#### **CHAPTER I**

#### INTRODUCTION

## 1.1 Background

Nepal is a country of immense social diversity where geographical structure reflects the climatic, ethnic and cultural diversity found within the country. Three geographical areas characterize Nepal and run horizontally parallel to one another. Nepal is divided into three distinct zones, running east to west: the Mountains (Himalaya), Hills (Pahar), and Plains (Terai). The mountains, hills and rural Terai contain respectively 35, 42 and 23 percent of total area, and 7, 44 and 49 per cent of the total 26 million population of Nepal (Ministry of Agriculture and Cooperatives, 2006). Nepal covers a land area of 147, 181 sq km, has an average length of 885 km and an average width of 193 km. The country has a unique topography and lies between the southern lap of the Himalayas, bordering with India in the south and the People's Republic of China in the north. The altitudes in the country vary dramatically from a minimum of 60 m in the low lands to a maximum of 8,848 m in the Himalayas, including seven of the ten highest mountain peaks in the world.

## 1.1.1 Agricultural development situation in Nepal

Nepal is a developing country with an agrarian society, agriculture contributing 36 per cent of the gross domestic product (GDP). About 85 per cent of the populations live in rural areas and 66 per cent of rural people depend on agriculture for employment and income generation (Central Bureau of Statistics, 2001). Most of this population comprises smallholders, and poverty is widespread.

About 80 per cent of them are classified as subsistence farmers. Income disparities are very evident across income groups, whereby the top 10 per cent of the population earn approximately the same as the bottom 50 per cent. National goal of reducing poverty in the country can be achieved only through the development of agriculture. Development of agriculture can alone influence positively the large portion of population.

Approximately 3 million hectares of land is cultivated in Nepal which accounts only for 21 per cent of total land area in the country. The remaining land is covered by forest and unproductive land that mainly has a value for ecotourism. Cultivated land is distributed amongst the mountains, hills and Terai, by 8, 50 and 42 per cent respectively. Although population density in the mountain areas is low, when comparing population density per hectare of cultivated land, the proportions are found to be comparable across all three regions. The GDP growth rate on agriculture sector was 2.96 per cent in 2004/5 and 1.69 per cent in 2005/6 which display its contribution to GDP has been in steady decline. Agriculture development has been sluggish and, most importantly, has failed to keep the pace with population growth. The consequences are evident and have resulted in overall increased poverty, food insecurity and malnutrition.

## 1.1.2 Food security situation in Nepal

Food security is greatly influenced by physical, economic, natural resources, socio-cultural and ethnic factors. Food security is a cross-cutting issue, and in a country such as Nepal, rural poverty and food insecurity are strongly interlinked. In Nepal, most people depend, to an important extent, on their own capacity to produce food to meet their needs. They grow crops including their staple food (rice) as well as

other annual and perennial crops, and raise livestock for food and income. Despite Nepal being self-sufficient in food at the national level, the country's food balance varies significantly from area to area, community to community within the country, as well as from year to year. Many rural households have insufficient land for crop production. Many rural people also depend on casual low-wage labor or informal-sector enterprises to make income with which to buy at least part of their food needs, and the food security of poor rural people can often depend mainly on income from such activities. Purchasing power to buy food is generally very limited in rural areas due to the high incidence of poverty. Food shortages (food gaps for two months or more) at the household level are frequent and contribute to the indebtedness of rural households, which in turn leads to chronic food insecurity. High health expenditures erode the asset base and purchasing power of food-insecure and vulnerable households. Income and food from common-property resources (forests and fisheries) are particularly important for the poor, but concessions and environmental degradation have restricted their access to these resources.

In recent years, flooding and drought have become more frequent, but emergency response capacities remain insufficient. The current production system is very vulnerable to drought due to the lack of diversification and irrigation. Depletion of productive assets, as a result of indebtedness, leads to chronic food insecurity. The food needs of permanent vulnerable groups are not sufficiently addressed as a result of disrupted rural social institutions and lack of social safety nets. While women in Nepal play a major role in all components of food security, whether in food production, marketing, household income/budgeting or as care takers, their role is

negatively impacted by issues such as high illiteracy rates among women, lack of education and knowledge, and poor health and nutritional status.

