Chapter I

Introduction

1.1 Background

1.1.1 Concept of social capital

There are four forms of capital namely natural capital, human capital, financial capital and social capital. Social capital is comparatively new area of interest and exploration among socio-economists, development workers and natural resource management specialists. It is loosely defined imprecise and elusive term in the existing literatures however its benefits are traced empirically in different spheres of economic development and human livelihood. The interactions, interrelations, trust, reciprocity, social norms, cooperation and collective action, and proactivity are inherent manifestations (many others depending on the society) of social capital in communities. The abstract resource from which these manifestations are emerged, summarily defined as social capital. The prominent proponent of social capital concept Robert Putnam (1995) defined it as features of social life - networks, norms, and trust – that enable participants to act together more effectively to pursue shared objectives. The World Bank is using social capital promotion as a poverty alleviation strategy in developing countries and has established a separate social capital initiative. World Bank (1998) defined social capital as “The social capital of a society includes the institutions, the relationships, the attitudes and values that govern interactions among people and contribute to economic and social development. It includes the shared values and rules for social conduct expressed in personal relationships, trust, and a common sense of civic responsibility, that makes society more than a collection of individuals’’.

Social capital is amoeboid term, which is measured differently by the scholars on particular context. In this milieu Krishna (2004) mentioned that "While the concept of social capital is valid universally, the measure of social capital will vary by context. It must be related in each case to aspects of social relations that assist mutually beneficial collective action within that particular cultural context". Social capital exists in societies in abstract form and available to each individual based on its accumulated stock in that particular community. The availability of social capital in societies generates benefit by reducing transaction costs, promoting cooperative behavior, diffusing knowledge and innovations and through enhancement to personal wellbeing and associated spillovers (Productivity Commission, 2003).

There is diversity in development performance/acceptance, collective behavior, household wellbeing, diversity acceptance and common property resource management among the communities and households, social capital is found a contributing factor in this respect. The contribution of trust and networks in business is well known since long time and in recent years it is found that these attributes count in many other aspects of social and economic wellbeing. The development practitioners have long been aware that program results vary considerably from one location to another, but so far it has been hard to account for these differences. A number of different reasons like quality of leadership; effectiveness of program staffs, etc. can be suggested to explain these observed differences. Social capital is another possible explanation that must be considered (Krishna, 2004). In this context it is worth to understand the performance of community development programs like vegetable production program with respect to social capital stock and its expressions. Within this background this study is directed to understand the role of social capital in varying performance of vegetable production sites in Western Nepal.

1.1.2 Socio cultural environment in Nepal

Nepal carries extreme geographical and ecological diversity within her small physical area creating diversified farming, social, cultural and livelihood systems. Human settlements are scattered and adapted to harsh ecological and geographical conditions since unknown time in the history. Nepalese society is diverse mosaic of

different culture, ethnicity and caste system ranging from Indian to Tibetian origin. The 60 living languages and 65 caste and ethnic groups dwelling in the country show complex diversity in social and cultural aspects within small geography (MoPE, 2000). The population of the country can be categorized in three major groups in terms of their origin: first group, comprising those of Indo- Nepalese origin, inhabited the more fertile lower hills, river valleys, and Tarai plains, second major group consisted of communities of Tibeto-Mongol origin occupying the higher hills from the west to the east and third and much smaller group comprised a number of tribal communities, such as the *Tharus* and the *Dhimals* of the Tarai. The Indo Nepalese groups have dominated in different aspect of social and national life. They managed to achieve early dominance over native and northern migrant populations, largely because of the superior formal educational and technological systems they brought with them.

1.1.2.1 Caste system

One integral aspect of Nepalese society is the existence of the Hindu caste system, modeled after the ancient and orthodox Brahmanic system of the Indian plains. The four caste divisions are *Brahman* (priests and scholars), *Chhetri* (rulers and warriors), *Baisaya* (merchants and traders), and *Sudra* (professional caste e.g. gold smith, blacksmith, artisans, and laborers). The ethnic tribes are considered as separate caste category in this system and are indigenous inhabitant before encroachment of Indo-Aryan and Tibetan migrants.

The deep rooted caste system diversified ecological settings, poor communication and infrastructures to interact with outer world had created the fertile land for feudalistic social system in the past. The cultural and religious rigidity of the caste system is slowly eroding in recent decades due to socioeconomic and political changes.

