

Chapter II

Literature review

2.1 Historical background and definitions of social capital

The social capital is relatively recent concept in comparison to other capital resources. Hanifan (1916) first used the word social capital (cited in Woolcock 1998) and defined as **“those intangible assets (that) count most in the daily lives of the people: good will, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit”**. After Hanifan, this concept remained silent up to mid eighties and remerged when Coleman (1988) proposed social capital may be important for developing individual human capital. The idea and literature in the subject was grown exponentially after Putnam’s finding on social capital and democratic institutions in Italy in 1993. The ground breaking article **“Bowling Alone: Americas Declining Social Capital”** by Robert Putnam in 1995 sparked debate among the scholars on measurement and importance of social capital in different spheres of social and economic life. Now every year, hundreds of literatures are being added in the field of social capital and its contribution in different dimensions of human livelihood.

Social capital is imprecise, multidimensional term, which is conceptualized differently and defined by different scholars and organizations. It looks like umbrella term which covers many aspects together. Some of the literature mentioned it as amoeboid term. The literature contains a variety of definitions some frontline definitions are:

1. “The ability of actors to secure benefits by virtue of memberships in social networks and other social structures” (Portes, 1998).
2. “Obligations and expectations, which depend on trustworthiness of the social environment, information-flow capability of the social structure, and norms accompanied by sanctions” (Coleman, 1988)
3. “features of social organizations, such as networks, norms, and trust, that facilitate action and cooperation for mutual benefit” (Putnam, 1993).
“Features of social life - networks, norms, and trust – that enable participants to act together more effectively to pursue shared objectives” (Putnam, 1995)
4. “A capability that arises from the prevalence of trust in a society or certain parts of it” (Fukuyama, 1995)
5. “The quantity and quality of associational life and the related social norms” (Narayan and Pritchard, 1997)
6. “Social capital represents the degree of social cohesion in communities. It refers to the processes between people that establish networks, norms and social trust, and facilitate coordination and cooperation for mutual benefit” (WHO, 1998).

Thus there are differences in ways social capital is conceptualized and used in literatures. Dasgupta (1999) mentions social capital as a peg on which to hang all of those informal engagements that we like and approve. By looking at above definitions we can conclude that social capital is resource hidden in social networks and appears in different forms producing both positive and negative implications for individuals, households, communities and nations.

2.2 Major dimensions of social capital

Social capital is abstract and contentious concept and difficult to identify objectively in the communities. Views differ about what constitutes social capital, how it operates and delineation of boundaries between its sources, manifestations and effects is difficult, there is still no agreement among the scholars in this subject (Productivity Commission, 2003). Grottaert *et al.* (2003) identified six dimensions of

social capital namely groups and networks, trust and solidarity, collective action and cooperation, information and communication, social cohesion and inclusion, empowerment and political action and recommended a set of questionnaires to measure social capital within these dimensions. Putnam (1995) while measuring social capital in USA used political participation, civic participation, religious participation, unions and professional associations, informal social connectedness, voluntarism and philanthropy, trust, honesty, and reciprocity as dimensions of social capital. Trust, reciprocity, collective action and cooperation, networks, norms and proactivity in common good works are widely used dimensions of social capital in social capital related studies (Table 2.1).

2.2.1 Networks

Literally, network is defined as connectedness of parts of a system together allowing communication and movements between and among the parts. Network in social context is an interconnected group of people who usually have an attribute in common (Productivity Commission, 2003). Network is considered as both source and outcomes of social capital. When we analyze networks from individual to national level we can find complexity in networks with different functions. Networks can exist with varying quality and form among the units (here units may be from individual to nation). Stone (2003) referring to Australian Institute of Family Studies (AIFS) (2000) described five categories of networks.

