

ROLE OF SOCIAL CAPITAL FOR COMMUNITY FOREST GOVERNANCE IN NEPAL

1. INTRODUCTION

This research paper examines the role and application of social capital in community forestry program in Nepal based on secondary information and literatures review. It widely reviews the literature that conceptualizes social capital, articulates the arguments of important scholars on the concept of social capital in general. Then the paper reviews some literature that has applied social capital in development, resource management and narrows down to community forest in Nepal. Unlike other research of social capital that tends to measure the social associations through engagements and networks, it only attempts to visualize how the social capital concept has been applied in research relating community forests in Nepal. This paper utilizes the World Bank's dimensions of social capital i.e. groups & networks, trust & solidarity, collective action & cooperation, information & communication, social cohesion & inclusion and empowerment & political action and discusses these dimensions with references to related literatures from community forests under separate headings.

2. PROBLEM AND SIGNIFICANCE OF STUDY

Natural resources have been an important trigger of struggle while resources have also suffered the most during the wars as they serve the financial needs of warring parties during armed conflict. Having natural resources in equilibrium and its governance stable is one of the preconditions of peace. Specifically, in the lack of proper management of forests, unequal benefits sharing and corruption results in local conflicts while social capital might help in maintaining the equilibrium through enhanced trust and collective action. Thus,

understanding the concepts and applications of social capital in forestry sector is important and this relation has a broader implication to peace studies.

3. RESEARCH QUESTION

Considering the World Bank Assessment Framework and by reviewing the earlier literatures in community forestry from Nepal, this research aims to answer the following question.

- Which element out of the World Bank proposed framework for assessing social capital has been mostly examined in community forest research in Nepal and which has been under investigated?

4. SOCIAL CAPITAL: REVIEW OF THEORETICAL CONCEPT

Social capital as a concept has gained a great momentum in social science, and recently scholars have attempted to link social capital with several social phenomenon. Tracing the history of the “social capital” as a concept in social science, French sociologist Pierre Bourdieu was the one who started using the term and defined it as “the aggregate of the actual or the potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition (Bourdieu, 1985). The other major scholar leading in the social capital sector is Putnam. Putnam defines social capital more in the line of trust, cooperation and long term relationships in family, work groups which provides independence to perform as individuals or corporate actors and also allows cooperation with each member. He uses social capital to mean social bonds that enable trust in order for people to interact more

positively and achieve goals (Putnam, 1995). The other pioneer in social capital concept was Coleman. Coleman's definition on social capital is however considered broader than Putnam's. Coleman (1990) perceives social capital as a social relationship which is developed as the result of various exchanges and transfers of control in society and that is meant for achieving some interest. "Coleman defines social capital as encompassing two features: (1) The difference between being born with a human '*brain*' and developing a human '*mind*' through social interactions of all possible sorts that it consists 'of some aspect of social structures' and (2) that it 'facilitates certain action of actors—whether persons or corporate actors—within the structure' (Coleman 1988a: p. S98).

Another well known scholar of social capital is Loury who defines social capital as a set of resources that exists in family relation and in community social organization that are useful for cognitive or social development. The social capital is thus discussed as relations of authority and trust in the society and as consensual allocations of rights which establishes such norms. Although so many ideas are suggested, at the most general level, "the idea of social capital is used to refer to the quality and quantity of a society's civic and political assets. (Collier and Gunning, 1999; Knack, 1999)

Putting conceptual definition to more workable definition, World Bank (2000) defines social capital as "the rules, norms, obligations, reciprocity and trust embedded in social relations, social structures and society's institutional arrangements which enable members to achieve their individual and community objectives." Thus, the concept of social capital has made a long odyssey in the social science; it is still considered an emerging concept as there are many areas of social science where there has been relatively less application of social capital and resources management is one of them.

4.1 Forms of Social Capital

Depending upon the intensity and scale of interactions, basically there are three types of social capitals.

- Bonding social capital (which refers to among same groups, among family members or ethnic groups)
- Bridging social capital (which refers to between groups, across families, ethnic groups); and
- Linking social capital (which refers to between different social classes)

Woolcock (2002) referred bonding and bridging social capitals to as “strong” and “weak” ties, the former representing immediate family members, close friends, and professional colleagues, the latter encompassing more distant associates and acquaintances. The linking social capital is however the networks and connection in a broader manner where the connection is more open and innovative.