1.1.2.2 Family and kinship

The first and fundamental unit of the community life is family, or *paribar*, consisting of a patrilineally extended household. The extended family system and kinship is a way of community life. Many extended families broke apart and family property is equally divided among the sons, as sons separated from parents and brothers from each other. If parents were alive, they each receive a share in certain communities if they are interested. Family separation always results in a division of parental properties and family landholdings. These types of family separation some time create distrust and weaken the family bonds and new networks and trust radius emerges with others in the communities. Beyond the immediate family, there exists a larger kinship network, which is an important source of individual and household wellbeing. These ties are very strong influential in individual and household wellbeing.

1.1.2.3 Village and community

Above the kinship network village is the broader unit of social existence. Some villages are no more than hamlets made up of just a few houses; others are sizable communities including different caste categories. In more populous villages, the caste groups contained, priests, occupational caste groups, such as Kami (IronSmiths), *Sarki* (Leather Smiths), and *Damai* (Tailors and Musicians), who fulfilled the vital basic needs of the village as a fairly self-sustained production unit. This system integrates all the castes within the community together creating the vital networks among the households. Most of the villages are homophilus in nature but in recent years villages in Terai and nearby town areas are heterophilus.

Villagers occasionally work together to implement village-level projects, such as building irrigation ditches/channels, facilities for drinking water, local treks, schools and other facilities. The farm households usually rely on mutual labor-sharing system called *parma* to perform farm activities in main seasons, which allows villagers to exchange labor for labor at times of need. This has created trust and

cooperation based neighborhood ties among the households to get by from day to day livelihood problems.

1.1.3 Agricultural development status in the country

The 27 percent of the total physical area of the country is cultivable and out of which only 20 percent is under cultivation (MoAC, 2002) which shows the scarcity of agricultural land in the country. The agriculture sector is the leading sector in Gross Domestic Product (GDP) of the country which alone contributed 39.16 percent of total GDP during 2002/2003 (NPC, 2003). The non-agricultural sector of the economy also largely depends on agriculture for raw materials. The agricultural sector grew 3.3 percent per annum during 1996/97- 2001/2002 as compared to the non agricultural sector (3.9 %) which is below the set target of the growth during the period (NPC, 2003). The agricultural production of the country largely depends on the seasonal weather conditions in spite of the government interventions in irrigation, extension and technology development. The agriculture sector provides employment to the 65.6 percent of the country population (MoAC, 2002).

The 79 percent of cultivated land is under staple cereal crops while the area under cash crops, pulse crops fruits and vegetables is 9, 7, 1 and 4 percent respectively (Table 1.1).

Table 1.1 Area and production of main crops in Nepal (2002/2003)

Crops	Area (ha)	Production (Mt.)
Cereal crops	33, 36,549 (78.19%)	73,60,403
Cash crops	4, 02,764 (9.44%)	40,19,795
Pulse crops	3, 11,170 (7.29%)	2,56,900
Fruits	51,016 (1.20%)	5,18,864
Vegetables	1, 65,988 (3.89%)	17,99,973
Total	42, 67,487 (100%)	

Source: MoAC, 2002/2003.

This shows that agriculture in Nepal is still subsistence based. Fruits and vegetable crops for which countries diversified ecological conditions are suitable, still not

commercialized to produce a momentum for the agricultural sector to lead economic growth. There is a wide comparative advantage available for the production of vegetable crops in the country and it is mostly not commercialized yet except certain peri-urban areas. The past efforts and achievements of agriculture development interventions could not be sustained due to many reasons. One possible reason might be lack of viable, empowered and self-propelling farmer institutions.

1.1.4 Agricultural extension

The history of agriculture development intervention in Nepal includes use of different approaches in the particular context of time, geography and available international support for agriculture extension. The main approaches used previously were Block Production Program (BPP), Training and Visit (T and V) System, *Tuki* System, Farming System Research and Extension (FSRE) and Rural Youth Club approach. All these approaches were tested and phased out in the particular context of time and presently none of them are in operation. In the early nineties the Ministry of Agriculture initiated farmer's group approach as a technology delivery vehicle to the farming communities, which was further encouraged by the reestablishment of democracy in the country. The democratic system with grass root decentralization allowed and encouraged (created enabling environment) participation of people in all development activities. Since then, group approach has become a popular approach for all the development workers in agriculture, forestry, microfinance, irrigation and rural infrastructure development in Nepal. It was the same period when the concept of social capital emerged and spread vigorously as a new area of study in many spheres of academic disciplines.

Presently, farmer's group approach is being used throughout the country for agricultural extension and efforts are concentrated to develop self propelling groups as farmer's institution to promote the demand driven extension system for agricultural development. Further more extension approach with pluralism and partnership is being used to get the synergy to create sustainable momentum in agriculture development by using the diverse capabilities and expertise of partners (Ojha, 2001). This approach has many benefits and able to fetch diverse need of farming

communities together when there is sufficient social capital stock among partner organizations and communities.

