

## **CHAPTER- ONE**

### **1. INTRODUCTION**

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

Nepal is a land-locked country bounded by the People's Republic of China in the north and by India in the East, west and south. The total area of the country is 1,47,181 sq.km. Nepal is located between 80 degree to 88 degree east longitude and 26 degree to 30 degree North latitude. The Himalayan region ranges in altitude between 4877 and 8848 meters covered by snow throughout the year out of 10 highest peaks, 8 peaks are in Nepal. It has very diversified climate and topographical features, comprising of the highest peak of the world viz, the Mount Everest at 8,848m. descending down to about 60m. at Kechanakalan in Jhapa district of Nepal. The climate of Nepal is therefore diversified as per the latitudinal differences.

Government of Nepal (2065 B.S.) stated that being land-locked country, the economy of the Nepal is based on agriculture. About 80% of the export consists of agriculture products. Agriculture dominates the economy of Nepal contributes for about 36% of gross domestic product, provides employment opportunities to more than 80% economically active population.

In this background, agriculture is the major occupation of the Nepalese People. Most of them are dependent on agriculture sectors for their economic prosperity. Economic prosperity is not possible without agriculture prosperity. Agriculture is therefore a backbone of national economy of Nepal. The cultivation has become an integral part of agriculture system, Mostly in eastern part helped to enhance the rural economy of Nepal. The Tea cultivators feel their living standard has increased over the past few years due to the Tea cultivation as a cash crop Tea can be planted even in sloppy areas as well, despite of its ever green beauty which it can check the soil erosion and landslide in hilly areas. Cash crops plantation in general and Tea plantation in particular, play a major role in increasing overall agricultural production, conserving the deteriorating environment and uplifting and economic status of small farmers.

Panta (2065 B.S.) mentioned that tea cultivation and its drinking habit are said to have originated in china. After that, it was introduced to the world. The drinking habits spread later to Japan, Tibet and whole of china. after 5<sup>th</sup> century but it was introduced in Europe by the Dutch in 17<sup>th</sup> century and its drinking habits spread through European empire in the world.

Tea cultivation in Nepal is 147 years old. It produces orthodox and CTC types of black Tea. Orthodox Tea is produced in hills at an altitude above 1500m. In Nepal, districts such as Ilam, Panahar, Jhapa, Dhankuta and Teratham is the main site of production. Other districts cultivating orthodox are Nuwakot, Sindhupalchok, Ramechhap, Sankhuwasabha and Kaski. Efforts are being made to develop Tea estates in some other districts as well. Nepal produces about 1.97 million k.g. orthodox Tea. It is chiefly exported to countries like, Japan, Germany, USA and India.

Nepal has a long history of Tea cultivation, initiated with the establishment of Ilam Tea Estate in the Hills of Ilam District 1963 and Soktim Tea estate in the plains. As per the recorded information, Mr Gaj Raj Singh Thapa in 1920 B.S initiated a Tea cultivation practice in Ilam by bringing seed and plants from Darjeeling prang hills. Previously there were only two gardens in Ilam, namely Ilam and Soktim.

First Tea plantation at private Tea sector in Terai was Established in 1959 and was with the name of Buddhakaran Tea Estate. Nepal Tea Development Corporation (NTDC) was established in 1966 by the His Majesty's of Government. His Majesty King Birendra Bir Bikram Shah Dev declared the five district i.e. Jhapa, Ilam, Panhathar, Terhathum and Dhankuta of the eastern development region as 'Tea Zone' in 1982. The National Tea and Coffee Development Board (NTCDB) was established in 2050 B.S is the public agency of responsible for developing and promoting Tea plantation in Nepal.

Panta (2065 B.S.) further stated that Nepal Tea Development Corporation (NTDC) inherited the historically Ilam and Soktim Tea estates and established five new Tea gardens since 1985 occupying 951 hectors of land and by now the management is privatized.

Both of big and small Tea gardens which are in the private Tea estate and the area is estimated to be about 16000 hectares with an annual production of 13688m.t of

made Tea registered out of 140 Tea estate would have contribute to 85% of the National production volume. Nepal has 40 Tea processing factories in private sectors. They produce both orthodox and CTC Tea.

As per the statistics, more than 67% of the orthodox produces are small formers and their contribution in the production is more than 60% other than small formers, there are five private Tea estates with processing facilities, processing facilities without Tea estates and Tea estates without processing facilities. Altogether there are 16 modern Tea processing facilities and out of them 11 are in Ilam. There are two in Dhankuta, two in Panchathar and one in Kaski.

Nepal has become member of WTO in 2004 A.D. As a member of Tea business, it has to produce both types of Tea (Orthodox and CTC) of definite quality as define by the respective country. Each country importing Tea from Nepal has set standard for made Tea. The standard is in production, products, presentation, packaging and chemical quality of finished products. Tea is produced in many countries of world like India, China, Kenya, Sri Lanka, Bangladesh, Indonesia Japan, Turkey, Vietnam and Argentina etc. Nepalese Tea is exported to different countries of the world especially Germany, France, Japan, U.S.A, Belgium, Sweden, Czech Republic and other countries.

## **1.2 STATEMENT OF THE PROBLEM**

Yet, Tea plantation has success history in Nepal, as a trend of Tea farming is become popular in different place of the country. It has been taken as long term cash crop plantation. Tea is one of the major exportable cash crops and habitual consuming crop by every person through out the country. It plays a significant role in the economic life and development process on the other hand it plays the maintainable role to preserve the environment . The production of Tea in the eastern part of Nepal like Jhapa and Ilam have taken place due to the Geographic as well as cultural environment.

Tea can be planted in both in Hilly and Terai Region. It preserves the natural environment as well as landslide and others natural disasters. There is high demand of Tea in internal and external market. The potentiality of Tea is high. In spite of this, Tea industry in Nepal is not much successful and is not able to meet the internal demand. Though, it's cultivated from one half century, Nepal does not produce

processed Tea in quality as desired by the market. Small farmers are not well equipped to produce quality green leaves that are desirable to manufacturer quality mode Tea in Nepal. The Tea leaves produced by Tea estates having processing facilities are also not qualitative to produce a good quality made Tea.

Thus, the emerging spatial aspects of Tea cultivation, its trend and how does the socio-economic status are affected the cultivation of Tea are some of the issues of interest more over, it is also essential to study the problems and prospects of Tea cultivation so that the farmers and other would be aware and take appropriate plan of action .

### **1.3 OBJECTIVES OF THE STUDY**

The main objectives of the study is to appraisal the status of Tea farming in Nepal and to suggest recommendations based upon findings. The specific objectives of this study are.

- a. To analyze the trend of Tea production in Nepal.
- b. To examine the present condition of Tea marketing.
- c. To state the present Tea farming scenario of Nepal.

### **1.4 SIGNIFICANCE OF THE STUDY**

Tea plantation in any rural areas brings about a healthy socio- economic situation. The Tea industry provides employment to the major fraction of the rural population there by checking the influx of migration problems. It further provides business opportunities to another half of the population in a number of ways directly and indirectly. Various link roads needs by the Tea estates for their day to day operation also contribute to the development of rural areas. The industry with its labour welfare program provides the workers or the rural population with education and hospital facilities. Tea farming is also an export oriented industry. Its development will help in correcting trade imbalances of our country. There is no doubt that the development of Tea industry would contribute a great deal of our Country's economy. It helps to earn foreign currency by exporting Tea to the foreign countries especially in European countries like Britain, the Netherlands and other Countries.

It has been realized that Tea cultivation in Nepal can be one of the best sources of national income through foreign earnings on the one hand and as an item of production helpful in import. The substitution on the others until few decades ago. The agro-based industry was so neglected that even the people of Nepal hardly hoped that Tea in this country could be hardly show such remarkable prospects for earning exchange in near future.

Tea is cultivated in eastern part of Nepal and it is one of the major exportable cash crops. But Nepal is unable to acquire enough foreign currency and on the other hand the current production is unable to meet the whole domestic demand. Tea industry has provided employment in Nepal .So this study will be helpful for betterment and

improvement to the existing condition of Tea industry and Tea farmer who are facing different types of problem.

It is assumed that study carried on an important sector of agriculture, i.e. Tea cultivation and marketing .It can also guidelines to other agricultural sector of Nepal to improve deteriorating economic status to the country by increasing per capita income.

It is also hoped that this study will be helpful in formulating plans and projects for further development the Tea industry. It endeavors to present a picture of the past conditions and present situation sufficiency to the Tea industry. Tea cultivation plays an important role to check the soil erosion. Tea is green and deep-rooted plant. The roots of the plant go inside the soil surface so it helps to protect the land-sliding problem and protect soil erosion. It also provides the valued greenery and thus in a natural pollution checker. In an overall analysis Tea farming brings about a pleasant social harmony and actually builds a society and therefore a Nation. Tea cultivation also plays important role for self-sufficient in Tea, adequate employment, attractions visitors and make good export earning.

## **1.5 LIMITATIONS OF THE STUDY**

This study has the following limitations:

- a. The study is concerned with the production of Tea within Nepal.
- b. The outcome of the study is based on the secondary data.
- c. The study is concerned with Tea production in the country as a whole.
- d. This study covers a span of five years period from 2005/2006 to 2009/2010.

## **1.6 ORGANISATION OF CHAPTERS**

This study has six chapters organized as follows:

- a. Introduction.
- b. Literature Review .
- c. Methodology .
- d. Introduction of Study Area.
- e. Tea cultivation in Nepal.
- f. Summary, Conclusion and Recommendations .

## **CHAPTER- TWO**

### **2. LITERATURE REVIEW**

There are several Scholars' reporters and academicians who have made contribution to the literature pertaining to tea plantation, production and marketing but there are very few studies related to the status of tea farming in various aspects of tea production.

#### **Some Related Literature Review**

Tea is one of the major cash crops in Nepal. Specially, it plays the vital role in the national economy. Due to its popularity in international market and national market, the demand of the Tea in general, is increasing. Therefore it is necessary to develop the country through industrial development by giving emphasis on development.

Subedi (2057 B.S.) described that there are several scholar's reporters and academicians who have made contribution to the literature pertaining to Tea farming, producing, processing and marketing but there are very few studies related to the Tea farming in Nepal in various aspects of Tea production.

Tea is main sources of polyphenols which act as antioxidant. The anti-oxidant activity of polyphenols has been shown by scientific research to play a beneficial role in a number of prevent cardiovascular disease, strokes and certain types of cancer. Whilst it cannot be claimed categorically that Tea delivers these benefits, there is an increasing weight of scientific evidence which suggest that it can play an effective role.

NTCDB (2002 A.D.) described that the cultivation of Tea had began more than hundred years ago in eastern region of Nepal but it comes as Industry after the establishment of NTDC with the objectives of bringing self sufficiency by producing best grade of Tea to earn foreign currency, Nepal Tea and Coffee Development Board in its recent bullet in pointed out others new areas for Tea cultivation. It mentions districts as Gorkha, Nuwakot, Sindupalchock, Sinduli and others districts also are suitable for Tea farming. Some of the mentionable literatures have been reviewed here.

Bald (1953) has made a study on the culture of Tea. In which he has describes the types of Tea and factors affecting production. This is very old document in Tea cultivation.

Amatya (1975) in his book cash crops farming in Nepal dealt with the growth of individual cash crops farming and attempted to show the distribution pattern of each crop including Tea, in the second chapter. Lastly he made some suggestions for the development of cash crop farming in the country. He suggested that Tea can play an effective role in the national economy due to its popularity in national and international market, should give emphasis on industrial development.

Joshi (1978) said Tea leaves are picked in cheap skilled labors and brought to factory for blending. Blending is done different fashion so as to bring a variety of product which is most for export and others for domestic consumption.

Silwal (1979) study identified cost element involved in the Tea production and makes an estimation of the art of production.

Shrestha (1982) makes general survey of the growth of Tea production in Nepal. Her dissertation is specifically concern with production. Performance of (NTDC) over time. Shrestha (1982) study found that with the establishment of public and private sectors Tea estates production of Tea has been gradually increasing and this has been capable to substitute imports to satisfactory extent. Further it has found that the present import volume of Tea is much lesser than what is used be during yearly seventies.

How ever, there was qualitative improvement in Nepalese tea in general. About domestic tea prices, it was found that tea prices in Nepal are directly attested by the price of Indian tea. On an average the Nepalese tea was found to be cheaper than the imported products and this had favorable impact on the domestic market. On the export prospects of Nepalese tea the researcher concluded that " There is ample export market for Nepalese Tea and many prospective foreign markets have not yet been tried.

Koirala (1983) showed the total Land under Tea cultivation has been extended considerably during the period of last twenty years. considerably during the period of last twenty years. consequently its production as well as consumption also has increased significantly. Again, he said the people have become more optimistic and more attention has been given to Tea plantation. It seems that Nepal is likely to reach the goal of self-sufficiency before 2000A.D.

Kansakar (1985) Concluded Nepal's Tea Plantation is characterized very slow progress owing to the emergence of Tea estates under private sectors during late 1950's and early 1960's. Again he said Tea. Plantation in Nepal has been going on without scientific experiments. Lack of such scientific experiment in one of the main reasons behind low yield of Tea and very slow development and expansion of Tea in plantation in Nepal.