Type	Formal (formal associations, groups etc.) Informal (family, kinship, neighborhood and other informal networks)
Size	Limited (family based, kinship based) Extensive (large scale coverage, global networks etc)
Spatial	Household – global
Structural	Open (larger scale networks where all members do not know each other personally) Close (local networks all party know each other) Dense (membership overlaps), Sparse (membership does not overlap) ,

Homogenous (similarity in members), Heterogeneous (dissimilar members)

Relational Vertical (network with authorities or hierarchy), Horizontal (network among the citizens)

The most commonly discussed types of networks in literature are formal and informal networks. According to Putnam (1998) informal networks include those held between family, kinships, friends and neighbors; where as formal networks include ties to voluntary and formal associations. The other concept used to define the networks in communities is *bonding, bridging and linking*. *Bonding networks* refers ties to people who are similar in terms of their demographic characteristics, such as family members, neighbors, close friends and work colleagues while *bridging networks* refers connection among the people who do not share many of these characteristics (Narayan, 2002). The bonding and bridging networks are helpful to get by from day to day problems and linking networks to get ahead for the individuals and communities (ibid, 2002). The *linking networks* refer ones connection to people in authority and private and public service delivery organizations (World Bank, 2000).

The networks provide benefit such as a greater pool of social support when needed, greater access to information (and lower search costs), and a wider range of opportunities to the individuals and communities. Only the active or vital networks can generate benefits. Networks can also play an important role in the provision of other aspects of social capital. Social norms are more likely to be spread and observed in a more connected society. Putnam (2000) argued that dense networks of social exchange bolster an effective norm of generalized reciprocity. Members of a highly connected community easily trust to each other. Further dense social networks encourage honesty.

2.2.2 Norms

Social norms are shared understandings, informal rules and conventions that prescribe, proscribe or modulate certain behaviors in various circumstances

(Productivity Commission, 2003). The norms in the context of social capital refer norms of reciprocity and trust spreading over the variety of networks. Stone (2001) mentioned social capital comprises norms of trust and reciprocity across a range of networks, it is important to include norms of reciprocity and trust in measurement of social capital. Misztal (1996) as cited in Stone (2001) explained norms of reciprocity and trust are overlapped and complementary to each other. Norms may be very specific and general with wider application. Generalized social norms can include honesty, caring and respecting others law abidingness, the work ethic, respect for elders/priests/teachers, tolerance and acceptance of diversity, and helping people in need. The specific social norms relate to particular situations such as returning others' lost possessions and surrendering seats for the elderly on public transport. Social norms facilitate predictable or beneficial behavior patterns from individuals in society. There are flows of goods, services, information, ideas, sentiments, sympathies through vital networks and such flow is fully guided by the existing social norms.

Networks and their functioning in the form of cooperation, restriction, felicitation and punishments are guided by the existing norms of communities. The existence of effective social norms that facilitates cooperation and proper functioning of networks is major source of social capital but how these norms are established in the communities and what makes their deterioration is also important in the social capital study (Productivity Commission, 2003).

2.2.3 Trust

Trust embedded in networks is both source and outcome of social capital for the actors. In general meaning trust refers to the level of confidence that people have that others will act as they say or are expected to act, or that what they say is reliable (Productivity Commission, 2003). Fukuyama (1995) defined trust as the expectation that arises within a community of regular, honest and cooperative behavior, based on commonly shared norms, on the part of other members of the community. Trust is the key component and bedrock of most personal relationships. It facilitates various day-to-day interactions, and plays an important role in common as well as personnel

wellbeing. Summarizing the forms of trust described in social capital literatures, Stone (2001) mentioned three types of trust. First one is *inter personnel trust* (personalized trust or particularized trust) which resides in established relationships and networks. The level of such trust depends largely on the personnel perception of the others trustworthiness, experience, learning and norms of relations and networks. The second type of trust is *generalized trust* (social trust) which is based on existing norms followed by the community members and extended to wider level. Generalized trust is a predisposition to rely on a stranger or organization even in the absence of specific knowledge about their past actions. A community member, trust his neighbors and do not lock the door while going outside because the existing social norms accepted by the neighbors makes them to trust each other. Third type of trust is *institutional trust*, which refers to basic trust in the formal institutions of governance including fairness of rules, official procedures, and dispute resolution. Putnam (2000) defined generalized trust as *thin trust* and personalized trust as *thick trust*. Trust based on personal experience and ongoing relationships may be more robust than trust based on community norms. Putnam (2000) argued that generalized trust is more valuable as it extends the 'radius of trust' to a wider circle of people, allowing a much larger range of interactions with their attendant benefits.

