# CHAPTER ONE INTRODUCTION

### **1.1 Background of the Study**

Nepal is predominantly an agriculture country. Most of the population resides in rural areas and about 80 percent people are dependent on agriculture for their income and employment. Agriculture sector contributes 33 percent of GDP (MoF,2009). The agricultural production and productivity, however, have not been satisfactory to give momentum to the pace of development and therefore, agriculture alone is insufficient for rapid development of the country. There must be a combination of agriculture with business. Particularly agro-based industries are the best examples of such combination. It is obvious that industry can play important role in the rapid economic development of country. Development of industrial sector has manifold benefits. Particularly it is important in mitigating the problems of growing unemployment and poverty.

Agricultural production is the main source of raw materials of the industry. It is generally divided in two groups cereal crops and cash crops. Tea is one of the main cash crop of Nepal. In Nepal, most of the cash crops are cultivated in terai region but tea is only the cash crop which is cultivated both in terai and hilly area of eastern part of Nepal.

Tea cultivation is not a new phenomenon for Nepal. The status of tea in Nepalese economy is almost similar to the other cash crops like jute, tobacco, ginger and cardamom. However, tea cultivation is newly introduced as a commercial point of view. Among the various cash crops, tea is one of the important source of foreign currencies. In recent years, tea cultivation is expanding in different districts of Nepal like Nuwakot, Ramechhap, Kaski etc. and it is cultivated in 16 thousand and 7 hundred Eighteen hector in the fiscal year 2008/09 (NTCDB, 2010).

Tea cultivation has been divided into two sectors :

(a) Private sectors (b) Smallholders (Rural farmers)

Tea plantation is rapidly expanding in the various parts of Nepal but in the public sector, the tea estates are privatized according to government policy in the period of ninth five year plan.

### **1.2** Statement of the Problem

Tea is one of the herbal Products which is used as medicine of various disease anti tumour, anti nuclear action, suppression of blood glucose increaser etc. It is one of the important cash crops farming in mostly the eastern part of Nepal and other hand, it replaces the subsistence farming. It plays significant role to preserve the environment. It is necessary to improve the transport, irrigation, marketing, labour, trade etc, for promoting of tea farming. Geographical complexity, economic insufficiency, lack of in –depth study, research for betterment of tea plantation.

Now, tea becomes the main source of the main income of the people. They earn foreign currency by its export in both India and abroad. It can be cultivated in both hilly and the terai belt of the district.

Tea cultivation in Kanyam VDC has a long history in Nepal. Now, it has been increasing rapidly in this VDC and most of people involve in tea cultivation. So, it is essential to study the problems of tea cultivation.

### **1.3** Objectives of the Study

The general objective of this study is to find out the problems being faced by the tea cultivators in Kanyam VDC .The following are the specific objectives of this study.

- i. To study the trend of tea production.
- ii. To examine and analyze the problems of tea cultivation.
- iii. To suggest appropriate measures to overcome them.

### **1.4** Limitations of the Study

The limitations of the study are as follows:

- The reliabilities of the study depend upon response of respondents.
- The nature of the study for most part is descriptive study.
- The study covers the period from 1992 to 2009.

## CHAPTER TWO REVIEW OF LITERATURE

There are several research papers, surveys, articles and books written on the problems of tea cultivation in Nepal. Different research studies have shown that the problem related to the tea cultivation came up with their own findings. Some research papers, dissertations are related to grow the tea production and some are related how to marketize it. So, in this regard it is worthwhile to review some relavent theoretical and empirical researches.

### 2.1 Theoretical Literature

Theoretical concept help to understand the problems of Tea cultivation. Some major theoretical concept are as follows:

### 2.1.1 National Context

Amatya in his book has presented the distribution pattern of each crops including tea in the second chapter along with the growth of individual cash crop farming. He has also suggested some ideas for the development of cash crops farming in the country (Amatya,1975).

GEFONT in its book has presented that the main objectives of the study area to investigate the condition and causes of child labour. They studied Public and private tea estate of Ilam and Jhapa district. They have concluded that child labour in Nepal cannot be stopped in an abrupt manner.

Determined, gradual and constant efforts are necessary to combat the child labour problem. Since socio-economic conditions reflected in man poverty, ignorance and illiteracy are the major factors responsible

for putting children to work instead of sending them to schools. Abrupt stoppage through strict enforcement of law may create terrible implications and worsen the situation. They have also studied the condition of adult labour and stated that the socio-economic condition of the tea plantation workers appears to be unsatisfactory as their level of income is very low and their family size is large. They are unable to afford school education for their children. They cannot think about their future due to illiteracy and lack of awareness. Thus, in order to improve the living standards of workers families and to send their school age children to school, it is necessary to increase their level of awareness on issues of health, education environment, family planning etc (GEFONT, 1996).

Agrawal in his article has mentioned that it is a good source of zinu, manganere, potassium and vitamin C. The caffeine which is contain in tea, is not good for health but people are to take tea due to its habit (Agrawal, 1997).

Sharma in his article has suggested that Nepalese tea production in eastern hilly region is same as high quality brand tea of Darjeeling tea by the reason of same climate condition. In addition, Nepalese tea is relatively better than the Darjeeling tea because Darjeeling tea is produced in old soil of more than 100 years but Nepalese tea is being produced on new soil. So, Nepal can earn foreign exchange through export promotion by introducing the tea produced on soil of Mount Everest in international market (Sharma,1999).

NRB in its article has explained that first of all the tea was used for medicine to promote all kinds of illness of human physical and mental body. After a long time, in the 6<sup>th</sup> century. It was used for drinking in the

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13<sup>th</sup> century tea was taken from China to Japan. In this way tea spread all over the world. In mid the 17<sup>th</sup> century, tea was entered into Europe (NRB, 1999).

Amgain in his article has explained tea as a medicine. Tea is divided into two groups, i.e. black tea and green tea. Both tea are the sources of medicine which are beneficial to different organs of human body. A black tea consists of coffeine, polifinol, vitamin C complex antioxidant and fluoride. The caffeine helps to excite the nerve system and initiates to perform intellectual activities and adds the memory power. Additionally, a caffeine reduces the heart diseases and continues the blood circulation. The polyphenolsis a kind of antibiotic which prevents from bacterial infection. The vitamin B complex prevents from scratehing skin parts i.e. leap, tongue etc. The floride protects from dental decay. An antioxidant content of tea helps to reduce the stomach diseases like gastic.

Similarly, the green tea which is made without fermentation is popular in China and Japan. It is also beneficial to cure gastic, excessive bleeding on menstruations of women, liver and kidney diseases (Amgain, 2002).

Tiwari in his article has stated that the future of any crop depends upon the policies determined by the government. There is great potentiality of tea plantation in Nepal. It is projected that there is 30,000 hectares of suitable land for tea plantation only in Ilam, Panchthar, Dhankuta and Terathum district (NTDC, 2006). There are many districts lies on same elevation range and climatic zones in Nepal. Thus, ordinary people may imagine that there is great potentiality of tea plantation. Keeping on the mind this reality, HMG/N announced the national tea

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policy in 2000. To manage the tea industry properly the policy declares on lease, interest rate, discount on registration fee as well as categorization of small farmer in three categories etc. National tea policy 2000 announces that the very lower interest rule on agricultural loan. Farmer can take loan up to 80 percent till the completion of project. The gross period is regarded at about 7 years in hill and 5 year in terai and interest is levied during gross period. Similarly, on the purchase of land to tea plantation 80 percent of registration fee and 90 percent of malpot are discounted. The lease period is determined at 50 years on the processing of tea electricity is provided as a discount rate. Likewise, the land area of 30,000 ropani is considered as a 'tea zone' and basic infrastructures have to established by government viz. road, electricity etc. Therefore, national policy is the important factor on extension of tea plantation (Tiwari,2002).

