract from PFA in the study is based on Kaiser-Guttman rule or "the Kaiser criterion" which states that the number of factors to be extracted should be equal to the number of factors having an eigenvalue greater than 1.0. The Kaiser criterion has wide appeal because of its simplicity and objectivity. The main shortcomings of the criterion are its arbitrary nature and the fact that it can result either in over-factoring or under-factoring (Mulaik, 1987).

Sampling design and data collection

This study uses primary data to achieve its objectives. The data were collected from a sample of 340 households covering the wider Nyeri¹ district. The sample was generated from a master national household sampling frame called the ‘National Sample Survey Evaluation Program (NASSEP IV) created by the Kenya National Bureau of Statistics (KNBS) in 2002. The NASSEP IV sampling frame is a multi-stage stratified cluster sampling design. The first stage comprises Enumeration Areas (EAs) created for the 1999 population and housing census. The EAs form the Primary Sampling Units (PSUs). The second stage relates to the development of clusters which are the secondary sampling units (SSUs). Clusters were selected from the EAs using the Probability Proportional to Size (PPS) method. A cluster is either a complete EA or a segment selected from subdivisions of an EA. A cluster comprises a listing of 100 households. The NASSEP IV sampling design has adequately been documented to facilitate identification and selection of clusters and households on the ground. The third stage involves the selection of the desired sample size of households from the household listing. This was done using the systematic sampling procedure.

At the time of the fieldwork, the study area had a total of 34 operational clusters comprising 10 urban and 24 rural clusters. Data were collected in all the 34 clusters. Ten households were selected from each cluster using systematic sampling method. This translated to a sample size of 340 households (100 urban households, 240 rural households). A community leader was identified in each cluster to respond to community issues.

Through field visits, data were collected covering social capital, rural livelihoods as well as basic household and village characteristics. The social capital data covered the five social capital types including groups and networks, trust and solidarity, collective action and cooperation, social cohesion and inclusion, and empowerment and political action. At the household level, the main respondent was the head of the household but where “not at home”, any knowledgeable adult member of the household was interviewed. Although the study focused on rural areas, the field visits and data collection also covered the urban areas. This was essentially to provide basis for a rural-urban comparison where that deemed necessary.

Study Area

Nyeri district is within the highland equatorial zone of Kenya and covers a total area of 3,266 km² and is mountainous being the home of Mt. Kenya at 5,199m above sea level, the Aberdare ranges at 3,999m and a series of hills. Two major rivers, the Sagana and Chania rivers, as well as several streams make the district self-sufficient in water resources for purposes of domestic use, agriculture, and industrial development. About 72 percent of the total area is arable land, 3.3 percent is non-arable while the rest covers gazetted forest (19.6 percent) and urban land (5.1 percent). Although the district receives equatorial rainfall, the mountains and hills influence the rainfall pattern and mode of agriculture into localized areas. The high potential zone receives good climate in terms of temperatures, weather, and rainfall, which combined with good land tenure system, influence agricultural activities. Much of the agriculture is carried out in

¹ In 2007, Nyeri was sub-divided into two, Nyeri North and Nyeri South districts. The term “wider Nyeri” in this study, refers to Nyeri district before the sub-division.

smallholder farms, which produce both food and cash crops. The main crops include tea, coffee, horticulture, maize, beans, potatoes and bananas. The marginal zone has low potential land and low rainfall and the predominant agricultural activity is ranching and growing of subsistence drought-resistant crops. The literacy level in the district has improved from an estimated level of 89 percent in 2002 (RoK, 2002) to 91.3 percent in 2007 (RoK, 2007). The district also has a total of 19 financial institutions (10 banks, 2 development financial institutions and 7 microfinance institutions). There are also 105 groups and cooperatives of various types in the district including producer, transport, housing groups and SACCOs with a total membership of 154,859 and a turnover of 4.3 billion Kenya Shillings (RoK, 2002). The 1999 population and housing census, estimates the population of the district to be 677,216 people (499,152 rural, 178,064 urban) with the total number of households at 168,786, a female/male sex ratio of 105:100, and an average population density of 202 persons per km² (RoK, 1999).

RESULTS: Factor loadings of social capital

Table 1 presents the rotated factor loadings for aggregate social capital and social capital dimensions.