2.2.4 Reciprocity

In general, meaning reciprocity is the two-way flow of goods, services, information and ideas through the available networks among and between the actors in social space. Stone (2001) defined reciprocity as a process of exchange within a social relationship whereby 'goods and services' (meaning exchange of any kind) given by one party are repaid to that party by the party who received the original 'goods and services'. Jary & Jary (2000) defined reciprocity as any relationship between two parties or things where there is a mutual action, giving and taking (cited in ABS, 2004). These reciprocal relations are governed by norms, such that involved parties can understand the social contract they have entered into. Trust promotes reciprocity among networks and reciprocity creates trust over time in the networks so these two are interlinked phenomenon. Reciprocity in the context of social capital

does not imply legal, business and other formal contracts. The individual provides a service to others or acts for the benefit of others and expects that this kindness will be returned in the future but not exactly in the same. In a community where reciprocity is strong, people care for each other's interests (Productivity Commission, 2003). Reciprocity is an important aspect of social capital because the norm of reciprocity may encourage the sharing of support, knowledge, and ideas between individuals, groups and communities (ABS, 2004).

2.2.5 Collective action and cooperation

Collective action and cooperation is the ability of people, organizations, and communities to come and work together for common benefits and to get by during hardship. Marshall (1998) as cited in Dick *et al.* (2004) defines collective action as an action taken by a group (either directly or on its behalf through an organization) in pursuit of members perceived shared interests. Social capital and collective action is closely linked. In this context, Uphoff (2000) explained social capital as stock variable and collective action as flow associated with it (cited in Dick *et al.* 2004). It is the outcome of trust, social norms and networks and used as a measure of social capital stock in the communities. It establishes networks and creates trust among the actors, and actors only come together for collective action when they have networks and trust. The collective action and cooperation dimension of social capital explores whether and how household members used to work with others for common well being (Grootaert *et al.* 2003). Regarding cooperation, ABS (2004) defined "Cooperation is a shared or complementary action or sense of purpose, to achieve a common goal. It contributes to building trust and understanding between people, which may result in a greater propensity for further cooperation. In the absence of trust and networks ensuring compliance, individuals tend not to cooperate because others cannot be relied on to act in a similar way".

It has larger role in community resilience during natural calamities. In the case of development projects and common property management schemes collective behavior of people plays important role so it is a subject of interest for development

workers in natural resource management. The strong networks lubricated by social norms and embedded trust are the key drivers of collective action and cooperation in the communities. Social norms and trust guide cooperation for individual as well as common benefits.

2.2.6 Proactivity

Proactivity is the willingness of people to participate and engage in community works. It is sense of personal and collective efficacy (Onyx and Bullin, 1997). Australian Bureau of Statistics (ABS) (2004) defined sense of efficacy as “Sense of efficacy refers to the belief that an individual, group, or community has in their capacity to produce desired outcomes by their own actions. It also relates to self reliance, initiative, and the degree of influence believed to be held, as well as the ability to draw upon additional resources as required”. The collective efficacy is considered as an important indicator of social capital and ABS has recommended it in the framework of social capital measurement. The development of social capital requires active and dedicated engagement of citizens within a participative community. Social capital expects creative, proactive individuals not a passive recipient of outcomes. Onyx and Bullin (1997) used proactivity in social context as an important measure of social capital while measuring the social capital in five communities of New South Wales in Australia.

2.2.7 Other dimensions

Different studies in the literature (e.g. Grootaert *et al.* 2003) mentioned about some other dimensions of social capital like information and communication, social cohesion and inclusion, empowerment and political action. Some other literatures include other specific dimensions like conflict rate, crime rates and tolerance of diversity etc (Table 2.1). The selection of dimensions of social capital largely guided by objective and scope of study in particular context.