Chhetrie's (2004) studies found that the trend of Tea planting in this district is growing Steadily despite of various problems they encounter.

Almost all the villages have Tea planting in their owned land. At present farmers have started to plant Tea even their agricultural land despite of food crop planting. Tea growers have several problems like problems at the fields transportation problems etc .The researcher further concluded that the interest of Tea planting is rapidly growing among the farmers of this district. They believe that Tea cultivation is sustainable means of uplifting their living standard. It is essential to exported Tea of Nepal has received good market but it is not promoted properly internationally.

Tea development requires a combination effort of government exporters, processors and Tea cultivars/farmers. A gap in activities in production, Processing, export and communication problem are equally damaging to all the stakeholders. Therefore transparency in activities and benefits, involvement of more small farmers and their representation is required to develop a synergetic effect in the chain

In the context of globalization of business and trend of privates sectors. Led development, the role of government as facilitators plays important role in place where majority of small farmers and where development activities has value to build base for commercialization of agriculture.

The infrastructure, the policies on production and export, knowledge, experience in technology and management, stable political system and above all desire of the industries and hardworking people will surely bring anticipated results.

Thapalia (1999 A.D.) concluded tea farming started in 1860A.D due to the consuming behavior, lack of business related economic infrastructure of land locked country, Tea development could not take place in Nepal as compared to India. recently there is growing interest in Tea plantation, if appropriate policy is formulated and management is given, it can substitute import, promote export and make self - reliant in this context. Furthermore, it can prove pivotal point to accelerate the economic development Following are given weakness, challenges and strategies to overcome the problems of Tea development

- i) Transportation problem.
- ii) Lack of appropriate variety of seeds and samplings.
- iii) Lack of technical knowledge.

- iv) Lack of market management.
- v) Lack of concrete Tea policies and proper implementation.
- vi) Lack of research.
- vii) Unavailability of organizational development for Tea development and processing.
- viii) Constant change in financial policies.
- ix) Lack of Knowledge related to quality of Tea.

### **CHALLENGES**

Nepal need to face the following challenges to reap to benefit of decline image of Darjeeling Tea.

- i) Built and maintain the image of Nepal Tea.
- ii) Study and implement the strategies adopted for development of Darjeeling Tea.

### **STRATEGIES TO BE IMPLEMENT IN FUTURE**

- i) Infrastructure build up i.e. road, transportation electricity etc.
- ii) Extension of processing technology, Tea farming that bits the climate, soil and socio-economic condition of Nepal.
- iii) Development of community principle.
- iv) Service for Tea forming and information.
- v) Development of Tea development financial institutions.
- vi) Research unit.
- vii) Formulation of long term policy.

Basnet (1999 A.D.) stated that the traditional concept of sustainability as covering on ecological balance by avoiding depletion of Natural resources is only of the limited application in the current and emerging Tea scenario. In its widening scope which combines policies, technologies and socio-economic principles, the following element have to be integrated and viewed in union in order to arrive at the true meaning of sustainable development.

- i) Productivity
- ii) Protection
- iii) Stability

iv) Viability

v) Acceptability

vi) Supportability

By using a comparable yardstick, sustainable management of Tea can be defined as one of that combines policies, technologies and activities aimed at integrating socio economic principles with environmental concern so as to simultaneously:-

i. Enhance production and productivity.

ii. Protect the potential of natural resources.

iii. Reduce the level of production.

iv. Be economically viable.

v. Be socially acceptable and

vi. Be politically supportable.

The ranking and weight age to be given to the various criteria, influenced as they are by wide-ranging considerations such as government policies, regional disparities, problems involving acceptability (labour shortage) and protection (environmental concern) may appear to be uppermost in some of the regions. It may be difficult to pinpoint the key elements in the weak and sick area, simply because all of them may be crucially equal for survival. Research studies to quantify each of these parameters relevant to the various planting locations into an overall package should receive priority, with the overall objective of developing model on the lines of a STAMP (sustainable Tea and agriculture management package).

Kansakar (1983 A.D.) found his study that the employment conditions of the Tea planting workers in Nepal is deplorable as compared to Tea plantation workers in India and in term of wages and well-fare programmer as compared to the industrial labour.

In Nepal, in the absence of any statutory provision regarding conditions of weak and welfare measures, the Tea garden have not been able to attract local laborers as such the labour in the Tea garden of Nepal represents mostly migrants from India. The study further notes that the capabilities of the Tea estates in Nepal to absorb and provide employment to large number of people is severely conditioned by the slow expansion Tea plantation areas.

viewing these and other problems the study recommended formulation of labour act for the plantation labour in general, creation of scientific Tea research institutes in Nepal, in involvement of NTDC as consulting agency as well for the development of private Tea estates.

Prospective Review of Tea cultivation in Nepal Vidya Nepali Jan 1975 was conducted his study with the intention of finding out the problem benefit from Tea cultivation in the eastern hills of Nepal. The study had made the following suggestions :-

- a. Tea factory should be reconstructed.
- b. There should be the best allocation of resources and activities in both seafloors, production and processing.
- c. Experts assistance is required to improve the quality of Tea.
- d. NTDC is required to implement policy effectively.
- e. Research activities must be conduct to improve the production and processing.
- f. With the assistance of International fund, NTDC should develop Tea estates.

Upreti (1982) A study on agriculture marketing structure of Nepal was studies and following suggestions were provided.

- i. Government must recognize the role of marketing (especially agriculture product)
- ii. Research and identification of necessary improvements programs.
- iii. Planning and co-ordination.
- iv. Cultivation of potential demand and reduction of risk on price and demand.
- v. Improvement in input distribution system and physical marketing efficiency.
- vi. Technical and financial support.
- vii. Increase in market supply at lower cost.
- viii. Increase in farmers disposal incomes and demand for manufactured product for economic development.

Prasain (2002) A study of profit planning in Ilam Tea Estates suggested that:-

- i. Factories must be well equipped.
- ii. warehouse facilities must be enhanced.
- iii. Transportation facilities must be developed
- iv. Technical work force must be developed.
- v. policies related to Tea promotion must be clear and implemented.

In recommendation and action plan by International Trade centre concluded that, Nepal Tea industry is now at a crucial juncture poised to take off to be an important industry employment generation for the rural masses as well as a key export income earner. These have been unplanned expansion resulting in lower quality products not able to find suitable markets and at remunerative prices. with the demand globally increasing, better quality and well presented commodities items, it is imperative that Nepal focus their attention on a program covering all aspects of the industry to meet the setbacks, shortage and problem facing it. The observations and recommendations out lined in this document will assists in evolving a strategies for the overall improvement and development of the industry.

Sapkota, (2067B.S.) Mentioned his Doctoral Research follow that A large number of small holder farmers are engaged in Tea cultivation in both areas: The CTC in Jhapa and orthodox in Ilam. And their contribution in total production is increasing over the years as more small farmers are being attracted towards the cultivation due to many reasons, including its profitability compared to other substituting crops. This section deals with various economics aspects of green leaf production such as productivity compared to other substituting crops. This section deals with various economics aspects of green leaf production such as, productivity of Tea, green leaf price trend, average price of green leaf benefit cost ratio, marketing of green leaves and at last conclusion of green leave economics has been made available.

Sapkota, (2067 B.S.) also mentioned that over the years, the Tea bush yields a number of branches and the surface area of the bush increases as the age of the bush increases. This indicates that the old bush generally occupies more area in the field compared to the younger bush. According to NTCDB field representatives and farmers in the CTC area, the density of plants are 14000 per ha (ITC,2007/2008) yield of Tea bushes depends on the number of plucking points on the surface area of the bush and also capacity of yielding number of green leaves which could be used for manufacture of made Tea.

Sapkota, further concluded that analysis of green leaves economics is most important aspect of Tea planting. 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 the Tea for both types 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. Total cost of production for CTC and orthodox green laves was 8.68 Rs/kg and 14.39Rs/kg respectively for the CTC and orthodox area for the year 2007/2008. Benefit cost ratio of CTC is 1.48 which is higher than 1.11 of orthodox. This situation indicates that cost of production is increased every year but price realization is not satisfactorily increases.

As a result, Tea farmers are not getting more profit from the Tea business. So most of the Tea farmers from the study area were suggested that, formation of concrete program and policy for Tea sector which should be farmers oriented, lunching the subsidy program, technical manpower development research centre establishment, laboratory establishment for testing the quality and pesticide residual level and market searching support and quality inputs availability with reasonable rate and price fixation of green leaves as according to their cost with participating the farmers representative and stakeholders .If we do all these works in Tea sector, it can make farmers economic condition better off as well as Tea sector of Nepal.

Further, Sapkota, concluded that relatively cost of production of green leaf in Ilam district is high and comparison to cost price realization for orthodox green leaf is relatively low. Due to this reason gross profit from the orthodox area is low than the CTC types low productivity and low profitable position of Tea farm in orthodox area as a result Tea farmers in Ilam district were not much more encouraging in their Tea business from the last few years. Field study data shows that price of green leaf in orthodox area was 33.35 and 33.40 respectively for the year 1998/99 and 1999/2000. Afterwards it has started to decline up to 2004/2005 and it has slightly improvement seemed at 2005/2006. Price decreasing trend in Tea sector is hampering The overall development of Tea sector.

## **CHAPTER- THREE**

### **3. METHODOLOGY**

#### **3.1 INTRODUCTION OF THE STUDY AREA**

The study of this area focuses the status of Tea farming in Nepal. The selected Tea farming area of the different part of the country is taken for the study area of this study. In Nepal since 1920 B.S. the plantation of Tea was started from Ilam district. It has a long history, It contributes the socio-economic and employment generating activities in that particular areas. Thus the area is selected for the study because it is a major cash crops in the country and create income generating and employment opportunities as well.

#### **3.2 RESEARCH METHODOLOGY**

The main objective, of the study is to appraise the true pictures of the status of Nepal Tea Forming as well as to recommend suggestions for its improvement. So a purposeful methodology has been followed for the fulfillment of the stated objectives. The methodology consists of nature and sources of data, data collection procedures, population and sample, data processing procedures and tools and techniques of analysis.

#### **3.3 NATURE AND SOURCES OF DATA**

To draw the reliable acceptable finding of the study mainly secondary data is used in this research. The present study is analytical and exploratory nature. Further the study is also the historical nature. It studies the statement of the past period, Yet it is innovative in the sense, it provides innovative suggestion. The study is based mainly on secondary sources of data.

### **3.4 DATA COLLECTION PROCEDURES**

The study mainly based on secondary sources of data which is taken form different secondary sources. The requires data were collected from Tea farming related magazines i.e. Tea-A-Tea of NTCDB, yearly magazines (Smarika), magazines of Trade and export promotion centre, International Trade centre, different journals and articles written by researchers, previous research work and others relevant published and unpublished documents. Discussion was also conducted in the concerned persons of Tea board for clarification and verification of truthfulness of the collected data, library consultation, review of earlier studies and E-Net were also made to collect the required data.

### **3.5 POPULATION AND SAMPLE SIZE**

The study span over a period of five years and covers a period from 2005/2006 to 2009/2010 of Tea farming of Nepal in Plantation of Tea, Production of Tea, productivity, export and import of the Tea as a sample size for the present study.

### **3.6 DATA PROCESSING PROCEDURES**

The statement and required data available from NTCDB, Tea-A-Tea, Trade and export promotion centre international trade different articles and research work were first of all reorganized in a tabular from. After this, diagrams, charts, tables and map are prepared and then tabulated on the planned way for the purpose of analysis.

### **3.7 TOOLS AND TECHNIQUE OF ANALYSIS**

For presentation of data and its interpretation, some tools have been used. They are statistical tools, like; percentage, tables, charts, diagrams and maps have been used to analyze the data in a meaningful way.



## CHAPTER- FOUR

### 4. INTROUCTION OF STUDY AREA

Nepal is a sovereign independent land locked country lies between two immediate giant neighbors china in north and India in the south, east and west. Nepal lies in 26<sup>0</sup>22' north to 30<sup>0</sup>27' north latitude and 80<sup>0</sup> 4' east to 88<sup>0</sup>12' east latitude. It has territory of 1,47,181 square kilometers with an average length of 885km.from east to west and of 193km. from north to south . The map of the country looks like a brick. It is small beauty country situated in the lap of Himalayans. Though it is a land locked country, however, it is rich in natural beauty.

Geographically, Nepal has been divided into three regions viz; Hilly, Mountain and Terai covering 15%; 68% and 17% respectively of the total land area. Mountain lies above 3000m. Height, hill lies in 600m. to 3000m height and Terai lies in 61m.to 600m height.

Nepal has been divided into five development regions. The eastern region covers 28.9% ,the central region covers 26.6%, the western regions covers 19.3%, the mid west region covers 15.3% and for west regions covers 9.9% of the total area of the country.