Pashupatinagar VDC in its report has explained that tea cultivation is increasing day by day. Cash crops are the major source of income of the VDC where 9.72 percent of income is generated from tea leaves and it is increasing year by year. Tea is a cash crop which can be cultivated in land without irrigation facility. A few land of the VDC are under irrigation facilities so tea can be the major crops. Mainly the green tea leaves of the VDC are exported to Indian factories which increases government revenue (Pashupatinagar VDC, 2003).

Khattri in his project report has explained that Ilam as a tourist destination due to the variety of flora and fauna. Tea cultivation is one of the major source of income for the people of Ilam. The people are earning money directly from tea leaves and employment in tea garden. Large number of illiterate women are employed in tea which reduces rural poverty. He, in the report, focus on the expansion of tea, cardamom and ginger, production in Ilam (Khattri, 2004).

Chettry in his article has explained that our country has ample climate for tea and coffee. It is hardly being and exaggeration to say that we'll be prospered if tea and coffee extensively planted all over the feasible areas of the country. Our development budget should prioritize to agriculture especially high value cash crops like tea and coffee. It's item of the hour not to do any late to commence people are not aware there is problem in implementation of tea and coffee policy. National tea and coffee Board is not action oriented, short loan seldom reaches to the targeted groups. He concludes that tomorrow never comes this Herculean task should be started to day. Participation of majority of people will make the Herculean task easy. It is no wonder that our Tea and Coffee are the best in the world. If marketed properly, it will bring huge amounts of money. Trade deficit will be lessened. Nepal's balance of payments will undergo a major structural change (Chettry, 2005).

Rawal in his book has stated that CTC tea is produced from the plant of Asamese variety. Planting at hot climatic places, it is able to give first harvest from years of plantation. The plucking operation may be conducted at three seasons in a year i.e. march-may, June - September and October-November. Therefore, the quantity of produced tea form Asamese variety tea plant is greater than Chinese variety tea plant. On the other hand ,the quality of made tea is better from making by only two leaves and an unopened terminal bud. But on making CTC tea more than two leaves also be plucked with an unopened terminal bud. Therefore CTC is a contribution of machine manufacturer sir William Mekercher who invented the CTC machine in 1930. There are three parts in a CTC machine which are responsible for crushing, tearing and curling operations (Rawal, 2005).

Dr Thapa in his article has highlighted the geographical situation and climate of Nepal to be suitable for the orthodox tea production and its demand is increasing each and everyday in the world market. Therefore, there is unlimited possibilities of tea production in Nepal. Along with the possibilities, there are lot of challenges related to government, manufacturing and marketing. Thus, for the development of tea in Nepal there should be Commitment (Dr. Thapa, 2006).

Sapkota in his article has analysed that in Nepalese context most of the farmers are owning small holding. Their economic condition and livelihood, basically depends on profitability of tea farming because they are using most of their land for production of green leaves. For the betterment of tea farmers, the high productivity and price of green leaf will make higher profit for them. Productivity of tea in Nepal is 1646 kg/ha. This is lower than India. Application of technical manpower and necessary inputs on tea gardens can improve the productivity of green leaves. Our study shows that there is high scarce of technical knowledge and low management skill of tea gardens owners as well as no scientific application of chemical fertilizer/pesticide. As a result productivity level is below the reachable level (Sapkota,2009).

### 2.2 Empirical Literature

There are many research papers an articles have been written on the tea production. The major findings are as follows:

### 2.2.1 International Context

Upasi in his book has explained that tea research association, Calcutta carried out the comprehensive study of tea culture and its origin. That was the attempt about early history of tea plantation, diversification. That study was mainly concerned with its botanical aspect, nomenclature and classification and anatomical features. That study also includes the place of origin of tea, tea cultivation in the major tea growing countries, which are china, Japan, Taiwan, India, Bangladesh, Indonesia, Srilanka, USSR and other countries of Africa (Upasi, 1989).

CNN in its report has stated that tea may reduce risk of death after heart attack, CNN reports drinking at least two cup of tea a day may dramatically reduce a person chances of dying following a heart attack (CNN, 2002).

Whittle in his report has covered situation of tea growers in Nepal, current extension and research provision and area for training in his report as well as argues in flavor of tea development foundation using the term 'development ' instead 'research' for development and extention of Nepalese to industry the report suggest the need of 'tea development foundation' and for small growers it should provide training service (Whittle,2003).

Revelutonary organization in its report has explained that the tea plantation workers are still paid wages below the minimum of agricultural workers. An industry which is highly capitalistic in character, considering its international marketing and financial activities, still pay their workers partly in cash and kind. Since 1947, the wage of the tea plantation labour has increased only numerically, their have been no rise in their real wage. More than 85 percent of tea plantation workers of Assam and West Bengal are tribal; forth generation immigrants of indentured migrants form the central Indian tribal heartland. Majority of the rest lower castes originating from the same region. After passing from the lower primary school of the gardens, they are forced to join the tea labour workforce as unskilled workers with no educational an alternative employment opportunity (Revelutonary organization, 2008).

ILO in its report has stated that the TCF (Textile, clothing and footwear) industries have traditionally been concentrated in the lower range of qualification and very often, in countries with limited alternative job opportunities. These factors have contributed towards maintaining wages in these sectors at relatively low rates. While industries are an invaluable source of employment. The TCF has provided many opportunities for unskilled workers. Tending to occupy positions in simple production, Labour have not, until recently, played a significant role in higher positions of responsibility (ILO, 2008).

### 2.2.2 National Context

Nepal in his thesis has described the production aspect of tea industry. He attempted to explore the extend of increasing tea farming. He found that the determinant of increasing tea industries are the geoeconomics prospects and price factors (Nepal,1976).

Joshi in his thesis has studied about tea industry in Nepal and revealed the fact that there will be positive effect of the increase in the per capita income on the consumption of tea (Joshi, 1978).

Koirala in his thesis has studied and analyzed that since last twenty years, there has been considerable extention on the total and under the tea cultivation. As a result, production and consumption of tea has increased significantly. Due to people's optimism and more attention in tea plantation, Nepal seems to reach the goal of self-sufficiency before 2000 A.D (Koirala, 1983).

Chaudary in his thesis has performed a study on the establishment of tea estates in Jhapa. Except Budhakaran tea estate, all the tea estate in Jhapa were established after the land reform act (2020 BS). The main reasons behind it seems to be that big landlord undertook the tea cultivation as a tool to protect their vast land areas from government acquisition. The industrial farms were exempted from the limitation of ownership up to 50 bighas of land. Private entrepreneurs took interest in tea cultivation due to its growing importance and higher economic growth. He suggested that fertile land is needed for the tea cultivation (Chaudary, 1984).

Shakya in her report has suggested that with the help of favourable government police several potentials can be exploited for plantation of hill grown tea and production of orthodox tea and generate maximum revenue from its export since the profit margin is high. However, the tea manufacturers and packers need to focus more on the product diverfication, as there is limited scope if we have to sell the tea in bulk to the brokers. The manufacturer\Marketer must focus on its brand promotion stand alone or united or working together with foreign company as joint venture. Considering all these aspects, studies can very well concluded that there are the prospects of Nepalese orthodox tea to inter the world market (Shakya, 2000).

Karki in her thesis has used both primary and secondary sources of information in her study find the problems faced by the female workers in tea industry where she concluded that the young energetic as well as

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married labour force comes from various ethinic groups in Ilam tea estate (Karki, 2001).

Shrestha in his article has suggested that adoption of few measures of development of tea in Nepal. Development of infrastructure, classification of small farmer with dept cancellation, worldwide marketing for the excess in the global market, conducting the research work for quality tea and for the cost expenditure reduction, priority for required manpower development and measures (Shrestha, 2004).