2.3 Determinants of social capital

There are agreements in the outcomes of social capital and its associated benefits for individual and community wellbeing. It is difficult to say exactly, what are the determinants of social capital, by what ways and means it is accumulated in the communities over time. The available literature identifies a range of potential sources of social capital, and factors that can influence the rate and extent of its formation or destruction. The World Bank and OECD identified eight sources of social capital family, schools, local communities, firms, civil society, public sector, gender and ethnicity. Stone (2002) mentioned age, gender, health, family circumstances, education, employment, home-ownership status, attitudes and values, and characteristics of the area in which they reside, such as its urbanization and level of socioeconomic disadvantage are governing factors for individual access to social capital. Grootaert *et al.* (2003) described about the difficulties to find the determinant of social capital empirically (develop models using social capital as dependent variable) as its creation is a complex process heavily influenced by social, political, and cultural factors as well as by the dominant types of economic activities.

Some authors emphasize that some sources of social capital are long-standing and may be slow or difficult to change. For example, Putnam (1993) suggested that the difference in the amounts of social capital observed in northern and southern Italy is partly a result of differences in political systems dating back hundreds of years. Fukuyama (1999) argued that social capital is a result of factors including religion, tradition and shared historical experiences. Most of the scholars agreed that family life is bedrock of social capital accumulation. Putnam (1995) stated that most fundamental form of social capital is the family. Family is the main site of accumulation and transmission of social capital (Bourdieu 1993, cited Winter, 2000).

Generally we can observe that there is a complex feedback effect between sources and outcomes of social capital resulting cycles of its creation and destruction. For example the important expression of social capital, trust creates trust but same time distrust undermines trust among the actors. The trust below a certain level in the

communities or among the actors creates vicious circle of distrust and promotes untrustworthy behavior in the communities or among the actors. Thus trust creates trust and finally social capital and lower level of trust below the critical mass depletes social capital.

2.4 Measurement of social capital

The most confusing and widely debated area under the social capital is its measurement. Social capital is an abstract term and can not be measured directly. It has to be measured using outcome indicators. Here source is estimated by measuring the flow of outcomes in different forms, further complexity arises as there is two way relationship between source and outcome (outcomes also enrich the source). In such context it is unlikely to find universal parameters for social capital measurement. Trust or betrayal expressed among actors is the outcomes of social capital and expressed trust or betrayal also affects social capital stock. The second complexity is social capital stock expressed in varying forms or outcomes then which expression or outcome is to be used to estimate social stock more accurately.

Social capital is generated from the relations or ties or networks, how much social capital is generated from such networks and for whom individual or group or community as a whole, there is still a debate. ABS (2000) mentioned about the debate on social capital as private or public good. ABS developed a framework to measure the social capital by aggregating the information collected at individual level in communities. It has supported the idea that social capital can be measured at the individual level. Social capital has been conceptualized at cognitive (micro, household level), structural (meso) and institutional (macro) and measurement tools vary with levels (Grootaert *et al.* 2003). Social capital integrated questionnaires prepared by the Social Capital Thematic Group, World Bank focused on the measurement at micro level i.e. at the level of household (ibid). Countries like Australia (ABS, 2004) and Canada (Franke, 2005) have developed social capital measurement framework in their particular context. Social capital measurement indicators are developed and used

differently within the major theme of social capital by different countries, scholars and organizations (Table 2.1).

Table 2.1 Measurement of social capital in different contextual studies

Measurement dimensions	References
Collective efficacy, psychological sense of community, neighborhood cohesion, community competence. Measured at the community level and used five point Likert scale for questionnaire survey.	Kawachi, I., B. P. Kennedy, and L. Kimberly. 1999.
Structure of social relations – networks (type, size and capacity spatial, structural, and relational), quality of social relations: norms – norms of trust: social trust (familiar/personal, generalized) and civic institutional trust. norms of reciprocity (in kind vs in lieu, direct vs indirect, immediate vs delayed) (Questions used to measure each dimensions and social capital is measured at household level)	Stone, W. 2001.
Membership in formal associations without distinction of their origin (voluntary or induced), Participation rate , meeting attendance, group characteristics (heterogeneity, ethnic affiliation and kinship) (External agency set up organizations are considered as voluntary organizations if community people consider them as such)	Luis, C. R. and U. Pascual. 2004.
The dimensions taken in consideration are : participation in local community, proactivity in a social context, feelings of trust and safety, neighborhood connections, family and friends connections, tolerance of diversity, value of Life and work connection	Bullin, P. and J. Onyx. 1997.
Six dimensions: groups and networks, trust and solidarity, collective action and cooperation, information and communication, social cohesion and inclusion, empowerment and political action (Recommended household level measurement of social capital)	Grootaert, C., D. Narayan, M. Woolcock, and V. N. Jones. 2003.