4.2 Application and Measurement of Social Capital

According to Portes (1998) application of social capital can be used to predict the social phenomenon like academic performances, child development, employment attainment, migration and ethnic enterprises which are very crucial in economic development. According to Woolcock(2002), social capital help in innovating strategic defense, building partnerships among private and public agents in the shock hours of trade declines, natural disasters, strikes, disputes and domestic violence.

Bowling's (1997) study on network measurements have measured social capital by using variables like size, geographic dispersion, density, composition and member homogeneity, frequency of contact between members, strength of ties, social participation and social anchorage. Strength of ties further implies to degree of intimacy, reciprocity, expectation of durability and availability and emotional intensity while social participation and anchorage are measured in terms of civic engagement in social, political, educational activities and years of residence in and familiarity with neighborhood and community. Stone (2001) has however highlighted that the indicators of social capital can be distinguished as proximal and distal indicators. For proximal indicators, outcome of social capital is directly related to networks, trust and reciprocity. Eg: Civic engagement as indicator of social network. For distal indicator, outcome of social capital is not directly related to these components. Eg: Life expectancy, suicidal rates, teenage pregnancy

In its attempt to measure Social capital, the World Bank has formulated assessment tools with six dimensions for this purpose—Groups & Networks, Trust & Solidarity, Collective Action & Cooperation, Information & Communication, Social Cohesion & Inclusion and Empowerment & Political Action.

4.3 Components of Social Capital

Aldridge (2002) highlights that there are essentially three components for social capital: Social networks, social norms and sanctions. Network is the definition of who is who and deals with what can be the possible roles of network members and influence in activities. Norms are more about the rules and understanding, reciprocity, expectation of trust and codified behavior while sanctions are meant for checking the compliance of rules. Sanction can be either rewards or punishments in regards to applying or breaking rules.

However, beyond just networks, Woolcock (2002) stresses that psychological dispositions (such as social skills, cooperation and honesty) and political measures (rule of law, contract enforceability, civil liberties are also the components of social capital.

5. IMPLICATIONS OF SOCIAL CAPITAL TO DEVELOPMENT

According to Nan Lin (2005), social capital is expected to produce returns in two ways—1) accessed (i.e. richer the capacity of it, better the return) and 2) mobilized (i.e. better the capital used, better the return). This illustrates that investigating the social capital within a group helps in deriving more benefits. While the first one is the endowment embedded in one's social links, the second one is the actual use of it in production. In development sector, application of social capital is gaining momentum because it enhances the opportunities and information and the sense of community feeling (for inclusive growth).

Social capital also has implication on economic growth and promoting equity in local level. Putnam argues that “the higher density of voluntary associations among people in northern Italy explains the region's economic success relative to southern Italy, where such associations are less frequent. ((Putnam and others 1993)” as cited by Christiaan, 1998) In another example in same literature, correlation of social capital and economic transformation can be analyzed with a comparative case of two banks: Grameen bank of Bangladesh and Inter-American Development Bank. Grameen bank is a model of social entrepreneurship which has contributed in economic reforms and particularly supported poor with promotion of inclusion, solidarity and social capital while in contrary to this,

analysis of the other bank show that many countries in Latin America are facing economy declines because of weak social and institutional ties.

A good network of relations between interest organizations and public institutions can favour the improvement of infrastructural facilities and the efficient provision of economic and social services, as well as the influx of capital and investments of both local and external firms. (Triglia, 2001) To this end, sociologists, such as Putnam (1993), development scholars such as Woolcock and Narayan (2000), and management scholars such as Nahapiet and Ghoshal (1998) have argued that social capital is a necessary ingredient for community development and may provide the necessary bridge between the poor and the resources available through external groups or institutions. (Ansari et al. 2012)

Generally, one would expect communities blessed with high stocks of social capital to be safer, cleaner, wealthier, more literate, better governed, and generally happier than those with low stocks, because their members are able to find and keep good jobs, initiate projects serving public interests, monitor one another's behaviour, enforce contractual agreements, use existing resources more efficiently, resolve disputes more amicably, and respond to citizens' concerns more promptly (Woolcock, 1998)

6. SOCIAL CAPITAL APPLICATION IN NATURAL RESOURCES MANAGEMENT

Social capital in natural resources management is fairly new concept. "The use of social capital in natural resources management evolved in the early 1980s when collaborative natural resources management in many developing countries had emerged (Nath et al. 2010)."

