



THE ROLE OF SOCIAL NETWORKS AS SURVIVAL STRATEGIES IN AGRO-PASTORAL COMMUNITIES IN ARID AND SEMI-ARID LANDS IN TANZANIA



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ABSTRACT

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Agro-pastoral communities in semi-arid areas of Tanzania are among the most food insecure groups in the country. In the absence of precisely stipulated mitigation measures from the government the agro-pastoralists have, all across their history relied on social networks for their survival. This paper seeks to examine in detail the role of social networks as survival strategies in coping up with food insecurity among agro-pastoral communities in Arid and semi-arid areas of Tanzania. Based on data and information that was collected through focus group discussions and in-depth interviews in three villages of Sejeli, Mtumba and Makoja it is reported that social networks have been significant in sustaining livelihoods of vulnerable households. These traditional social networks are based on mutual trust and organized on consanguine and kinship ties and through these networks wealth and riches are shared by the agro-pastoral communities. The findings further reveal that these traditional social networks do better than the externally induced initiatives. It has also been revealed that, despite facing a myriad of challenges such as competition for labor, lack of entrepreneurial skills and negative impacts of commercialization of livelihoods on food security the traditional social networks are surviving albeit with hitches. It is recommended that policy interventions that seek to construct resilience of the vulnerable households need to consider traditional systems of social networking.

Contribution/ Originality: The study contributes in the existing literature of Economic sociology by unveiling that social networks have been significant in sustaining livelihoods of vulnerable households. And that, policy interventions that seek to construct sustainable resilience of the vulnerable households need to consider traditional systems of social networking.

1. INTRODUCTION

Recent decades have witnessed a resurgence of interest in social capital and its role in economic development (World Bank, 2000). Although social capital has its theoretical roots in early sociological works by Marx, Durkheim and Weber (Watson and Papamarcos, 2002) its emergence as an important concept in development practice and theory is relatively contemporary. This renewed verve has been accompanied by the rapid growing literature which emphasizes the significance of social ties and shared norms to societal wellbeing and economic efficiency (Putnam,

1993; Arnason *et al.*, 2004). A growing body of empirical evidence suggests that the density of social networks and institutions, and the nature of interpersonal interactions that underlie them, significantly affect the efficiency and sustainability of development programs (Grootaert and Bastelaer, 2002). Indeed, this represents a paradigm shift from the modernization theory of the 1950s and 1960s which regarded traditional social relationships and ways of life as impediments to development to a necessary component. Thus, there is now emerging consensus that social and human capital manifested in groups does pay for local people (Narayan and Pritchett, 1996; Mukherjee, 2001; Krishna, 2002). It is hardly surprising, therefore, that in many recent publications, and as promoted by the World Bank, "social capital" of which social networks are important forms has been introduced as a tool or "missing link" which is necessary in alleviating poverty and achieving societal development (Grootaert, 1998; Wiesinger, 2007). The importance of social capital as a necessary ingredient in development is context specific and changes over time. Drawing on the experience of semi-arid Tanzania, this paper seeks to examine the role and challenges of social networks as survival mechanisms in the context of food insecurity. The work is constructed on the growing realization that, social networks fastened in familial and consanguine kinship and neighborhood networks are under unrelenting pressure from both endogenous and exogenous forces. In view of this, consequently, elucidation of the role and challenges of social networks is deemed crucial, and this paper is a contribution towards that.