Adhikari in his thesis has studied and presented the tea export condition of Nepal. He predicted the brighter aspect of Nepalese in international market since Nepalese orthodox tea is source of foreign currency (Adhikari,2005).

Nepal Samacharpatra in its article has defined Management of Antu tea processing plant has refused to buy green tea leaves produced following organic farming practice from the farmers due to conflict in price setting and closed the processing plant. The farmers have complained to the local authorities and have been selling green tea leaves suitable for orthodox tea to CTC tea producers at a lower price (Nepal Samacharpatra, 2008).

### 2.3 Research Gap

Most of these studies reviewed focus on production, consumption development and export volume of tea at the micro level. All these studies pointed out the importance of tea production for the international, national or the local economies. None of these studies have focused on the Problems of tea cultivation at Ilam district.

# CHAPTER THREE METHODOLOGY

### 3.1 Selection of the Study Area

The study intends to explain the real problems of tea farmers of Kanyam VDC. It is famous for tea production. It lies at the middle east part of Ilam district. The study has been diagonised all above problems to solve of the Kanyam VDC. Therefore, Kanyam VDC for the study area was selected.

### 3.2 Nature and Sources of Data

Primary data have been collected from the field work. Questionnaires and field survey were used as the main tools of primary data collection. The secondary data have been collected from published and unpublished dissertations, reports, journals, newspapers, books to make the research more informative. Data related to tea production are collected from NTCDB and its publications.

### 3.3 Universe and Population Study

The universe of this study is Kanyam VDC of Ilam district. The selected household heads are included in the study area.

### 3.4 Sampling Procedure and Sampling Size

The household survey, 2010, the VDC has 1539 households. Out of total households, 400 are engaged in tea production. Among them 40 households have been selected for the survey. Random sampling method was used in the study. The member of sample households included in the study area is given in table no. 3.1.

Ward	Total no. of	Total no. of tea	Total no. of sampled
no.	HHs	cultivators household	households
1	220	90	9
2	230	91	9
3	125	30	3
4	230	40	4
5	203	45	5
6	50	19	2
7	170	13	2
8	181	43	4
9	130	29	2
Total	1539	400	40

Table No. 3.1

Sample Frame

Source: Field survey, 2010.

### 3.5 Tools of Data Collection

Questionnaires and field study were the main tools of primary data collection of this study. In the same way, secondary data were collected books, research reports, articles and VDC official records.

### 3.6 Household Interview Questionnaire

Household questionnaire was the main tool of data collection. It was designed to collect data from the field. The questionnaire was asked to the household heads. The household heads provided the real data to the research which was more reliable to interpret the data. The structured questionnaire included socio-economic conditions, educational status, present situation of tea productions and its problems. Both the close and open-ended items were included in questionnaire.

### 3.7 Key Informants

For the analyze of subject matter there must have different information. So, the key informants were tea growers, farmers, social workers, political leaders, tea exports and other reputed person in the field of tea sector, to provide more information on the tea production and its problems.

### 3.8 Field Diary/ Observation

A field diary was maintained to record additional information such as its history, origin, ritual importance etc. Which were not captured by the questionnaire. Details of important incidences, events and discussions were recorded in diary.

### **3.9** Methods of Data Analysis

After the completion of field survey, the information was gathered in one place. The data thus gathered were first edited and then coded with the help of a coding table. After coding the data, they were tabulated. Before tabulating data, they were classified and put under required headings and sub-headings. The data were converted into percentage as well as frequency table. The obtained information were processed and tabulated by using simple statistical tools such as table, percentage, average, bar-diagrams and pie-diagrams.

#### **CHAPTER FOUR**

### AN INTRODUCTION TO STUDY AREA (KANYAM VDC)

### 4.1 Socio Economic Status of Respondents

Ilam district is one of the beautiful place as a part of eastern development region of Nepal. There are 49 VDCs and one municipality in Ilam district. Among them Kanyam VDC is the study area of this research. Kanyam VDC is the most popular of tea production in the context of Ilam district. It is 40km far from Ilam (District headquarter of Ilam). Total population of this VDC is 5649 out of total population 2824 are males and 2825 are females. The total no. of household of this VDC is 1539 (Field survey, 2010).

The climate of this area is cold in nature. The area is located in the altitude between 1000m to 1600m and suitable rainfall 150 mm to 200mm is estimated. The average temperature is 12 to 27 degree celcious.

Generally, the main cast of the study area is Brahman and other castes such as Chhetri, Kami, Damai, Giri, Newar, Limbu are also living there. Major occupation of the study area is agriculture. Some people of the study area also engaged in service sectors of either Nepal or aboard also and some are engaged in trade. There are altogether 12 schools out of them one is higher secondary school 8 are primary schools and other are private boarding school in this VDC. There is a tea factory called Kanyam tea factory, which plays the vital role in the tea farming sector, in the study area.

### 4.2 Demographic Characteristics

When we talk about the demography it includes population structure, family size, occupational structure etc. Economic activities are

directly affected by the demographic variables. To study the activities of any society, we should know about the demographic variables.

### 4.2.1 Population Distribution by Sex

According to the household survey, the total population of the study area is 5649. The total households of the study area is 1539.Out of total households 10 percent( 40 household) had been taken as sample study. 152 population had been covered out of them 76were males and 76 were females which is given in the table no. 4.1

### Table No. 4.1

### **Population Distribution by Sex**

Sex	Population	Percentage	
Male	76	50.00	
Female	76	50.00	
Total	152	100	

Source Field Study,2010.

# 4.2.2 Population Distribution of Tea Growers Family Size by Ethnic Group

Brahman (47.37) is the dominant ethnic group among the total population of the study area. Others are Dalit 8.56 Percent and Janjati 44.07 percent. According to family size of study area the average size is 3.67 person per households.

### Table No. 4.2

### **Population Distribution of Tea Growers Family**

Castes	HHs	Population		Total	Percentage	Family
		Male	Female			Size
Brahmin/Chhetri	19	34	38	72	47.37	3.79
Dalit (Kami, Damai, Sharki)	4	7	6	13	8.56	3.25
Janjati (Limbu, Tamang,	17	35	32	67	44.07	3.95
Gurung, Rai						
Total	40	76	76	152	100	3.67

### Size by ethnic Group

Source: Field Survey, 2010.

### **4.2.3 Population Structure**

Population Structure in the study area had been divided into different age groups. But in the study area the population is divided into three age group. Below 14 age group are called children, (14- 59) are called economically active population group and 60 above are aged population. The population structure also shows the economically active population and dependent population. Children and aged group population are dependent population and rest are active population.

### Table No. 4.3

### **Population Structure**

Age	Male	Female	Total	Percent
Below 14	10	9	19	12.5
14-59	60	63	123	80.92
60 above	6	4	10	6.57
Total	76	76	152	100

Source: Field Survey, 2010.

### Figure No. 4.1

### **Population Structure**



Source: Based on the Table No. 4.3

According to the table no. 4.3 and figure no.4.1, 19 persons are children, among them 10 are males and 9 are females. The population of the aged are 10. Where 6 are males and 4 are females. In this way dependent population covers 19.07 percent in the study area. Then the economically active population is 80.92 percent.

### 4.2.4 Occupation Structure

Nepal is an agricultural country. Most of the people depend upon agriculture sector. In the study area most of the people devote in the agriculture sector. In the study area agriculture sectors population covers 75 percent whereas non – agriculture population is 25 percent. It shows that large of the population of the study area mainly depends upon the agriculture sector.

Table No. 4	1.4
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### **Occupation Structure**

Occupation	Population	Percentage
Agricultural	114	75
Non -agricultural	38	25
Total	152	100

Source: Field Survey, 2010.