Membership in labor sharing groups (networks), dealing with crop disease (collective action), dealing with natural disasters (collective action), trust, solidarity and reciprocity. (Recommended: Measuring indicators should be developed and verified locally)	Krishna, A. 2004.
Trust, reciprocity and sharing were used as the proxies for the measurement of social capital at household level. These three dimensions of social capital were measured through relevant questionnaires.	Gilligan, D., M. Huq, and P. Sheoli
Network: density of organizations and density of household participation in those organizations. Organizational performance: number of rules, regulations, activities, and effective participation by members in activities and at meetings.	Diane, D. C., B. Drabo, and N. McCarthy. 2004.
Measured in three dimensions trust, reciprocity and social networks using seven point (1-7 rank) Likert scale. Household level and community level scores are analyzed separately. Seven questions were used and coded in 0-1 scale. Mean household level score of a community was the community level score.	Cook T. J., B.L. Rogers, H.M. Joseph, and K.S. Martin. 2004.
Index of trust in government, index of trust in fellow citizens and corruption perception index (CPI) were used as a measure of social capital. Index of trust in both cases was constructed from 1-5 rank questionnaire survey. Rank 1 is totally lack of trust and 5 is full trust. Corruption perception index was based on data from 14 sources (surveys of business men, the general public and country analysts) from seven independent institutions. The CPI ranges from 10 (highly clean) to 0 (highly corrupt)	Kootena, C.V., G. Slangena, H.G. Louis and P. Suchaneka. 2004.

Social cohesion, trust between extension agent and contact groups, trust between contact groups and outside members are taken as the measure of social capital. Social cohesion is measured using the indicators - village cleanliness, distribution of infrastructure according to need, ability to organize for maintenance or construction of public goods, number of organizations, leadership, physical condition of the mosque and Friday afternoon prayer attendance

Reid, C., and L. Salmen. 2000.

Four types of relations were used as a measure of social capital, market relations, bureaucratic relations, associative relations, and communal relations. Used framework analysis approach to know the capacity of communities to use their social capital for entrepreneurship.

Reimer, B. and M.G.N. Tiepoh. 2004.

Selected dimensions were social trust, inter-racial trust, conventional politics participation, protest politics participation, civic leadership, associational involvement, informal socializing, and diversity of friendships, giving and volunteering, faith based engagement and equality of civic engagement across the community.

Burdsal, C. A., S. B. Megan, and A. M Craig. 2004.

Social capital is measured in six dimensions: trust in institutions (state and community), trust in people (thick trust and thin trust), social cohesion solidarity, social control and civic participation. Five point (1-5 rank) Likert scale questionnaires were used to measure the each dimension.

Grant, E., H. Trudy, and R. Carlos. 2004.

Social capital is measured at two levels; community level social capital is measured as reciprocity index and individual level social capital as trust index. Both the reciprocity and trust are measured by five questions with five point (1-5 rank) Likert scale. In trust both vertical (trust in governmental organizations) and horizontal trust (generalized trust level) is measured as proxy measure of individual level social capital.

Hsiao, W., H. Wang, L. Wang, and L. Zhang. 2005.

The main indicators used were: Political participation, civic participation, religious participation, unions and professional associations, informal social connectedness, voluntarism and philanthropy, trust, honesty, and reciprocity.

2.5 Importance of social capital

Several studies have found positive associations between indicators of social capital and outcomes as lower crime rates (Putnam, 2000), improved health (Grant et al. 2004), educational attainment (Putnam, 2000), governmental efficacy (Putnam, 1993), individual income (Narayan and Princhitt, 1997), community development (Krishna, 2004) and at the aggregate level economic performance (Knack and Keefer, 1997). Social capital is being more important in all spheres of human well being like economic, social and personal health, child welfare, social peace, natural resource and environmental management. Some of the areas in which empirical studies proved importance of social capital are as follows.