Apart from Nath, Jules Pretty is one of the most cited scholars in the social capital applications to natural resources management. An in-depth literature review revealed that even in the global level the literatures linking social capital theory and natural resource management is limited. According to Pretty (2003), social capital can be considered a prerequisite for the sustainable management of natural resources. The ideas of social capital and governance of the commons, combined with the recent successes of local groups, offer routes for constructive and sustainable outcomes for natural resources in many of the world's ecosystems (Pretty 2003).

Strong networks among social organizations, other civil societies and government actors prevent other actors from impounding natural resources (Bebbington, 1996). This idea links to the forms of social capital; bonding, bridging and linking. It emphasizes that having all of these forms of social capital is important and has a strong role in protecting natural resources.

Empirical studies from different cases have tried to assess the externalities posed by the social capital on resources management while most of them have encouraging results. Nath et al. (2010) in the study of social capital and forest management in Bangladesh found that social capital was connected with both improved livelihood and better forest conditions. There the role of NGO appeared vibrant in forming user groups. A positive relationship was found between social capital and forest conservation.

Just as with other types of capital, social capital can be put to negative or positive social uses; it has benefits and costs for both the participants and for society at large, and its externalities must be considered (Carroll, 2001). Other studies suggest that because of the

non exclusive and rival nature of natural resources, the potential influence of social capital through collective action is even higher in this area (Isham, 2002).

Fauroux (2003) shows in the context of rural Madagascar that power relationships relying on complex and heterogeneous social structures bring about a multiplicity of power struggles that affect the management of forests, commons, and irrigation. Bourdieu's analysis of the influence social capital has on other forms of capital is thus especially useful to highlight the downside of this concept.

Most pertinent to the present article are efforts that have used the construct of social capital to capture the nuances of social relationships in resource management. Ostrom (1992) identified concepts such as common understanding, trust, and reciprocity as attributes that enhance the likelihoods of self-organization for managing resources. However, it is important to note that social capital is not the only factor explaining the success or failure of resource management in general. Contextual differences among cases, such as culture, institutions, and types, will also play an important role.

7. HARNESSING SOCIAL CAPITAL FOR COMMUNITY FOREST MANAGEMENT IN NEPAL

Community forest model remained successful in many of the countries where it was practiced for the reasons that it benefits the community in several ways. It is based on the rationale that those whose livelihood is impacted the most by the forests should be involved in the forest management which is also because of the proximity to the resources; the effective husbandry could be ensured. The other important rationales are forest should be managed so as to ensure adequate resources flows to rural population and the forest dwelling communities could be the better managers than governments. Brown (1999) also

mentions about the development philosophy where decentralization and subsidiarity helps people become the end of development and that applies well to community forestry.

Community forestry program is also cost effective as it deals with local management and cuts off the costs of state while community involvement also puts important checks and balances in relation to state services.

7.1 Social Capital Shaping Policy: Shifting Paradigms

Social capital has a strong influence as according to Triglia (2001) the network of relations binds the individuals and collective actors and contributes in shaping appropriate policies. Argument of Triglia (2001) proved true in case of Nepal, where experimental local initiatives in the 1980s increased biological regeneration and income flows in forests of Nepal that governments issued new policies for community forest management in Nepal in 1993 which had plans to promote the active participation of community to protect and meet their basic needs through Master Plan for Forestry Sector. These encouraged the involvement of NGOs as intermediaries and facilitators of local user group formation. However, explicitly it is not mentioned that social capital played this instrumental role in shaping the policy but studies refer to several components of social capital that will be discussed in the other section of this paper.