### 4.2.5 Educational Status

Education is the key information of development and social condition. Educational status of the study area has not been satisfactory. 25 percent are still illiterate and 15 percent people are literate. The population having S.L.C is 27.5 percent. Similarly, higher secondary level people are 17.5 percent, graduate level people are 10 percent and master level people are 5 percent of the total population in the study area.

Table No. 4.5

Education Attainment	Population	Percent
Secondary	42	27.5
Higher secondary	26	17.5
Graduate	15	10.0
Masters	7	5.0
Literate	23	15.0
Illiterate	39	25.0
Total	152	100

### **Educational Status**

### 4.3 Land Use Pattern

In my sample study, according to the survey largest portion of the land has been covered by the tea plantation is 18.85 hectare of the total area. The second largest portion of the land is covered by agriculture. Forest covers the 7.2 hectare and Swamp land has been covered 3.6 hectare.

### Table No. 4.6

### Land Use Pattern

Land Use	Area in Hectare	Percent
Tea plantation	18.85	41
Agriculture	16.45	36
Forest	7.2	15
Swamp	3.6	8
Total	46.1	100

Source: Field Survey, 2010.

### Figure No. 4.2

### Land Use Pattern



Source : Based on the Table No. 4.6

The table no. 4.6 and figure no.4.2 show that the largest portion of the land has been covered by tea plantation land. The area of tea plantation is 41 percent of the total area. Similarly, the second largest portion of the land is covered by agriculture land i.e. 36 percent and forest land covers the third largest portion of land i.e. 15 percent. According to the research only 8 percent of land has been covered swamp land.

### 4.4 Situation of Food Sufficiency

Due to the lack of the irrigation, fertilizer, modern technology, the people of the hilly region have the low production, which creats the problem of food scarcity. However most of the households of the study area are having more unproductive land and a few land is productive but this land is facing the problem of irrigation and modern technology. So, production is very poor. only the 60 percent of household can survive in their production while the rest can not survive in self production. They purchase the food grain from the market Fikkal, Birtamode etc. The sale of tea, livestock, trade and services are the main source of income.

### Table No. 4.7

Food Sufficiency	Number of HHs	Percentage
Surplus	1	2.5
For 12 months	23	57.5
For 10 months	5	12.5
For 6 months	9	22.5
For below 5 months	2	5.0
Total	40	100

**Situation of Food Sufficiency** 

Source : Field Survey, 2010.





Source : Based on the Table No. 4.7

The table no. 4.7 and figure no.4.3 indicate that only 2.5 percent of the total households are capable selling their agriculture products and 57.5 percent of the total households can fulfill for the whole year. Nearly, 40 percent of the household in the Kanyam VDC is suffering from food insufficiency for more than 6 months. Thus, people of Kanyam VDC depend on other sources to support their livelihood system.

# CHAPTER FIVE TEA PRODUCTION IN KANYAM VDC

First of all tea cultivation was started from Ilam district. It was brought from Darjeeling, India. Ilam and Soktim tea estates are the first tea estates in Nepal. Tea estate in Kanyam started in the year 2028 B.S.. In the previous days Ilam and Jhapa were the districts, where we can see the tea garden but now a days tea is spread to the others districts as well like Panchthar, Morang, Dhankuta, Ramechhap and Sindhupalchok. Tea is one of the major cash crops of Nepal. It is mainly cultivated in the eastern part of Nepal. Now the tea drinking tradition has been universal. However, the technique of taking tea differs from place to place. The tea has become a very popular drink in Nepal for a long time. At present, there are four types of tea products in Nepal. They are as follows:

- a. Herbal tea
- b. Green tea
- c. Olong tea
- d. Black tea

Black tea can be categorized in the following parts:

- a. Orthodox
- b. CTC (Crush Tear and Curl)
- c. LTP (Lawrie Tea Processer)

CTC, Orthodox and green teas have high demand in national and international market. Mainly the Orthodox and green tea are grown in the hilly region and the CTC is grown in terai. Tea farming is more profitable than other cash crop .

Furthermore, the prevalant sectors involved in tea production can be categorized into two parts. They are private sectors and smallholders. More than 110 private tea producing companies are registered in Ilam, Jhapa, Morang and Dhankuta, districts (NTCDB, 2010). Tea can be cultivated in irrigated land and less productive land. So, small holders are interested in this sector. In the hilly region farmers are facing irrigation problem so in those land tea can be one important cash crop which can benefit the farmers. Lack of proper irrigation and infertile land, people are sinking inside poverty, if tea is cultivated in it helps to reduce the level of poverty.

The data of NTCDB shows that each year tea production of Nepal is increasing and the market of Nepalese tea is expanding all over the world. Mainly Nepalese tea is exported to Germany, Japan, Pakistan and India. The green tea leaves are also exported to India from the eastern parts of Nepal.

### 5.1 Essential Condition for Tea Cultivation

Tea is produced mainly in the tropical and sub-tropical region of the world. The following are the geographical limitation beyond which the cultivation of tea is almost impossible.

### 5.1.1 Topography

Tea can be cultivated both in hill and plain up to 2100 meters of altitude. Water logging is very harmful for tea cultivation. So, sloppy area is preferred for tea farming. Tea can be cultivated in the plain if there is good drainage system. There is co-relationship between the altitude and quality of tea. It means when altitude increases the quality of tea increases and when altitude decreases the quality decreases.

### 5.12 Climate

For the tea cultivation tropical monsoon climate is very suitable. It is grown in the period of 7-8 months and during this time, moderately high temperature about 20 degree celcious to 25 degree celcious and rainfall about 150mm is favourable. Forest and bushes decrease the productivity of tea plants. Wet and warm areas is more suitable for tea cultivation.

### 5.13 Soil

For the tea cultivation soil must be well drained for the rapid growth of the plant. The elements like phosphorous, potas, iron and nitrogen are essential in soil. Acidic soils are also suitable for tea. Fertilizers help grow the tea plant rapidly but virgin soil needs less chemical fertilizer.

### 5.1.4 Slope

Slope is one prime physical factor for tea cultivation. It plays vital role in the tea production. Slope is useful for irrigation purpose. Generally, gentle and moderate sloping land are brought under tea cultivation. The position of water level and air drainage is also determined by the nature of slope gradient.

### 5.1.5 Altitudinal Zone

The altitudinal variation plays significant role for the production of tea. If the altitude is low the production becomes high and if the altitude is high the production of tea becomes low. Different altitude regions also provide different options and facilities to human beings in the case of land and other economic and social activities. Altitude changes the geographic condition. The altitudinal area has been divided in five different altitudinal zones with every 200 m interval of counter line.

### Table No. 5.1

### Altitudinal Zones of Kanyam VDC

S.N.	Altitude (in m.)	Area in sq. km.	Percent
1	Below 1000	0.33	1.17
2	1000 - 1200	2.72	9.50
3	1200 - 1400	11.19	39.71
4	1400 - 1600	10.60	37.62
5	1600 to above	3.34	11.85

Source: Namsaling Community Development Committee, 2003.

# Figure No. 5.1 Altitudinal Zones of Kanyam VDC



Source: Based on the Table No. 5.1

The table no. 5.1 and figure no. 5.1 show only 1.17 percent of the total area below 1000m altitude. The altitude of (1000-1200)m covers 9.5 percent of the total area. The large portion of land is under (1200-1400)m altitude, which is 39.71 percent of the total. Similarly, the land is in between (1400-1600)m altitude covers 37.62 percent of the total area, 11.85 percent of land is above 1600m.