2. MATERIALS AND METHODS

A series of focus group discussions and in-depth interviews were conducted in each of the three villages. The selection of focus group discussions as a method of data collection was dictated by the nature of the study which sought to find out how groups of social network actors address the problem of food insecurity in their areas. These discussions were found appropriate because they shared group opinions on how the local people have been networking in their bid to ensure survival, and in some cases, to accumulate wealth. In a wider context, Bloor and Wood (2006) argue that focus group discussions are most ideal for collecting data on the norms of behavior current within a social group – that is, what kinds of behaviors are approved and disapproved of by that group. Therefore, this is most relevant to this study which seeks to collect data on what community members feel and believe to be the social obligations of each member of the society. In total, nine focus group discussions were conducted in the three villages, one for women, and another for males and the third for youths. The size of each group ranged from 8 to 12 members. This size was found ideal to get individual perspectives which were later moderated in the course of discussion. Guided by a check list of questions, the discussions were centered on the existence of social networks and their roles in ensuring survival with regard to food insecurity. In addition to focus group discussions, in-depth interview method was used because of its effectiveness in giving a human focus to research problems. Also it allows respondents to talk about their personal feelings, opinions, experiences as well as providing insights into the connections and relationships a person sees between particular events, phenomena and beliefs. Therefore, in-depth interviews provided the researcher with an opportunity to gain insights into how people interpret their society. Data pertaining to the types, importance and challenges of social networks were collected. The number of interviews differed for the three villages. For example, in Makoja village six in-depth interviews were conducted while there were eight interviews in Sejeli village and in Mtumba village there were ten such interviews. The number of sessions was largely determined by saturation points. The researcher stopped at points where no new information was being generated by the interviewees. In selecting the interviewees, however, proportional representation of males and females was taken into consideration.

3. THE ROLE OF SOCIAL CAPITAL IN SOCIO ECONOMIC DEVELOPMENT

The discussions in this part takes a broader view of social networks and make general reference to social capital, but in the latter part of the paper, precise emphasis is placed on networks. Conceptualization of social capital with social networks as a critical component is still evolving with no absolute agreement on its definition or

measurement (Akçomak, 2009). Phillips (2010) further contends that social capital represents a concept that is both ‘congested’ and ‘contested’, with a multiplicity of conceptions and little consensus as to the most desirable. Coleman (1988) defines social capital as ‘the structure of relations between actors and among actors in which others may be contacted, obligations and expectations can be safely formed, information can be shared and sanctions can be applied’. Shortall (2004) posits that social capital ‘is the ability to secure resources by virtue of membership in social networks or larger social structures’.

Putnam (1993) defines social capital as features of social organizations such as networks, norms and trust that facilitate coordination and cooperation for mutual benefits. This means that social capital exists only as a by-product of membership to social network and social support systems that exist within a community, both inside and outside the family (Woolcock and Narayan, 2000). Woolcock (2001) identifies three types of connectedness as being important for the networks within, between and beyond communities. First, bonding social capital describes the links between people with similar outlooks and objectives, and is manifested in different types of groups at the local level – from guilds to mutual aid societies. Second, bridging social capital describes the capacity of groups to make links with others that may have different views, particularly across communities. Third, linking social capital describes the ability of groups to engage vertically with external agencies, either to influence their policies or to draw down on resources.

Øyen (2002) also sums up that an individual acquires social capital through participating in informal networks, registered organizations, associations of different kinds and social movements, and it represents the sum of these experiences. Fukuyama (2004) argues that social capital is the establishment of norms that permit people to work in groups. This definition provides some explanation for the differences in the definitions of social capital in the sense that this form of capital is the consequence of intensely rooted cultural habits and as a result, it is defined differently in different cultural settings. Specific empirical correlates of social capital may vary across cultures (Krishna and Uphoff, 1999). Norms and forms of association that promote collective action in one cultural setting may fail to do so in another. Some kinds of networks may facilitate collective action in a given environment while other kinds of networks may inhibit such action.

Until the 1990s, the major theories of development held narrow, even contradictory, views of the role of social relations in economic development, and offered little by way of constructive policy recommendation (Abiche, 2012). In the 1950s, for example, modernization theories regarded traditional social relationships and ways of life as an impediment to development. These conventional theories emphasize economic growth over development as the only means to increase human wellbeing. Furthermore, these theories accept the notion that accumulation of wealth by a few would stimulate entrepreneurship and innovation (Melkote and Steeves, 2001; Rist, 2008). Relatively little attention was paid to the extent and quality of institutional infrastructure and social capital which are widely accepted today as among the main determinants of success by which developing countries can create and effectively deploy resources and capabilities, and gain access to markets which are critical for their development (Hettne, 1995).