2.5.1 Disseminating knowledge and innovations

Social capital plays both positive and negative role in disseminating new knowledge and innovations.

2.5.1.1 A positive role

The knowledge, innovation and information has been disseminated across the societies, individuals and transmitted from one generation to other generation through interconnection of the society and individuals. In general, more connected communities can pass information among the individuals at a faster rate and wider scale. Finding jobs and professional career development are important dimensions of personal wellbeing which are directly associated with social ties with family, friends and professional connections. People locate jobs through informal ties rather than advertisements (Stone *et al.* 2003).

The information flow that contributes to income generation depends on social capital at individual as well as the community level. The social capacity (ability of people to organize and use their social capital) facilitates the flow of income-related knowledge and information between economic agents (Bill *et al.* 2004). This is very important in rural areas where knowledge, information, innovations and skills are transferred based on interpersonal ties (connections) without any formal training institutions and modern communication facilities. Vegetable growers learn more from their neighbors and kinship in comparison to formal skill-based trainings in communities.

2.5.1.2 Negative role

Some of the social capital expressions retard inflow and outflow of information in the groups or communities. Some elements or manifestations of social capital, associated with the dynamics of strong social groupings, can potentially reduce inflow of information into a group and inhibit uptake of innovations which is harmful for dissemination of knowledge and innovations (Productivity Commission, 2003). Adler and Kwon (2000) as cited in productivity commission (2003), pointed out: strong solidarity with in-group members may overembed the actor in the relationship. This over embeddedness reduces the flow of new ideas into the group. Bridging social capital may likely to promote innovation than bonding social capital. Portes 1998 observed that all inhabitants of some small villages and towns know each other and the level of social control in such setting is strong and also restrictive of personal freedom. Similarly Woolcock (1998) suggested that strong civic groups may inhibit individual economic advancement by placing heavy personnel obligations on members that prevent them from participating in broader social networks. In such case when individuals are limited within small groups there is less in and outflow of knowledge, innovations and ideas.

2.5.2 Poverty reduction and equality

Social capital carries significant importance for the poor people as they can ameliorate social capital stock for their day to day livelihood and recurrent hardship. It is also important to reduce their poverty. Social capital can be transformed in other forms of productive resources, which have direct relationship with economic wellbeing. Grootaert *et al.* (2004) showed social capital as an asset, matters more for the poor than the non-poor. Looking at the personnel income and its relation to social capital Narayan *et al.* (1997) found measures of social capital have direct correlation with greater personnel income. Grootaert (2001) found social capital significantly reduce the probability of being poor in his studies. Looking at the distribution of social capital in Bolivia he found social capital is more equally distributed among the households than other assets. The social capital endowment at individual and household level has direct effect on getting employment ultimately to personnel income. Individuals who are ‘social capital poor’ are less likely to be in employment (particularly full-time employment) and are more reliant on friends, family and responding to advertisements for finding work than people with greater levels of social capital (Stone *et al.* 2003).

The social capital is most important asset for the poor people and main ideas to support the view is complementary roles of bonding, bridging and linking social capital (Woolcock, 2000). The *bonding* capital based on strong ties between immediate family members, neighbors and close friends guards against the vulnerability of the poor. The weaker ties of *bridging* capital, gained through association between people of different ethnic, geographical, and occupational backgrounds are seen as more important in terms of “getting ahead” and creating public benefits, while *linking* social capital allegedly provides poor people with the opportunity to promote their interests with people of influence in institutions such as government agencies and banks (Cleaver, 2004).

Social capital is related to various aspect of equality existing in the communities and nations. The countries with high levels of trust and social

engagement tend to be more equal in terms of income, adult literacy and access to further learning. Economic inequality may be both a cause and consequence of inequality in social capital (OECD, 2001).