Benefits of community forests to community include increased fuel wood and fodder productivity, improved biodiversity in regenerated forests, and income growth amongst the poorest households. Old attitudes started changing, as foresters come to appreciate the remarkable regeneration of degraded lands following community protection, and the growing satisfaction of working with, rather than against, local people. (Pretty, 2003)

8. APPLICATION OF SOCIAL CAPITAL CONCEPT IN COMMUNITY FORESTS OF NEPAL

Presence of decentralized, democratic, autonomous organizations, citizen's active participation in decision making, resolving conflicts through discursive mechanism today have become important factors in developing the local economy and community forests in Nepal is a solid example where all these elements are very vibrant. Next, providing voice to the marginalized and disadvantaged groups, the social economies have contributed towards a workable model of democracy so vital for promoting local development. The community forestry programs often have been found to do the credit linkage to an impoverished economy and promote entrepreneurship and banish exploitation in the local economy. Government delegating the local community and community based organizations in developing social enterprises is a good example of democratic practice and has a likelihood of success. Their collective action in monitoring the progress and quality (of various private and public works through social audit) also builds the idea of awareness (including the environmental conscience) and responsibility of the community and the need for social capital as an input for sustainable development.

Community Forest Management in Nepal is one of the globally successful models of Community Based Natural Resource Management. Many different aspects of community forestry ranging from livelihood issues to environmental values have been a subject of research for a long time. Warner (2001) emphasizes that government programs are most effective in enhancing social capital when they view participants as producers and not clients by providing more autonomy and facilitating with participatory framework more often than not social economy has been found to do the credit linkage to an impoverished

economy and promote entrepreneurship and banish exploitation in the local economy. This is also an example of linking social capital, which remained visible in community forests in Nepal. The Community Forests user groups are the community based civil society organizations which have been provided autonomy by the government making them responsible for protecting the forests and promoting its sustainable use. Capitalizing on this linking social capital, the model have proved to work well in Nepal and especially in the hilly regions which encouraged government to take action for designing the policy to handover the forests for community management through CFUGs. International and Local NGOs came up with projects that established community based forests user groups in Nepal to promote sustainable management of forests.

In case of Nepal, literatures that connect forest management with social capital however are sparse. A study by Kanel and Dahal (2008) has used social capital as a terminology but has not addressed any of its elements further explicitly. They mentioned that the legitimization of the Community Forest Users Group(CFUG) as an incorporated body and the process of democratization at the CFUG have strengthened the social capital of the users but fails to explain anything further on social capital and its components like networks, norms, collective actions and cohesion. Dangol et al. 2002, in their studies on role of capital formation in sustainability of community forestry have examined the financial capital, human capital and the natural capital but clearly missed out addressing social capital. Human capital in their study only means human as resources but their social bonding, cooperation and collective action is not discussed as capital. Few others have also used the term social capital but failed to talk deeper on that. Other research massively used terms that come under the definition of social capital like; cooperation, empowerment,

collective action and inclusion but they are used as independent concepts in pieces rather than collectively under a common umbrella of social capital. Thus, a specific literature that talks concretely about social capital in community forests is lacking for Nepal.

9. WORLD BANK FRAMEWORK OF ASSESSMENT: APPLICATION TO COMMUNITY FORESTS IN NEPAL

The model of social capital assessment used by World Bank integrates the important dimensions of social capital which in some cases may be overlapping but provides a clear framework on analyzing social capital in community level. It examines how different types of networks help and/or hinder access to key resources and how participation in different types of community groups shapes the capacity for collective action. Using the six dimension of the social capital, this section attempts to review literatures of community forests from Nepal and analyze important findings related to them which help or hinder the objective of social groups formed for forest management.

9.1 Collective Action and Cooperation

Putnam's definition sees social capital as a distinct form of "public good" with an effect on economic and political performance at collective level (Putnam, 1993). Applying his idea to community forestry, management of forest resources would be a shared vision of the community members in collective manner through which they expect the economic and political benefits or common good. Shared vision is the collective goals of a group, organization or in this case, a community (Tsai and Ghoshal, 1998) shared vision is a construct related to how members of the group envision themselves as part, and what

common goals are shared. Tsai and Ghoshal (1998) found shared vision was a significant and positive indicator of social capital. However, discussing further in complex system of societal fabrics like communities of Nepal where very diverse group of population co-exist in a small community, would it still be possible to have this collective action and cooperation and a shared vision? The socio cultural composition of settlement or groups of settlements may result in difference of interest in forest user groups that affects the forest governance and management. There is a strong hierarchy of caste system in Nepal which is even more prominent in rural communities so what made them still cooperate? Is there no any co-relation between this diversity in community and a vision for shared goal?