Nepal has been divided into six climate regions. Tropical monsoon climate has covered from sea level to 500m.height. Its maximum temperature has 44<sup>0</sup>c.Subtropical monsoon climate has covered in 500m. to 1200m.where as temperature is 26<sup>0</sup>c. The rainfall has 200cm in this region. It is suitable climate for Tea cultivation warm temperature monsoon climate has covered in 1200m to 21,25m. Height. Its maximum temperature has 21<sup>0</sup>c cool temperature climates has covered 2125 to 3500m height. Alpine climate is found in 3500m to 4800m height. And Tundra climates has covered above 4800m height so, there are six types of climate in Nepal.

Tea is the cheapest and common for all. The people of all ages, it is taken as means of etiquette in most part of the world. The Tea is originated in china about 2500 years ago. Nepal with the advantages of diverse agro-climate conditions and eco-friendly cultivation methods is producing very good quality Tea, both CTC and orthodox Tea.

Tea cultivation was started by Mr. Gaj Raj Singh Thapa in 1863 A.D. in Nepal. He started Tea plantation by bringing few seeds and plant from Darjeeling hills. Eastern part of Nepal in Jhapa, Ilam, Dhankuta, Panchathar and Terathum, has been covered by tea plantation. Others places of Nepal like- Dolakha, Sindhuli , Kavre are potential districts for cultivation of Tea.

Beginning of Tea plantation in Nepal goes back to the year 1863 when Mr.Gaj Raj Singh Thapa, the chief administrator of Ilam district planted the first Tea garden the present day Ilam Tea Estate, with an approximately 50 hectors. After that Tea plantation was started at Soktim, Ilam in 1922 B.S. There after HMG, Nepal established Nepal Tea Development Corporation on 23<sup>rd</sup> Ashwin 2023B.S for the development and expansion of Tea plantation and processing. Later on many Tea estates were established in Ilam and Jhapa district. National Tea and Coffee Development Board was established in 2050 B.S. is the public agency responsible for developing and promoting Tea plantation in Nepal.

#### **4.1 A BRIEF HISTORY OF TEA DEVELOPMENT IN NEPAL**

Nepal has a long history of Tea cultivation, initiated with the establishment of Ilam Tea estate in the Hills of Ilam District 1963 and Soktim Tea estate in the plains. It is believed that Tea plantation in Nepal started within the same decade, when was introduced in Darjeeling hills of India. Mr. GajRaj Singh Thapa is the remarkable name in Nepalese Tea history who planted Tea first time in Ilam, district of Nepal it's the same geographical and Topographical conditions with the open border in Darjeeling in India. In the year 1993, the first Tea plantation was arrived out in the hills of Ilam, district by private sector. The Tea plantation was nationalized and privatized a numbers of times, until the year when it was inherited by Nepal Tea Development Corporation in the year 1966 A.D.

- i. First Tea plantation sector in Terai was started in 1959 A.D.
- ii Nepal Tea development corporation was established in 1966 A.D.
- iii. His Majesty the late king Birendra Bir Bikram Shahdev declared the five district of eastern developing region, viz Jhapa ,Ilam, Panchthar, Terahthum and Dhankuta as Tea zone in 1982,A.D.
- iv. National Tea and Coffee development board was established in the year 1992/93 A.D.

v. Nepal Tea planters Association was established in the year 1997/98 A.D.

vi. Himalayan orthodox Tea producer association was established in the year 1998A.D.

Presently, three main types of private organization are engaged in Tea business. They are:

1. Nepal Tea planters Association They organize and promote farmers for the production of CTC Tea.
2. Nepal Tea Association: They help and facilitate packaging export and import of Tea: They are better organized and are providing valuable service to trade Tea.
3. Himalayan orthodox Tea producer association They have been managing the production of orthodox Tea an organized way.

There are certain governmental and nongovernmental organizations, they are: NTCDB, trade promotion centre and export promotion centre. The present status of the Tea industry of Nepal comprises of government own Tea states given in lease for 50 years to the foreign companies, private estates, bought leaf factories, the small holders packages and marketers. Nepal Tea Development Corporation is privatized in 2001/2002.

#### **4.2 TEA DEVELOPMENT**

At present there are 43 varieties of Tea grown in Nepal, nine from seed stock and others being clones. There are two main types from the same botanical plant species, camellia, sinensis which had been developed at the Indian Tea Research station and used extensively in Indian Tea garden which have been introduced to Nepal for planting in the two different growing areas. The clone varieties developed from cutting from mother bushes are used in the Tea gardens in the Terai regions of Jhapa and Morang districts. There are ideally suited for the processing of CTC variety where the leaf is more succulent.

In the Hilly areas varieties from seed stock and used to propagate the nursery plants. These two have been experimented and developed India at their Tea Research station for Darjeeling region and introduced in Nepal. Their leaf is more leathery and during the changing climatic cycles, concentration of juices varies thus giving more aroma and flavor for limited periods.

#### **4.2.1 CTC processing unit**

According to data available there are 25 CTC factories. Some of them are recently constructed with large capacities going upwards of 600-1000Mt. per year, built at cost around us \$ 5,00,000 with new continuous processing lines of CTC machinery imported from India. Others are smaller ranging from 100 Mt. to 400 Mt. with older machinery but processing a good final product. Some of the factories have applied for HACCP certification whilst few are seeking ISO certification.

Now a day there are 124 numbers of Tea garden and 40 numbers of processing factories operating in Nepal. Out of these, 25 numbers are CTC and 15 numbers are orthodox factories. The Tea garden and processing factories contributed employment opportunities nearly 40 thousand over the numbers to the Nepalese laborers (NTCDB- statistics). In Terai and other hilly districts, there were 8184 small farmers and theirs about 40,920 families depends on Tea profession (NTCDB- statistics-2067).

#### **4.3 TEA POLICY**

In first plan, there was no policy about Tea. After it, National planning council has taken the policy about Tea.

##### **4.3.1 TEA POLICY IN SECOND PLAN: (2019-021 B.S.)**

In any list of fruits and vegetables Tea occupies a top place as a commercial cash crop. Arrangements have been made for planting a Tea garden on 250 acre plot in Ilam which produced 47150 pounds of Tea in 1959. The production rate may be computed on this basis at 188 pounds per acre as compared with 600 to 900 pounds per acre in India and Pakistan The main factors leading to this low yield are lack of proper care poor management retention of old plants and in sufficiency of technical knowledge with in the second plan period Tea cultivation period Tea cultivation will be Confined to this plot on an experimental basis with of course appropriate reforms measures.

##### **4.3.2 TEA POLICY IN FIFTH PLAN (2032-037 B.S.)**

At the end of fifth five years plan Tea plantation areas was 1641.5 hectores and annual Tea production was 442 metric tones. During the 6th five years plan targeted Tea plantation area was 2380.5 hectores and targeted production was 1400 metric tones . The target was formed with combined effort of NTCDB, private Tea gardens

and small farmers However no specific programmed were announced to achieve the target.

#### **4.3.3 TEA POLICY IN SEVENTH PLAN (2042-047 B.S.)**

During the seventh five years plan target was made to fulfill 60% of national demand by national production Before this only 40% national demand as fulfill by domestic production In order to fulfill the after stated target it had planned to produce 1569 metric tones from 900 metric tones produced during sixth 5 years plan To fulfill this target private sectors and local farmers were to be encouraged. targeted Tea plantation area was 5427 hectors from 2054 hectors including private sectors .

Tea gardens and local farmers at the end of sixth Five years plan To achieve the target of seventh 5 years plan following programmers were announced.

- i. Tea production programme will be conducted in two phases
  - a. Specific programme will be conducted under NTCDB.
  - b. General programme will be conducted under farmer's level.
- ii. To extend the Tea plantation area technical service will be provided by NTCDB,
- iii. To improve the productivity of Tea related factors of production viz fertilizers, Agriculture Loan, Social research crop protection programmer will be conducted where required.
- iv. For re-plantation of Tea in barren area Tea nursery will be established by NTCDB technical services will also be provided to private sectors by NTCDB.
- v. Effective transportation facility of green Tea leaves, effective pricing and distribution will be managed.
- vi. Priority will be given for the production of export quality of Tea.
- vii. To improve the productivity and quality of Tea, research activity will be conducted by NTCDB.
- viii. For effective implementation of those programmers evaluation of planning monitoring and encouragement to private sectors and small farmers will also be conducted.

#### **4.3.4 TEA POLICY IN EIGHTH PLAN (2049-054 B.S.)**

During the seventh 5 years plan the actual production of Tea was only 1500 metric tones and total area of planning was only 2725 hectors respectively.

In order to achieve the target following programmers were formulated.

- i. Priority will be given to Private Sectors Government Corporation and small formers group for extension of Tea plantation. There will be no restriction for the Land owners for the area of Tea plantation.
- ii. Poor forest will be provided on lease to small farmers group for long period term for to plantation.
- iii. Facilities will be provided to the small farmers groups for selling green Tea leaves.
- iv. Encouragement will be given in the establishment of Tea processing industries after expanding Tea plantation area.
- v. Skilled manpower will be produced to increase the potentiality of Tea productivity.
- vi. Effective pricing of Tea and market of Tea will be managed though research and studies.
- vii. NTDC will be privatized to increase the performance

#### **4.3.5 TEA POLICY IN NINTH PLAN (2054-059 B.S.)**

Tea farming is successful in eastern hills and Terai region according to physic-climatic condition It is estimated that only 40 percent of integral demand has been met by the present level of Tea production.

It is believe that orthodox to produced in hilly region should be promoted for export and the Terai Tea for local consumption. since the Tea farming is labour intensive it has an important role in generating employment especially for women It support soil Conservation in environmentally friendly manner because of its shadows shrubs, During the eight plan period target of Tea garden coverage was 4187 hectors and production level 2485 metric tones but the achievement was 3568 hectors and 2805 metric tones.

National Tea and Coffee Development Board was established as on institutional development in the 8<sup>th</sup> 5 years plan. Due to minimum research activities for Tea development lack of activities for Tea quality parental stock inadequate efficient technical manpower, minimum electrical and transportation facilities, problems in quality and processing improvement and in transportation of green leaves Tea farming could not be expanded as desired.

During this plan projected Tea plantation area and production was 4564 hectares and 4104 metric tonnes respectively. The total area of plantation at the end of 8th plan period was only 3156 hectares with quality productivity and expanding Tea gardens in 9th plan periods the following Tea development programmes were announced.

i. Focus will be given to provide basic infrastructure such as agriculture, roads, rural electrification and other services for the development of Tea farming in a commercial way. Agriculture credit technical back-stopping training short distance agriculture roads and electrification infrastructure as a package programmed will be focused if the private sectors submit proposed to establish Tea garden of at least 3000 Ropanis with processing plant in any Tea priority district or other potential districts.

ii. Research activities related to Tea will be carried out in close co-ordination with NARC. NARCS will co-ordinate with government to receive the help from proper country for the development of improved Tea.

iii. Services will be rendered to interested entrepreneurs by providing minimum tax for the import of machinery equipment, raw materials and the production inputs necessary for processing industry that needs to be operated by purchasing local green leaves. Royal Nepal Embassies and Trade promotion centre will be mobilized to collect market information to reach overseas market and advertise Nepalese Tea for its promotion.

iv. Farmers and mid level technician's skill will be improved by providing practical training in the private farmers garden as a training venue. There will be deputation of trained technicians in Tea producing districts. Environment will be created for the promotion of working technicians in Tea estates.

v. NTDC will be privatized in appropriate process. A separate working policy will be formulated for the promotion of Tea farming and industry by setting clear cut role of the tea and coffee board in providing the import license of machinery equipment, credit recommendation industry registration manpower development marketing import-export of Tea product.

vi. Priority will be given to production of orthodox Tea for export and other Tea for internal consumption especially eastern region of the country. Establishment of processing units cover at least 3000 Ropanis of these areas where orthodox Tea has

been successfully produced Propriety services will be provided to small farmer's group women's group and co-operatives.

vii. During the ninth plan, Tea area is projected to be 4564 hectars with the addition of 1000 hectars. Total Tea production is projected to be 4101 metric tones from 3156 hectars.

#### **4.3.6 TEA DEVELOPMENT POLICY, 2054 B.S.**

HMG/N has announced Tea development policy for Tea years from 2054/55 B.S. to 2064/65. The policies include the following various objectives and programmed.

Main Objectives:-

- i. For sustainable growth in qualitative and quantitative production, private sectors participation will be encouraged.
- ii. Making this country self-sufficiency by supplying Tea for national demand and export of high graded Tea.
- iii. Well managed Tea distribution system will be created.
- iv. By extending the Tea production sectors more income and employment will be generated.
- v. Tea farming will be conducted in unused barren land and poor graded forest areas.

Programmers:-

In order to fulfill the above mentioned objectives, the following programmers will be implemented.

- i. Establishment of Tea research centers to increase the productivity by improving quality in Tea production.
- ii. Transportation irrigation electricity facilities will be prioritized in the areas of commercial Tea farming.
- iii. The area suitable for Tea and not protected and poor forest will provided in lease for 99 years by government after agreement among the ministry of forest agriculture, land reform and NTCDB.
- iv. Providing the skill manpower for Tea production and processing.
- v. sales and distribution will be facilities by encouraging producer through action system in the country.
- vi. 80% national demand of Tea will be fulfilled by low quality Tea produced in the country and high standard quality (orthodox) will be provided for export promotion .



vii. For effective implementation of policy and programmer different implementation growth and establishment will be conducted.