2.5.3 Management of risk and hardship

Social capital is important to cope with the individual and communal risk, and hardships. The communities/individuals endowed with high level of social capital easily get rid of such problems in comparison to others. The communities with higher level of social capital are more resilient in facing hardships than communities with poor social capital. Hunger is one very common hardship frequently faced by poor people in rural areas. “Social capital, at both household and community level, is significantly associated with household food security. Social capital particularly in terms of reciprocity among neighbors contributes to household food security. Households may have limited financial or food resources but households with higher levels of social capital are less likely to experience hunger” (Cook *et al.* 2004).

2.5.4 Community development and governance

The outcomes of development efforts and their sustainability are of major concern for all development workers and policy makers in recent years. The performance of governmental institutions and success of their development efforts largely depend on the endowment of social capital to the environment under which they operate. Narayan (2002) claimed that social capital enables people collectively to participate in effective local decision making, better monitor government agencies and lobby for improved services. The governmental efficacy in southern Italy where people are less civic minded, is poor (inefficient, lethargic and corrupt) in comparison to north where level of civic and social engagement is higher (Putnam, 1993).

The social capital is not single determinant of development performance there are many other factors involved in this complex input output process, social capital increases the efficiency of other resources used in this process. There is a need of

better agencies and leadership to churn the existing social capital to achieve better performance of development efforts in the communities. “High level of social capital supported with agencies is associated with high level of development performance. Agency is important particularly in situations where institutions are not available that enable citizens to connect with the state and with markets. The productivity of social capital is considerably reduced on account of this institutional gap. Development performance can be improved in these situations by adding to the stock of social capital and also through enhancing agency capacity” (Krishna *et al.* 2004).

Common property resource management is another important concern for development workers in recent years due to chronic degradation of natural resources associated with livelihood of the people. Social capital is the key driver to initiate collective actions and operational norms for the improvement of these resources. Studying the watershed management in dry land of Rajasthan Krishna *et al.* (1999) found the index of social capital variables is related positively and consistently with superior development outcomes both in watershed conservation and in cooperative development activities.

In Nepal the success of the community forestry program can be better understood through use of social capital concept. This program has efficiently exploited the latent social capital stock existing in the communities to generate the collective action among the villagers to manage the degrading forest resources by using the participatory management policy.

The present development efforts focus on multi-agent people centered development approaches, which is different from the traditional single agency led top down approaches. The development agencies like GOs, NGOs, INGOs and CBOs have to work together to foster the sustainable development which needs interrelation, cooperation, collective action and trust to each other at different level. The existing level of trust, networks, collective actions and social norms in the communities can easily grasp the interest of both governmental non-governmental development actors. In this context Pena *et al.* (1998) mentioned communities with high levels of social

capital were twice as likely to receive assistance from NGOs and almost four times as likely to receive assistance from the government.

The participation of people in development activities is driven by social capital stock inherently accumulated through social political processes. The people's participation plays key role in success and sustainability of development interventions. The farmer's willingness to join government community health insurance program even after the premium subsidy by the government remained only 50 percent in China (Hsiao *et al.* 2005). The community level social capital, as measured by reciprocity index, and individual level social capital, as measured by trust index, both are significantly and positively associated with the probability of farmers' willingness to join (WTJ) in newly developed government subsidized community health insurance (*ibid*).

2.5.5 Agricultural development

The social capital plays central role in agriculture development and its sustainability. The key role of social capital is identified in irrigation system management, integrated pest management, watershed management and participatory research and learning (Pretty, 2003). A farmer is confident to get the seed, bullocks and other tools from the neighborhood when he lacks these resources and join hand in irrigation canal management on regular basis, these all only possible due to inherent endowment of social capital in the communities. The farming communities have sustained their knowledge, tools and techniques for agriculture production through trust, reciprocity and informal networks since unknown time. The social capital is being more important in commercial agriculture as it carries many possibilities of wider negative effects in human health and environment. Commercial agriculture needs wider networks, trust and trade norms to be followed for its success and sustainability.

