CHAPTER- I
INTRODUCTION

1.1 General Background

Nepal is characterized as an agricultural country located in South Asia between its two giant neighbors, India and China. Due to the arrival of disparate shelter groups from outside through the ages, it has now become a multiethnic, multicultural and multilingual country. It is the landlocked country and its economy is based upon the agricultural sector. In Nepal around 74 percent of the total populations are dependent on agriculture activities. The large proportion of the land of Nepal lies to the mountain and hilly area. Basically, in these areas the economic condition of the people is based on production of barley, potato, millet and animal husbandry. However, in terai, the socio-economic condition is better than mountain and hill and the productivity of land is also high. The production in agricultural sector is not satisfactory due to the lack of irrigation, population pressure on limited land endowment, subsistence agricultural system, rural poverty, natural resource depletion with emphasis on deforestation, land degradation and modernization. However, the contribution of agriculture to GDP is more than 36.18 percent (MoF, 2011).

Nepal is one of the richest countries in the world in terms of ethnic diversity comprising of 125 casts and ethnic groups, 123 native languages (CBS, 2011). According to their casts, ethnic groups and languages, they follow different cultures and religions such as Hinduism, Buddhism, Islam and Christianity. It faces many problems like poverty, deficit trade, income inequality and conflict. The per capita income of Nepal is $472 (IMF, 2013) and the large proportions of its population are under poverty line. The population under poverty line is 25.16% (CBS, 2011) but there is no accurate data that how many Janajati, Madheshi and dalit people are under poverty line. Income inequality is the main feature of the country that effects on the consumption pattern of the people. This raises the gap between the poor and the rich in the country.

The consumption is considered as a direct function of income. The poor people are unable to meet their basic requirement such as cloth, food, education, health and shelter. On the other hand, very few rich people are enjoying luxurious life. The

marginal propensity to consume (MPC) of the poor people is very high and saving is almost zero. Rich people who have their saving generally use in unproductive sectors like buying gold, land and making conspicuous consumption. This situation leads to continue the unequal distribution of income. Whenever inequality exists in the society majority of the people cannot test the fruit of development properly and that hampers welfare of the society.

Joshi and Rose (1966) have broadly classified the Nepalese population into three major ethnic groups in terms of their origin; Indo-Nepalese, Tibeto-Nepalese and indigenous-Nepalese. The first group Indo-Nepalese inhabited the more fertile lower hills, river valleys, terai and the second group considered of communities of Tibeto-Mongol origin occupying the higher hills from the east to the west. The Tebeto-Mongol groups; there was a longitudinal pattern, in which ethnic populations were concentrated in specific geographic pockets. The deeply cut village and high ridges tended to divide ethnic groups into many small, relatively isolated and more or less self contained communities. This pattern was especially permanent among the Tibeto Nepalese population. For example the Bhote group was found in the far north trans-Himalayan section of the mountain, close to the Tibetan border.

The Limbu are an indigenous mongoloid ethnic group in Nepal who call themselves Yakthuŋba. They have their own religion, culture, tradition, language and script. They follow the Kiratism as their way of life. The Limbu have been residing mainly in the Hilly region since the time immemorial. Ancestral homeland of Limbu lies in the east northern side of Nepal. They have the high density of population mainly in the Sankhuwasava, Taplejung, Terhathum, Panchthar and Ilam. In the recent time, they are migrating and have been settling in neighbor Terai cities like Dharan and Jhapa. According to the national census – 2001, the population of Limbu is 19261, which is 0.083 percent of total population. Out of it 9959 are male and 9302 are female. According to the most recent Nepal government census, 363,868 Limbu, the vast majority, live in an area situated between the Arun and the Mechi rivers (CBS 2013). The area covers approximately 4,500 square miles, historically known as Limbuwan ('Land of the Limbu').

Limbu are religious people so that they have great hope upon the lord, god and goddess. They have faith and belief on the Dhami and Jhakries. Some of the Limbu get opportunity to serve in the Indian army and British army forces because of the recognition of their bravely. Against this background using primary data this study concentrates income and consumption pattern of Limbu community of Savapokhari V.D.C of Sankhuwasava District, Nepal.

1.2   Statement of the Problem

The economy of Nepal is heavily dependent on agriculture. Most of the people live in rural areas where the quality of the rural people is very poor. Even after the completion of eleventh government plan, economic development and living standard of rural people is still unchanged.

The main problem of the developing countries is poverty caused by low level of income. In Nepal a large proportion of the population are under poverty line. The economy of the developing country is characterized by low level of income, unemployment, corruption, lack of policy implementation, unequal distribution of income and wealth. Very weak economic and resources are main causes of income inequality and poverty.

There is sharp difference between rich and poor household's income and consumption pattern. The rich families receive high level of income and enjoy luxurious life while majority of the poor people are socially excluded groups. The poor people are deprived from the consumption of national facilities and opportunities provided by the state. In this context, two main research questions of this study are: (i) what are the major sources of income of the Limbu community and (ii) whether they spend their income on consumption in the right way.

1.3   Objectives of the Study

The general objective of this study is to obtain the entire knowledge regarding the consumption and income pattern of Limbu households living in the study area along with socio-economic characteristics. Main specific objectives are as follows:

- To study the level of income and their sources in the study area;

- To analyze consumption pattern of Limbu community in the study area; and

- To explore the gap between income and consumption pattern in the study area.