#### **4.3.7 TEA DEVELOPMENT POLICY, 2057**

HMG/N has approved and implemented National Tea policy 2057 as per the intention in Nepal Tea and coffee Development Act, 2049 for the development of Tea as a reliable sources of income in the enhancement of opportunities of employment and earning of foreign currencies by the promotion of private sectors in the production processing and commercial transactions of Tea with the sustainable and systematic utilization of available opportunities in the country.

#### **6.7.1 TEA TERMS DEFINED BY NATIONAL TEA POLICY 2057**

Unless the subject or context otherwise requires in this policy:-

- a. Small farmers means the farmer who cultivated Tea in the private land having area up to 350 Ropanies in hilly region and up to 25 Bighas in Terai region.
- b. Tea farmer means the persons who cultivate Tea by registering industry utilizing the facilities of concession of land ceiling.
- c. Cooperatives Tea cultivation means the Tea cultivation in groups having registered under the cooperatives Act.
- d. "Tea industry" means the Tea cultivation with the registration of industry in the land availed ones one processing plant.
- e. "Tea industry" means the plant or industry established for processing green leaf of Tea.
- f. "Tea exporter" means the exporter of Tea produced in Nepal to countries including India.
- g. "Tea exporter" means the seller and distributor of Tea by importing it from other countries including India.
- h. "Packing" means the business of sealing Tea offering trade mark in the Tea packed as per the demand of customers having blended different grades of ready made Tea as per taste of Customer.
- i. "Tea Packing Industry" means the industry established for selling of Tea after packing it.
- j. "Tea business" means the activities like cultivation processing import export packaging and arrangements pertaining to market of the Tea.

k. Grace period means the period from the date of lending of principal loan amount for the cultivation of the Tea up to the payments of first installment of principal loan amount.

l. "Board" means the National Tea and Coffee Development Board.

m. CASs means the service charge to be levied on the processing importing and exporting of Tea.

N. "Bank" means the financial institution and banks including Agriculture Development Bank investing in Tea business.

#### **4.4 OBJECTIVES OF THE NATIONAL TEA POLICY, 2057 B.S.**

- a. To increase the production of Tea qualitatively and quantitatively with increased participation of private sectors in the Tea cultivation.
- b. To encourage the business and farmers of Tea
- c. To help in the poverty alleviation with increased opportunities of income generation and employment.
- d. To promote the Tea market.
- e. To make the Tea business sustainable and attractive.
- f. To render assistance in the preservation of environment as well by the extension of Tea cultivation
- g. To keep on promoting the Institutional development for the development of Tea.
- h. To increase the opportunities of foreign currency earning with the increased export of Tea having fulfilled to internal market.
- I. To give emphasis in the development of human resources technology study, study and research necessary for the Tea business.

#### **4.5 TARGET OF THE NATIONAL TEA POLICY 2057 B.S.**

- a. To make the Tea covered area up to 40875 hectares in the coming five years.
- b. To make gross Tea production up to 46111000 kg in the coming five years.
- c. To avail the employment opportunities for additional 79310 Nepalese people in the first five years period.
- d. To make the orthodox Tea production up to 65% out of total Tea production.

#### **4.6 POLICIES AND WORKING POLICIES**

- a. Production and processing.
  - i. The bank shall provide loans as priority credit on the minimum interest rate for Tea cultivation and processing.
  - ii. After the registration of Industry for the cultivation the bank shall provide loans up to 80% of the total project cost.
  - iii. A grace period up to 7 years for orthodox and green Tea in the hilly region and 5 years for CTC Tea in the Terai shall be given on the loan provided of Tea cultivation.
  - iv. The interest on loan shall not be capitalized in grace period.
  - v. Income tax shall not be levied with in the grace period.

- vi. The principal and interest amount of the loan invested on the Tea cultivation shall have to be fully paid up to within 10 years from the end of grace period.
- vii. There shall be the exemption of 75% land registration fee to be levied while purchasing and for Tea cultivation.
- viii. The board shall recommend for exemption of land revenue on the land cultivated for Tea.
- ix. A Team comprising of members of ministry for forest and soil conservation, ministry of land reform and management ministry of agriculture and co-operatives and national Tea and coffee Development Board shall hire the public land in the districts where commercial Tea cultivation is feasible and shall recommend such land to his majesty of government through board Land such may be awarded as lease on such recommendation up to a period of 50 years for Tea cultivation.
- x. The amount received through lease shall be deposited in the following funds:-
- a. 50% in the revenue of his majesty's government
  - b. 50% in Tea Development fund.
- xi. A capital grant shall be provided for irrigation the Tea cultivations awarded to others crops. And a custom duty shall be levied at the same rate as that of agriculture equipment while importing pipe and other equipments required for irrigation.
- xii. Custom duty on the important of equipments required for Tea processing industry shall be levied at the same rate of agriculture equipment.
- xiii. His majesty's government shall give priority for infrastructure development like, road, irrigation electricity communication, education and health in the commercially Tea cultivated areas.
- xiv An arrangement shall be made to avail the fuel wood required for the operation of Tea industry directly from the periodic quantity to entrepreneurs in a way not adversely affecting the local people.
- xv. The chemicals fertilizers, Pesticides, Wee decide and agriculture equipment etc. Required for the Tea business shall be allowed to import from other countries.
- xvi. The development fund shall be established from the fee to be received from Tea entrepreneurs, grant to be received from his majesty's government amount to be received from international non-government organization and foreign grants or

Assistance. And such fund shall be utilized in the development extension of Tea with the participation of private sectors.

xvii. Following activities shall be given priority to encourage land consolidation:-

a. Arrangement of low interest loan shall be made to purchase land for Tea cultivation.

b. The extension of land consolidation through Tea cultivation shall be encouraged law fully.

xviii. On the basis of feasibility study any area of least 300 Ropanies for Tea cultivation shall be like electricity communication services and agriculture road shall be given priority to develop in such area.

Xix The information received from the feasibility study of Tea market shall be made available to Tea entrepreneurs.

#### **4.7 MARKET AND TRADE PROMOTION**

i. The action system shall be developed with the participation of private sector for the introduction of Tea in international market system. Necessary infrastructure shall be developed in this regard.

ii. Tea export promotion with agriculture business promotion and statistical Division of ministry of Agriculture, Agriculture Enterprise centre (Federation of Nepalese chamber of commerce and Industry) Royal Nepalese Embassies and consulates. The information pertaining to production, quality, quantity and production areas shall be included in the poster pamphlet and booklet to be published under the ministry of tourism.

iii. The custom duty on packing materials to be imported for export of Tea shall be levied at the same rate as of agricultural equipment.

iv. While exporting Tea incase it is to be exported in quantity equal to that of one container it shall not be required to open the letter of credit to the effect.

v. The facility to be received in export to other countries shall be provided in the export to India as well.

vi. Encouragement shall be made towards timely reform of the packing industry in order to develop and establish domestic Tea board.

vii. For sale export the value added packed Tea shall be encouraged than to open Tea

viii. The Participation of the small and cooperative Tea entrepreneurs in trade for rate exhibition workshop seminars by Tea development fund.

#### **4.8 INSTITUTIONAL ARRANGEMENT**

The board shall perform following Functions for the effective implementation of these policies

a. To render technical advice and assistance by conducting necessary study and research in relation to Tea cultivation and to import the improved Tea samplings from abroad in order to arrange for sales and distribution of it by increasing the quantity.

b. To award grant to shall farmers in order to transport the Tea cutting.

c. To render free technical services to small and co-operatives Tea farming.

d. To recommended concern agencies in relation to the awarding of concession of registration fees, land ceiling land revenue etc availing of custom facilities in the machinery irrigation equipment packing materials steel structure letter of credit facilities and national emblem after making field inspection.

e. To recommend loan, Pesticides chemical fertilizers agriculture equipment and full necessary for business.

f. To keep records about Tea entrepreneurs of the country.

g. To stop the facilities provided it found not performed as per this policy after conducting regular inspection and supervision.

h. To arrange the best producers processors, Tea packing industry and exporter in order to encourage the Tea business.

i. In order to provided information oriented materials for the development of Tea business to keep up to data records of Tea covered area production information action quantity producer processor exporter importer and researcher and to provide such information to his majesty's government and concerned parties on periodic basis.

j. To maintain relations with Tea related international agencies enter into agreement and perform other joint effort with the permission of his majesty's government.

K. To develop board as an autonomous entity along with the participation of private sectors for the continuous development of Tea business. The board shall provide different recommendation and advice including awarding of land on lease for Tea production and processing and the board shall realize fees for providing such service with the approval of his majesty's of government.

L. To collect notational as well as international information covering study and research market development of Tea and to provide information to Tea entrepreneurs.

M. To causes to arrange in providing statistics and other related information on regular basis by all Tea related agencies and to arrange to stop for business malpractices of such information. To utilize such information in decision making research analysis and market promotion.

N. To engage in human resources development and research being affiliated with universities trade schools.

O. To perform in co-ordination with export promotion committee.

P. In the operation of Tea development fund to maintain majority of persons having high investments in the fund.

Q. To render necessary suggestions from time to time to his majesty's government for the effective implementation for the provision mentioned in this policy.

#### **4.9 MANPOWER DEVELOPMENT**

a. A Tea research and training center shall be established with the participation of Nepal Agriculture Research Council, International co-operation and private sector.

b. To arrange for domestic and foreign training under Tea development fund for small farmers Tea farmers and manpower working in Tea co-operatives and for the under entrepreneurs arrangement shall be made to bear such cost by themselves.

C. No income tax shall be levied on investments made by entrepreneurs on training in order to encourage manpower development.

d. An arrangement of training shall be made on them to time basis to technicians extending their services.

#### **4.10 DEVELOPMENT AND PROMOTION OF AUXILIARY INDUSTRIES**

- a. A minimum custom duty shall be levied on the import of machineries for packing industry as it is beneficial to country to sell the Tea on local market or to export after getting value added it .
- b. The duty levied on the packing materials to exports Nepalese Tea shall be refunded under duty draw back facility.
- c. An income the holiday of the five years shall be awarded to industries established with view of exporting of Tea and packing industry having such objectives.

#### **4.11 FINANCIAL RESOURCES OF THE BOARD**

- a. There shall be the following funds in the Tea Development fund established as per Claus 4.1.16 under the supervision and central of the board.
  - i. The less amount realized at the rate of 50 paisa per kilogram from Tea producers 10 paisa per kilo gram from Tea importers and 50 paisa from Tea exporters as per the authority empowered by national Tea and Coffee Development Board Act- 2049 (1992 A.D.)
  - ii. Amount received from national and international agencies and from others sources for the research and development of Tea.
  - iii. Amount received from lease.
- b. The board shall avail the amount from following sources and use it in the operation of board except the annual budget to be received from his majesty's of government.
  - i. The amount received as a result of the fee levied for the advice and recommendation provided for different activities.
  - ii. The income amount to be accrued from the Tea extension project executed under the board.
  - iii. Amount to be received from others sources.

#### **4.12 REFORM IN LEGAL STRUCTURE**

- a. Necessary information of law shall be made to include equal proportional representation of his majesty's government and Tea entrepreneurs to include secretaries of ministry of Land Reform Forest and Soil conservation Agriculture and Co-operative Finance, Industry, Commerce and supply Governor Nepal Rastra Bank and from Tea business and institutional representation in the exclusive committee



constituted as per subsection of section 8 of National Tea and Coffee Development Board Act 2049B.S

b. An arrangement shall be made by executive committee of Board to constitute a working committee from among themselves for the implementation of national Tea development policy.

## **CHAPTER- FIVE**

### **TEA CULTIVATION IN NEPAL**

#### **5.1 BACKGROUND**

Tea is the popular beverage crop of the world. The custom of drinking Tea is Universal perhaps, there is today no part in the world, where Tea is not consumed. The Tea cultivation in Nepal was started in 1863 A.D. Before that period people planted Tea in their garden as a flower that means people have been growing a few bushes of Tea for a long time. Gaj Raj Singh Thapa was the founder of Tea plantation in Nepal. He established two oldest Tea garden called Ilam and Soktim.

The plantation was nationalized and privatized a number of times till the year when it was inherited by Nepal Tea Development Corporation (NTDC) in the year 1966 A.D. First Tea plantation at private Tea sector in Terai was established in 1958 viz. Nakal Banda Tea Estate, Budhakaran Tea Estates was established in 1959 A.D. and Himalayan Tea Estate in 1961. Late king Birendra Bir Bikram Shah Dev declared the districts of eastern development region viz. Jhapa, Ilam, Panchathar, Terathum and Dhankuta in Tea Zone in the year 1982. National Tea and Coffee Development Board (NTCDB) was established in 1992/93

Tea plantation is possible in Jhapa, Ilam, Panchatar Dhankuta and Terathum districts of eastern Nepal. These districts are favorable for Tea cultivation. only, Ilam and Jhapa districts of Mechi zone have some Significant achievements in the history of Nepalese Tea industry. These two district are isolated from the Tea growing areas of Darjeeling the world's best Tea producing district of India, by the Mechi river Ilam district lies in hill and Jhapa is located in Terai. So, Ilam district is able to produce quality of tea high as that produced in Darjeeling. Jhapa district can produce the high yielding tea of Assam.