1.1.5 Agriculture perspective plan (APP) and its focus

A twenty year Agriculture Perspective Plan (APP) was prepared in 1996, since then it has been implemented as a policy guideline to formulate the agricultural development program to lead economic development of the country. This plan has focused on the development of crop specific sites (pockets) as commercial growth centers through coordinated flow of required inputs. This strategy of agricultural development is recognized as “pocket package strategy” and farmer’s group approach has been selected as the principal conduit for the extension delivery (NPC, 1995). Agriculture Perspective Plan (APP) has focused on the concentrated efforts by all development stakeholders (transportation, irrigation, input supply, electrification and agriculture research and extension) in target areas which is supposed to be augmented by the active participation of private sector in marketing of input, output and service delivery. Thus APP demands wider networks, trust and collective action among the communities and service delivery organizations (NPC, 1995).

The highly ambitious visionary plan “APP” could not achieve envisaged outputs during the first five years of implementation. During the ninth five-year plan, the agricultural sector could not achieve the envisaged targets by the APP; one major hurdle traced at the end of the plan is poor coordination and fragmented sense of responsibility among the responsible departments, ministries and field level implementing organizations (NPC, 2003).

1.1.6 Vegetable production program

Vegetable production and marketing in potential areas is one of the poverty reduction program priorities, as vegetable crops generate cash income within short period of time and contribute to poverty reduction among the farming communities. The country is deficit in vegetable production and import vegetables (9.8 million USD vegetables during 2003) from India (MoAC, 2002).

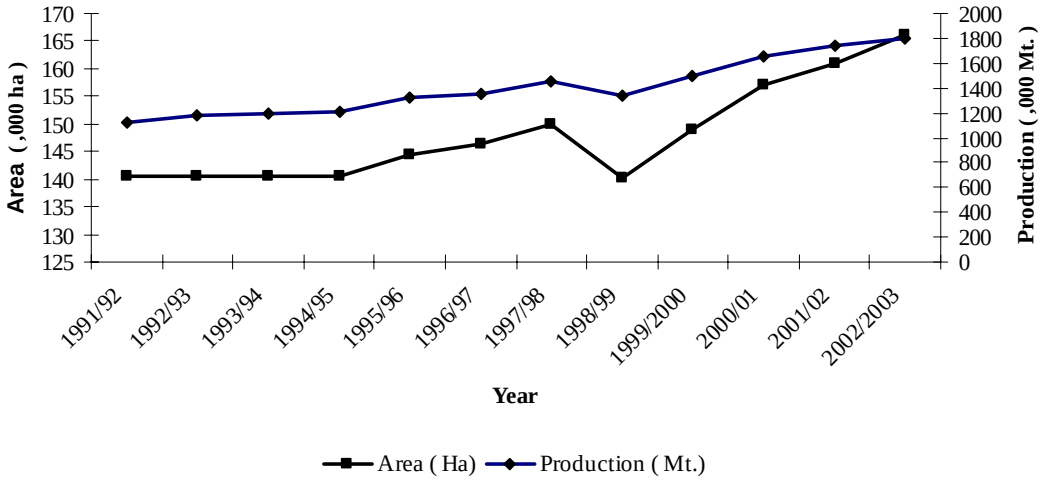

Figure-1.1 Trends in area and production of vegetable crops in Nepal

Source: MoAC, 2002/2003

The vegetable crops occupy very small proportion of cultivated area in comparison to other crops (Table1.1). There is a steady increase in areas and production of vegetable crops during last twelve years (Figure 1.1). Many agricultural development projects have been formulated and are being implemented in different part of the country to get self-sufficiency in vegetable production and exploit the export potential in certain areas where the comparative advantage for these crops is available.

Far Western development region (in topic Western region) is the least developed region with poor infrastructure in terms of transportation, market, and program support structures. Mostly farming communities follow subsistence agriculture in the region. Only some areas where transport and marketing infrastructures are available are moving to market based production system. The area under vegetable crops in seven districts of the region is only 2.9 percent of the total cultivated land. The vegetable production and marketing is still in primary stage in spite of the government efforts to develop commercial vegetable production sites in the region.

1.2 Statement of problem

The vegetable production and marketing program is being implemented in potential sites throughout the country by district agricultural offices. At present, the Department of Agriculture has two goals regarding development of these potential sites as commercialized vegetable production areas. The first one is development of self-propelling broad-based farmer's groups (ultimately organizing in the form of cooperatives or associations) with absence of gender and other form of discrimination. The second one is to promote the vegetable production through these groups in the areas. The integrated efforts of private and public organizations are envisaged to achieve these goals. To this end human and social capital at different levels can play important role.