Narayan (1999) also contends that the formal and informal ties that bind and help members may also exclude and alienate others. Strong social networks may also inhibit individual initiative and curtail the entrepreneurial spirit by posing excessive claims on successful group members. Furthermore, policies encouraging competition, dividing rural inhabitants into winners and losers, might be detrimental to the positive development dynamics and could mean a total breakdown of the rural social fabric. In the per urban areas of Tanzania, for example, Lanjouw and Lanjouw (2001) also notes that kinship and tribal affinities, and time devoted to communal activities appear to deter entrepreneurial activities and non-farm employment, but trust in officials and public servants and strong heterogeneous village associations are important in stimulating rural economies. In recent years, the role of institutions and networks in establishing relationship between people and the associated norms and values has risen to a considerable prominence in programs of poverty alleviation and development. Perhaps, in response, many

donors are actively trying to support the development of civil society and social capital in developing countries. Donors are funding local NGOs, structuring development projects in ways that allow for participation, and are providing organizational training for community groups and NGOs. Yet, the effectiveness of these efforts to build social capital is largely unknown. Numerous studies have shown relationship between social capital and positive development outcomes such as health (Rose, 2000) natural resource management (Pretty and Ward, 2001) and economic development (Edwards and Foley, 1998). The potential for social capital to make a positive contribution to outcomes in diverse areas of social concern such as health, community safety and education has captured the interest of policy makers, social analysts and researchers (Australian Bureau of Statistics, 2002). Putnam (1993) astutely point out that trust, norms and networks of civic engagement (associations) can substantially improve a society's efficiency in overcoming dilemmas of collective action. Arnason *et al.* (2004) also discussed the concept of social capital in the context of rural development and they maintain that social capital may affect the performance, competitiveness and social cohesion of a community. In this connection, social capital is a necessary ingredient for sustainable development to take place. Social capital plays a socio-economic role in community empowerment by fostering social and cultural coherence of a society, the norms and values that govern interactions among people and initiate social capital- based microcredit formation for rural entrepreneurship to diversify rural livelihoods.

3.1. The Role of Social Networks among Agro-Pastoralists in Arid and Semi-arid Tanzania

The semi-arid areas of Tanzania are characterized by highly variable rainfall (Yanda *et al.*, 2015). Not only does low and unpredictable rainfall make for uncertainty, but it also lends emphasis to the need for timely access to key resources (e.g. oxen for ploughing, seeds for planting, labor for weeding) for optimum harvest outcomes (Morris *et al.*, 1998). The Gogo agro-pastoral societies in semi-arid Tanzania provide examples of how social protection mechanisms, especially social networks, have helped vulnerable households to cope with various forms of risks like food shortage. These mechanisms involve resource pooling, sharing information, milk, livestock and other resources for households that lost their belongings through different shocks. Social networks among the Gogo in semi-arid areas of Tanzania exist in many forms. They can be categorized on the basis of the membership, whether traditional or modern, and whether formal or informal. These ties are reflected mostly in the ways the agro-pastoralists share labor, gifts, livestock and exchange food items. In fact, the traditional African family is best understood as resulting from a principle of "consanguinity" or blood descent whereby social groups beyond the nuclear family are social units for economic cooperation (Prazak, 2006).

Like elsewhere in Sub-Saharan Africa, some of the social security mechanisms are voluntary while others are compulsory, and failure to obey may lead to social sanctions. For the destitute and most vulnerable households, their access to resources is facilitated through social ties of kinship, place, friendship and religion, i.e. social capital (Narbeth, 2001). Therefore, social capital in these communities minimizes risk, enables common resource management and provides safety nets at times of crisis (Nori *et al.*, 2005). Further (Hodgson, 2004) notes that in agro-pastoral communities, exchange networks perform the function of promoting herd and family development largely driven by cultural inertia and history. These networks also serve to promote the independence of the household, and at the same time they provide the promise of support at times of need. One remarkable observation is the generational gap in value systems regarding traditional social networks. This gap is best reflected in the way people of different ages perceive the value of social networks especially sharing of livestock. Focus group discussions with youth groups in all the three villages revealed their growing drive more towards responding to market forces than communal obligation to help others. For most of the youths, having livestock means having economic wealth and there is a growing tendency to place lesser attention to the cultural and social valuation of livestock. On the other hand, the elderly placed themselves in a dilemma of having to choose between selling livestock and feeling obliged to loan it to a member in their community. The fact that this situation places them in a dilemma is a further proof that they are culturally bound to help the needy households in their community.