Study by Varughese and Ostrum (2001) however has an interesting result with research carried out in 18 community forests in Nepal which shows that heterogeneity in social and economic structure does not have determinant impacts on likelihood of success of collective actions. This is potentially one of the reasons that despite of such a strong caste system and economic disparity in Nepal's rural community with elites' dominance in decision making and power control, the community forest remained a big success. Their collective action in monitoring the progress and quality (of various private and public works through social audit) also builds the idea of awareness (including the environmental conscience) and responsibility of the community and the need for social capital as an input for sustainable development. Since Coleman emphasized that "an especially important form of social capital is the norm that one should forgo self-interest and act in the interest of the collectivity" (p. 104), social capital is seen as the institutional solution communities develop to solve the free-rider problem and thus make collective action possible.

Social capital helps households better cope with income fluctuations and manage risk because activities undertaken for social purposes spill over into the economic arena. For example, membership in associations that have non-economic objectives can positively affect members' access to credit. The study further reveals that collective action is more frequent in communities with high social capital (World Bank, 2000). The community forests user groups in Nepal through different projects practiced savings and credits, micro finance schemes which was the outcome of collective action and that helped them overcome their financial needs.

9.2 Groups and Networks

It is discussed that social networks help to increase the productive efficiency of society. As Arrow (1993, 3) states, "there seems to be widespread consensus on the plausibility of the hypothesis that social networks can affect economic performance." Most simply, it is argued that better connected people enjoy higher returns. Social networks may guard against coordination failure and prevent information gaps between groups. The very idea of a social network is to patch the holes between individuals or groups so that information flows smoothly and at minimum cost (Nepal et al 2007). Several studies have shown that conservation and environmental management are correlated with social networks. Using data from 18 different community forestry sites in Nepal, Varughese and Ostrom (2001) find that forest condition is positively correlated with the degree of collective activities of forest user groups i.e. higher the engagement of the forest user groups in the networks, higher the likelihood of better forest conservation. According to Nepal et al. (2007) the quality of network also has a role to play. In his case study from forests

management in Nepal, he found that social networks that are directly related to the conservation activity have a positive and significant impact on the number of trees planted while social networks that are not directly related exhibit a kind of indifference (or even indicate rivalry) to tree planting. Thus, networks and affiliation was found to be important.

Very heterogeneous with caste system, but relative inaccessibility of government institutions led to largely self-sufficient communities with a basis for local management. (Brown 1999)

In addition, studies on the differential impact of “bonding” social capital (within a community), “bridging” social capital (horizontal links among heterogeneous actors) and “linking” social capital (vertical links) have drawn attention to the importance of linkages between poor communities and larger networks (World Bank 2000).

9.3 Trust and Solidarity

Trust is an element of social capital which also builds solidarity. Mutual trust thus arises within a social group when a high level of subjective probability is associated with most individuals of the community. High level of mutual trust incites community members to follow the rules of the community (i.e., social norms) because everyone anticipates that the others will do the same. With the higher level of trust the governance costs can also be lower. (Ballet et.al 2007) Defining trust in a given social context is a prerequisite for understanding the complexities of human relationships. Sometimes trust is a choice while in other cases it reflects a necessary dependency based on established contacts or familiar networks. (Francis, 2000) Trust also encourages community in collective actions. As social capital lowers the transaction costs of working together, it facilitates cooperation. People

have the confidence to invest, knowing that others will also do so. (Pretty, 2003) Thus, trust is an instrumental idea as trust involves expectations of “regular, honest, and cooperative behavior, based on commonly shared norms” (Fukuyama 1995, 26). Trust can also be related to the attaining self governance as trust is an essential condition for crafting and promoting self-governance (Ostrom 1997) which is one of the factors that holds a strong significance in proper management of forests and sharing equitable benefits. After all good governance is a rationale of community forest management.

However, in the literatures on community forestry in Nepal, there is no explicit explanation on how the trust has been capitalized for management of forests, however the ideas of trust and cooperation is blended in many works. For instance, In the study in 38 community forest users groups, lack of trust was identified as a factor that inhibits the exercise of power in community forests user groups and hinders the sustainability. (Lachapelle et al. 2004) However, trust is an important factor and deserves to be examined in detail in further research in community forests. In absence of trust, an attempt to reach a common goal may fail positioning trust in a priority for an action to provide successful results.