1.4   Significance of the Study

This study has been associated with the income and consumption pattern of Limbu community of Savapokhari VDC of Sankhuwasava district. So, this study has attempted to analyze the income and consumption of Limbu through micro level study. Many studies have been carried out in the distribution of income in Nepal. However, there are only few studies about the Limbu communities. As this study concentrate about Limbu and their existing problems this may be the great interest for many people.

This study can be important for the ethnic explorer and policy makers. It has also importance for the investigators, social workers and donors. It will help the authors who are giving concern about the Limbu community of Nepal. It also helps to local government for arranging the local level development program and distribution of public plans as well.

1.5   Limitations of the Study

This study is an attempt to analyze income and consumption pattern of Limbu community. The limitations of the study are as follows.

- This study is concentrated only at micro level study in income and consumption pattern so that windfall gains are not included. Only the regular and visible items at local market price level are included here.

- Accidental and irregular Expenditure has not been quantified and analyzed.

- Only 20% household has been included for data collection because of limited economic resources and time constraint so that it does not cover all Limbu of Sankhuwasava district.

- This study has been concerned with Limbu community of Savapokhari VDC of Sankhuwasava district only. Therefore the finding of this study may not be applicable to other ethnic groups of Nepal.

- This study concentrated only income and consumption pattern of Limbu community. Other socio-economic aspect of the community is beyond the scope of this study.

CHAPTER-II
REVIEW OF LITERATURE

This chapter reviews the income and expenditure pattern of Limbu community. They have their own langue, culture, and regarded as one of the indigenous people of Nepal. Limbu community is called one of the oldest indigenous ethnic groups of being residents in the hilly region and the neighboring districts like Therathum, Taplejung, Pachthar and Ilam.

The concept of income and consumption was first developed from the economic theory. Income is the total amount received from agriculture, business, profit, pension, salaries, industry, wages etc. In simple words, income of a person or household is the sum of all income which comes from different sources within certain period of time. Income is also defined as the amount of funds, goods and services received by an individual, corporation or economy in a given period of time. Carl Pelhn (1992) defines income as recurrent receipts including wages, salaries, interest, rent, annuities, pensions, and also dividend including capital gains.

Consumption is defined as the use of goods and services for satisfying wants. As one consumes goods, its utility is destroyed. So, consumption is also referred to as a distraction of utility. The goods that are consumed are known as consumer goods. This concept is related to the human behavior in nature. At first Earnest Engel (1857) estimated the relationship between income and consumption expenditure in the kingdom of sarony with the help of econometric tools. Later during and after the publication of "The General Theory Of Employment, Interest and Money (1936)" various studies have been done in the field of income and consumption function fitted to time series data as well as cross sectional data.

2.1   Empirical Studies: International Study

Various empirical studies on income and consumption expenditure have been made around the world. This section review some selected studies.

Kuznets (1946) has made empirical study on the consumption expenditure and income data for the united states during the period 1869- 1938. He has estimated the consumption function for this period as 0.9 and concluded that in the long-run, as the

level of income rises, the APC remains quite stable and in the short-run, the APC tends to decline as the level of income rises. In other words, a smaller fraction of income is being devoted to consumption as the level of income double and redoubled over the decades; an approximately stable proportion of income is devoted to consumption. This study reveled that in the short-run consumption is non-proportional because APC > MPC and proportional in the long-run where APC =MPC (Jhingon, 1999).

J.S Duesenbery (1952) has given a new concept about the determinant of consumption expenditure. According to him, the fraction of family's income sacrifice for the consumption depends on the relation to the income of neighboring families but not on the absolute level or current level of income. This theory has focused on the relative aspect of income rather than other component and emphasized the initiative and emulative nature of consumption. He calls it as the "Demonstration effect".

Radhakrishna and Misra (1972) have jointly analyzed that how the consumption is influenced by the income level. They have found that the rural area of Bihar showed high percentage of income shared by food grains. This study has concluded that the expenditure elasticities for food items in the rural area are high in Bihar and low in the urban area. It had further concluded that as income increases the demand for non-food increases but demand for food items decreases.

U.S Department of commerce conducted an empirical study in 1981, taking the family budget data for the years 1929-1980, in constant dollars to observe the income consumption relationship. The cross-sectional data shows, how aggregate consumption expenditures have varied with aggregate disposable personal income for given years between 1929 to1980. This had concluded that the consumption function is non proportional in the short run and proportional in the long run. Further, it found that for 1970-1980 the MPC is slightly greater than unity because as the autonomous consumption is negative, the APC have increased with the increase in income (Shapiro Edward, 1990).

World Bank-WB (1999) has published a policy research paper on 'Micro Determinants of Consumption, Poverty, Growth and Inequality in Bangladesh'. This paper has analyzed the micro-determinants of consumption, poverty, growth, and

inequality from 1983 to 1996 using simple regressions. This study has concluded that income, consumption, and poverty are determined by education, demographics, land ownership, occupation and location. Per capita consumption associated with many of these household remained stable overtime. The returns to demographics had a greater role in the determination of income level respectively in rural and urban areas. It has used Geni coefficient to show income inequality.

Mishra (2007) tries to explore the way organized retail has dramatically changed not only the Indian traditional retailing structure but also the consumption behavior. She also tries to find out, how are the conventional and organized retailers perceived. The study was conducted in seven cities of India, Mumby, Delhi, Hydarabad, Ahamadabad, Kolkota, Chennai, Bhubaneshwari, known as commercially active city. The sample was drawn as it represented with different economical, social and geographical characteristics. The methods used for data collection were face to face interview and questionnaire.