However, on the other side (Yang, 2007) assert that Social networks, often loosely referring to the connections among a group of people, do not necessarily or directly lead to social support. As a matter of fact, social connections can become a liability; at least, resources (time, effort, money, etc.) need to be invested for establishing and maintaining social connections, and there is no guarantee that individuals will earn what they hope to get if they take the networks as a kind of capital.

3.1.1. Sharing of Livestock - Kukozwa

The social and cultural importance that agro-pastoralists attach to livestock needs no further emphasis. Indeed, this is one attribute that distinguishes agro-pastoral communities from many other forms of peasant production in rural Tanzania. This form of social capital found among agro-pastoral communities in Arid and semi-arid in Tanzania encompasses social relation based on trust and neighborhood. Based on trust, for example, cattle – rich persons (*mgoli*) among the Gogo feel obliged to loan cattle to members of the clan (*mlango*) and in some other cases, to trustful neighbors under a system locally known as *kukozwa*. Loaning livestock to family and friends is meant to help them rebuild their herds and develop social relations. Sharing of livestock is sometimes necessary as a way of spreading risks against persistent drought, diseases or shortage of pastures. Loiske (1995) also reported that in Babati and Manyara, north of the Gogo land, people practice redistribution of livestock whereby a cattle owner in need of food entrusts a cow to a neighbour or friend against food loan such that when the calf grows, the cow is returned to the original owner and the deal is finalized.

The *kukozwa* system also allows families to maintain a functional balance between herd and family size. This arrangement does not only serve to fulfil some societal obligations, but also serves to relieve the burden of keeping large herds of cattle together. This example serves to illustrate a situation where in the past, social and societal obligations took precedence over economic considerations. Otherwise, the system does not amount to total wealth re-distribution among community members. Instead, it only cushions the poorer households from falling into abject poverty. In arid and semi-arid lands of central Tanzania, cattle have been an important means for survival in times of famine because they could be exchanged for grain. In some cases, the sharing of livestock goes beyond survival-needs and allows some households to accumulate herds of cattle. It is important to note, however, that, trust takes time to build (Fukuyama, 1995) and this explains why all cattle-rich households do not loan cattle to the poor households. Only in rare cases the sharing of livestock went beyond members of the clan – *mlango*.

The sharing of livestock, just like other forms of social networks, is facing pressure for change. With growing trend towards commercialization of rural livelihood where some agro-pastoral groups are pervaded by distrust and temptations to gain cash, this system of wealth sharing is being seriously threatened. Under growing market pressure, for example, the sharing of livestock among Gogo people is now confined to very close family members. In an in-depth interview with a 60 year person in Mtumba village, it was remarked that “*Yes, kukozwa system is still there for fewer households, but I would offer cattle to close family members only*”. Similar sentiments reflecting pressure on this system were echoed by another interviewee in Sejeli village who claimed: “*We are caught in a dilemma of having to choose between helping your neighbor and exchanging cattle for cash*”. Furthermore, only two members of focus group discussions in all the three villages acknowledged to have received cattle from family members in the last five years.

One remarkable observation is the generational gap in value systems regarding traditional social networks. This gap is best reflected in the way people of different ages perceive the value of social networks. On the one hand, none of the youth in all the three focus group discussions were willing to share livestock with other members of their families under the *kukozwa* system. Focus group discussions with youth groups in all the three villages revealed their growing drive towards responding to market forces. On the other hand, the elderly find themselves in a dilemma of having to choose between selling livestock and loaning it to other members in their community. The fact that this situation places them in a dilemma is a further proof that they are culturally bound to help the

needy households in their community. Thus, although sharing of livestock is still existent, it is under intense pressure for extinction.