9.4 Information and Communication

Information and communication is one of the important assessment tools for measuring the social capital. The mechanism of information and communication, within community forestry user groups makes it possible to understand the nature of social capital

in a particular community. Information has a direct influence in decision making process. Banjade et. al (2006) from the study of community forests in Nepal mentions that in decision-making processes, information plays an important role, but information perspectives differ across the users with different social status defined by economic class, caste and ethnicity, gender, education and access to an executive position. According to them, people holding an executive position and those without it have conflicting views on the provisions of power sharing and access to information and resources. There are differences in perceiving and evaluating different qualities of information at various levels of policy processes, and what higher policy makers might think is important quality of information for community forest user groups may no longer be valued by the users.

The other study suggests about the relationship between the government department of forests and the local elites. It is mentioned that within community forestry program forest department continues to work closely with local representatives/elites, who have retained significant control over community forestry institution. (Malla, 2001) This study implies that the linking social capital is lacking in this sector and it is the bonding social capital that is strong between the power elites. Thus, information flow from high level to the common village citizens might not be transparent. However, transparency is very important in forest governance as suggested by Kanel and Kandel (2004) where they emphasize that stakeholders should have access to information in order to understand and monitor forest management issues. According to them, more attention is needed on the transparency in forest product flow, fund generation and utilization. Surprisingly, many user group members are hardly aware of their own community forest constitutions and operational plans and lack understanding of their rights and responsibilities towards

effective functioning of their FUG. “Lack of adequate knowledge and technical skill among users might be the reason for the formulation of poor operational plan and constitutions.” (Kanel and Kandel, 2004)

9.5 Social Cohesion and Inclusion

Capacity building of community in issues of inclusion has remained an integral part of most of the community forest user groups and NGOs and INGOs worked in bridging the gaps. NSCFP for example, has sought to raise collective awareness of the moral justification for social inclusion, as well as the benefits of community cohesion that it can bring. The data collected by this pioneer forestry project in Nepal indicates that in the early 1990s, most disadvantaged individuals were extremely reluctant to attend meetings, and if they did, they rarely spoke - nor were they encouraged to do so. As a result of governance coaching and similar interventions, this is no longer the case in most CFUGs. The figures show good and increasing participation by women and Dalits, even if there is still room for improvement. (NSCFP, 2011)

Forest User Groups in Nepal, particularly those with strong women’s representation, have built up the social capital of the poor through providing loans and insurance functions and by contributing to the democratization of Nepalese society.(Brown et al , 2002)

While women-only CFUGs do provide space for women to participate in forest management decision-making within the groups, it is important to analyze which caste, class and ethnicity of women are dominating the decision-making process in these groups. (Gentle & Acharya, 2006). In the case of the six CFUGs studied, the women leaders have demonstrated their commitment to produce promising results in terms of organizing and

mobilizing women and marginalized communities to advocate their needs, concerns and rights, and to increase their access to and control over community forestry resources. The findings indicate that in the context of rural Nepal, the implementation of a collective action program which concentrates only on participation without focusing on empowerment and capacity building is insufficient. A study in the mid-western region of Nepal notes that women representing land rich and high caste households mostly capture decision-making positions and influence decisions according to their interests (Rai & Buchy 2004).

9.6 Empowerment and Political Action

Project self evaluation data indicates that in the early 1990s, most disadvantaged individuals were extremely reluctant to attend meetings, and if they did, they rarely spoke nor were they encouraged to do so. As a result of governance coaching and similar interventions, this is no longer the case in most CFUGs. The figures show good and increasing participation by women and Dalits, even if there is still room for improvement. The current average presence of women in CFUG executive committees in the three main project districts is 35%, compared against the national average of 26%. If trends in the project area are considered, women's participation is on the increase – from 29% in 2000 to 35% in 2008, whilst in a smaller cluster sample of 116 households (2009), it is 39%.