The national level cereal production is higher than the requirement which represents all Nepalese people are food secure in national level (Table 1.1). However, twenty seven percent of population at household level are food insecure (World Food Program, 2006), even though the Nepal produces enough food for everyone (Agri Business Promotion and Statistics Division, 2006). This fact shows that food production does not guarantee improved food security and nutrition of all people. The principal groups of food insecure people are backward ethnic communities, low caste, upland dwellers, landless and small farmers and women headed households in Nepal.

Table 1.1: Edible cereal grain production and requirement in Nepal

Crop/year	2001/02	2002/03	2003/04	2004/5	2005/6
			Metric tons.		
Rice Production	2,294,205	2,271,914	2,455,971	2,358,540	2,314,065
Maize Production	999,831	1,059,751	1,082,455	1,186,840	1,097,612
Wheat Production	1,008,827	1,069,257	1,105,087	1,151,282	1,211,445
Millet Production	231,714	231,931	232,373	237,778	238,651
Barley Production	8,472	8,613	8,485	8,113	7,667
Total Production	4,543,049	464,1466	4,884,371	4,942,553	4,869,440
Requirement	4,463,027	4,565,820	4,671,344	4,779,710	4,890,993
Balance	80,022	75,646	213,027	162,843	-21,553

(Source: Agri Business Promotion and Statistics Division, 2007)

People belong to Tharu ethnic communities are particularly numerous in the mid-west and far-west part of Nepal where is known as more food insecure region of country (World Food Program, 2006). Dang district lies on mid-western region of Nepal where population of Tharu communities is nearly 32 per cent of total 491,345 population of the district (Central Bureau of Statistics, 2001). Low income, unproductive labor, lack of autonomy, landlessness, illiteracy etc are the main identity of this community (Sharma, 2006). Subsistence agriculture is the main traditional occupation of the majority Tharu ethnic groups accordingly they are facing food security problems due to poor performance of agriculture. Most of these farmers are tenants' farmers and adopting traditional agricultural practices because current government agricultural development service programs are not effectively reaching to improve their production system.

## 1.1.3 Traditional alcohol use in Nepal

It is important to understand the context of the taking alcohol in the term of initiation, motivation, social, political, legal and cultural environments of people of Nepal. The *Muluki Ain* (Chief Law) as Legal Code of Nepal adopted in 1854 divided Nepalese society into different groups and caste systems. Liquor drinking groups are among them whereby the preparation and consumption of alcohol is allowed socially and legally. Nepalese society is also segmented along the lines of traditional alcohol users and non-users based on Hindu Hierarchical caste systems. *Brahmin* and *Chhetri* caste groups are traditional alcohol non user groups while Tharu and other occupational caste/ethnic groups are traditional alcohol user groups. This group and caste system is still in existence after dismissed *Muluki Ain* in 1963 legally. Each group of traditional alcohol user has its own values, perception and cultural practices

in the use of alcohol. Traditionally, alcohol is produced in the house of some caste/ethnic groups. This has cultural, religious and ritual importance. Alcohol is being widely used for socialization purposes. Although there is segmentation of the society along the times of traditional alcohol users and non users, traditional boundary has almost disappeared and alcohol use has been cutting every caste and ethnic groups (Dhital et al., 2002). There is no legal restriction of traditional alcohol production, consumption and distribution in Nepal which is commonly used in special occasion such as traditional and cultural ceremonies, ritual ceremonies and social gathering. There are three types of traditional alcohol namely Jand/Jaar (alcohol brewed from rice grain), Chhyang (alcohol brewed from millet grain) and Raksi (wine prepared from different cereal grains) consumed in the Nepal. Tharu ethnic communities prepare Jand/Jaar and consume it that is non formatted alcohol prepared in their home which effect physical and mental health of consumers. But it is also taken as food supplement in most of poor households. As an alcohol user group, Tharu and other ethnic communities are using higher proportion of cereal grain for making alcohol. It clarifies misuse of food grains that leads perhaps to their food insecurity in Nepal.