3.1.2. Sharing of Labor- Kulalika

Arid and Semi-arid areas in central Tanzania are risky environments for those communities whose livelihood depends on natural resources. For example, due to insufficient and unreliable rainfall, agricultural production is characterized by frequent crop failures. Under situations of unpredictable rainfall timely access to key production resources is of critical importance, and one of such resources is farm labor. Focus group discussions and in-depth interviews in Mtumba, Makoja and Sejeli villages reveal that agro-pastoral communities in semi-arid Tanzania are socially bound and help each other in various aspects including sharing of grain and labor. Sharing of labor, for example, takes the form of work parties through which labor-deficit and vulnerable households are offered such assistance. These work parties operate under a system locally known as *kulalika* where able-bodied persons in the village are invited to provide labor support to the needy households. In this way, the food-insecure households are able to benefit from others simply by virtue of their membership to the community. These societal obligations have been playing an important role in cushioning the poorer households from sinking into deeper poverty.

Labor sharing between agro-pastoral households in Arid and semi-arid areas of Tanzania is a social safe net which traditionally has helped vulnerable families at times of draught (Lynn, 2010). This system of mutual support-groups works well because the benefiting households are also expected to reciprocate the assistance in other different forms of cooperation. Sharing of farm labor is still common in most remote villages where pressure for wage labor is still limited. In Mtumba and Sejeli villages, where urban-based farmers are beginning to establish themselves, sharing labor is rare. One respondent in Mtumba village remarked that *“Much as I would wish to give a helping hand to the most vulnerable members of the community, I would only do so if there are no people to hire me for cash”*.

Results from focus group discussions and in-depth interviews showed a clear pattern whereby female respondents were more willing to help each other through sharing of labor than their male counterparts, and this is despite the growing pressure for wage labor. This pattern of responses was the same for all the villages regardless of the intensity of pressure for wage labor. Most of the female respondents considered providing food security to their households as their key responsibility especially where male partners did not seem to place high priority on it. During the interviews and group discussions, it was further revealed that nearly every member of the group had shared farm labor with between three and five other households in the past two growing seasons. Therefore, even under growing competition for household labor, vulnerable households obtain labor through this traditional system.

3.1.3. Sharing Grains - Songoleda

Agro-pastoral households in Arid and semi-arid in Tanzania are particularly vulnerable to crop failures because an overwhelming majority of households is dependent on rain-fed agriculture and have low adaptive capacity. Therefore, weather-related irregularities impact negatively on the food security of many households in the area. Throughout their history agro-pastoral households in semi-arid Tanzania have had various coping mechanisms. Many of these mechanisms are built in the societal norms and obligations which require community members to help each other. For example, under the norms of agro-pastoral communities, the better-off households (*watwanga*) who possess wealth in the form of grain (*uwuhemba*) have the obligation to save the poorer households (*wachirwa*) from starvation. One of these systems is *songoleda* which is a form of informal lending of grains. This is a system where food-deficit households borrow grains from the better-off households on an agreement that during the harvest period, the borrowed amount plus an interest would be returned to the loaning household. The interest charged ranges from 20 to 50 percent of the borrowed amount depending on the amount borrowed. That is, the higher the borrowing, the higher the interest.

Stressing the importance of *songoleda* system, one interviewee in Sejeli village remarked: “Had it been not for the *songoleda* system, many households, especially the poor, would have sold all their belongings and perished because they may not even have enough to live on. Failure to pay would result into sanction not only by the lending household, but also the whole community would turn against you”. Again, this traditional system of social network was more common in Makoja village where the majority of the inhabitants are Gogo compared to villages like Mtumba which are now inhabited by people from different ethnic background. In some isolated cases, *songoleda* is now practised under written agreements with the heads of the sub-village sanctioning the agreement. This move has been prompted by increasing number of defaulters. This nevertheless, *songoleda* is to a large extent, still an informal sharing of grains on which the food –insecure households survive.