In general, the observed performance of the program in different sites varies in terms of area coverage, scale of adoption, participation in production groups and gender equity. Generally the variation in performance of such programs is analyzed by looking at socioeconomic characteristics, geographical location, access to market and transportation facilities in different sites. Social capital, which might be important in the performance of the program, is excluded in past studies. Past studies regarding performance of agricultural extension programs mostly concentrated on suitability of technology, community characteristics and market based variables but social capital at different level has generally not been included. There is a knowledge gap to understand the performance of agriculture extension programs and sustainability of outcomes in the context of social capital endowment.

The fundamental idea to understand the role of social capital in the performance of vegetable production program is the measurement of its stock empirically. The available variation in social capital endowment and its micro constituents can provide basis for understanding of its role in performance of such programs. The second knowledge gap here is about understanding of variation in social capital endowment among different socioeconomic segments in farming communities.

The socio economic environment in farming communities is continuously changing. Individuals in the communities have higher cash needs, better income opportunities and wider outlook in comparison to the past when the needs were limited and people were confined within smaller geographical setting and narrow social interactions. In this context, understanding of temporal trends in social capital stock in the communities is of paramount importance. Here, one question how does social capital and its constituents are changing over time in the farming communities is also a knowledge gap. Thus specifically this study seeks to answer the following questions.

1. What is the existing level of social capital in different vegetable production program sites?
2. How does the social capital endowment vary among the households and communities?
3. Is there any relation between social capital endowment and performance of vegetable production program in different sites?
4. How the social capital stock is changing over time in farming communities?

1.3 Rationale of the study

It is relevant for each country to measure and map social capital stock periodically to understand its role and trends. This is more important for the farming communities where agriculture production largely depends on collective action, cooperation, reciprocity and interrelation among the households. Knowledge and innovations are shared and disseminated among households and communities due to these inherent attributes. The clear understanding of changes in these attributes of farming communities will help to understand the ongoing changes in farming systems. Such understanding will help to design the new programs and policies regarding agriculture development interventions in farming communities.

Firstly, the analysis of social capital variation among different socioeconomic strata (income groups, land holding size, social caste category) will help to understand the socioeconomic processes, disparities and resource access in farming communities.

Secondly, the understanding the role of social capital in performance of the vegetable production program will help in planning and implementation of new programs.

Understanding of social capital and its expressions is more important to promote commercialization of agriculture. In the traditional farming communities with subsistence agriculture market had limited role, but now farming in many areas (accessible to market and transportation facilities) is not only a basic source of livelihood but a tactical business enterprise for economic wellbeing of the family. This needs new types of networks and a high level of generalized trust expanding outside the traditional radius. The traditional type of networks and trust based on caste and kinship does not produce benefits for commercial farmers in the absence of new occupational ties with market and sources of technology. This can be understood by measuring and understanding social capital endowment in different communities.

1.4 Objectives of the study

Given the above background, the main objective of this study is to understand role of social capital in performance of vegetable production program in different sites of Western Nepal. The specific objectives to reach this end are as follows.

1. To assess household level social capital in selected vegetable production program areas.
2. To identify the variation of social capital among land holding sizes, income groups and social caste in farming communities.
3. To determine the relationship between social capital and performance of vegetable production program.
4. To examine changes, and factors behind the changes in social capital over time

1.5 Scope and limitation of the study

This study has focused on the household-level social capital measurement considering household as a fundamental unit of social capital accumulation. Community-level social capital is calculated by averaging household level social

capital endowment in the community. The social capital is measured in six dimensions networks, trust, collective action and cooperation, reciprocity, social norms and proactivity with composite kit of questions under each dimension. Some other dimensions in the literature like political actions, diversity acceptance, and empowerment are not included in the study. The dimensions and questions are weighted based on local situation, which might not be applicable for other conditions. The analytical hierarchy process is used to weight questions and dimensions to construct social capital index, which is specific to particular socio-cultural condition. The social capital is measured only in communities but social capital among other actors having stakes in performance of the vegetable production program is not covered.

In the context of performance of vegetable production program, it has selected only a few measures leaving some important measures aside e.g. marketing, annual transactions, group functioning and level of technology adoption. It does not cover inter and intra organizational level social capital which is important for the performance of any participatory agricultural development programs. The findings of the study regarding social capital are specific to socio-cultural and geographical setting of far Western Nepal which does not represent the status of social capital in the country. The empirical results about the contribution of social capital in the performance of vegetable production program can be generalized to similar type of community development programs.