She concluded that supermarkets are the preferred kind of store by consumer, even though the consumer buys several establishments and not exclusively in the organized outlet, which indicates that there is no single locality. While in organized outlet, consumers buy essentially convenience goods with low level of risk. In traditional retail they buy essentially product of more involvement, which requires more complex buying behavior. The result shows that consumers evoke price and convenience for not buying certain goods in traditional retail that reveals an attempt to optimize their time and money.

2.2   Review in Context of Nepal

In the field of income and consumption expenditure various studies have been made in Nepal and this section reviews major findings of some selected studies.

National Planning Commission (1978) has conducted a first nationwide survey on employment, income distribution and consumption pattern in Nepal. The whole survey was carried out with 10 town panchayats and 128 village panchayats of 37 districts. In this survey consumption expenditure has been analyzed in different categories, geographical regions and occupational classes. The annual average percentage consumption expenditure on all goods and services have been estimated

that the average household per capita consumption on rural area is less than the urban areas i.e Rs 5461 and 931.66 in urban areas and rural areas respectively. It has found that consumption expenditure is concentrated more on food i.e. 74.08 and remaining portion is spent on non food items.

Nepal Human Development Report (1998) has made a comprehensive study in economics and social sectors. It has used various statistical and geographical methods to analyze the findings. This study has made conclusions that agriculture land is our principle productive resources that determine income level and that in turns determines consumption pattern. It found 69% of the landholders have below 2 hectors. This unequal distribution of productive assets significantly influenced income earning opportunities. About national income distribution it had made clear that the bottom 20% of household received only 3.7% of the national income while the 10% claim a share of nearly 50%.

Nembang (2002) has conducted a research entitled income and consumption pattern of Limbus in 2001 using primary data through interview method in Jhapa and Panchthar district. The number of households is 236 out of 240 total households. The study has found out that main source of income is remittance and a large proportion of income is spent on consumption of goods. They spent 66.88% on food items following 25.43% on non food, 0.59% on tobacco and 7.19% on fuel expenditure. It found most of the rural dwelling people are poor in comparison with the urban people. The people of Jhapa are richer than the people of Panchthar. Family size and the per capita income show inverse relationship i.e., larger the family size lower is the per capita income and vice-versa. The economic condition of remittance receiver is better than the condition of non-receiver and people of Jhapa are more literate than the people of Panchthar.

Rijal (2002) specified the nature of consumption pattern in one village of Dhanusa district. Out of 1110 households a sample of 110 households that is 10 percent of total households have been included to collect information using a structured questionnaire. Statistical tools including range, Lorenze curve, Gini coefficient and regression are used for data analysis. In the research area, an annual household income and consumption expenditure has been found Rs. 52725.04 and 46378.04 respectively. An average per capita income has been estimated to be Rs. 7702.2 and

consumption expenditure has been estimated as 6775.02. Out of the total expenditure, 68.56 percent is spent on food items and 31.44 percent on non-food items respectively. The value of Gini coefficient is 33.58 percent. The research found that 80 percent of households have engaged in agriculture occupation and only 24 percent people have found in non-agriculture sector. The study has also found that there is the problem of low productivity in several sectors and unequal distribution of income among households.

CBS (2003) has made a comprehensive study between urban and rural of different regions and ecological zones. The survey followed the world Bank's living standard survey (LSMS) methodology and uses a two stage stratified sampling scheme, as was done in the first survey. This found that per capita income increased as compare to first living standard survey. Other significant change in the past eight years is the composition of income sources; remittances increased from 16 to 25 percent. However, the study revealed that household has decreased but the proportional of irrigation land areas has been increased as compared to the first survey.

Rai (2003) analyzed the income and consumption pattern of Thami community in Nepal, conducting a case study of Khopachangu VDC of Dolakha District. The study found that the main occupation of Thami community is manual labour. Hence, wage was the main source of their income. Out of the total expenditure, expenditure made in beverage by this community was found very high in all the level of income while expenditure in education, nutrition, fruits and health seems to be negligible. Based on this analysis the study has concluded that, in the study area, all the income groups fulfill the basic notion of Keynesian psychological law of consumption. Besides it also found that the household size plays a significant role in the determination of the income and consumption, in the study area.

Rai (2007) explored on the consumption expenditure of household with income source, educational status, occupation and household size. He collected data from 10 different colonies. It used 72 samples out of 606 universes. In the study it is used different statistical tools for data analysis and found that the average size of the household to be 4.52 which is 4.60 for Kathmandu and 5.45 for the country as a whole (CBS, 2004). The large numbers of household persons have been involved in business, which have followed by professionals, bank employees, industries,

homemakers, and teaching. They spent an average 53.31 percent of total expenditure on food items and spent the rest (about 46.69 percent) on non-food items. On non-food items, the highest expenditure is on education followed by clothing and house operating. The total expenditure elasticity is 1.067 for all non-food items and 0.455 for all food items respectively. The regression coefficient of total expenditure (b1) is 0.439 on food grains, pulses (0.361), vegetables (0.379), fruits (0.567), beverages (0.336) meat (0.404), milk (0.402), sweats (0.347), bread (0.550) and outside meal (0.403) respectively.