3.1.4. Informal Lending

In addition to traditional social networks involving the sharing of livestock, grains and labour, agro-pastoral societies in central Tanzania have other informal networks for accessing cash. Informal lending involves the flow of cash from better-off households (*wagohi*) to destitute households (*wachirwa*). Traditionally, this safety-net ensured survival of the poorest who would access some cash on condition of repaying in the form of grains after harvest or farm labor. Therefore, the better-off households (*wagohi*) filled the lack of formal institutions by providing informal lending services. Of recent there have been noticeable changes in terms of the borrowers because informal money lenders have become an important source of capital for small scale business operations. Borrowing and lending operations are based on high degree of trust and mutual understanding between the parties. Such transactions are much localized to allow easy feedback and monitoring of the borrower.

3.2. Challenges of Social Networks as Survival Strategies

In the preceding sections, we have exposed the role of social networks as survival strategies in Arid and semi-arid lands as well as their potential contribution to rural development. [Portes and Landolt \(1996\)](#) however, provide a caution against being too optimistic about local groups and their capacity to deliver economic benefits. Important as these traditional social networks have been to rural communities, they face a myriad of challenges and in actual fact, they are being overstretched. In order to have a clear understanding of the challenges that these social networks face, it is important to appreciate the socioeconomic environment in which they operate. Traditional social networks in agro-pastoral areas operate in communities which are vulnerable to chronic food insecurity. For the majority of the households, production is scarcely enough for subsistence, let alone having a surplus for the market. Fighting against high incidences of poverty (contributed by drought and weak natural resource base), most agro-pastoral communities in central Tanzania has low purchasing power. These communities are placed in a vicious circle of “low purchasing power - low production – low income”. Thus, traditional social networks described above are expected to keep these communities at survival levels and beyond. The argument here is that this production environment is strenuous enough for the traditional social networks to accomplish with ease. More challenges on the social networks in central Tanzania emanate from the ever growing impact of commercialization of smallholder livelihoods in rural areas. For example, there is now a stiff competition for farm labor because as the demand for wage labor creeps in, it poses a threat to the traditional systems of sharing labor such as *kulalika*. Farm labor that would have been shared with vulnerable households is also demanded by other activities including farming by urban based farmers. The communities practicing sharing livestock and grains are also facing similar predicament of having to choose between fulfilling their communal obligations to other members and giving them to the ready markets for livestock and grains. The bait to produce for the market is perhaps too strong for the poorer households to resist. However, with low production levels, the new market opportunities offer very little rescue to the rural households.

The capacity of social groups to act in their collective interest depends crucially on the quality of trust of formal institutions under which they reside (Woolcock and Narayan, 2000). This is essentially because trust enhances commonly agreed and shared objectives. Efforts to strengthen the social networks would be towards two possible directions: either to expand membership or increase the size of resource flow per person. The former option involves the risk of losing trust and hence cohesion, and in the views of most respondents in all the three villages, the networks have to remain small in order to survive. The latter option of increasing the volume of flow of resources is just not feasible because grain and livestock are not produced in large quantities. Mere membership to the groups is not enough for effective social networks. In fact, Øyen (2002) warns that social capital is not acquired by sporadic participation in a social movement and should not also be defined as social capital until such an individual develops joint interests and shared norms, which in turn will lead to trust and thereby have the opportunity to capture rights and benefits from the societal association. For the social networks striving to go beyond ensuring survival of its members, it is imperative that they develop or acquire entrepreneurial skills. Part of the failure to transform capital into entrepreneurship emanates from the lack of entrepreneurial skills which is manifested in the inability to set achievable goals and mismanagement of financial resources. There is also plenty of evidence of members of the networks using the funds for unintended purposes, hence falling into further indebtedness. Despite the training on basic entrepreneurial skills that are offered to network members, a good number of them do not apply the skills. This is usually the case where the flow of resources is strongly embedded in the culture and social life of the people.