### 5.2 Tea Plantation in Nepal

In one hand day by day the tea plantation area and total production of tea is increasing and on the other per kg price of green leaves is decreasing. It is due to the lack of marketing policy and other is the universal fact that is when quantity increases quality decreases. For the over production farmer are using more fertilizers, pesticides and other chemicals which reduces the quality of tea as well as land.

# Table No. 5.2Tea Plantation Area in Nepal

(In Hectares)

FY	Pri	vate	NT	NTDC		Smallholders	
	Area	Percent	Area	Percent	Area	Percent	-
1992/93	-	-	-	-	-	-	-
1993/94	-	-	-	-	493	-	-
1994/95	-	-	-	-	644	-	-
1995/96	-	-	-	-	828	-	-
1996/97	165.2	48.12	937.6	26.77	879	25.10	350.18
1997/98	2192	48.54	937.6	20.76	1385.4	30.68	4515
1998/99	6073.2	59.25	937.6	9.14	3239	31.60	10249.6
1999/2000	6073.2	59.25	937.6	9.14	3239	31.60	10249.6
2000/01	8179	68.17	-	-	3818	31.82	11997
2001/02	8179	66.24	-	-	4186	33.90	12346
2002/03	8321	65.81	-	-	4314	34.12	12643
2003/04	8869	59.07	-	-	6143	40.92	15012
2004/05	8312	54.32	-	-	6989	45.67	15301
2005/06	8911	55.65	-	-	7100	44.34	16011
2006/07	9011	54.87	-	-	7409	45.12	16420
2007/08	9030	54.41	-	-	7564	45.58	16594
2008/09	9063	54.21	-	-	7655	45.78	16718

Source: NTDC, 2010.

Note: A dash - denotes nil

### Figure No. 5.2

**Tea Plantation Area in Nepal** 



Source: Based on the Table No. 5.2

Above table no. 5.2 and figure no. 5.2 show that data of NTDC and private sectors for 1992/93,1993/94, 1994/95,1995/96 are not available but 493, 644 and 828 hectares of land was under tea plantation by smallholders. In the year 1996/97 165.2 he, 937.6 he and 879 he land was under tea plantation by private sectors, NTDC and smallholders respectively. In the year 1998/99 the involvement of private sectors has increased suddenly. Except the year 2004/05 the tea plantation area was decreased then the other years of private sectors. Among the years 1999/2000 to 2008/09 the tea plantation area increased continuously in both private sectors and smallholders.

### 5.3 Tea Production in Nepal

In Nepalese context there are two sectors involved in the production of tea. They are - private and smallholder. Tea production in Nepal is increasing simultaneously. In the fiscal year 2008/09 per kg price of green leaves was 16.01 Rs/Kg [NTCDB] which encouraged the rural farmers for its production.

FY	Private		NTDC		Smallholder		Total
	Production	Percent	Production	Percent	Production	Percent	-
1992/93	75400	46.71	860000	53.28	-	-	1614000
1993/94	687000	39.39	982000	56.30	75000	4.30	1744000
1994/95	837000	43.00	1009403	51.85	100000	5.13	1946403
1995/96	1500000	86.33	112329	6.46	125000	7.19	1737329
1996/97	1800000	61.94	925942	31.86	180000	6.19	2905942
1997/98	1946455	64.48	603136	19.98	468980	15.53	3018571
1998/99	3577857	79.63	496881	11.05	418242	9.30	4492980
1999/2000	3577857	70.35	496881	9.77	1010499	19.87	5085237
2000/01	5089579	76.67	-	-	1549503	23.34	6638082
2001/02	5864720	78.00	-	-	1653855	21.99	7518575
2002/03	6478000	79.01	-	-	1720000	20.98	8198000
2003/04	7714669	66.21	-	-	3956535	33.95	11651204
2004/05	7789893	61.80	-	-	4816188	38.20	12606081
2005/06	8443907	61.70	-	-	5244330	38.31	13688237
2006/07	9340656	61.60	-	-	5826989	38.41	15167743
2007/08	9940311	61.64	-	-	6187179	38.36	16127490
2008/09	9990130	61.63	-	-	6218114	38.36	16208127

# Table No. 5.3Sector wise Tea Production in Nepal

Source: Smarika, NTCDB, 2010.

Note: A dash denotes nil.





Source: Based on the Table No. 5.3.

Table no. 5.3 and figure no. 5.3 show sector wise tea production in Nepal. The production of tea in private and smallholders has increased but the production of NTCDB is not satisfactory in comparison to the private and smallholders. In fiscal year 1992/93 the total tea production of NTCDB was 8,60,000 kg but that decreases every year and in the year 1999/2000 that arrived 4,96,881 kg on the other hand each and every year the production of private sector increasing till the year 2002/03. After this year the production of private sector is slowly decreasing.

In the fiscal year 1993/94 the total production of smallholders was 75,000 kg and 62,18,114 kg tea was produced in the year 2008/09 by the smallholders.

### 5.4 Average Price Trend Of Green Leaf of Tea

Price is determined by production. If price is high the producer produce more otherwise, the producer can't encourage so tea cultivator get more price they cultivate more, hence the researcher present eleven years trend of average price which is mentioned below

Average Titte Trend of Green Leaf of Tea			
Year	Average Price (Rs in kg)		
1998/99	33.36		
1999/2000	33.40		
2000/01	26.74		
2001/02	21.50		
2002/03	18.15		
2003/04	15.87		
2004/05	14.78		
2005/06	13.65		
2006/07	14.09		
2007/08	15.92		
2008/09	16.01		

Table No. 5.4Average Price Trend of Green Leaf of Tea

Source: NTCDB, 2010.

Figure No. 5.4 Average Price Trend of Green Leaf of Tea



Source : Based on the Table No. 5.4

Table no. 5.4 and figure no. 5.4 show the green leaf price trend from the year 1998/99 to 2007/08. In the year 1998/99 and 1999/2000, green leaf price was high at the rate of 33.36 and 33.40 Rs/Kg. Afterwards, price of green leaf has declined drastically. If we can see the table no. 5.4.

### 5.6 Area, Production and Productivity Trend of Tea

The area production and productivity of tea in Nepal (smallholder) and its trend during (1993/94-2008/09) has been shown in table no. 5.5 below.

Year	Area in	Percentage	Annual production	% change in	Productivity
	hector	change in Area	(in kg)	Production	(kg/ha)
1993/94	493	-	75000	-	152.1
1994/95	644	30.62	100000	33.33	155.3
1995/96	828	28.57	125000	25	150.96
1996/97	879	6.15	180000	44	204.77
1997/98	1385.4	57.56	468980	160.54	338.51
1998/99	3239	133.78	418242	-10.8	129.12
1999/2000	3239	0	1010499	141.60	311.97
2000/01	3818	17.87	1549503	53.34	405.84
2001/02	4186	9.63	1653855	6.73	395.03
2002/03	4314	3.05	1720000	3.99	398.70
2003/04	6143	42.39	3956535	130.03	644.07
2004/05	6989	13.77	4816188	21.72	689.10
2005/06	7100	1.59	5244330	8.88	738.63
2006/07	7409	4.35	5826989	11.11	786.47
2007/08	7564	2.09	6187179	6.18	817.97
2008/09	7655	1.20	6218114	0.49	812.29

# Table No. 5.5Area, Production and Productivity Trend of Tea

Source: NTCDB, 2010



Figure No. 5.5 Area, Production And Productivity Trend of Tea

Source: Based on the Table No. 5.5

Table no. 5.5 and figure no. 5.5 clearly show the actual picture of the productivity of tea in the different years. In the fiscal year 1993/94 the production of tea was 152.1 kg / hector and in the year 2008/09 it was 812.29 kg / hector. According to the table no.5.5 and the figure no.5.5 show the productivity of tea was high in the year 2007/08. In the year 1998/99 the productivity was low then the other fiscal years. Besides these years the productivity of tea was up and down.