Table 1: Rotated Factor Loadings for Aggregate and Dimensions of Social Capital

	<i>Aggregate social capital</i>	<i>Groups & networks</i>	<i>Trust & solidarity</i>	<i>Collective action & cooperation</i>	<i>Social cohesion & inclusion</i>	<i>Empowerment & political action</i>
gn7	0.2677	0.6785				
gn8	0.2561	0.6785				
ts_1	0.5826		0.5015			
ts3	0.5839		0.549			
ts2	0.0292		0.1392			
ts2_4	-0.0287		0.0577			
ts2_2	0.0854		0.1267			
Ts_3	0.0197		0.1856			
ca1	0.408			0.316		
ca5	0.6566			0.5814		
ca6	0.5762			0.5599		
sc1	0.6063				-0.4311	
sc2_1	-0.2827				0.4281	
sc4_2a	-0.1805				0.307	
sc4_3	-0.0678				0.1895	
ep1	0.0866					0.2929
ep2	0.384					0.4194
ep3	0.1471					0.3043
ep4	0.207					0.4963
ep5	-0.1726					-0.1695
ep6	0.0943					0.3758
group	0.2763					

Source: Author's construction using survey data

Social capital, livelihood sources and socioeconomic status

Table 2 presents cross-tabulation results of social capital over main sources of livelihoods and socioeconomic status of households in Nyeri district. The study identified three main sources of livelihoods including crop and livestock production both of which are agricultural related activities, and non-farm activities. The economic status is derived from the quintiles constructed from the wealth index based on the households' ownership of physical assets and housing characteristics.

Table 2: Social Capital by Livelihoods and Socioeconomic Status

	Social capital indicators					
	Aggregate social capital index	Groups/networks index	Trust/solidarity index	Collective action/cooperation index	Social cohesion / inclusion index	Empowerment & political action index
Main livelihoods						
<i>Crop production</i>	0.311	-0.207	0.234	0.141	-0.288	0.132
<i>Livestock production</i>	0.162	0.113	0.131	0.175	-0.102	-0.221
<i>Non-farm</i>	-0.022	0.112	-0.023	-0.021	0.083	0.005
All livelihoods	-0.003	-0.008	0.001	-0.003	0.007	-0.0002
Socioeconomic status						
<i>First quartile</i>	0.157	-0.121	0.052	0.137	-0.208	-0.059
<i>Second</i>	0.183	-0.090	0.101	0.147	-0.110	0.015
<i>Third</i>	0.088	-0.152	0.170	0.035	-0.010	0.053
<i>Fourth</i>	0.146	0.089	0.083	0.057	-0.006	0.117
<i>Richest</i>	-0.567	0.244	-0.357	-0.382	0.422	-0.077
All	-0.003	-0.008	0.001	-0.003	0.007	-0.0002

Source: Author's construction using survey data

Household livelihoods, assets and social capital

The basic question addressed in this section is whether households with high levels of social capital in Nyeri district are better off than those with low levels of it and whether investment in social capital can help such households escape from poverty. Table 3 provides a descriptive answer to these questions. Households are grouped in aggregate social capital and household consumption expenditure quintiles. The results of the aggregate social capital quintiles are cross-tabulated over household activities as sources of livelihoods, consumption expenditure, and ownership of assets (wealth index as well as human capital in form of education).

Table 3: Livelihood Sources, Asset Ownership, Social Capital and Expenditure Quintiles

	Aggregate social capital quintiles					
	Lowest				Highest	All
Household activities						
<i>Value of Crop produced (Kshs)</i>	5054	6085	5835	5623	7202	4858
<i>Livestock production (Kshs)</i>	2566	3662	4413	4538	2941	2890
<i>Income Non-farm activities (Kshs)</i>	6604	5508	7958	5175	5506	9961
All household activities (Kshs)	14224	15255	18206	15336	15649	17708
Total expenditure, p.a. (Kshs)	72939	82923	76553	67768	66964 ²	80091
Years of schooling	7.22	7.55	8.76	7.22	8.36	8.81
Wealth index	-0.332	-0.512	-0.343	-0.139	-0.184	0.002
	Expenditure quintiles					
	Lowest				Highest	All
Aggregate social capital	0.3672	0.1627	0.22690	0.3515	0.2036	-.0032
Groups and networks	-.2378	-.1703	-0.0256	0.2268	0.1274	-.0080
Trust and solidarity	0.1839	0.0125	0.0892	0.2346	0.2245	0.0012
Collective.action.and.cooperation	0.2210	0.1835	0.1949	0.2168	0.0430	-.0025
Social cohesion and inclusion	-.2186	-.0534	-0.2550	-.1097	-0.0672	0.0072
Empowerment.and.political action	0.4227	-.0023	-0.0236	-.0408	-0.0418	-.0002