Banu (2008) analyze economics status of Tibetan refugees with the main objective to examine the economic status of Tibetan refugees and various sources of their endowment of Jawalakhel Tibetan refugee camp taking 50 household samples (25%) from the camp. For the purpose of analyzing the data, Lorenz curve, Gini coefficient, ratio, percentage, tables and so on are used. It was found that the total consumption expenditure made on food items is 59.49 percent and 43.51 percent is made on non food items. Among food items all the income groups have shown higher share of consumption expenditure. Expenditure on housing which includes electricity and water bill, gas, kerosene and the rent bill is found to be the highest in all the income groups. Expenditure on education is found to be second position in the large income i.e. 10.47 percent. The research showed that the high income group spends high income on education and health comparatively to low and medium income group.

Dahal, (2010) studied the socio economic status of Dalit of Made Rambeni VDC of Sankhuwasava. The study is done using descriptive and analytical method. An objective of this study is to analyze socio economic status of Dalit in terms of education and health. It was found that 38.82 percent Dalit had equality in consumption expenditure and income. 49.25 percent did more consumption expenditure than income. 11.89 percent Dalit had saved a little from their expenditure. High share of their consumption expenditure was on meat. So, most of the Dalit had difficulty to meet their daily needs.

Phayal (2010) attempted the study on consumption behavior in the Nepalese context using secondary data and found that consumption is not merely the function of current disposable income but it is also the function of past income, permanent income, interest rate, population, economic growth, credit availability. Further, the point

estimation of APC and MPC of the economy is not worthwhile and the inferences drawn for policy purposes may result failure. The results of RIH and PIH are more appropriate than the earlier explanation of absolute income hypothesis of consumption. People form their expectation about future income and observe their past standard of living, based on which they plan to consume in current period. The time series analysis of consumption function of Nepalese economy based on different sophisticated version of consumption functions show that MPC of the economy is low. These results signify for the lower performance of the economy as the aggregate demand generated from the private sector is not satisfactory. The point estimation and the time-series analysis of consumption phenomenon of Nepalese economy are found quite puzzling. However, it is not a denying fact that the MPC of the economy is low as it is found from the recent year's data and the long-run estimation of the consumption functions.

Rai (2010) has conducted a research using primary data through interview method/ questionnaire method. It found that there are various sources of income. Mostly people receive income from remittance and pension. It showed most of them are foreign employee and retired from Gurkha regiment. A few are involved in other occupations like business, public services, banking, and so on. Out of 42 households, 21 households' income source is pension, 17 households' income source is remittance, and 2 households' income is public service. The conclusions are drawn using the simple statistical tools and where necessary standard deviation, R-square, adjusted R-square, linear regression analysis have also been used for data analysis using ordinary least square (OLS) method. The consumption on non-food item is high as compared to food item. It is due to high expenditure on education, health care and demonstration effect. The value of MPC on food expenditure is higher than non-food commodities. MPC on all non-food items is inelastic. The MPC on food commodities is 0.17 and non food commodities are 0.06 respectively. The total APC is 0.68 and MPS is 0.32. It shows MPS is less than gross national saving rate.

Ghimire (2010) conducted a study in consumption and Expenditure behavior of household in Damak Municipality. He collected primary data from 164 households and to make comparison secondary data has been used. In the study only 10 foods and 5 non-foods items is analyzed. It analyzed income, consumption expenditure,

household's size, education and occupation. For the data analysis, variance, coefficient of variance, range, pie chart, bar diagram, Gini coefficient, regression, and other test are used. In the research, it is found that 37.9 percent households have engaged in service sector followed by business 21.95 percent, agriculture sector 16.46, foreign employments 12.19, labor 9.15, and other 3.06 percent respectively. The total expenditure elasticity has been estimated 1.067 for all non-foods, which shows that an increment in total expenditure, that seems to be more increase proportionately. Similarly, the elasticity of all food items has been found 0.455 that indicates an increment in total expenditure but on food, it is proportionately less. Among food items, the highest total expenditure elasticity is in pulse followed by fruits, wine, paddy and oil respectively. Among all non-food items, the total expenditure elasticity is maximum for housing operation; the highest expenditure is in education followed by cloths and housing. In the study area, 38.58 percent of total income has been received from business, followed by 27.65, 25.93, and 6.06, percent from services, foreign employment, and agriculture respectively. The study has found that the total expenditure on food items is higher than the share of non-food items.

Magar (2011) in his study has found the highest per capita income which is 28609.69 has been earned by household having family size 1-4 persons, 28013.77 by 5-8 person and 25960.93 earned by above 9 persons. Gini coefficient among the sample households is 0.35, Range is 498770 and variance is 14264 and coefficient of variation is 65.99 percent. This shows the inequality in the distribution of income. Total consumption expenditure made on the food item is 40.88 percent and a non food items is 59.12 percent. His study shows that MPC is declining along with increasing in higher income group. Maximum MPC for lower income group is 75 percent where as 59 percent for large income group. Most of the sample households are engaged in agriculture and foreign employment.

Detail study and research work have not been done yet inclusively about the Limbu community and their income and consumption pattern in Nepal. This research work has focused on the different aspects of this community analyzing income and consumption pattern as well as socio-economic status.

CHAPTER – III
RESEARCH METHODOLOGY

This chapter provides the process through which this research was conducted. It also presents research design, nature and source of data, selection of the study area, sample design and size, data collection and technique, data analysis and concept and variables.

3.1   Research Design

This study is designed to meet the objectives of understanding income and consumption pattern of the Limbu community residing in Savapokhari VDC of Sankhuwasabha district, the eastern part of Nepal. This study is based on descriptive as well as analytical method. The research is being prepared with the view of ascertaining new knowledge and ideas by doing plain description of any events or subject matter is called descriptive type of research design.