# 5.6 Area Production and Productivity of Tea in Kanyam VDC (2001/02 to 2008/09)

The Area production and productivity of tea in Kanyam VDC and its trend during (2001/02 to 2008/09) has been shown in the table no. 5.6 below.

Year	Area in	% change	Annual	% change in	Productivity
	hector	in area	production in	production	Kg/ha
			Kg		
2001/02	16.60	-	36930	-	2224.70
2002/03	17.20	0.036	41142	11.4	2391.98
2003/04	17.80	0.034	41830	1.8	2350.00
2004/05	17.90	0.006	41879	0.1	2339.61
2005/06	18.05	0.053	42093	0.5	2332.02
2006/07	18.25	0.011	42340	0.6	2320.00
2007/08	18.60	0.019	42371	0.1	2278.01
2008/09	18.85	0.013	42676	0.7	2263.98

Table No. 5.6

# Area, Production and Productivity of Tea in Kanyam VDC From 2001/02 to 2008/09

Source: Field Survey, 2010.

According to the table no. 5.6 in the fiscal year 2001/02 the area under tea cultivation was 16.60 hector and productivity was 2224.70 kg per hector. In the year 2002/03 the total area under cultivation increased up to 17.2 hector. Similarly, production also increased from 36930 kg to 41142 kg in this year. In the year 2003/04 the area under tea cultivation was 17.8 hector but the production increased by 1.8 percent and productivity decreased by 2350 kg in this year.

In the year 2004/05 the area under tea cultivation was 17.9 hector but the production increased by 0.1 percent and productivity decreased by 2339.61 kg in this year.

Likewise in the year 2005/06, 2006/07, 2007/08 and 2008/09 the area of tea cultivation was increased but the productivity was decreased than the previous years.

### 5.7 Ward Wise Distribution of Tea in Kanyam VDC

In every ward of Kanyam VDC there is no equal distribution of tea cultivation area and production. This fact is shown in the given table.

Ward	Household	Area	Percent	Production	Percent
No.		(in hector)	(in hector)	in kg	
1	9	4.3	22.81	8230	19.27
2	9	6.5	34.48	14300	33.49
3	3	1.4	7.42	3375	7.90
4	4	0.7	3.71	1820	4.26
5	5	1.5	8.00	3600	8.43
6	2	1.5	8.00	3750	8.78
7	2	0.8	4.24	1950	4.56
8	4	1.9	10.07	4625	10.83
9	2	0.4	2.12	1040	2.43
Total	40	18.85	100	42690	100

Table No. 5.7Ward wise Distribution of Tea in Kanyam VDC

Source : Field Survey, 2010.

Figure No. 5.6 Ward wise Distribution of Tea in Area and Production



Source : Based on the Table No. 5.7.

Table no. 5.7 and figure no. 5.6 clearly show that ward no. 2 covers the largest area of tea cultivation and production having 33.49 % and on the other hand, ward no. 9 covers 2.12 % tea cultivation area and 2.43 % production.

### 5.8 Cost and Its Return of Different Cultivations

Cost and return analysis is necessary in the economic point of view if there is higher cost than return. Cultivators do not stop their farming and if the higher return, cultivators become encouraged to more cultivation and more production themselves. Some competitive cultivation and its return are given below.

### Table No. 5.8

S.N.	Operation	Tea	Ginger
1	Land Preparation	490	730
2	Plants	1410	-
3	Chemical fertilizer	730	-
4	Insecticide	160	185
5	Weeding	250	660
6	Harvesting	1510	250
7	Transportation	635	-
8	Seeds	-	3010
Total Cost		5185	4835
Average Production(Per Ropani in Kg)		420	700
Average Price (Rs/Kg)		16	9
Total Return		6720	6300
Net Return		1605	1465

### **Cost and Its Return of Different Cultivations**

Source: Field Survey, 2010.





**Cost and Its Return of Different Cultivations** 

Source: Based on the Table No. 5.8

The table no. 5.8 and figure no.5.7 show that total cost of tea and ginger are Rs. 5185 and Rs. 4835, and total returns are Rs.6720 and Rs. 630 and its net return are Rs. 1605 and Rs. 1465.

### 5.8 Types of Tea Plant

In Kanyam VDC, There are different kinds of tea plant planted by the farmers. Most of the people in Kanyam have planted orthodox tea are as follows:

- a. Gumti
- b. Takda 78
- c. Takda 83
- d. Tarapur
- e. Benek bone

### 5.9 Marketing of Green Leaf

Green leaf marketing have started from leaf producer to the processing factories. Mainly in green leaf marketing producers, collectors, transporters and buyers factories are involving in these activities. The marketing system of green leaf is little bit different from other agriculture product. It is not directly consumed commodity rather it had to pass from lengthy processing mechanism before the product being ready to consume. The plucked green leaf must reach to processing factor within a reasonable time i.e.3 to 6 hours of plucking to produce good quality made tea.

The tea cultivators of Kanyam VDC sell there fresh green leaf in Nepal and India notable are Ilam Tea producer P. Ltd., Tinghare, Hill Range P. Ltd., Chhipitar, Fikkal, Small producer P. Ltd., Doctor Khola, and Gurase tea industries P. Ltd., Dhankuta.

### **CHAPTER: SIX**

### **PROBLEMS OF TEA CULTIVATION**

### 6.1 Problems

It is not a new fact that most of the people in Nepal are involved in agriculture. So, the economy of Nepal largely depends upon the agriculture and its products. The development of agriculture and agro based industries in Nepal can have direct influence on the national economy. Here , we can say that in the context of Nepal, the economic development is interconnected with the development of agriculture in spite of this fact, the government and other private organizations and agencies are still not paying much attention towards it. The following are the main problems related to tea cultivation:

### 6.1.1 Lack of Technical Knowledge

The lack of adequate technical knowledge has become a serious problem among the tea farmers of Kanyam VDC. The government and other concerned authorities should take the responsibility of its solution. They are not providing adequate techniques and other related knowledge to the farmers. If the farmers were provided with the technical knowledge and trainings, the tea farming would be more better than what it is today. The following table shows the present position of technical knowledge among farmers.

Table No. 6.1	
<b>Present Position of Technical</b>	Knowledge

Responses	No.SampleFarmers	Percentage
Possessing Technical Knowledge	10	25
Not Possessing Technical Knowledge	30	75
Total	40	100

Source: Field Survey, 2010.

Table no. 6.1 shows, only 25 percent farmers possess technical knowledge about tea cultivation whereas a vast majority, i.e. 75 percent farmers are producing tea without having any proper technical knowledge about its production.

### 6.1.2 Problem of Diseases (Insects)

In tea cultivation we can see different diseases. Some diseases and solutions are as follows:

Red Spider

- ) Plucking of unnecessary grasses.
- ) Don't mix tea leaves which are attack by red spider and which are not attack.
- ) Neem medicine should be used in the ratio 1:400.
- ) In case of more attack medicine should be used in the ratio 1:200.

Aphid

- ) Neem medicine should be used in the ratio 1:400.
- ) If there is more attack, Neem medicine should be used in the ratio 1:200.

Helopelties

- ) Pruning should be done at the place where helopelties has attacked.
- ) Plucking unnecessary grasses.
- ) Neem medicine should be used in the ratio 1:400.
- ) When there is more attack medicine should be used in the ratio 1:200.

### Looper

- Attacked place should be separated.
- ) If there is few looper then catch and kill it.
- ) Collect looper and kill.
- ) Neem medicine should be used in the ratio 1:400.
- ) In case of more attack Neem medicine should be use in the ratio 1:200.