Source: Author's construction using survey data

DISCUSSION

Social capital, livelihood sources and socioeconomic status

The results in Table 2 indicate that the values of the aggregate social capital indicator for crop (0.311) and livestock (0.162) production activities as main sources of households' livelihoods are positive suggesting that endowment of aggregate social capital is an important factor in crop and livestock production as main sources of livelihoods. This is in contrast to the case of non-farm activities with a negative value (-0.022) of aggregate social capital indicator. The results further show that the five social capital dimensions vary distinctly in importance over the three main sources of households' livelihoods. The value of the indicator for groups and networks dimension, for example, is positive over livestock production (0.113) and non-farm (0.112) activities suggesting that endowment of groups and networks (mutual support) social capital is important among households that engage in livestock production and non-farm activities as their source of livelihoods. The social capital dimensions of trust and solidarity as well as collective action and cooperation, exhibit a similar pattern over the main sources of livelihoods. The values of the indicators for both dimensions are positive over crop production (0.234, 0.141) and livestock production (0.131, 0.175) while negative over non-farm (-0.023, -0.021) activities. This implies that stronger endowment of trust and solidarity as well as collective action and cooperation social capital types is important for households engaged in crop and livestock production activities. Endowment of social cohesion and inclusion social capital is important for households engaged in non-farm (0.083). Households strongly endowed with empowerment and political action social capital are more engaged in crop production (0.132) and non-farm (0.005) activities than in livestock production (-0.221). These results suggest that social capital asset can

²Suggests that social capital enables people to consume without having to spend cash.

be an important factor in the livelihood diversification strategy of households in Nyeri district in particular and Kenya in general.

The results further show that aggregate social capital is inversely correlated to the richest socioeconomic group. The indicator for aggregate social capital is positive for all socioeconomic groups except the richest. The results indicate that ownership of social capital in Nyeri district is high among the second (0.183) and poorest (0.157) groups of households but lowest among the richest socioeconomic group suggesting that being rich reduces incentive for socialization and social capital may be considered an inferior good for the rich. This finding is consistent with the result for Indonesia (Grootaert, 1999) which concluded that social capital is, indeed the capital of the poor. However, the richest group of households is strongly endowed with both groups and networks (0.244) and social cohesion and inclusion (0.422) social capital types.

Household livelihoods, assets and social capital

The results in Table 3 indicate that there is strong overall pattern of co-variation between aggregate social capital and livelihood sources, household consumption expenditure, and asset ownership. The results collaborate with the findings in Table 2 that strong endowment of aggregate social capital is important for households engaged in crop and livestock production activities. It turns out that households with higher aggregate social capital have better livelihoods especially from crop production. The pattern of household consumption expenditure is fairly evenly distributed across all levels of aggregate social capital. These results support findings for Indonesia (Grootaert, 1999).

The results of the household consumption expenditure quintiles are cross-tabulated over the aggregate and social capital. The results indicate that the households facing lowest consumption expenditure levels are the most strongly endowed with aggregate social capital. Tables 2 and 3 suggest that these are households in the second and poorest socioeconomic groups.

CONCLUSIONS

The study findings show that strong endowment in social capital is important for household engagement in main sources of livelihoods. Households strongly endowed in all social capital types, except the social cohesion and inclusion dimension, will be engaged in crop production activities as main sources of livelihoods while a household's strong endowment in the groups and networks, social cohesion and inclusion as well as empowerment and political action dimensions of social capital will facilitate their engagement in non-farm activities. This finding suggests that social capital can be an important factor in the livelihood diversification strategy of households.

The results further show that households with higher levels of aggregate social capital endowment have better livelihoods especially from crop production. Ownership of aggregate social capital is higher among the poorest households than among other socioeconomic groups, making such groups better off than comparable groups without social capital. The results indicate that social capital asset is an important component of a household's survival portfolio. This

finding suggests the need to promote rural social networks as a strategy for raising standards of living of the rural households.