3.2   Nature and Source of Data

For the purpose of the study, both primary and secondary data have been used. The primary data have been collected through field visit using a pre-structured questionnaire. The secondary data have been collected from different sources including CBS. DDC office, VDC office, various published and unpublished documents, thesis, journals, books and relevant materials related to the subject matter.

3.3   Selection of the Study Area

The study was undertaken on the Limbu community of Sankhuwasava district, Nepal. This study area is selected on the basis of the researcher's interest and familiarity to the area. Moreover, the issue of indigenous people is the most discussed topic in the present political scenario of Nepal. Likewise, the area where the study was conducted is a virgin area for the research.

3.4   Sample Design and Size

There are 624 households' with 3,136 populations in the Savapokhari VDC. Among them, there are 404 Limbu households with 1,854 populations comprising 584 Rais',

491 Tamangs' and 207 people from other caste and ethnicity. Limbu are available in all wards .Out of 404 households, 20% have been selected for the study. The selection of the study households has been done by using simple random sampling procedure. The sampling procedure adopted during the study has been given below:

Table 3.4

Sample Design and Size

Ward no:	Sample HHs of Savapokhari VDC	Percent
1	16	4
2	12	3
3	6	1.5
4	14	3.5
5	10	2.5
6	9	2.25
7	6	1.5
8	7	1.75
9	0	0
Total	**80**	**20**

Source: Field Survey 2013

Universe: There are 624 households in the study area, out of which 404 Limbu households have been selected purposively.

Study Unit: Among 404 Limbu households, 20% households were selected for the study on the basis of simple random sampling without replacement. All family members were selected from each Limbu households. And one member of the family as a household was interviewed respectively.

3.5 Data Collection and Techniques/Tools

Primary and secondary data have been collected using various tools and techniques. The primary data collection techniques are described below:

3.5.1 Observation Method

Observation is a very useful tool for collecting information such as observes the location of the study area, relationship between people and environment. During the survey period the researcher has collected information on the basis of field observation of the study area regarding socio-economic status of Limbu in the VDC.

3.5.2 Interview Method

In this method, some informal interview has been taken to the chairman/secretary of the Village Development Committee, indigenous leaders, social workers, teachers, educated persons and other ordinary Limbu people.

3.5.3 Questionnaire Method

The major information of this study area are collected from the head of the household or well informed about family member with the help of the well structured questionnaires. The sample size of the study area was selected 80 households to collect the primary data. Structure questionnaire was prepared to generate the realistic and accurate data. The respondents were asked the questions and required answers were obtained to fill up the questionnaire. The researcher collected the information asking the question from the schedule from their respondents who were not able to fill up the questionnaires.

3.6 Data presentation and Analysis

All collected data are presented in various forms in order to convey relevant information. This is a descriptive analysis. So, the data were analyzed descriptively and tables are also presented to make it more meaningful. From tables, socio-economic indicators like education status, population, occupation, income and expenditure status are presented. Statistical tools like those that percentage and ratio have been used. Other data analysis tool were also used which are mentioned in the following sub-Sections.

3.6.1 Gini Concentration Ratio

Gini-coefficient is a measure of the inequality of income distribution. The possible lowest value of Gini-concentration ratio is zero. The zero Gini concentration ratios signify perfect equality in the distribution of the income and the highest values of the ratio is 1 and this signifies inequality in the distribution of income.

The formula for the computation of Gini Concentration is,

- For group data
- Gini $= \frac{1}{100^2} [\sum X_i Y_{i+1} - \sum X_{i+1} Y_i]$

Where,

X_i = cumulative of variable on X.

Y_i = cumulative of variable on Y.

3.6.2 Lorenz Curve

The Lorenz curve is a graphical method for measuring the dispersion in distribution. This method of measuring inequality comes into existence when Lorenz first of all applied to measure inequality of income and wealth in U.S.A. Although some time this curve is used to measure the distribution of profit, wages, production etc. It is cumulative percentage curve in which the percentage of items is combined with the percentage of other things as income, wealth, profit etc. The Lorenz curve shows the difference between equal distribution and actual distribution.

3.6.3 Variance

The variance is defined as the average of the square deviation from the mean. This exactly equal to the square of standard deviation thus it is useful tools to estimate variation. For calculating variance, the following formula is used.

$$V = \sum \frac{(Y - \bar{y})^2}{n}$$

Where,

Y = percent of income,

$\bar{y}$ = average of income percent,

n = number of percent income

3.6.4   Coefficient of variation

Coefficient of variation shows the ratio of standard deviation and mean.

We have the formula to calculate coefficient of variation,

$$C.V = \sqrt{\frac{v \times 100}{\bar{y}}}$$

V= variance,

$\bar{y}$ = mean

3.6.5   Range

It measures the degree of dispersion in the sample observation. It is defined as the ratio of the difference between the maximum and minimum level of income.

Symbolically, it is defined as

Range = Max Y - Min Y

3.7   Concept and Variables

The researcher has used some of the concepts/variables in the study to clarify the readers.

Household: The household is defined as a group of persons dwelling in a residence and   sharing a common kitchen under the same roof.

Household Head: Household head is the persons who manage all the rules and regulations in family.

Literacy: Literacy represent to the state where a person is able to read and write and calculation of literacy rate is population aged 5 and above.