Leaf Roller

- ) We can separate leaf roller while plucking tea leaf.
- ) Neem medicine should be used in the ratio 1:400.
- ) In case of more attack Neem medicine should be used in the ratio 1:200.

**Blister Blight** 

- ) To stop disease Boropaste or Biocare F should be use as protector in the ratio 1:200.
- ) Diseases seen on one or two place should be plucked and separated.
- ) Where insect has attack Boropaste , Biocare F should be used in the ratio 1:200.

Totrtrix

- Neem medicine should be used in the ratio 1:400.
- ) In case of more attack, Neem medicine should be used in the ratio 1:200.

### Shoot hole Borer

- Attack portion should be separated from the branch.
- ) Pasting hole by soil.

) Biopower should be used in the ratio 1:200.

### 6.1.3 Lack of Pesticides and Insecticides

Because of the lack of good knowledge about the use of pesticides and insecticides the farmers are not being above to save tea plants. They do not have proper knowledge about the fertilizers. Many tea plants are ruined by insects every year and the farmers have to sustain a great loss. This has made the production of tea decrease. The following table vividly presents the farmers understanding and knowledge regarding pesticides and insecticides.

Tab	le No	. 6.2

**Present Position of Pesticide and Insecticide** 

S.N.	Institute	Sample Tea HH	Proper users	Percent
1	Baral agrovat	40	3	7.5
2	Pradhan	-	2	5.0
3	Negen	-	2	5.0
4	Others	-	1	2.5
	Total	40	8	20

Source: Field Survey, 2010

As the above table no. 6.2 shows a very small minority of the farmers, i.e. 20 percent have knowledge about pesticides and insecticides and are using it which they buy in different shops and agro vates there. But a vast majority, i.e. 80 percent farmers is not using it. It is because of the lack of knowledge regarding pesticides and insecticides.

### 6.1.4 Lack of Well Trained Labour Supply

Not only in small scale industries but also in large scale industries the lack of skilled and well-trained manpower strikes much. One of the problem that hinder the development of tea farming of the study area is the lack of well trained labours supply. The labours should have good knowledge regarding the plantation in cutting and harvesting of tea. The lack of well-trained labours supply is also hindering the developmental expansion in tea cultivation. The diagrams below presents the condition of labours regarding their knowledge and training.

# 12 5% Trained Untrained 87.5%

### **Present Position of Well - Trained Labour**

Figure No. 6.1

Source: Field Survey, 2010.

The above figure 6.1 present only a very small minority, i.e. 12.5 percent of the labour are trained Whereas vast majority, i.e. 87.5 percents labour are untrained. This shows that lack of well-trained labour has also become one of the great problems for the development of tea cultivation.

### 6.1.5 Lack of Chemical Fertilizer

The fertility of land and proper use of fertilizer also determines the quality and amount of production for the farmers here in the study area, The lack of chemical fertilizer has also become a serious problem. The farmers are not getting fertilizers of good quality neither are they getting it is sufficient amount. This has also caused the tea production to decrease.

Figure No. 6.2 Present Position of Chemical Fertilizer



Source: Field Survey, 2010.

From the above Figure, We can say that 30 percent of sample farmers use urea and 50 percent of sample farmer use DAP and rest of the sample farmers use Potash.

### 6.1.6 Lack of Market

If farmers do not have good market for their production, there is no use of producing something. Similar is the case with the tea farmers of Kanyam VDC. The farmers are facing the problems of good and established market. They are deprive to sell the green tea leaves which has the table show the existing situation of the green leaf market available for the farmers.

Factory	Sample HHs.	Percent
Small tea producer P.Ltd. Dactarkhola, Fikkal	22	55
Ilam tea producer P. Ltd., Tinghare	7	17.5
Hillrange P. Ltd. , Chhiptar, Fikkal	7	17.5
Gurase tea industries P. Ltd., Dhankuta	3	7.5
India	1	2.5

Table No. 6.3Present Position of Market

Source: Field Survey, 2010

As the above mentioned table shows 55 percent of the produced green leaves are supplied to small tea producer P. Ltd. Dactarkhola, Fikkal and 17.5 percent is supplied to Ilam tea producer P.Ltd. which is in Tinghare. Similarly, Hillrange P.Ltd. in Chipitar, Fikkal and Gurase tea industries p.ltd Dhankuta buy 17.5 percent and 7.5 percent of the produced tea leaves. Likewise 2.5 percent of the tea leaves is exported to India. From this what we conclude is that there is not even a single local factory for manufacturing tea in Kanyam VDC and has become a great problem for the farmers.

### 6.1.7 Lack of Irrigation

If there is no facilities of irrigation we cannot expect good result from the agricultural products. What this means is that irrigation has a major role to play in the field of agriculture. Similar to other crops tea also needs good irrigation. The following table presents the position of irrigation in Kanyam VDC.

Table	No.	6.4
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### **Present position of Irrigation**

Sample HHs	No.	Percent
Irrigation	11	27.5
Non Irrigation	29	72.5
Total	40	100

Source: Field Survey, 2010

Figure No. 6.3 Present Position of Irrigation



Source: Based on the Table No. 6.4

As the above figure reflects, we can say that 27.5 percent of sample household has the facility of irrigation whereas almost all, i.e. 72.5 percent of the sample household has no any facility of irrigation in Kanyam VDC. This shows that the facility of irrigation in Kanyam VDC is very poor. The lack of the facility of irrigation has also stood as one of the major problem for the development of tea cultivation.

### 6.1.8 Lack of Market Competition

If our products do not get a good market there is no utility in producing them. There are very few tea manufacturing factories in Nepal. They cannot consume all the green tea leaves produced by Nepali farmers. They just buy a limited amount of the green tea leaves and the rest does not get the market and the farmers have to sell it at low price.

### **6.1.9 Lack of Transportation**

Being one of the infrastructure of development the facility of transportation is also very much important to run agro-based industries. It

is highly needed to carry the raw materials to the industries and the finished products to the market. This is also one of the important aspect of the economic development of a country. The following table shows the current situation of transportation in Kanyam VDC.

### Table No. 6.5

### **Present Position of Transportation**

Transportation	Collection centre %	Collection to factory %
Motor	_	45
Horse	70	45
Manpower	30	10
Total	100	100

Source: Field Survey, 2010





### **Present Position of Transportation**

Source: Based on the Table No. 6.5

The table no. 6.5 and figure no. 6.4 show that there is not much good facility of transportation of the total amount produced, only 45 percent is taken to factory by motors and there is no facility of motor transportation from farm to collection centre. Seventy and thirty percent of tea is taken to collection centre on horse and people themselves respectively. Similarly, from collection centre 45, 45 and 10 percent tea is taken to factory from collection centre on motor, horse and by people respectively. This shows that transportation has also become one of the serious problems of tea farmers.

### 6.1.10 Lack of Credit Facilities

As tea required a large amount of capital during the preliminary stage of its cultivation which poor farmers cannot afford by itself. Hence extensive credit facilities to small producers is most urgent to enlarge the volume of production of tea in the study area.

There are still various problems which have become the obstacles on the way of agricultural development. Kanyam VDC of Ilam district largely depends upon cash crops cultivation for its economy. But the production of cash crops have not been satisfactory. Nepalese agriculture has still not become able to release itself from the grip of problems.

# CHAPTER - SEVEN SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 7.1 Summary

The main occupation of average Nepalese people is agriculture. In our country more than 80 percent people are involved in agriculture and depend on it for their livelihood. About 33 percent of the total GDP of our country is constituted by the income from agriculture. Our country is famous for growing various cash crops. Among these cash crops, tea is the best and has new long been introduced in our country. In the terai, mainly Jhapa, Morang and the hilly districts like Ilam, Pachthar, Dhankutta and Tehrathum are presently producing tea.