## 1.1.4 Ethnic /caste composition in Nepal

History of unified Nepal begins only after 1768, and no survey has been carried out in Nepal yet to document about the various ethnic/caste groups. So it is difficult to provide the reliable information on ethnic /caste groups of Nepal. Before the capture of Kathmandu Valley by King Prithivi Narayan Shah in 1768, the history of Nepal was the history of small kingdoms and principalities ruled by different kings and chiefs of different caste/ethnic groups. Nepal became a multi-cultural, multi-

religious and multi-lingual state only after the unification of Nepal in 1768 and subsequent consolidation of the state thereafter.

The Central Bureau of Statistics (CBS) has made available the national level information on caste/ethnicity and their various socioeconomic characteristics. The CBS provided data on 59 ethnic/caste groups in the 1991 census, whereas it provided data on 103 ethnic /caste groups living in different parts of the country in the 2001 census. Differences of opinions are reflected in understanding and interpretation of relations among different caste/ethnic groups of Nepal.

Based on caste/ethnic groups, there are 103 ethnic/caste groups with distinct language and culture. Nepali population can be broadly classified into three major groups. *Jat* (Caste groups) are 52 groups which are classified into two sub groups according to caste origin Hindu groups: *Pahadi* (hill people) with 38% and *Madheshi* (plain people) with 21% of total population. *Janajati* (ethnic groups) are 49 ethnic groups which can be classified into Tibeto-Burman origin (22%) and indigenous Nepali people (15%) of total population.

Table 1.2: Cast/ethnic group composition in Nepal

No.	Cast/ethnic Group	Caste/ethnic groups	Percent of total population
JH	Jat (Caste group)	52 68	68.97
	Janjati (Ethnic group)  Muslim  Total	Chiang M t s <sub>103</sub> r e	ai University 4.29 s e r <sub>100.0</sub> e d

Source: Central Bureau of Statistics (CBS), 2001

Indigenous Nepali people ethnic groups are the original inhabitants of low land and high land region which are not related to Hindu caste system. Indigenous

people are regarded as indigenous on the account of their descent from population which inhabited the country or geographical regions to which the country belongs. Tharu ethnic group come under this category. Muslim which are Indo origin people but their culture and religion are same as Islam.

Nepal has the climatic, ethnic and cultural diversity found within country.

Inter caste/ethnic groups relations in pluralistic and diversified society may be complementary or conflicting or mixed of both types. In Nepal relations between diverse groups of society is harmonious and free of tension and violence

### 1.1.5 Tharu ethnic group in Nepal

The origin of the Tharu is not clear. Some claim them to be migrants from the Thar Desert in Rajasthan, India. Others say that they are the offspring of the children who were born out of the relationship between the Rajput women and their servants who escaped the Muslman invaders. They are clearly Mongoloid in their facial features. Tharu is one of fourth largest group among caste and ethnic groups and the second largest groups among ethnic groups only in the country which cover a population of 1.19 million and 6.5 percent of the national population (Central Bureau of Statistics, 2001) occupying the Terai zone of southern Nepal. They are indigenous community of the Terai region where the vast majority is still spread across 22 districts from east to west and traditionally live throughout the jungles of the southern Terai lowlands of Nepal. The Tharu divide themselves into seven major clan groups, their distinct dialect, ethnic identity and culture. Tharu maintain a close relationship with the forests and rivers of their native Terai. The group is made up of many subgroups, each with its own language and cultural distinctions. Their language has

slowly transformed from the original language to a mixture of local dialects, from which most of the subgroups take their name.

While the Tharu women handle the household chores, the outside work is done entirely by the men, except for collecting fodder, which is done by the young girls of the village. The Tharus are traditionally animistic in their beliefs, worshipping various animals such as monkeys, snakes, and cows. The Tharu family is an extended family structure and remains so for a period of three to four generations. The family unit is headed by the oldest member whose word is law. Within each community, one of the wiser, older men is selected and made the community headman or leader as chieftain. He is authorized to select from each of household head within community with whom he can sit and discuss various matters pertaining to the welfare of the community, making beneficial decisions with their help.