Policy implications

The study has identified a policy gap that can partially explain continued poor performance of Kenya's rural sector. Policy formulation process has not been favorable to indigenously-based local economies since it ignores societal values by not embracing some key resources such as social capital on which rural communities can depend on to manage risk as well as for livelihoods. This is a policy gap in terms of inadequate application of the rural diversification strategy. For several years the strategy placed main emphasis on farming with consequent result that rural households with sources of livelihoods other than farming did not receive much attention in the rural development mainstream. Rural households endowed with social capital can promote rural development and improve their livelihoods and welfare. One of the key findings of this study is that rural households in Kenya are endowed with social capital. The results have implications for Kenya's rural sector development policies and programs.

Drawing from the study findings, the following can be considered as important policy initiatives for possible role of social capital as a resource and a process in facilitating the improvement of livelihoods of rural households in Kenya.

The government can institutionalize the measurement of social capital. This would require creating a data base of social capital formation for Kenya. Measures of social capital will provide additional social indicators of standard of living and well-being that the current range of socioeconomic and demographic indicators do not fully or adequately explain. Institutionalizing the measurement of social capital translates into incorporating a social capital perspective into public policy. It would therefore be important to incorporate social capital dimensions in national surveys.

Another important policy initiative is promoting rural social networks and interactions, cooperation and bonding activities among households as well as community empowerment. This policy aims at enhancing development of social capital since social capital asset is an important component of a household's survival portfolio that enhances its engagement in various sources of livelihoods. One of the ways of enhancing development of social capital is increasing the households' cohesiveness to be able to lobby leaders for the provision of services as well as increasing the womens' participation in social capital activities. Involvement of community in lobbying for provision of social services, including infrastructure, affects social capital accumulation, but has no direct effect on livelihoods (Grootaert, 1999). Communities that lobby for support or vote for leadership are likely to be more cohesive than communities that do not involve themselves in these activities. Such communities are more likely to fight together for their rights and improve their welfare. As grassroots institutions, NGOs and CBOs should be encouraged to increase their role in mobilizing societies to invest in social capital.

REFERENCES

Aker, J. C. (2007) Social Networks and Household Welfare in Tanzania: Working Together

- to Get Out of Poverty. *Working Paper Series*, Social Science Research Network.
- Alila, P. O. (1993) Informal Credit and Rural Sector Enterprise Development. In McCormick, D. and Pedersen P. O. (Ed.), (176-177) *Small Enterprises: Flexibility and Networking in an African Context*. Nairobi: Longman.
- Barr, A. (2000) Social Capital and Technical Information Flows in the Ghanaian Manufacturing Sector. *Oxford Economic Papers*, 52(3): 539-559.
- Bourdieu, P. (1986) The Forms of Social Capital, in United Kingdom Office for National Statistics, *Social Capital: A review of the literature*, pp. 7. London.
- Canadian Government (2003) Social Capital as a Public Policy Tool. Policy Research Initiative, *Research Project*, Canada.
- Coleman, J. S. (1990) *Foundations of Social Theory*. Cambridge, Mass: Harvard University Press.
- _____. (1988) Social Capital in the Creation of Human Capital. *American Journal of Sociology*, Vol. 94 (Supplement): S95-S120.
- Donnelly-Roark, P., Ouodraogo, K., & Xiao, Ye. (2001) Can Local Institutions Reduce Poverty? Rural Decentralization in Burkina Faso. *Policy Research Paper No. 2677*. The World Bank.
- Durlauf, S. N., & Fafchamps, M. (2004) Social Capital, *NBER Working Paper No. W10485*
- Ellis, F. (2000) *Rural Livelihoods and Diversity in Developing Countries*. Oxford: Oxford University Press.
- Ellis, F. & Freeman H. A. (Eds.) (2005) *Rural Livelihoods and Poverty Reduction Policies*. London and New York: Routledge.
- Flora, J., Flora, N., Ryan, V., Hobbs, D., Gulik, J., Allen, J., Cordes, S., Nelson, E., Manley, R. & Shaffer, R. (2002) *Rural Social Enterprise*. Iowa: Iowa State University, University of Missouri, and University of Nebraska.
- Fox, J. and Gershman, J. (2000) The World Bank and Social Capital: Lessons from Ten Rural Development Projects in the Philippines and Mexico. *Policy Sciences*, 33(3): 399-419.
- Grootaert, C. (2001) Does Social Capital Help the Poor? A Synthesis of Findings from the Local Level Institutions Studies in Bolivia, Burkina Faso, and Indonesia. *Local Level Institutions Working Paper No.10*. World Bank. Washington, D.C.
- _____. (1999) Social Capital, Household Welfare, and Poverty in Indonesia, *Policy Research Working Paper No. 2148*. World Bank. Washington D.C.
- Grootaert, C., & Bastelaer, van T. (Eds.). (2002a) *The Role of Social Capital in Development: An Empirical Assessment*. New York: Cambridge University Press.
- _____. (2002b) *Understanding and Measuring Social Capital: A Synthesis of Findings and Recommendations from the Social Capital Initiative*. Washington, D.C: World Bank.
- _____. (Eds.). (2002c) *Understanding and Measuring Social Capital: A Multidisciplinary Tool for Practitioners*. Washington, D.C: World Bank.
- Helliwell, J. F. & Putnam, R. D. (1995) Economic Growth and Social Capital in Italy. *Eastern Economic Journal*, 21(3): 295-307.
- Krishna, A. & Uphoff, N. (1999) Mapping and Measuring Social Capital: A Conceptual and Empirical Study of Collective Action for Conserving and Developing Watersheds in Rajasthan, India. *Social Capital Initiative Working Paper No. 13*.
- Lafourcade, O. (2002) Prestemo de US\$32 millones para Colombia, El Pais, in The Importance of Social Capital in Colombian Rural Agro-enterprises. pp. 2, *CAPRI Working Paper No. 26*.