Total Household Income: It is defined as the income earned by the entire household comprises from farm income wage income, non farm income (i.e. enterprise income), agricultural income and rental income. Subtracting from the expenditure made from the total income by the respective items derives the net total income.

Total Household expenditure: It consists of food as well as non food expenditures. Food items consumption contains food grains, pulses, milk, fish, meat, vegetables

including alcoholic drink etc. non –food consumption include tobacco, educational expenditure, fuel, housing and so on.

Occupation: The main occupation performed by the Limbu of Savapokhari VDC comprises of agriculture, daily wage labor and small business and so on.

CHAPTER- IV
DEMOGRAPHIC PROFILE OF STUDY AREA

This chapter provides about the geographical location, climate, population, education, caste and ethnicity, language, religion, settlement pattern and house structure, development infrastructure of the study area.

4.1 Geographical location

Savapokhari is one of the VDC of Sankhuwasava districts, which lies in the east north part of the Sankhuwasava district. Sankhuwasava is a mountainous district situated in the northern part of Kashi zone. The spatial location of this district is latitude 27°10' to 27°55' north and longitude 86°58' to 87°40' east. There are consisting 33 VDCs and 1 municipality i.e. Khandbari, the head quarter of the district. Taplejung and Terhathaum district in the east, Bhojpur and Solukhumbu district in the west, the great China in the north and Dhankuta district in the south surround it. The famous natural scenarios arun valleys, Arun River, mt. Makalu, Barun national conservation area, Manakamana, Savapokhari etc are also located here.

Savapokhari VDC is surrounded by Taplejung district in the east, syabun, dhupoo and Barabise VDCs in the west, Pawakhola VDC in the northern area and Jaljala VDC in the south. Savapokhari Lake and Savakhola are the main scenarios of this VDC. The total area of the VDC is 21.02 sq. km. Transportation services are available in the Savapokhari VDC but it is not available in all the wards.

4.2 The climate

The climate condition of the Savapokhari VDC is not static to one type, because of the better, due to the geographical nature of the country. The climate varies according to the season. It becomes too cold in the winter and favorable in summer. Naturally the northern part is colder than southern part. Generally, Savapokhari has subtropical monsoon climate and warm temperature climate.

4.3 Populations

Savapokhari is one among the most populated VDCs in Sankhuwasava district. Limbu, Rai, Tamang, Gurung ethnic groups of people are residing in this VDC.

According to the profile of Savapokhari VDC the ward wise distribution of the total population is as follows:

Table 4.1

Distribution of VDC Population and House Hold in the wards wise.

wards	No. of Household	Male	Female	Total
1	49	113	127	220
2	91	197	235	432
3	51	99	147	246
4	168	406	435	841
5	36	83	97	180
6	50	119	138	257
7	49	134	126	260
8	52	145	155	300
9	78	197	183	380
Total	**624**	**1493**	**1643**	**3136**

Source: CBS, population censes, 2011

Table 4.1 shows that there are 624 household and population is 3136. Among them 1643 are female's and1493 are male.

4.4   Education

Savapokhari VDC is a well-known VDC for education. There are eight primary schools, one lower secondary school, one secondary school and one higher secondary school running from government sector. These schools and higher secondary schools largely have been contributing to produce educated personalities in Savapokhari VDC. According to population census 2011, 46.94 percent are literate and 53.04 percent are illiterate. However, there is variation in male and female literacy level. It is presented in the table 4.2. 63.72 present of total female population is illiterate while male illiterate rate is 41.53 present.

Table 4.2

Population (6 years Age and above) by Literacy and Set

Sex	Population	Illiterate	%	Literate	%
Male	1252	520	41.53	732	58.47
female	1348	859	63.72	489	36.28
Total	2600	1379	53.04	1221	46.96

Source: CBS, population census, 2011

4.5   Caste and Ethnicity

Savapokhari has adverse population of ethnic background. Rai, Limbu, Tamang are the main inhabitants of this VDC. Table 4.3 illustrates the distribution of population by caste and ethnicity of Savapokhari.

Table 4.3

Distribution of Population by Caste and Ethnicity of Savapokhari

S.N	Caste and Ethnicity	Population	Percent
1	Limbu	1854	59.12
2	Rai	584	18.62
3	Tamang	491	15.65
	Others	207	6.61
Total		**1916**	**100**

Source; CBS population censes, 2011

In Savapokhari VDC, Limbu is the largest inhabitants comprising 59.12 percent of total population. Similarly, Rai occupying 18.62 percent of the populations are the second inhabitants in terms of majority and a small group of Tamang occupying 15.65 percent of the population have been living here since the very beginning. In addition, other castes of the people from the different background occupying only 6.61 percent are found to be living in this VDC.

4.6   Language

People of Limbu caste use Limbu language in Savapokhari VDC. Rai, Tamang and others people use Nepali language as mother tongue of Limbu. All caste use Nepali language as common language and use to communicate with different caste.

4.7   Religion

Kiratism is the main religion followed by Limbu in majority. Despite Kiratism, some of the inhabitants follow Hinduism while some follow Christianity. They are the devotee of the god and religion and follow different feast and festivals according to their interest. Chosolongma is the main festival celebrated by them. Festival like Dashain, Tihar, Shrawne Sankranti are also celebrated by few.

4.8   Settlement Pattern and House Structure

The major groups present in the study area are Limbu, Rai, Tamang. Most of the houses are made by stone and wood. Most of the houses are found having one or two rooms. In the house, they use one room as kitchen and sitting room; other room is used to keep their religious materials. Total houses are cleaned mostly once a year, especially in Dashain.