At present, three types of Tea are produced in Nepal. They are:-

- a) Herbal

b) CTC

c) Orthodox

Herbal is made from leaves, bark root and other plant materials and may be from single plants or mixture of them. CTC is mainly grown in the Terai. Orthodox is grown in the hilly areas if Ilam, Panchathar, Dhankuta and Terathum. It is more exclusively from leaves, leaf, buds and delicate stems of the Tea shrub. It is required to grow in the hilly area under natural condition using organic matter for market as organic Tea.

## 5.2 ESSENTIAL CONDITION FOR TEA CULTIVATION

Tea is mainly grown in the tropical and subtropical regions of the world. The following are the geographical limitations beyond which the cultivation of Tea is almost impossible.

### 5.2.1 TOPOGRAPHY

Tea can thrive both in hill and plain up to 2100m of altitude, water logging is very harmful for Tea cultivation. So, sloppy areas are preferred. Tea can be cultivated in the plain only when there is good drainage system.

### 5.2.2 CLIMATE

Tea can thrive best in the tropical monsoon climate. It has growing periods of months and during this time moderately high temperature about 20<sup>0</sup>c to 25<sup>0</sup>c and rainfall of about 150c.m. is favorable. Hailstone is highly injurious to Tea plant. High range of temperature and frost also hamper Tea plantation. Tea can grow in many areas where there is wet and warm climate.

### 5.2.3 SOILS

Soil for Tea cultivation must be well drained for rapid growth of Tea plant, elements like Phosphorous, potash, iron and nitrogen are essential in soil. Acidic soils also are suitable for Tea. In Nepal, mostly forestland is cleared and Tea cultivation started. The planting has been done in very good paddy land in satiate and Giribandhu Tea estate in Jhapa. Similarly other Tea estates also are established in the good fertile and virgin land.

In fact the mountain region with almost similar climate and soil conditions extent from Darjeeling district of India to Ilam and Jhapa district of Nepal. When

cultivation is continued for a long time, fertility of soils goes on decreasing. So the cultivators annually use nitrogen, phosphate and potash. Because, these chemical fertilizer help to grow the plant rapidly. But virgin soils need less chemical fertilizers.

#### 5.2.4 SLOPE

Slope of the land is also prime physical, determinant factors, which affect Tea cultivation in both ways directly and indirectly/ It specially plays an influential role in farming system as agriculture land use pattern. Generally slope has been categorized under the degree of various levels. Slope does not only contribute to cultivation inaccessibility, soil erosion and irrigation purpose. It also plays vital role in the process of formation of soil variety etc. The position of water legal and air drainage is also determined by the nature of slope gradient. In the village, the farmers perceive slope gradient very remarkably. Generally gentle and moderately sloping lands are brought under Tea cultivation.

#### 5.2.5 SLOPE ASPECT

Slope along with the aspect is also important fact for the Tea cultivation. The effect of slope aspects and farming system in the hill region is tremendous in regard to micro-climate variation even in small area. Generally, slope aspect refers to the direction of the land exposure. Therefore, there is more or less on radiation input by various exposures of slope aspects. The aspect of slope plays the major role to distribution of Tea cultivation land.

#### 5.2.6 ALTITUDINAL ZONE

Altitude is a great influential factor, which determines different physical factor. The change in altitudinal makes difference especially, in temperature, precipitation, wind velocity, soil and relief. There are common factors in the altitude that differ from one place to another. The altitudinal variation plays significant role for production of Tea. if the altitude is low, temperature is warm and production becomes high. Similarly if the altitude is high, the production of Tea becomes low due to the cold temperature. Different elevation regions also provide different options and facilities to human beings in the case of land use and other economic and social activities.

Altitude ultimately brings change in geographic condition and different in potentialities.

### **5.3 TEA PRODUCTION IN NEPAL**

There are three sectors involved for the production of Tea in Nepal. They are:

- i. Government
- ii. Private sector
- iii. Smallholders.

Nepal Tea Development Corporation (NTDC) has been producing Tea in Nepal at government sector being given lease to foreign company nowadays. more than 60 private Tea estates are expanded in Jhapa, Ilam, Panchathar, Terathum, Dhankuta and Morang districts, The third types of producer are farmers who depend on small farmers Development project The project is implemented in Ilam (Fikkal, Jasbire and Mangalbare), Panchathar (lalkharka) Terethum (Solma). After this step, Tea production is rapidly increasing in farmer level.

Private sector has become more active than government in Tea production. Accordingly, the government established Nepal Tea Development corporation and entrepreneurs in the private Sector also began their career as Tea entrepreneurs. Before the establishment of government owned NTDC's incorporating seven different Tea estates. The private sectors had established five different Tea estates, namely Budhakaran, Giribandhu, Himalayan, Satighatta and Mittal Tea Eastate.

A large number of small holder farmer are engaged in growing Tea in both areas; the CTC in Terai and orthodox in the hill districts. And their contribution in total production is increasing over the years as more small farmers are being attracted towards Tea cultivation due to many reasons, including its profit stability compared to other subsisting crops particularly in the hill areas. It is estimated that they now account for 26.5% CTC Tea production and 67.6% of orthodox Tea.

#### **5.3.1 YIELD AND COST OF PRODUCTION**

According to NTCDB field representative and farmers in the CTC are, the average Field plant is 1.55kg per annum and the density of plants is 14,000 per hector. farmers in the CTC areas are able to get a fair price for their leaf, almost double their

cost of production during better times where as the orthodox Tea farmer suffer very often obtaining a price about 10-15% lower than their cost of production.

In the orthodox areas, however, the yield are significantly low, nearly 25% lower than India and 30% below Srilanka. In the CTC areas the yields are lower than in Kenya. As the international Tea market is very competitive, relative low yield is a cause of concern.

The farmers sometimes get paid almost other six month from date of direct delivery to the factories. They prefer to sell to middlemen or Tea dealers as most often money is paid immediately on delivery. However they are beaten down on the price by about 10-20%. Those who follow the code of conduct are able to get a premium of nearly 20% for their green leaf.

The farmers are unable to get an accurate calculation of their cost of production and very often the financial cost is not taken to account. Even fertilizer and pest central inputs seem to be inaccurately compiled. This is due to lack of knowledge of simple costing methods.

Smallholder forms are generally well maintained with a plant population being adequate although in some instance over crowding was observed.

In Jhapa and Morang the farmers indicated that their yields are in their region of 18500kgs.Going to 22000kgs in some instances. There are high indication but seem to be acceptable as the quality of plucking is not kept at the ideal 2 or 3 leaves and bud. In the hilly areas of Ilam and Fikkal the plant population in the plots observed wire less and more scanty. The indicate pest, insect and fungi was more as this region is damp and is more conducive of them too thrive.

Their cost of population is around 0.093 to 0.125 US\$ per kg. The selling price is around US\$1.5 ot1.60 from the factories. The cost of production and corresponding selling price lower in the CTC areas. However, this money is delayed sometimes up to six months in both areas ,causing financial strain. These are green leaf Tea dealers who pay spot cash ,about US\$ 0.03 per kg less. Farmers fall in to difficulty and find it hard to obtain loans at government's stated low interest rates and as farmers are also at the mercy to the middleman, habitually they are not amenable to accepting technical advice and change their methods .

The estate workforce Tea picker earns US\$1.50 per day for delivering 26kgs of leaf with an incentive payment of 0.018 US \$ per each additional kg. There are instances of plunked delivering up to 35 even 50 kg. Consisting of mixing leaf good and coarse, which affect quality whilst processing. However, due to political pressure on labour matters the factories are forced to accept all the leaf delivered.

#### **5.4 AREA UNDER TEA CULTIVATION IN NEPAL**

Tea cultivation in Nepal had started after the establishment of Ilam and Saktim Tea estates. From that period during a century Tea cultivation was hidden in Nepal. When private Tea cultivation started early 1960, areas under Tea cultivation increasing rapidly. As a result, NTDC was established in 1966 A.D. to lunch cultivation Tea in Nepal. Area under Tea cultivation is given in table.

Table No. 5.1

Tea Plantation Area in Nepal (in hectors)

Fiscal Year	Private(%)	Smallholders(%)	Total (%)
2005/2006	8312 (52.27%)	6845 (47.73%)	15900 (100%)
2006/2007	8911 (55.65%)	7154 (44.35%)	16012 (100%)
2007/2008	9011 (54.87%)	7593 (45.13%)	16420 (100%)
2008/2009	9030 (54.41%)	7791 (45.59%)	16594 (100%)
2009/2010	9063(54.21%)	8184(45.79%)	16718(100%)

**Source: NTCDB, Tea- Coffee, 2009/2010**

Above table shows that total Tea cultivation areas is increasing in Nepal .Tea cultivation area is occupied more by private sector then small holders. It is a good symptom of cultivation of Tea by private sector, total plantation was 15900 hectors in 2005/2006, which increased to 16718 hectors in 2009/2010.Tea cultivation area under private sectors and small holders increasing except in the fiscal year 2008/2009 in private sector.

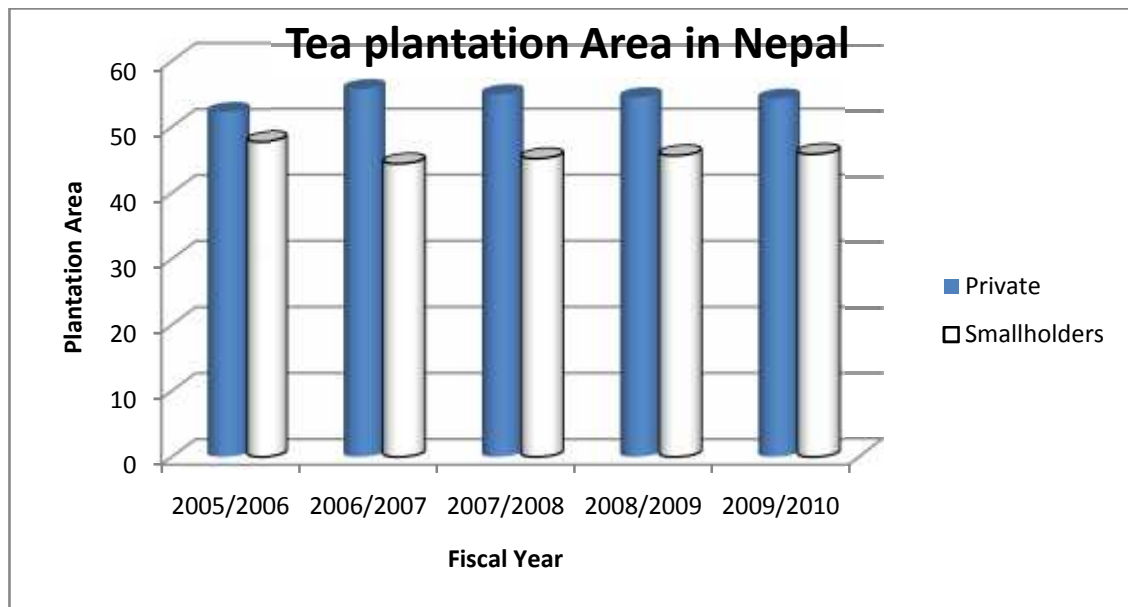


Table No. 5.2

Trend of Tea Plantation Area by sector (in hectors)

Fiscal Year	Private	Change	Smallholders	Change
2005/2006	8321	(-)	6845	(-)
2006/2007	8911	(+590)	7154	(+309)
2007/2008	9011	(+100)	7593	(+439)
2008/2009	9030	(+27)	7791	(+198)
2009/2010	9063	(+33)	8184	(+393)

**Source: NTCDB, Tea Coffee, 2009/2010**

Above table shown that the Tea plantation areas of private and small holders sector are changing positively the except the fiscal year 2005/2006 of private sector. This study showed positive sign for plantation of Tea in both sector and build up awareness on plantation of Tea to the people.



## 5.5 RELATION BETWEEN TEA PLANTATION AND TEA PRODUCTION

The relation between Tea plantation and Tea production showed in the following table during the whole study period.

Table No. 5.3

TEA PLANTATION AREA AND TEA PRODUCTION IN NEPAL

Fiscal Year	Plantation area(in hec.)	Production ( in kg)	Production (in hec.)
2005/2006	15900	12606081	792.83
2006/2007	16012	13688237	854.87
2007/2008	16420	15167743	923.73
2008/2009	16594	16127490	971.88
2009/2010	16718	16208127	969.50

**Source: NTCDB, Tea-Coffee, 2009/2010**

Above table showed that the Tea plantation and Tea production is increasing in Nepal during the hole study period. In the fiscal year 2005/2006 the Tea production per hector was most increasing then Tea production is increasing in Nepal during the whole others study period so this study showed that the Tea plantation production hectors is gradually increased in Nepal.