The Dang and Deukhuri valleys of Dang district was originally a malaria disease infected area mainly occupied by the Tharu ethnic group due to their higher resistance capacity against malaria disease. The use of chemical named DDT for mosquito control around 1960 opened the district to migration from the hilly residents, who took land away from the Tharu ethnic people by various tricks and reduced them to sharecroppers. The nearly 147,176 Dangali Tharu live in the Dang district which accounts for 32 per cent of district population.

#### 1.1.6 Community system in Nepal

A community is a social group of organisms sharing an environment, normally with shared interests. In human communities, intent, belief, resources, preferences, needs, risks and a number of other conditions may be present and common, affecting the identity of the participants and their degree of cohesiveness. The community is the aggregate of persons with common characteristics such as geographic, professional, cultural, racial, religious, or socio-economic similarities; communities can be defined by location, race, ethnicity, age, occupation, interest in particular problems or outcomes, or other common bonds.

Different villages constitute different size of communities having either same caste/ethnic group or different caste/ethnic group in Nepal. Heterogeneous communities consist of different caste groups along with priest, ruler, trader and traditional caste group who work together to fulfill their basic needs within the communities. This community system unites either all caste/ethnic groups or same caste/ethnic group together by set of connection among different households within communities. Moreover, a Tharu ethnic community is specific groups of Tharu people living together in the same area or village, usually interacting or depending on each other for existence who share a common culture, values and norms are arranged in a social structure according to relationships which the community has developed over a period of time.

#### 1.1.7 Agricultural extension system in Nepal

For a number of decades before the 1990s, the Nepalese economy had been performing very poorly and virtually all the population in the rural areas were living

in conditions of poverty. After the start of democratic rule in 1990, Nepal entered a period of economic reform covering most sectors of the economy and aimed at improving employment conditions, promoting economic growth and reducing poverty levels.

Different agricultural extension approaches were adopted in Nepal based on geographical area, regions, time and available international support. Four H club, Block Production Program (BPP), Training and Visit (T and V), Tuki system, Farming System Research and Extension (FSRE) were the examples of previous extension approaches which are not existence now in Nepal. The government of Nepal has been adopted farmer's group approach for agricultural service delivery mechanism to farming communities since nineties which are still functioning as best extension approaches in most of development activities. Farmer's group approach is useful to develop self driven group within backward community as community based farmer's organization to promote need based agricultural extension and development programs for improving their livelihoods and food security.

### 1.2 An overview of plan and policies for the agricultural development in Nepal

The government of Nepal has brought out several acts, plans and policies for the development of agriculture in the country. Out of them, the Agriculture Perspective Plan (APP), National Agriculture Policy (NAP), Three-Year Interim Plan, Irrigation Policy (IP) and Local Self Governance Act (LSGA) are valuable for agriculture development and ultimately improve food security in the country.

#### 1.2.1 Agriculture perspective plan (APP)

The government of Nepal unveiled a 20-year (1997-2017) Agriculture Perspective Plan (APP) as policy guideline to formulate the agricultural development

programs and activities for agriculture led economic development of the country. The main expectation of APP is to accelerate Nepal's agricultural growth rate from 3 to 5 percent per annum (APROSC and JMA, 1995). Poverty alleviation and improving food security was the main target of APP, which begun in 1997, formulated by the government to accelerate agricultural development by promoting four priority inputs (irrigation, roads and power, technology, fertilizer) to achieve four priority outputs (livestock, high-value crops, agribusiness and forestry). In addition, APP has adopted "pocket package strategy" in which a commodity based production pocket is identified with a clear geographical demarcation. Farmers' groups within the identified pocket are then formed and established to carry out commodity projects. Based on the advancement stage of the pocket, packages of technology are then designed and utilized for optimizing benefits. Extension system with pocket package strategy and farmer's group approach is now adopted all over Nepal. Efforts are being made to strengthen farmers' groups so that the group can help themselves.