4.9   Development Infrastructure in Savapokhari VDC

Savapokhari VDC is also one of the back warded VDCs in the development sector among 33 VDCs in Sankhuwasava district. It has been back warded every sector of development infrastructures in comparing to other VDC of the district. Towards the education sector there are 8 government schools, among them one is higher secondary. Health facility is also available to the people; one Health Post is in Savapokhari VDC ward NO. 2. For major condition of the patient, the people of this VDC are referred to Sankhuwasava District Hospital. But the VDC is rich in local resources. The major productions are millet, wheat, maize, potato and so on. About 50 percent of the total land is used for agriculture production and about 30 percent of total agricultural land is receiving irrigation facility. This facility is boosting up economy sector of this area. In addition to this; river, Kuwa, Mul Dhara and stream are main sources of water for drinking, irrigation and domestic use.

Telephone lines have been extended to this VDC, telecommunication service is available but there is not e-mail internet service. Although, electricity facility has not available yet, all over the houses of all nine wards of the VDC has solar system. A Post Office, a Police Office, one Food Institution Office are in Savapokhari VDC.

CHAPTER – V
PRESENTATION AND ANLYSIS OF DATA

5.1   Distribution of Sample Population by Age and Sex

The sample population distribution by age and sex is presented in the following Table 5.1. The demographic feature shows that the male and female population has equal proportion.

Table 5.1

Distribution of Age and Sex of the Sample Population

Age group	No of Population			Total percent	Sex ratio
	Male	Female	Total		
Below 14	64	68	132	33	0.94
15-39	79	77	156	39	1.03
40-59	46	48	94	23.5	0.96
60 above	10	8	18	4.5	1.25
Total	**199**	**201**	**400**	**100**	**4.18**

Source: Field Survey 2013

Table 5.1 shows that out of 400 populations 199 are male and 201 are female. Among broader age groups on a descending order, it is found that 39 percent of population falls under 15-39 years of age, 33 percent at bellow 14 years of age, 23.5 percent at 40-59 years of age and 4.5 percent at above 60 years of age. Here, main contribution is made by working age groups of 15-39 years. Sex ratio is estimated to be 4.18, which imply female population to be higher than male.

5.2   Education Status of study area

In the study Area majority of the households are found literate. Table 5.2 depicts that the literacy scenario of the study Area.

Table 5.2

Education Status of the study Area

Education	Male	Female	Total	Percent
Illiterate	60	68	128	32
Literate	11	35	46	11.5
Under SLC	55	72	127	31.75
SLC	Å	15	42	10.5
Above SLC	46	11	57	14.25
Total	**199**	**201**	**400**	**100**

Source: Field Study 2013

Table 5.2 depicts that only 32 percent of the sample population is illiterate and the rest of 68 percent are literate. Educated people of the people of the population having under SLC is 31.75 percent of the sample population, out of the sample population SLC holders is 10.5 percent, Above SLC is 14.25 percent and literate only is 11.5 percent of the total sample population.

5.3 Family Size Structure of Households

To categorize the sample households by number of family member the range are taken as 1-2, 3-4, 5-6, 7-8, 9 and above.

Table 5.3

Family Size Structure of Households

Family	No of Family	Total population	Household %
1-2	8	16	10
3-4	24	88	30
5-6	28	154	35
7-8	16	106	20
9 above	4	36	5
Total	**80**	**400**	**100**

Source: Field Survey 2013

Table 5.3 depicts that the number of 80 sampled households have 400 persons in total. From the sample size of 80 households about 10 percent of households are having

family size 1-2 persons. About 30 percent of households are having 3-4 persons. Similarly, 35 percent and 20 percent of households are having family size of 5-6 and 7-8 persons respectively. Only 5 percent of households are having family size above 9 persons.

5.4   Occupation

The main occupation of household of Savapokhari is Agriculture. Among the selected 80 households, the 28 sampling household were reported in Agriculture. It was found that households also have different sources of income rather than one. Different family members were found to be involved in different occupation. So, it was difficult to level the main occupation in many cases. Based on the highest income yielding occupation, the main occupation in Savapokhari VDC is Agriculture. The occupation in Savapokhari VDC is shown in below table 5.4.

Table 5.4

Occupation of Household

Occupation	No of HHs	Percent
Agriculture	32	40
Service	15	18.75
Business	10	12.5
Foreign job	18	22.5
Others	5	6.25
Total	**80**	**100**

Source: Field Survey 2013

Table 5.4 depicts that 40 percent of the households earn their income mainly from Agriculture. Besides, other occupation such as foreign employment, service and business also play important role in the generation of income and employment in the Savapokhari VDC. Other non specified occupations are also the important field where a significant number of populations get employment and income.

5.5   Land Distribution in the Study Area

The nature of income is highly affected by the size of land holding. In the present situation land is the most important assets and a source of income and employment of

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every household. It is also an indicator of the state of every household. In general there is positive relationship between size of the land holding and income level and negative relationship between size of the land holding and poverty. Table 5.5 shows the distribution of land among total sample households.

Table 5.5

Land Distribution in the Study Area

Size of Distribution of Land (Ropani)	Numbers of Households	Percent
Landless	2	2.5
Having below 5	12	15
Having 6 to 9	45	56.25
Having10 to14	13	16.25
Having above 15	8	10
Total	**80**	**100**

Source: Field Survey 2013

Table 5.5 shows that among the 80 respondent households 2.5 percent households are landless, 97.5 percent households have ownership of land. Out of 80 households 16.25 percent household have less than 14 ropani, 12 percent households have been less than 5 ropani they have only Ghar, Gharbari and Bari, 56.25 percent households have 6 to 9 ropani and 10 percent households have the land ownership above 15 ropani.