- Manda, D. K., Kimenyi, S. M. & Mwabu, G. (2001) A Review of Poverty and Antipoverty Initiatives in Kenya. *KIPPRA Discussion Paper No. 3*.
- Mulaik, S. A. (1987) A Brief History of the Philosophical Foundations of Exploratory Factor Analysis. *Multivariate Behavioral Research*, 22: 267-305.
- Narayan, D. & Pritchett, I. (1999) Cents and Sociability: Household Income and Social Capital in Rural Tanzania. *Economic Development and Cultural Change*, 47(4): 871-897.
- _____. (1999) Bonds and Bridges: Social Capital and Poverty. *Policy Research Working Paper 2167*, Poverty Reduction and Economic Management Network. World Bank. Washington, D.C.
- Nicholson, W. (1991) *Microeconomic Theory: Basic Principles and Extensions*, 5th Edition. Amherst, Massachusetts: The Dryden Press International.
- North, D. C. (1990) *Institutions, Institutional Change and Economic Performance*. New York: Cambridge University Press.
- Productivity Commission (Australian Government) (2003) Social Capital: Reviewing the Concept and its Policy Implications. *Research Paper*, AusInfo. Canberra, Australia.
- Putnam, R. (1995) Bowling Alone – America’s Declining Social Capital. *Journal of Democracy*, 6(1): 65-78.
- _____. (1993a) *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press.
- _____. (1993b) The Prosperous Community: Social Capital and Public Life. *The American Prospect*, 12(13): 35-42.
- Republic of Kenya (2008) *Kenya Vision 2030 First Medium Term Plan (2008-2012): A globally competitive and prosperous Kenya*. Nairobi: Government of the Republic of Kenya.
- _____. (2007) *Basic Report on Well-being in Kenya: Based on Kenya Integrated Household Budget Survey 2005/06*, Volume 1, Kenya National Bureau of Statistics. Nairobi: Government Printer.
- _____. (2005) *Economic Survey*. Nairobi: Government Printer.
- _____. (1995) *District Focus for Rural Development*, Revised February 1995. Nairobi: Government Printer.
- _____. (1994) *Seventh National Development Plan (1994-1996)*. Nairobi: Government Printer.
- Rose, R. (2002) *Coping with Organizations: Networks of Russian Social Capital*. Scotland: University of Aberdeen.
- United Kingdom Office of National Statistics (2001) *Social Capital: A Review of the Literature*. London: UKONS.
- United Nations Food Agricultural Organization (1997) The State of Food and Agriculture, in Johnson, N. L. Suarez, R. and Lundy, M. (2002), pp (1), The Importance of Social Capital in Colombian Rural Agro-enterprises. *CAPRI Working Paper No. 26*.
- Uphoff, N. (1986) *Local Institutional Development: An Analytical Sourcebook with Cases*. Ithaca: Cornell University Press.
- Woolcock, M. (2001) The Place of Social Capital in Understanding Social and Economic Outcomes. *ISUMA. Canadian Journal of Policy Research*, 2(1): 11-17.
- _____. (1998) Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework. *Theory and Society*, 27(2): 151-208.
- World Bank-AllAfrica.com (2013), Poverty Levels in Kenya Dropping. Washington, D.C.