The highly ambitious visionary plan 'APP' could not achieve predicted outputs during first and second five years of implementation (ninth and tenth five year plan). The poor coordination among responsible line ministries, departments and district level implementing agencies and poor investment on agriculture is found major factors. The government of Nepal has already removed subsidy on the development of shallow tube well, promotion of agricultural market, improvement of agricultural roads, provision of agricultural inputs and rural electrification need to be provided as an indirect subsidy for development of the agriculture sector.

### 1.2.2 National agriculture policy-2004

In view of the high population growth, limited land, growing poverty, environmental imbalance, involvement of private and non-government organizations, decentralization and competitiveness and economic liberalization in international arena, the national agriculture policy guides to attain broad-based and sustainable agricultural growth through modernization of agriculture for enhancing productivity, empowerment of farmers, raising socioeconomic well-being and promotion of agrobusiness in an integrated and sustainable way. The objective of this policy is to contribute for improving the food security and alleviating poverty from high and sustainable economic growth through the transformation of subsistence agriculture to commercial and competitive agricultural systems by increasing agricultural production and productivity, developing commercial and competitive agricultural systems and the use, promotion and protection of natural resources, agro-biodiversity and environment. This policy has focused to provide special facilities for target groups who have less than half hectare land, less irrigation access farmers, marginal communities and disadvantaged groups but it is not still in functions due to lack of implementation. ทยาลัยเชียงใหม

#### 1.2.3 Local Self Governance Act (LSGA) -1999

The government of Nepal promulgated Local Self Governance Act (LSGA) to plan, implement coordinate and manage local development by providing important authority, responsibilities and resource to the District Development Committees (DDC) in 1999. Based on the act, District Council is the supreme body for the

formulation of district development plan which should ratify the plans and programs of all development line agencies of the district. DDC is the executive body of the District Council and conducts its activities in accordance with the decisions and direction of the District Council. DDC is delegated administratively with the responsibilities of all development activities of the district as an autonomous body. DDC plays an important role for coordinating all the development initiatives implemented by line agencies and I/NGOs. DDC has implemented its development program and activities within the framework of periodic plan to fulfill the need of people residing in the district. DDC is also a leading organization for support of agricultural development through district level agricultural development programs and activities implemented by District Agriculture Development Office (DADO) and other development line agencies in the district.

Along with above plan and policy, the main objective of Irrigation Policy–2003 is to provide year round irrigation service to the irrigable land through effective utilization of the country's water resources. And the main objective of Three-Year Interim Plan (2007-2010) is to realize changes in the life of people by reducing poverty and existing unemployment and establishing sustainable peace.

# 1.3 Rationale of the Study

About 77 per cent of total land area in Nepal is made up of hill and mountain in those areas the food production is negligible. The various studies show that the majority of people living in these areas are the most vulnerable to food insecurity due to low productivity and lack of alternative employment opportunities. In such situation, the plain areas (Terai belt) which only cover about 23 per cent of total land

area. Even in the surplus growing Terai belt like Dang, there are some backward ethnic community, traditional occupational cast, landless agricultural worker who cannot meet their food requirement. The backward ethnic community, poor, landless or small farmer constitute some percentage of the country's population who do not grow sufficient food for themselves and therefore their vulnerability to food insecurity is higher. The food consumption of the people residing in rural areas is low due to poor income sources. The production and food consumption pattern varies according to religion, culture, ethnicity and location.

Tharu ethnic community lies mostly in rural areas near the forest and river of their native Terai who are considered as backward ethnic community. Most of farmers from the Tharu ethnic communities are subsistence farmers and small farmers. Tharus are dependent on agriculture but this profession is not sufficient for sustaining their livelihoods (Sharma, 2006) although they live in Terai region of Nepal which serves as the country's grain basket accounting for 71 per cent of total rice production of country (Agri Business Promotion and Statistics Division, 2006). Alcohol consumption is common, particularly among men and people belonging to lower cast and tribal groups which are also particularly vulnerable to poverty and food insecurity (Food and Agriculture Organization, 2004). Tharu ethnic community is using traditional practice to make alcohol from cereal grain which leads perhaps to thier food insecurity than other community in Nepal. The incidence of poverty is higher among ethnic minorities such as Tamang, Magar, Tharu, Mushahar (Asian Development Bank, 2002). If we want to improve Tharu peoples' livelihood and food security, the study is important to better understand and assess the range of vulnerable factors that interact with performance of food production and their availability, access

to food and food utilization to create positive outcomes.