Among various places where tea is grown, Kanyam VDC is the most popular. The commercial starting of tea plantation in Kanyam dates back to 2028 BS. In the context of Nepal, this is a long time, Generally, all the people living in this area are involved in the production of cash crops and among them tea cultivation is the most popular and done by many people. As the field survey 2010 shows, the population of Kanyam VDC which depends on agriculture constitutes seventy five percent of the total population. And another good and interesting fact found during the study is that both male and female are equally involved in farming. Tea cultivation in Kanyam VDC covers 41 percent of the total area of land.

In Kanyam VDC, both the small holder and private tea estates are found. For the purpose of the study, the data updates up to fiscal year 2008/09 were collected. As found from the study, there is 30 percent fluctuated from small holder and private sectors. Most of the land is covered by the tea farming .

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Many new tea gardens are opened, the popularity of public states is decreasing. They have not become able to create opportunities of employment, farmers are changing their land into tea estates and they are themselves creating opportunity of employment. From the research, it has been found that private sector is making much progress in the field of tea cultivation in comparison to smallholders.

The production of tea seems to be fluctuating in the local area because of shortage of irrigation, diseases, lack of technical knowledge, lack of fertilizer etc. Since, in the later days the popularity and economic profit from tea is increasing, people are more lured to do tea cultivation rather than in the production of cereal corps and consequently they are changing their land into tea estates. We can see a dynamic change in the use pattern of land of Kanyam VDC of Ilam district. On the basis of this things we can say that cash crop carry large potential in our country. Among various cash crops in the Kanyam VDC, Ilam, tea cultivation has proved to be much fruitful and it has brought significant changes in the life standard of the people living here.

The tea cultivation in Nepal is still in the grips of serious problems because of the heavy demand of orthodox tea cultivation is rapidly increasing in our country. Several problems were found in the tea production area of the study. Among them, the problems like lack of fertilizer, lack of technical knowledge inadequate market competition, unavailability of insecticides are striking much. However, tea cultivation is growing slow pace in Kanyam VDC.

### 7.2 Conclusion

As found from the study, we can say that the farmers of the study area are shifting from traditional type of farming to modern and improved agricultural system. To increase and bring improvements in the production, the farmers should be provided with improved seeds, chemical fertilizer and insecticides in right time. In the study area, tea cultivation has been found to become more beneficial than the cultivation of other crops. It gives more benefit but it has given Rs. 140.

Kanyam VDC, which is famous for tea production. Tea cultivation carries the history of 30 years. But in Ilam, tea cultivation has been found to be started 100 years ago. People are using their land for the tea cultivation. They have stopped ginger farming because tea cultivation is more profitable than the other cash crops.

Not only from the perspective of benefit but also from the perspective of employment, the tea farming has been proved to be good. Tea cultivation has created more opportunities of employment for the local people i.e. 75 percent . More laborers are required for plantation, harvesting and cutting. As found from the study, both 50 percent male and 50 percent female are equally involved in tea cultivation. The popularity of tea cultivation is growing slowly leaving other cereal crops far behind.

There is not proper management of market. Farmer don't get sufficient return of their production due to unmanaged and unsystematic market. The price of tea is always fluctuating, which has created a problem for the farmers so that the government and other concern authority should take necessary step to systematize the tea price on the basis of scientific guidelines.

### 7.3 **Recommendations**

The main concerned of the study is to find out the problems of tea cultivation in Kanyam VDC of Ilam district. During the research, the researcher has found various problems that the farmers are facing regarding tea production for the better solution to these problems, following measures should be adopted.

- As already mentioned, farmers do not have much technical knowledge regarding tea production. They do not have better ideas about the insects, diseases and proper use of chemical fertilizer in adequate amount. So, to increase benefit from tea production the concerned authorities should work effectively to increase the technical knowledge of the farmers and fertilizers, modern tools, insecticides and pesticides should be supplied and provided at subsidy rate. The government should establish its local body to work for and provide facilities to the tea farmers.
- The government should pay attention towards the improvement of irrigation facility. Available streams and rivulets should be utilized properly.
- Most of the farmers are poor. They cannot start tea farming by using their money only. It means they need loan. But the process of getting loan is very lengthy. It takes a lot of time. Because of this, they have to go to local loan lenders and get loan at high interest. By considering this, the government and other agencies should provide loan to the tea farmers in an easy, simple and faster way at low interest.
- There in lack of market. Government should established a new market or should facilitate the farmers to take their products to the market. There should be certainty of tea export at high price.
- Schools and university curriculum should include one subject giving information and technical knowledge about tea farming, no matter whether it is compulsory or optional. Similarly, farmers should also be given vocational training regarding tea farming.
- Farmers are facing problems in taking their tea to the market. There is not good facility of transportation. So, the government should provide necessary infrastructure facility to the farmers so, that they

can take their products easily to the collection centers and industries.

- One of the burning problem in the tea state is lack of skilled workers. Lower the quality of labour, the lower the production. Trained workers could help to increase the production then by untrained one. Therefore, training of workers seemed quite necessary for tea farmers.
- Literacy programs should be launched effectively in the study area.

### APPENDIX

# Household Survey Questionnaire

1.	Study Area:	VDC:
	District:	
	Village/Tole:	
2.	Respondent Information:	
	Name of respondent	
	Sex:	Age:
	Religion:	Language:
	Education:	Caste /Ethnicity:

# 3. Demographic Information:

No.	Name of family	Age	Sex	Marital	Education	Occupation	Remarks
	head			Status			
1.							
2.							
3.							
4.							
5.							
6.							

4.	Land ownership (In he	ector)	
	a. Khet	b. Bari	
5.	Main sources of income	b Trade and bussines	h Service
6.	What Is your main purp	bose of cultivating Tea?	b. Service
	a. Self consumption	b. Commercial purpose	c. Both

7.	When did you start to cu	ltivate tea farming?
	Since	
8.	Do you have extra tea cu	ltivable land?
	a. Yes	b. No
9.	If yes ,why didn't you cu	ltivate tea?
	a	
	b	

10. What are the causes of tea farming?

.....

### 11. Food sufficiency situation:

No.	Duration of food sufficiency	No. of household	Percent
a	Surplus		
b	For 12months		
с	For 10 months		
d	For 6months		
e	For below 5months		

### 12. If food Is not sufficient how do you manage?

a. Relative b. Lender	c. Credit	d. Other
-----------------------	-----------	----------

No.	Land	Area in q.km
a	Agriculture	
b	Forest	
c	Tea plantation	
d	swamp	

### 13. Information Land use pattern

.....

Year	Area	Production (kg)
2060		
2061		
2062		
2063		
2064		
2065		
2066		
2067		

### 14. Description of tea cultivation of eight years.

15. What are the problems of tea farming?

.....

### 16. Information about different manuring users

Fertilizers	organic	urea	DAP	Potas
Users no.				

### 17. What is the average cost of tea?

.....

18. Which farming is most profitable?

a. tea b. ginger c. cardamom

19. What type of tea do you plant?

.....

20. What type of diseases and insects pests attack the tea plant?

a	b
c	d

21.	Do you make tea dust at home?	
	a. Yes b. N	No.
22.	What are present situation	of tea cultivation?
		•••••
23.	What are the trend of tea cult	ivation?
	•••••••••••••••••••••••••••••••••••••••	
24.	What about the marketing fa	acilities ?
		•••••
25.	What about the loan facilities	s in your village?
	a	b
	C	d
26.	Information about mode of t	ransportations
	a. Horse b. Vechie	l c. Manpower
27.	To solve the referred problem	ms give some recommendation?
	a	b
	C	d
28	Have you thought to increase	e the tea plant in the year to come?
	a. Yes b.	No

29. Any suggestion

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