The adoption of recommended technologies at wider scale by the communities is important in agriculture development, which largely depends on trust, networks and

existing farmer's institutions. The communities where there is poor trust among the people and with development agencies it is less likely to achieve the faster adoption of recommended practices. Studying the success of training and visit system of agriculture in Mali Reid *et al.* (2000) found that the degree of social cohesion already existing in particular community is most important single factor determining the success of any external intervention. The predisposition of a community's residents to attend association meetings, to gather in places of worship, to build and maintain public infrastructure, is what creates the fertile ground for external inputs, such as agricultural extension agents and contact groups, to take root. The development becomes more effective when there is trust among institutions, intermediaries and clients (*ibid*). Here trust in three levels is important i.e. trust between agriculture extension worker and farmer, trust among the members of the group and trust between group and community as a whole for the wider and better performance of agricultural extension programs. The diffusion of innovation occurs at faster rate in communities, which are more, associated. In a society with high levels of social capital, individuals or groups are more willing to pursue higher returns through engaging in high-risk economic activities or innovative practices. Social capital acts as informal insurance, against risk, by minimizing potential negative economic effect of the risk (Woodhouse, 2006)

Studying agricultural development in east European countries Kootena, *et al.* (2004) found that "Protection of private property, freedom of exchange, consistency in monitoring environmental laws, governments that act neutrally and are not corrupt, and trust all contribute to agricultural success". This shows the importance of social capital from national to grass root level for success of the agriculture development. The evolution, growth and maturity of farmer organizations is induced and fertilized by the existing social capital in the communities and service delivery organizations. Danish dairy cooperative movement is well known for its success all over the world. Svendsen *et al.* (2000) found that social capital largely facilitated the success of that movement.

2.6 Trends in social capital

The measurement of social capital is a recent area and emerged prominently after 1990. There are very limited studies regarding temporal trends in social capital in the communities and countries. It is agreed that social capital is dynamic over time. The world value survey, which was conducted in early eighties, provides first basic data on basic values and beliefs in a number of developed and developing countries. A comparison with a trust index for 1981-1983 revealed that measured trust in countries Britain, USA and Australia has fallen 13, 10 and 8 percentage points while increasing in some other countries like Italy 9 and Germany 12 percentage points (cited in Productivity Commission, 2003).

Robert Putnam did the most extensive work in the declining trend of social capital in 1995. Putnam demonstrated that on range indicators of civic engagement including voting, political participation, newspaper readership, and participation in local associations declining over last three decades in USA.

2.7 Studies of social capital in Nepal

There are very limited studies about social capital in Nepal. However, studies on the role of collective action and cooperation in community forestry and irrigation management are common. Finnis *et al.* (2004) studied about the political ecology of urban squatter in Nayabasti and found poor social capital is one of the reasons for powerlessness of the community. Other study by Eklund *et al.* (2003) found: low level of child malnutrition in the self-organized mother groups due to higher level of social capital in comparison externally supported community groups.

Agrawal and Gupta (2005) while studying people's participation in decentralized environmental management program, the likelihood of participation in management groups is significantly contributed by linkage of the individuals with state organizations. The individuals who have better linkage to the government offices are more likely to participate in groups. Secondly they found socially and

economically better off households are more likely to participate in groups. The poor and marginal households are less likely to participate in state sponsored groups for environmental management.

The school enrollment of the children of the household is affected by the social and human capital endowed by the household. Dhital (2004) studied the relation of human and social capital with school enrollment in Chitwan district of Nepal. He found that household level social capital significantly increases the likelihood of the both primary and secondary school enrollment while controlling the other demographic and socio economic variables.

The social capital is accumulating and eroding due to government policies. The community forestry policy is found social capital accumulating but in irrigation management government policy to support for rehabilitation of farmer managed irrigation systems is eroding traditional social capital in communities. Pradhan (2002) studied about the role of government support in farmer managed irrigation systems in relation to social capital and found that centralized management policy by the government eroded social capital in farmer managed irrigation schemes. The main factors behind such erosion of traditional social capital are lack of transparency at the time of physical rehabilitation of the systems blurring the obligation unclear accountability destroying reciprocity, corruption promoting distrust, political polarization at the community level, and change in the demographic composition of the irrigator's community due to migration of young people into the urban areas.