In eastern Nepal, community forest user groups have been able to invest US\$ 327,000 generated by the sustainable use of forests over ten years in formal school education, informal literacy programs for women and the poor, and scholarship for poor students.(Banjade et al. 2006) Some CFUGs have contributed to construction and maintenance of roads, schools, irrigation canals, health posts, etc. which has caused several

direct and indirect positive impacts upon livelihoods of the people living in the area. Furthermore, CF has brought supportive influences on agriculture production, income and employment generation, biodiversity conservation, democratic governance, social unity and literacy in society. In this way, CF has brought a change of great socio-economic

At large, the CFUGs are providing public services. For example, when there were no political institutions in the rural areas for democratic deliberations during the time of insurgency in Nepal (1995-2005), the CFUGs served the purpose (Banjade & Timsina 2005). In the context of the Koshi Hills, more than 85 percent of the total households are involved in CFUGs as members. So far, through direct financial intervention, CFUGs in the Koshi Hills have provided support in income generating activities to more than 20,000 households aiming to enhance their economic conditions. The data shows that the emphasis and priority goes to the *dalit* community as more than 80 percent of the *dalits* fall below the poverty line. Likewise more than 3,500 and 14,000 poor households have been benefitted from skill development trainings and infrastructure support respectively.

Malla (2001), however has strong critics towards the role of government. He is skeptical that government working closely with community elites in management issues of community forestry, and government's reluctance to handover the forests in Terai to the community is shows that government has strong vested interest over these forests resources. As per Malla(2001), Terai being the geographical region with very valuable timber and other forests resources, government did not hand over the forests to community for management which questions government's willingness to community development through this participatory forestry program in Nepal.

10. CHALLENGES OF SOCIAL CAPITAL APPLICATION TO FORESTS MANAGEMENT

To date, however, the successes of the commons have been largely at local to regional level, where resources can be closed-access and where institutional conditions and market pressures are supportive. The greater challenge will center on applying some of these principles to open-access commons and worldwide environmental threats and creating the conditions by which social capital can work under growing economic globalization (Pretty, 2003) So community forestry success model may be only a very small example when compared to large scale natural resources management challenges.

Natural resources management through participatory approaches like community forests and harnessing social capital in resource management becomes a challenge during a conflict in a country as resources pay a huge cost. Research by Pokharel & Paudel (2005) illustrates that Community Forest User Groups remained less active in Nepal during the decade long conflict. Despite the rapid increase of forest user groups, the armed conflict in Nepal had several negative effects on the community forests and their management. Personal insecurity and war-related disharmony and threats caused reduction in the frequency of visits to the forests and also in the reduction of the average time spent in organizing activities. This also reduced the harvest of forest products by the user groups. Less meetings and assemblies were held among the users groups which hampered the collective actions. Some leaders of forest users groups were displaced from their home during the war. Rebel group asked group leaders to abandon their positions and forced donations were collected through community forests during the war regime in Nepal.

In many places local elites created alliances with smugglers and contractors to supply forest products illegally. Some contractors have been able to influence rebels by regular donations and thus managed to extract products in remote areas.

Project Report from Nepal Swiss Community Forestry Project (NSCFP), which remained a very significant project in Nepal for over two decades, articulates that not much creative and innovative work could be crafted during the conflict; only a few programs had to be continued which were safe. Attention had to be placed more on the security and safety of staff rather than the effectiveness of the program. NSCFP position was sandwiched between the warring parties. This evidence can be built upon to draw inferences for other community forestry projects as well because NSCFP was geographically very dispersed and have witnessed wars for the whole duration.

Not just a big national level conflict but a minor local conflict can negatively influence a collective action. Anderson (2000) cites an example from India where four villages took collective action to protect a degraded patch of a reserved forest. They started in 1975 and by 1984 the vegetation had increased in density and height. However that same year, several of the villages had a series of conflicts about the siting of a road, the sharing of benefits from a jointly managed pond and local elections. The social capital (including trust) needed for collective action degraded as the result of conflict over the local issues. The protected patch paid the cost of conflict and was cut down by the villagers. By 1986, the patch was worse than it had been in 1975. It should be noted that while the conflicts had a dramatic effect on the collective action needed for forest management and protection they originally had no link to forestry. This example clearly explains that during any conflict in local level resources suffer the most.