4. CONCLUSION

The importance of traditional social networks in sustaining agro-pastoral livelihood in semi-arid Tanzania has long been recognized. These networks are particularly essential where agro-pastoral communities are vulnerable to food shortages caused by erratic weather conditions. This observation lends credence to the conclusion reached by other scholars who contend that social networks are most important in marginal economies, and the experience of Gogo communities is a further testimony to this. The monetization of natural agro-pastoral economy, and the ensuing demand for rural resources, is exerting pressure on traditional social networks. The sense of obligation to help kin members and neighbors within the communities is being threatened by market economy. Under these dynamics, the traditional social networks have been overstretched and face a myriad of challenges. Trust among members in the local communities is being compromised by attempts to enlarge the networks. Although “*small is beautiful*” and “*old is gold*”, the benefits from the small mutual support groups at family or kinship level are barely enough for subsistence. The emerging community level networks such as the village community banks provide some hope of success. However, unless training on entrepreneurial skills to the intended beneficiaries is provided, poverty among agro-pastoral communities will persist. The traditional social networks remain important and policy interventions are required to rid the vulnerable households out of persistent food insecurity.

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REFERENCES

- Abiche, T.T., 2012. Community empowerment and sustainable livelihoods: Transforming social capital into entrepreneurship in rural Southern Ethiopia. Unpublished Thesis, University of South Africa.
- Akçomak, S., 2009. Bridges in social capital: A review of the definitions and the social capital of social capital researchers. Working Paper #2009-002. Maastricht: United Nations University.

- Árnason, A., J. Lee and M. Shucksmith, 2004. Understanding networks and social capital in European rural development: Improving living conditions and quality of life in rural Europe. EU Conference, Westport, Ireland.
- Australian Bureau of Statistics, 2002. Measuring Australia's progress. ABS Catalogue No. 1370.
- Bloor, M. and F. Wood, 2006. Keywords in qualitative methods: A vocabulary of research concepts. London: Thousand Oaks, New Delhi: Sage Publications.
- Coleman, J.S., 1988. Social capital in the creation of human capital. *American Journal of Sociology*, 94: 95-120. [View at Google Scholar](#)
- Edwards, B. and M. Foley, 1998. Social capital and the political economy of our discontent. *American Behavioural Scientist*, 40(5): 669-678. [View at Google Scholar](#) | [View at Publisher](#)
- Fukuyama, F., 1995. Trust: The social virtues and the creation of prosperity. London: Penguin.
- Fukuyama, F., 2004. Social capital and development: Course overview. Baltimore, Maryland, USA: John Hopkins University.
- Grootaert, C., 1998. Social capital: The missing link? Social capital initiative Working Paper, No.3. Washington, DC: World Bank.
- Grootaert, C. and V. Bastelaer, 2002. Understanding and measuring social capital. Washington, D.C: IRIS Centre.
- Hettne, B., 1995. Development theory and the three worlds. 2nd Edn., London: Longman Group.
- Hodgson, D.L., 2004. Once intrepid warriors: Gender, ethnicity, and the cultural politics of Maasai development. Bloomington, IN: Indiana University Press.
- Krishna, A., 2002. Active social capital. Tracing the roots of development and democracy. New York: Columbia University Press.
- Krishna, A. and N. Uphoff, 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. Washington DC: World Bank.
- Lanjouw, J.O. and P. Lanjouw, 2001. The rural non-farm sector: Issues and evidence from developing countries. *Agricultural Economics*, 26(1): 1-23. [View at Google Scholar](#) | [View at Publisher](#)
- Loiske, V., 1995. The village that vanished: The roots of soil erosion in Tanzanian village. Doctoral Dissertation, Department of Human Geography, Stockholm University.
- Lynn, S., 2010. The Pastoral to Agro-Pastoral transition in Tanzania: Human adaptation in an ecosystem context. Retrieved from http://economics-of-cc-in-tanzania.org/images/Stacy_Lynn_Pastoralism_TZ_Draft_2010_08-09_draft_2_v2.pdf.
- Melkote, S. and H. Steeves, 2001. Communication for development in the third world: Theory and practice for empowerment. New Delhi: Sage.
- Morris, M., J. Butterworth, R. Lamboll, E. Lazaro, F. Maganga and N. Marsland, 1998. Understanding household coping strategies in semi-arid Tanzania, ANNEX 1 household livelihood strategies in semi-arid Tanzania: Synthesis of findings.
- Mukherjee, N., 2001. Forest protection committees of West Bengal: Measuring social capital in joint forest management. New Delhi: Development Tracks.
- Narayan, D., 1999. Bonds and bridges: Social capital and poverty. Policy Research Working Paper 2167. Poverty Reduction and Economic Management Network. Washington, D.C: World Bank.
- Narayan, D. and L. Pritchett, 1996. Cents and sociability: Household income and social capital in rural Tanzania. Policy Research Working Paper 1796. Washington DC: World Bank.
- Narbeth, S., 2001. The targeting of emergency food distribution in Somalia: vulnerability, redistribution, and beneficiary participation. Nairobi: WFP Somalia.
- Nori, M., J. Switzer and A. Crawford, 2005. Herding on the brink: Towards a global survey of pastoral communities and conflict - An occasional working paper from the IUCN commission on environmental. Economic and Social Policy. Retrieved from http://www.iisd.org/pdf/2005/security_herding_on_brink.pdf.