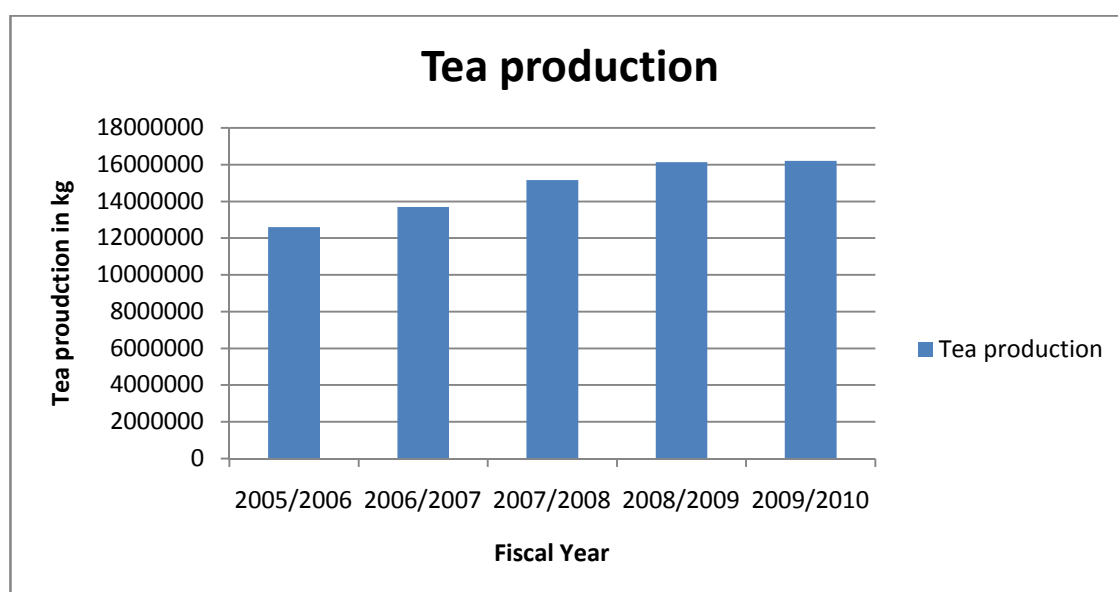


Table No. 5.4

## PRODUCTIVITY OF TEA BY SECTOR

Fiscal Year	Private Sector			Smallholders		
	Area (in hec.)	Production (in kg.)	Per hec.	Area (in hec.)	Production (in kg.)	Per hec.
2005/2006	8312	7789893	937.18	6989	4816188	689.10
2006/2007	8911	8443907	947.58	7100	5244330	738.64
2007/2008	9011	9340656	1036.58	7409	58266989	786.47
2008/2009	9030	9940311	1100.80	7564	6187179	817.98
2009/2010	9063	9999013	1103.27	7655	6218114	812.29

**Source: NTCDB, Tea-coffee, 2009/2010**

Above table shows that the Tea production in per hector of the private sector has higher then small holders. But the Tea production is increasing in trend on both private and small holders sectors. The Tea production in private sector is most increased in the fiscal year 2005/2006 and least increased in the fiscal 2008/2009 . Similarly the Tea production of small holders is most increased in the fiscal year 2005/2006 and least increased in the fiscal year 2007/2008 But smallholder's productivity rate is higher than private sector except the fiscal year 2008/2009.

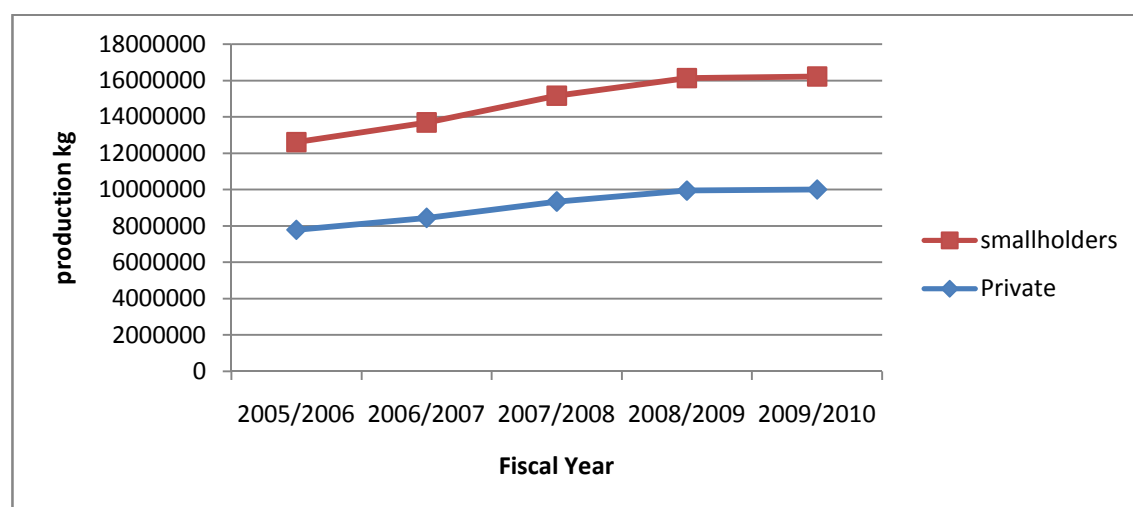


Table No. 5.5

Plantation area and production in Tea in Different District of Nepal fiscal year 2009/2010

S.N.	Districts	Garden		Small farmers			Total	
		Plantation area(hec.)	Production kg	No of small farmers	Plantation Area (hec)	Production kg	Plantation area(hec)	Production kg
1	Jhapa	6107	9294867	954	2981	4823783	9088	14118650
2	Ilam	1347	493985	5007	3794	1102910	5141	1596895

3	Panchathar	382	89950	917	456	140999	838	230949
4	Dhankuta	230	50340	422	412	73351	442	123691
5	Terathum	37	5595	525	207	40893	244	46488
6	Others	960	55276	359	5	36178	965	91454
7	Total	9063	9990013	8184	7655	6218114	16718	16208127

**Source: NTCDB, Tea-Coffee, 2009/2010**

According to the table 5, Jhapa district is the highest production in the Tea production and plantation area in garden sector but second position in plantation area is small holders sector. Ilam district is in highest position in plantation area in small farmer sector. In total, Jhapa district is highest position in Tea production and Tea plantation area. Total Tea plantation in Jhapa 9088 hectares and total production was 14118650 fiscal year 2009/2010. Ilam has second position in Tea production and Tea plantation but in small farmers sector, Ilam has first position in Tea plantation area in fiscal year 2009/2010. Terathum district produced and planted of Tea less than four districts, i.e.; Jhapa, Ilam, Panchathar and Dhankuta. The total Tea production quantity of Nepal was 16718 hectares. And 16208127 respectively during the fiscal year 2009/2010.

In the point of view of garden sector and small farmers sector, Tea plantation area and Tea production area quantity is in total 9063 hectares. And 9990013 kg respectively in garden sector and 7655 hectares and 6218114 kg. Respectively small farmer sector. This study showed that the garden sector has high position in the Tea plantation and production then small farmers sector in the fiscal year 2009/2010.

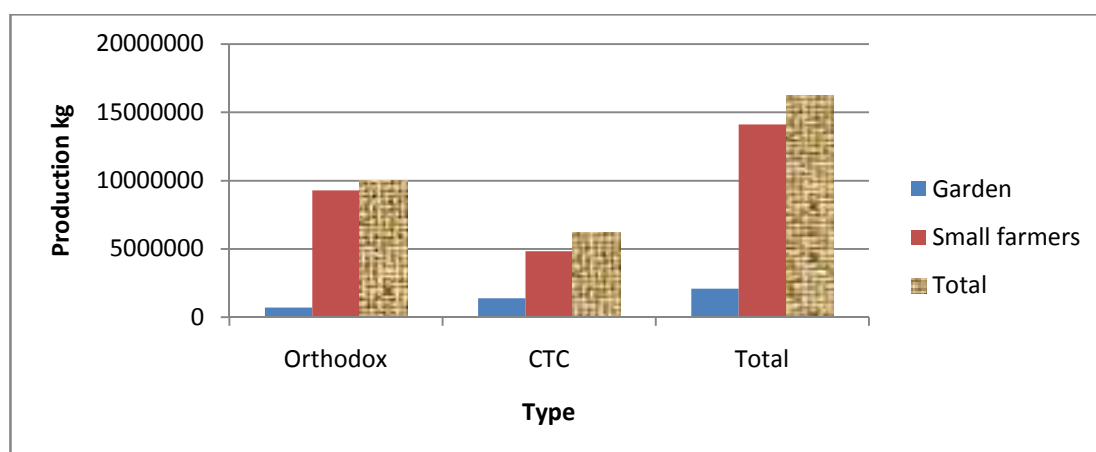
**Table – 5.6**

Orthodox and CTC Tea plantation Area and production in Nepal  
Fiscal year 2009/2010

S. N.	Type	Orthodox		CTC		Total	
		Area(hec)	Production kg	Area(hec)	Production kg	Area(hec)	Production kg
1	Garden	2956	695146	6107	9294867	9063	9990013
2	small farmer	4664	1394331	2981	4823783	7655	6218114
3	Total	7620	2089477	9088	14118650	16718	16208127

**Source: NTCDB, Tea-coffee, 2009/2010**

According to table -6 CTC Tea has more production and area than orthodox Tea in the fiscal year 2009/2010 total area and production of orthodox was 7620 hec. and 2089477 kg respectively. Total area and production of CTC was 9088 hec. and 14118650 kg respectively But Tea plantation of small farmers sector has more area than garden sector which is 4664 hec. of orthodox and 2981 hec of CTC. In the fiscal year 2008/2009, total Tea plantation area and total Tea production quantity was 16718 hectars and 16208127 kg respectively. This study showed that Tea plantation area and production quantity in small farmers sector was higher than the garden sector of orthodox Tea but Tea plantation area and production quantity in garden sector was higher than the small farmers sector of CTC Tea.



## 5.6 MAJOR TEA MANUFACTURERS OF NEPAL (Registered)

### CTC TEA (All in Jhapa District)

1. Bajgain Tea Farming and procession.
2. Raj Tea Estate (Pvt) Ltd
3. Danfe Tea processting company (Pvt) Ltd.
4. Haldibari Tea Industries.
5. Kalika Tea Estate.
6. Sattighatta Tea estate (Pvt) Ltd
7. Budhakaran and sons Tea Estate (Pvt) Ltd
8. Loknath and sons Tea estate (Pvt)Ltd
9. Aroma Tea Eatate (Pvt) Ltd
10. Giribandhu Tea Estate.
11. Nakalbanda Tea Esate.

12. Buttabari Tea processing (Pvt) Ltd.
13. New Giri and sons Tea Estate (Pvt) Ltd
14. Bansal Tea Estate (Pvt) Ltd
15. Mital Tea Estate (Pvt) Ltd
16. Tokla Tea Garden

**ORTHODOX TEA INDUSTRIES (Registered)**

1. Ilam Tea estate, Ilam (No opration)
2. Kanyam Tea Estate Ilam
3. Dhanahill Tea Estate (Pvt) Ltd, Ilam
4. Chatra Bahadur Raj Tea Estate (Pvt) Ltd Ilam
5. Himalayan sangrila Tea producers (Pvt) Ltd Ilam
6. Guranse Tea Estate Dhankuta .
7. Kanchanganga Tea Estate phidim.
8. Nepal small Tea producers (Pvt) Ltd Ilam.
9. Nepal small Tea producers (Pvt) Ltd Ilam.
10. Himalayan Range Tea Industries, Ilam
11. Sri Antu Tea Industries Ilam

Source :- NTCDB, Tea-coffee, 2067 B.S.

**Only Tea processing factory of Nepal (Registered)**

1. Danfe Tea Processing Industries (Pvt) Ltd.
2. Buttabari Tea Processing Industries (Pvt) Ltd.
3. Haldibari Tea processing (Pvt) Ltd
4. Guranse Maipokhari Tea industries Dhankuta.
5. Sri Himalayan sangrila Tea industries, (Pvt) Ltd.
6. Mistvalley Tea processing Industries (Pvt) Ltd.

Source: NTCDB, Tea-A-Tea, 2065.

**Garden and Manufacturing Factory of Nepal (Registered)**

1. Aroma Tea Estate (Pvt) Ltd.
2. Kalika Tea Estate
3. Giribandhu Tea Estate.
4. Chilingkot Tea Garden.
5. Tokla Tea Garden.
6. Nakalbanda Tea Estate
7. Budhakaran and Sons Tea Estate Pvt Ltd

8. Mital Tea and Estate Pvt Ltd
9. Yangrup Tea and Chita too Garden Pvt Ltd
10. Loknath and sone Tea Estate Pvt Ltd.
11. Himalayan Range Tea Industries, Ilam .
12. Kanyam Tea Garden.
13. Kanchanganga Tea Estate, Pvt Ltd. Phidim.
14. Guranse Tea Estate, Pvt Ltd Dhankuta.
15. Narayani Tea Pvt Ltd.
16. Kuwa Pani Tea Estate Pvt Ltd.
17. Shanke Jung Hill Range Processing Industries Pvt Ltd.
18. Lwang Ghalel Tea processing Factory .