The conflict in Nepal surprisingly had some positive impacts in empowerment issues that resulted in increased transparency and reduced misuse of group funds. Local elites were challenged and were afraid of abusing community funds. Their attitude towards poor and marginalized people started to change as the war in Nepal was against the feudalistic structure of the society. Thus the war also increased sensitivity to issues of equity and transparency in decision-making processes. The participation of marginalized and lower-caste people in leadership positions notably increased. (Pokharel and Paudel, 2005)

However, various studies from Nepal community forests confirm that improved forest resources may not benefit all members of a user group particularly where the most powerful actors control the use of forests in order to fulfill their own interests. Pretty (2003) has also identified some of the challenges in deriving benefits from social capital in natural resources management where it is speculated whether all forms of social relations would prove good for everyone. In the feudal and unjust societies it is difficult to assure that poor and marginalized population gets the equal incentives of conservation. This also appeared in several community forest research papers from Nepal. On the other hand communities operating on their own way might find it challenging to abide by the formal rules and norms within the community based associations like community forests user groups. It is also a big challenge to ensure women benefits the same way and in equal proportion as men does while their attachment to natural resources is even more significant. Some associations may act as obstacles to the emergence of sustainability, encouraging conformity, perpetuating inequity, and allowing certain individuals to shape their institutions to suit only themselves; in this sense, social capital can also have its "dark side" (Pretty, 2003: 29)

Discussion and Conclusion

With a detailed literature survey on the area of community forestry in Nepal, this study attempted to investigate whether social capital has been embraced as a core concept while assessing the overall impacts of projects or while conducting individual research. The interesting observation was that, social capital is still a very new concept for community forest research in Nepal. Over the past three decades, substantial research has been done in community forest of Nepal. Nepal's community forest served as research ground not just for national scholars but for many international scholars. International Non - Governmental Organizations siphoned substantial funds to Nepal's forests and many documents were published as results. However, very few of them explicitly talks about social capital while most of them have missed out even mentioning this terminology. Research papers mostly have focus on conservation of the forests through the community involvement. There are numbers of papers also on participatory approaches, empowerment of women, inclusion of marginalized population, and economic incentives, which definitely fall under the social capital elements. However, research linking social capital elements holistically to application in this community forest management is missing.

The less investigated out of the six dimension of social capital is the networks and groups. Assessing the quality of networks and frequency of engagements in groups would make a difference in conservation efforts, while this area still awaits more research. For Example, NSCFP's two decades project evaluation report analyses the following topics: implementation modality/fund management, human resource and institutional development, pro-poor livelihoods, social inclusion: caste, ethnicity and gender, good

governance, conflict sensitive project management, sustainable tree and forest management, forest based enterprises, forest policy contribution while it fails to analyze any role on networks, and communication/information which is also considered components of social capital in World Bank's framework despite of the fact that these elements are well connected to good governance. Thus, dealing with good governance component without tackling the communication and information networks may not visualize a clear picture.

Using the World Bank Framework for analyzing the social capital in community forestry in Nepal, it was interesting to observe in many researches that there is a strong overlap on the six dimensions set by the World Bank. For example social cohesion and collective action has hardly been discussed as two different dimensions by the previous researcher of community forestry in Nepal. The same is inclusion and empowerment as inclusion can be understood as a means of empowerment. Thus, these are the intrinsically interlinked factors that can hardly be segregated in a research and are strongly overlapping. This questions if the World Bank Framework on social capital assessment would be perfectly applicable in social capital research and overcoming these conceptual overlaps might be challenging.

To conclude, acknowledging the significance of social capital in application to resources management, care should be taken that capability of social capital is not overrated. Standalone social capital is not a sufficient factor for change. The paper discussed earlier that social capital helps in shaping policy but another important dimension is that policy also helps to generate social capital. Social capital not just shapes policy but the relation is both way because in some countries where there is weakness in state structures

politics, it naturally obstructs the productive usage of social capital (Triglia, 2001). Thus, having an adequate government policy in place is very important in order to benefit the most out of the existing social capital in the community. For instance, if in case of Nepal, the government had not introduced the community forestry program as a participatory approach of resource management, the user groups would not be formed, which essentially was a foundation that helped the community to unite for collective action. Having a policy in place invited foreign donors with attractive empowerment packages, helped in regeneration of forests and catalyzed the social changes despite of inevitable critics. Thus social capital standing alone with no policy backup is unlikely to bring equally encouraging results.

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