The government has also somehow failed to change their socioeconomic conditions (Sharma, 2006). Food insecurity level is persisting despite the existence of many direct or indirect intervention programs by the government in these communities. It shows that the current Nepalese government's agricultural service delivery efforts have not been effective considering the rapidly growing population and the expectations of Tharu community. This indicates possible threats to sustainable food security of Tharu farming communities at present and in the future. This research could be used to identify new strategies for enabling effective policy and institutional framework for improving food security in that community.

Agriculture in Nepal closely depends upon monsoon and productivity is low because of inadequate supply and use of agricultural input, technology and finance. These may be the factors responsible for food security in the study area. Imbalanced access to food is another factor to the food insecurity in community. It has been estimated that 27 per cent of the total population in Nepal consume less than minimum calorie requirement. There are 103 cast/ ethnic groups living in different parts of Nepal which have different socio economic status, consumption pattern and culture. It is necessary to know that what type of caste/ ethnic group or community is food insecure, why are the vulnerable populations of Tharu ethnic community food insecure and why policy in the past did not cover the all caste/ ethnic group in the country for the improvement of food security.

Household level of ethnic community is appropriate level for assessing factors affecting food insecurity because at this level, food is actually produced and consumed. This type of study focuses food security problems of Nepalese context.

The level of food security at household level can be calculated by household cereal availability and requirement.

This study was conducted in a food sufficient district but the ethnic community which was selected poor and backward facing food insecurity problem. This will help us to find out how they become food insecure and what are the factors affecting their food security situation and how does the government policies affect the socio economic situation of Tharu ethnic community?

Most of previous studies are related to food deficit region, famine, poverty and conflict affected region. But there is still a lack of information from those areas where food security issues are related to ethnicity and culture under food sufficient areas. The different caste/ethnic groups have different production and consumption patterns. This study has been designed to explore those factors which affect food security situation of different ethnic communities. That is why this study points out to identify and address the vulnerable factors affecting food security situation among Tharu ethnic communities of the study area of Nepal and also to identify constraints to and strategies for improving food security on Tharu ethnic community. The most recent studies on food security in Nepal have been undertaken at the macro level (the country as a whole), the major development regions and the districts (ANZDEC 2002, RRN/AAN 2002). This study attempted to examine the differential pattern of food security and insecurity by Tharu ethnic community and other social features for Nepal. It explored the dynamics of the local food economy and the issue of food security for Tharu vulnerable households.

## 1.4 Objectives of the study

The objectives of the study are:

- to assess the degree of household food security and its variability among
   Tharu ethnic communities in the Dang district, Nepal;
- 2. to identify and analyze key factors affecting household food security among Tharu ethnic communities; and
- 3. to identify constraints to household food security and strategies for improving household food security of Tharu ethnic communities in the study area

## 1.5 Expected contribution of the study

This proposed study will contribute to identify and assess factors that account for variations in household food and livelihood security toward sustainability and it will also contribute to identify constraints to household food security and strategies for improving household food security of Tharu ethnic communities in Dang district, Nepal. This study will help to explore these complex issues and identify new strategies to enhance the performance of agricultural production systems on household food security and nutrition outcomes of Tharu ethnic communities. It will help policy makers and others to design enabling effective institutional framework to attain food security not only for Tharu ethnic communities but also for other communities in Nepal as well. This study will be of great use to wide range of users of food security and livelihood information from researchers to policy makers and line agencies to address key issues of sustainable food production systems and able to find practical solutions to those issues. The finding of this research will be disseminated to policy and decision makers, Tharu Welfare Committee (WFC) and relevant departments, district level line agencies and Tharu ethnic communities through national workshop, technical reports, local workshops and discussions.