- Øyen, E., 2002. Social capital formation as a poverty reducing strategy? A Paper Presented at UNESCO/MOST and CROP/ISSC on "Social Capital Formation in Poverty Reduction: Which Role for Civil Society Organizations and the State?" at the UN Summit +5.
- Phillips, M., 2010. Counterurbanisation and rural gentrification: An exploration of the terms. *Population, Space and Place*, 16(6): 539–558. [View at Google Scholar](#)
- Portes, A. and P. Landolt, 1996. Unsolved mysteries: The toqueville files ii. Retrieved from <http://prospect.org/article/unsolved-mysteries-tocqueville-files-ii-1>.
- Prazak, M., 2006. Kenyan families. In Oheneba-Sakyi, Y., and Takyi B. K. (Eds), *African families at the turn of the 21st century*. Westport, Connecticut, London: Praeger.
- Pretty, J. and H. Ward, 2001. Social capital and the environment. *World Development*, 29(2): 209–227. [View at Google Scholar](#)
- Putnam, R.D., 1993. *Making democracy work: Civic traditions in modern Italy*. Princeton NJ: Princeton University Press.
- Rist, G., 2008. *The history of development: From the Western origins to global faith*. 3rd Edn., London & New York: Zed Books.
- Rose, R., 2000. How much does social capital add to individual health? A survey study of Russians. *Social Science & Medicine*, 51(9): 1421–1435. [View at Google Scholar](#) | [View at Publisher](#)
- Shortall, S., 2004. Social or economic goals, civic inclusion or exclusion? An analysis of rural development theory and practice. *Sociologia Ruralis*, 44(1): 109–123. [View at Google Scholar](#) | [View at Publisher](#)
- Watson, G.W. and S.D. Papamarcos, 2002. Social capital and organizational commitment. *Journal of Business and Psychology*, 16(4): 537–552. [View at Google Scholar](#)
- Wiesinger, G., 2007. The importance of social capital in rural development, networking and decision-making in rural areas. *Revue de Géographie Alpine*, 95(4): 43–56. [View at Google Scholar](#) | [View at Publisher](#)
- Woolcock, M., 2001. The place of social capital in understanding social and economic outcomes. *Canadian Journal of Policy Research*, 2(1): 11–17. [View at Google Scholar](#)
- Woolcock, M. and D. Narayan, 2000. Social capital: Implications for development theory, research and policy. *World Bank Research Observer*, 15(2): 225–249. [View at Google Scholar](#) | [View at Publisher](#)
- World Bank, 2000. *World development report 2000/01*. New York: Oxford University Press.
- Yanda, P., F. Maganga, E. Liwenga, A. Kateka, A. Henku, E. Mabhuye and C. Bavo, 2015. *Tanzania: Country situation assessment Working Paper*. Dar es Salaam.
- Yang, K., 2007. Individual social capital and its measurement in social surveys. *European Survey Research Association*, 1(1): 19–27. [View at Google Scholar](#)

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