Source: NTCDB, Tea-A-Tea, 2065.

### **Tea Packaging Industries and Exporter and Importer of Nepal**

1. Budhakaran Tea Packaging Industries Pvt Ltd.
2. B.B.T. Exporter.
3. Nepal Pavilition Company.
4. Agriculture Technology centre.
5. Tripura Tea Pvt Ltd.
6. Mygdi International Enterpriser.
7. Kakra International Pvt Ltd .
8. Valley Trade Centre.
9. Pashchim Himalayan Tea Industry.
10. Arjun Tea Industry.
11. Sakun Tea Industry.
12. Mangal Food product.
13. Nepal Tea Exporter.Pvt Ltd.
14. Himalayan Tea Exporter.
15. U.S. Trade concern.
- 16 Otera Tea Packaging Industry.
17. Yagna Traders.
18. Didya Laxmi Exporter Pvt Ltd.
19. All Nepalese Tea and coffee centre Pvt Ltd.
- 20 Nepal welcome Group Pvt Ltd.

source: Tea - Coffee, 2067 B.S.

In Nepal, 89 Tea garden are registered with NTCDB, 45 Tea garden are in process of registration out of total Tea garden of 134 members District wise Tea garden are shown in the following table:

**Table -5.7**

Tea Garden Registered with NTCDB

Districts	No of Gardens
Jhapa	57
Ilam	10
Dhankuta	5
Others	17
Total	89

**Source : NTCDB, Tea- A-Tea, 2065**

Out of these, there are twenty three co-operative societies related with Tea production in different districts of Nepal.

According to the statistics of National Planning commission 2064 targeted production of Tea will be 21180 metric tons in the three years interim plan period,2064/2065 to 2066/ 2067.



## 5.7 Export and Import of Tea

**Table – 5.8**

Export of Nepal Black and Green to others Countries Except to India.

Country	Black Tea Qty. kg	Black Tea value(Rs.)	Green Tea Qty	Green Tea value(Rs.)	Total Qty..kg	Total Value (Rs.)
Bangladesh	4800	40752			4800	40752
Japan	6267	1707715	856	930903	7123	2637826
Korea	859	16497			859	16497
Pakistan	327086	28770246	13720	119662	340806	28891959
Taiwan	1942	1502676			1942	1502676
UAE	264256	24987263			264256	24987263
USA	2832	923960	8147	537229	10979	1461189
France	2843	2886468	38	351080	2901	3237548
Germany	65176	28808721	3791	1922318	68967	307313039
UK	38	25508			38	25508
Latvia	2367	27036			236	27036
Honking	5000	155892	525	21663	5525	177555
Canada	115	54455	156	139270	271	193725
Italy	1200	43830			1200	43830
Czech Rep.	61665	2446551	60545	2331211	122210	4777762
Total	746446	92397570	87778	4255236	834224	100739810

**Source: TEPC, 2009/2010**

Above table shows that is playing the vital role in Tea export to the other countries in this table Pakistan has first position i.e. 340806 kg and UK has last position i.e. 38kg of import of Tea from Nepal in terms of quantities In terms of n\value in Nepalese rupees, Germany has first position i.e. Rs. 16497 of Tea from Nepal similarly UAE has second position in terms of both quantities and values. of import of Tea from Nepal i.e. 264256 kg and Rs 29987263 respectively Nepal exports both black and green Tea to other countries in total quantities 8,3422kg and Rs 100793810 Pakistan is an important buyer of CTC Tea from Nepal and is in Fact the world's second longest buyer bulk packed black Tea.

## 5.8 Major Importer of Green Tea

**Table- 5.9**

Major Importer of Green Tea in 3 kg Packages.

Counties	Imported Value US \$ (000)	Imported Qty mt	Unit value us\$/Unit	Ave. growth value p.a (2006-2010) (%)	Ave. growth Qty p.a (2006-2010) (%)	% of world Imports
Morocco	78821	40394	1753	18	8	22
France	29296	5402	5423	15	1	9
Ghana	23018	11326	2032	134	120	7
USA	20217	2822	7164	19	14	6
Canada	19536	3196	6113	41	9	6
Russia	15057	4786	3146	54	23	5
Algeria	14833	8163	1817	19	13	5
Mauritania	9836	4848	2029	70	60	3
Libya	8245	5884	1401	33	-	3
Belgium	7345	1705	4308	12	38	2
Total	218204	88526	35186	415	286	68

**Source: ITC calculation based on COMTRADE: 2010, Cited from ITC, UNCTAD/WTO.**

According to table - 9 Morocco is the first import of green Tea in terms of imported value, imported quantity average growth value per annual Belgium has position in average value per and percentage of world imports Ghana has first position in average value per in terms of percentage in the fiscal year 2001-005. It is observed that total imported value USS in thousand of green Tea is 218204 and total imported quantity is 88, 526 kg In the nutshell the percentage of world imports of green Tea in total is 68 percent.

## 5.9 Growth in cultivation and Trade of Nepalese Tea

**Table – 5.10**

Growth in Cultivation and Trade of Nepalese Tea

Details	2005/2006	2009/2010	% increase/Decrease
Area	3500 hec.	15700 hec	450%
Imports	6.2 million kg..	0.5 million kg.	800 %
Exports	0.77 million kg.	5.0 million kg..	650 %

**Source: ITC, 2010**

Above table shows that the total area for Tea cultivation has increased with some 45% over the Last ten years. The growth of Tea exports from Nepal has even been more impressive and reached some 650% over the last decade The exporters have grown and while the imports have decreased.

**Table – 5.11**

Major Importers of Black Tea in Bulk

Importers	Imported value US \$ ( 000)	Imported Qty. (Mt.)	Unit value US \$ /Unit	Ave. growth value % (2006-2010)	Ave growth Qty % (2006-2010)
UK	1809369	1022965	1769	4	1
Pakistan	227800	137600	1656	-	-
Russian	166151	128684	1291	13	8
USA	124967	75350	1658	1	-1
Japan	98271	31430	3127	-4	-4
UAE	94920	39962	2375	5	2
Iran	87423	33914	2578	92	-
Germany	78467	28775	2727	2	-2
Saudi Arabia	57534	16916	3401	31	27
Kenya	43002	51962	828	11	15
Syria	41507	19241	2157	0	0
Ukraine	37884	15896	2383	40	15
Kazakhstan	36161	20147	1795	23	19

Sudan	35145	17684	1987	4	-14
Netherlands	34852	23193	1503	7	5
Poland	34556	25649	1347	2	-2
south Africa	22742	19307	1178	10	5
Chili	20521	17636	1164	2	-
India	19828	15223	1303	18	16
Canada	19485	8606	2264	5	1
Jordan	18262	4632	3943	153	114
Ireland	16796	8454	1987	-3	-3
Iraq	16701	7916	2110	-18	-25
Honking	16640	7429	2240	- 7	-5
Malaysia	14648	12882	1137	20	10

Source: ITC calculations based on COMTRADE, 2010 cited from ITC, WTO

**Table- 5.12**

Major Importer of Black Tea in 3 kg Packages

Importers	Imported Value US\$ ( 000)	Imported Qty. (Mt.)	Unit Value US \$ /Unit	Ave. growth Value p.a (2006-2010) %	Ave. growth % (2006–2010)
Russian	122349	38206	3202	7	-10
Saudi Arabia	70228	8713	8060	-7	-8
Canada	68588	6309	10871	9	-6
UAE	63028	26670	2363	4	6
USA	56663	10565	5363	19	19
France	56661	5719	9908	8	-5
Australia	56552	10231	5528	16	14
Japan	42919	4744	9047	0	4
Italy	29084	2658	10942	9	6
Sweden	25210	2747	9177	8	-1
Syria	23369	8526	2741	12	7
UK	21588	6371	3388	8	-3

Poland	20872	3765	5544	9	2
Libya	20614	10643	1937	-22	1
Ukraine	17494	3694	4736	-11	-26
Iraq	17269	11234	1537	12	9
Netherland	16723	4088	4091	7	-6
Kenya	16225	13437	1207	-2	-7
Newzeland	13793	2767	4985	11	13
Germany	13539	3797	3566	12	11
Belarus	12927	2544	5081	42	26
Belgium	12729	1854	6866	6	8
Norway	11659	868	13432	7	2
Denmark	11269	1181	9542	7	6
Finland	11070	846	13085	3	-5

**Source: ITC, Calculations based on COMTRADE, 2010 cited From ITC,WTO**

Tables 11 and 12 Show the main world importers of black Tea in bulk mostly CTC black Tea in < 3kg packs Orthodox and CTC Tea per -packed retail packed and green Tea respectively.

As orthodox Tea is of higher value it can be assumed that the countries showing higher unit value imports in table 12 have a preference for orthodox Tea. Norway and Finland especially stand out in the context and to lesser but not insignificant extent Italy and Canada Germany is an important buyer of Nepalese orthodox Tea and paid an average CIF value of 19000 US\$ per ton in for its imports from Nepal . The German market is also sowing Steady growth averaging 12% in value over the last 5 years and paying increasing price as growth in value exceeds growth in quantity over this period.

**Table- 5.13**

Major Importer of Green Tea in bulk

Importers	Imported Value US\$ (000)	Imported Qty. Mt.	Unit value	Ave. growth Value %	Ave. growth %	% of World Import
USA	41728	11325	3685	27	8	16
Japan	36987	14136	2617	-1	-2	14

Germany	26886	9460	2842	20	19	10
Morocco	12355	9392	1315	-5	-7	5
France	10918	2134	5116	20	9	4
Russian	9518	7901	1206	34	28	4
Mauritania	8316	3767	2208	22	4	3
Uzbekistan	7092	12283	577	0	-7	3
Senegal	6372	5900	1080	-8	3	2
Algeria	6287	3238	1942	7	0	2

Source: ITC, Calculations based on COMTRADE : 2010 Cited from ITC UNCTAD/WTO.

Table 13 shows the world major importers of green Tea. USA contributes the highest imported value i.e. US \$ 41728 and over this Period average growth value is 27 percent. The importance of green Tea market one Japan Germany, Morocco, France, Mauritania etc. cannot be ignored. But the average growth value in percentages of Japan is decreased over this period. Growth and upward pressure on price can be seen in bulk imports of green Tea very rapid growth in Russian Federation cannot go unnoticed, averaging 28 percent in value over The last for five years and paying increasing prices on growth in value exceeds growth in quantity over this period.

**Table -5.14**

Export of Tea to India

Year	Green Tea		Black Tea		Total	
	Qty.	Value(Rs.)	Qty.	Value(Rs.)	Qty.	Value(Rs.)
2005-006	28714	6006	2839350	219697	2868064	225703
2006-007	2983176	264549	1024500	113749	4007676	378298
2007-008	704196	98825	3608681	34749	4312877	446337
2008-009	80449	7246	4279524	375579	4359973	382825
2009-010	NA	NA	NA	NA	NA	NA
Total	3796535	376626	11752055	1056537	15548590	1433163

Source : Department of customs : cited from ITC, WTO, 2010

Nepal Tea industry is very valuable due to their dependency on one major market India for 24.2% of their green Tea and 75.58% for the black Tea. Above table shows

the dependency in India as a trading partner for Tea has increased tremendously over the last four years which further illustrates Nepal's vulnerability. But it is observed that the export price of Tea is Fluctuated in trend over the whole study period.

**Table- 5.15**

Import of Tea from India

Year	Quantity(Kg.)	Value(Rs.)
2005 -006	291946	28640
2006 -007	323966	31297
2007 -008	330327	31157
2008-009	195093	18196
2009-010	NA	NA
Total	1141332	109290

**Source: Department of customs cited from ITC, UNCTAD 2010.**

Table 14 and 15 show that Nepal imports more Tea from India than exports. Therefore India is main country to import of Tea for Nepal. Indian Tea contributed 1141332 kg and Rs. 109290000 in total imported Tea over the last four years. In the nutshell, India has successful to fulfill national demand of Tea for Nepal.

**Table- 5.16**

Export and Import of Tea from Nepal to India

Fiscal	Export			Import		
	Quantity	Value	%	Quantity	Value	%
2005-006	2868064	225703	18.4	291946	28640	25.6
2006-007	4007676	378298	25.8	323966	31297	28.9
2007-008	4312877	446337	27.8	330327	31157	28.9
2008-009	4359973	382825	28.0	195093	18196	17.1
2009-010	NA	NA	NA	NA	NA	NA
Total	15548590	1433163	100	1141332	109290	100

**Source: Table 14 and 15**

Above table shows that the trend of exporting Tea from Nepal is more than importing Tea from India because of the trend of Changes in percentages in Tea

export and import over the last four years . So, Nepal is self dependent on Tea because the amount value of exporting Tea is higher than the amount value of importing Tea over the whole study period.

### 5.10 Export of Tea from Nepal

The Tea industry in Nepal is small. The volume exported currently is around 0.23% and production is 0.32% out of the total global output (ITC statistics). Over 90% of orthodox Tea processed is sold to India through official and unofficial channels. Reportedly nearly 60% of the CTC Tea is sold in the domestic market whilst nearly the total balance goes to India. There is some interest now coming from Pakistan with about 10% exported in the last year (ITC,WTO, 2010)

Green Tea Black Tea and other kind of Tea have been exported to different overseas countries from Nepal. Mainly Nepal export orthodox Tea to Germany France, Czech Republic Russian Federation, Hong Kong, Japan, Canada and Other Countries.

**Table- 5.17**

Export of Tea from Nepal

Year	Quantity (Mt.)	Change	Value Rs. (000)	Change
2005-006	4316	-	438771	-
2006-007	4623	307	415632	23139
2007-008	7000	2377	NA	NA
2008-009	8600	400	902122	NA
2009-010	8889	289	1160593	25871

**Source : NTCDB, Tea-Coffee, 2067 B.S.**

Above table shows that the export trend has fluctuated. Maximum quantity has 8889 M.t in 2008/009 where as minimum quantity is 4316 in the fiscal year 2005/006. The maximum value in Ra 1160593 thousand in fiscal year 2009/010. In nutshell, the export of Tea from Nepal has highly fluctuated.

### 5.11 Import of Tea

Nepal Consumers Consume mainly CTC Tea So Nepal imports only CTC Tea from foreign countries Nepal also produce CTC Tea but it is not sufficient India, Pakistan Bangladesh Singapore Sri Lanka, Saudi Arabia Netherland is main countries to import of Tea for Nepal. More than 90% of importing Tea imported from India.



**Table-5.18**

**Import of Tea**

Fiscal year	Quantity (Mt.)	Value Rs. (000)	Change
2005 – 006	NA	419	–
2006-007	NA	5005	4586
2007 -008	NA	19000	13995
2008 -009	NA	13123	5877
2009- 010	NA	9624	3499

**Source: NTCDB, Tea- Coffee, 2067 B.S.**

According to table 18 the import trend has fluctuated over the study period. Maximum import value has Rs 19000000 in 2007/008 The table shows that the trend of importing Tea is highly increasing over the first two years. But the trend of importing Tea is highly decreasing in 2007/008 to 2008/009. The import value is highly fluctuated in the fiscal year 2007/008 to 2008/009. In nutshell, the import of Tea from other countries has highly fluctuated.

## **CHAPTER –SIX**

### **6. SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **6.1 SUMMARY**

Nepal is country of agro- based economy. More than 80% of its population is involved in agriculture for employment. Agriculture sector contributes about 36% of total GDP. So agriculture is still back bone of Nepalese economy.

Tea cultivation has a long history of over 147 years in Nepal. it was started in eastern part of Nepal out first and extended to other parts of the country . Nepal has brought Tea from Darjeeling of India. Among the cash crops of Nepal, Jhapa, Ilam are Panchathar, Dhankuta and Terathum districts, Producing Tea At present Kavre, Sinduli, Dolakha districts are only in cultivation. It takes minimum 5 years to give production in this districts but now days these districts are producing Tea at lower quantity.

The pressure of increasing population on limited cultivated land has caused large scale in employment in the agriculture sector. Since Tea industry is labour intensive and in agro- based industry it has played a vital role in providing employment opportunity for the people.

Tea is an important consumption items. Its demand with in the domestic market is growing over time. Because of inadequate supply from the local sources, the country is even bond to export Tea from foreign countries thus draining the hard earned foreign currency.

Tea production involves two broad phases like. Cultivation phase and industrial phase each having sub phases. They are planting pruning plucking relating and flushing related to cultivation phase. Withering Rootling fermentation, Drying Grading, Staving and Packing are related with the industrial phase. These phases are to be followed in proper way.

Nowadays there are many Tea producing countries in the world. In Nepal Ilam panchathar, Dhankuta and Jhapa is the main site of Production.

Orthodox Tea is cultivating in Terthum, Nuwakot, Sindhupalanchock, Ramechap, Sankhuwasabha and Kaski. Nepal produces about 1.97 million kg Orthodox Tea. It

is chiefly exported to countries like Japan, Germany, USA, India and other SAARC countries.

Tea cultivation was started in Nepal from 1920 B.S. by Mr Gaj Raj Singh Thapa. He had taken Tea plants from Darjeeling district of India. Before the establishment of the NTDC, Ilam and Suktim were the two Tea gardens in Nepal as private estates. When the NTDC is established as a company in 1966 to manage these two estates it was not limited only on two but also had created other five gardens under it self called Kanyam, Tokla Barne, Baradashi and Chilingkot. But its production quantities were decreasing gradually after 1995/96 its main causes was mismanagement and political interference so NTDC was privatized the result has not come according to the management of Leaser Company.

Other Tea industrial Institutional in Nepal is National Tea and Coffee Development Board (NTDCB) established in 2049 B.S. Of which main functions were to help and guide extension and cultivation of Tea qualitative production, Proper management for its market.

Besides these Himalayan Organic Tea Planters Association Mechi Hill Tea Producers Association Nepal Tea Development Alliance Nepal Tea Planters Association and different Tea co-operative societies are playing a pivotal role for the production, processing and marketing of Tea in Nepal.

Tea plantation has a successful history in Nepal, mostly in the eastern hills of Nepal. The trend of plantation is rapidly growing and the entire Tea grower is optimistic regarding the bright future of eastern hilly Tea. But lack of proper technical and financial assistance Tea grower are facing many difficulties. Therefore proper technical training regarding the quality Tea cultivation financial proper promotion infrastructural favorable development and favorable policy can help to create better opportunities for the Tea growers of Nepal.

## **6.2 Conclusion**

This study concluded that the trend of Tea plantation in Nepal is growing steadily despite various problems they encounter. All most all the villagers of eastern part of Nepal and other region have Tea plantation in this own land Presently farmers have started to plant Tea even in their growers have several problems at the field,

transportation problems financial problems, unsteadily policies technical problems etc However, the interest of Tea plantations rapidly growing among the farmers of Nepal . They believe that Tea cultivation is sustainable means of uplifting their life standard. It is essential to promote Nepalese Tea nationally and internationally. The exported Tea of Nepal has received good market but it is not promoted properly internationally. The major findings of the study are as follows

- i. The Plantation of Tea is increasing every year. Total plantation area were 16718 hectors in 2009/2010 Jhapa, Ilam, Panchathar, Dhankuta and Terathum are main Tea plantation districts of Nepal. There were only 965 hectors Tea plantations except those five districts in 2009/2010. Orthodox Tea grown in 7620 hectors in 2009/2010 where as CTC was in 9088 hectors. The production of Tea is also increasing every year. It was 16208127 kg in 2009/2010. Jhapa district produced 14118650kg in 2009/2010. This was large amount among producer districts.
- ii. Tea cultivation area under private sector and small holders showed positive sigh for plantation of Tea and build up awareness on plantation of Tea to the people The Tea plantation and production per hector is gradually in creased in Nepal.
- iii. The productivity of Tea under private sector and small holders sector is increasing in the whole study period the smallholders' productivity rate higher than private sector.
- iv. This study showed that the garden sector has high position in the Tea plantation and production than small farmers sector in the Fiscal year 2009/2010.
- v. Jhapa District is highest position in Tea production and Tea plantation area in garden sector but second in plantation area is smallholder sector.
- vi. Ilam district is highest position in plantation area to small farmers sector.
- vii. Jhapa district has highest position in Tea plantation and Tea production in total.
- viii. Orthodox Tea has taken place in Tea plantation area and production quality in small farmer sector so, smallholder productivity is higher than garden sector of orthodox Tea.
- ix. The total area for Tea cultivation has increased with some 450% over the last ten years. The growth of Tea export from Nepal has been more impressive and reached some 650% over the last decade. The exporters have growth to 20 whilst the importers have decreased.

x. Nepal exports Tea only to overseas and it imports Tea basically from India. Exporting quality of Tea is higher than importing of Tea. Nepal export Tea to overseas countries total 834224kg and Rs 100739810 in 2009/2010. Nepal export and import Tea from to India. was 15548590kg. Rs. 1433163000 and 1141332kg kg Rs 109290000 respectively. Germany is main country to export Nepalese Tea which the total value was Rs 28808721 in 2009/2010.

xi. Nepal is self-depended on Tea because the quantity and value of exporting Tea (i.e. 15548590kg and Rs 1433163000) is higher than the importing Tea (i.e. 1141332kg and Rs 109290000) during the whole study period in 2005-2010. The volume exported currently is around 0.23% and production is 0.32% out of total global output.

xii. Many problem are in Tea industry such as lack of finance, trained manpower Tea specialist lack of transportation lack of chemical fertilizers and irrigation lack of manufacturing plant and lack of Tea policy Due to these problems the Tea industry could not make much progress in Nepal. Nepal does not produce processes in quantities desired by the market. Small farmers are not desirable to manufacture quality made in Nepal. the Tea leaves produced by Tea estates having processing facilities are also not qualitative to produced a good quality made Tea However private sector and smallholder have tried to enhance it. Government cannot manage action of Tea market until now. Tea policy 2000 has launched in Nepal.

xiii. Frequently, fluctuating Tea is common nature of its market. Nepalese Tea market is unscientific, unorganized and limited. It's needed that establishment of well organized market to provide real return to the nation and to promote the quantity and quality. Soil climate rain, temperature slope of land play vital role in production of Tea in eastern middle hilly region of Nepal the Tea cultivation can be extended. Now it is limited in Jhapa of Terai region and in Ilam panchathar, Dhankuta and Terathum of eastern hilly region.

Thus Tea development requires a combination effort of government exporters' processors and Tea farmers. A gap in activities in production processing export and communication problems are equally damaging to all the stakeholders. Therefore, transparency in activates and benefit involvement of more small farmers and their representation is required to develop a synergetic effect in the chain.

In the context of globalization of business and trend of private sector led development the role of government as facilitator plays important role in places where majorities are small farmers and where development activities has value to build base for commercialization of agriculture.

### **6.3 Recommendations**

Agriculture has been playing a significant role in the economy of Nepal. Economic development is not possible without agriculture prosperity Nepali planner have over the years given top priority to this sector. It provides employment opportunities to the labor force and contributes the Gross Domestic Product (GDP).

This study shows that the plantation and production of Tea are in creasing every year. Private sectors are investing in Tea industry. Smallholders are also interested in Tea cultivation. It brings serious problem in the Tea industries in many ways. It is essential to make lot of improvements in Tea cultivation:

The following measures should be taken to solve the problems.

1. In Nepal Tea cultivation is depended on monsoon rains serious attention must be taken to improve the irrigation facilities by the government agencies.
2. Many people cannot solve their agricultural program due to poverty. So agricultural loan is necessary for them Tea Industry requires a large initial investment but gives return after 5/6 years. Therefore the government has to formulate appropriate loan policies in this sector.
3. The price is declared by India market. Since about half to the domestic demand is fulfilled by Indian Tea Therefore it is recommended that Tea production should be increased in the country.
4. Tea industry is establish as well as developed industry in the world. So, it is cultivated with full encouragement in order to get higher price but the fluctuation of Tea price with in a short period, farmers and exporters often discourage for this crop. So, government should establish minimum support price to the profitable level.
5. Proper marketing network and institution should be established so that the fluctuation of price would be controlled.
6. Soil erosion landslide and flood are major problems of Nepal. Local cultivators should be educated in this regard to avoid it should initiated in landslide prone area.

7. Government should provide transportation facilities by building sub agricultural tracks. This will enhance use of fertilizers medicine and industrial equipment or rural materials to the farmers . To provide the facilities for Tea producers, transportation facilities extended in Tea growing areas.
8. Chemical fertilizers modern tool and insecticides and Pesticide should be supply at study rate. It is necessary to provide such facilities on regular basis by establishing the government institution in the village its self.
9. It is necessary to provide some disease resistant varieties of Tea and should encouraged farmers to cultivate that variety to some extent it helps from the problems of insecticides and pesticide.
10. We needed to identity more potential Tea growing areas in other part of Nepal besides the exiting areas in Jhapa, Ilam Panchathar Terathum and Dhankuta districts. This will increase Tea production Tea export and earning of foreign exchanges.
11. Heavy tax must be levied on the import of Tea and priority must be given for domestic consumption of Nepalese Tea.
12. National plans must be focused to raise the rural economy by giving priority in agriculture development, especially Tea in feasible areas.
13. Promotional campaign must be done at national multinational and international level.
14. Trade fairs, E-marketing, seminar must be done to improve the Tea market.
15. NGOs and INGOS should be inspired to focus their program in this area for poverty alleviation by improving the Tea cultivation systems.
16. Academic curriculum must be made to generate manpower.
17. There is needed to be minimizing conflict in Tea leaves pricing between the processors and small farmers. There is need to make processors having garden to develop a model of sustainable garden management practice so that the small farmers and small Tea garden can follow the quality Tea leaves production process.

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