5.6   Housing

In the study area majority of houses are made by stone, wood and roof are made from jastako, chhanako and falyakko. Table 5.6 depicts that the housing condition of the study area.

Table 5.6

Pattern of Housing Condition

Type houses	No of houses	Percentage	Type of roof	No of household	Percentage
2 Storey	24	30	Jastako	28	35
1 Storey	48	60	Chhanako	36	45
GroundFloor	8	10	Falyakko	16	20
Total	**80**	**100**	**Total**	**80**	**100**

Source: Field Survey 2013

Table 5.6 shows that out of 80 household 36 houses were made of by stone, wood and use chhanako in roof. 28 houses made of by jastako and other 16 houses were made of stone wood and falyak's roof. In the Limbu community, 60 percent houses are one storey and remaining 30 and 10 percent houses are two storeys and ground floor level respectively.

5.7   Use of Electricity (solar) by the Households

Table 5.7

Use of Electricity (solar) by the Households

Electricity (solar)	No of HHs	Percentage
User (solar)	56	70
Non user (solar)	24	30
Total	**80**	**100**

Source: Field Survey 2013

Table 5.7 shows that the most of Limbu household user electricity (solar) and some household non-user. 70 percent of the total households are using electricity (solar) facility and 30 percent of the households are not found electricity (solar) in the study area.

5.8   Drinking Water and Toilet Facility

In the study area, 100 percent of households use drinking water from muldhara that means nobody gets drinking water from government sector. In the national level, 80 percent people get drinking water service. Most of the Limbu community has made general bored hole toilet and rest of the other used open toilet in the study area.

5.9   Composition and Level of Income

5.9.1   Level and Structure of Source of Income

Source of income determines the level of poverty. If the income source of level is high, the incidence of poverty will be lower, that is why the nature of poverty or poverty problem is influenced or determined by the source of income or occupational structure. Most of the people in the rural area are engaged in the agriculture sectors which provide low productive income value which is at subsistence level due to lack of education, technical farming, irrigation and operational land holdings. Limbu of any area are still engaged in their traditional work. But their traditional works are in danger situation. Most of Limbu are engaged in agriculture, daily works, and traditional work and now day's foreign employees especially to male.

In the context of Nepal, a single occupation cannot support individual to maintain the subsistence norm, so the people are forced to accept the many occupations at the subsistence level due to the lack of specialization. Thus it is clear that multi-occupation can't support to increase the level of income without specialization in the occupation. Limbu are also adopting multi occupation for their livelihood.

In the case of present study area, most of the households have two or three occupations but their earning level is low. Almost all of the households of the study area do agriculture as the main occupation from the long past. But it is not sustaining.

5.9.2   Occupational Distribution of Income

Field observation and interviews indicates that, in the Savapokhari VDC of Sankhuwasava District, Limbu in general is found to be engaged in multiple occupations. It is evident that the level of income of a household is not only determined by the number of earners but also by their occupations. In this VDC, the

households are engaged in various sectors like agriculture, labor service, traditional work business and other occupations. Main occupation, considered as the highest income yielding occupation, found to be Agriculture. Composition of occupation is mentioned above. In the view of both major and minor occupation, nearly 25.90 percent of the total annual income is generated by agriculture and 20.85 percent, 17.02 percent, 14.72 percent, 8.93 percent, 2.45 percent and 10.14 percent of the total annual income generated by foreign employment, business, service, daily wages works and others respectively.

Table 5.9.2

Composition of Income from Major Occupation Rs. (per year)

Sources of Income	Total annual income	% of annual income	Number of households
Agriculture	50,00,500	30.32	25
Business	32,32,700	19.59	15
Service	30,00,300	18.19	15
Foreign job	40,60,200	24.61	16
Daily Wages Works	15,75,450	3.47	5
Others	6,25,000	3.27	4
Total	**1,87,57,850**	**100**	**80**

Source: Field Survey, 2013

Table 5.9.2 shows that 31.25 percent households earned their income mainly from agriculture. 31.25 percent of the households were engaged in agriculture and earned 30.32 percent of the total income. Only 18.5 percent household are engaged in service and earned 18.19 percent of total income. Similarly, 18.75 percent of households are engaged in business and earned 119.59 percent of total income. 20 percent of household are engaged in foreign employment and earned 24.61 percent of total annual income. 6.25 percent of household are engaged in daily wages and earned 3.47 percent of total annual income. 5 percent household are engaged in other sector and earned 3.75 percent of total annual income. This indicates that most of the Limbu have engaged in agriculture sector. Remaining sectors have minimum contribution for earning money except daily wage work.

5.9.3 Household Size and Income Distribution

As indicated earlier, the total household size in the study area is 80. The effect of household size on the composition of income and its relation with the level of per capita income is shown in below.

Table 5.9.3

Household Size and Income Level

No HHs size	Number of household	Annual household income (Rs.)		Total	Total Population	Annual per capita income
		Agriculture	Nonagricultural			
1-3	8	2,61,800 (25.44)	7,67,400 (74.56)	10,29,200	16	64,325
3-4	25	14,46,110 (30.05)	41,10,300 (73.08)	55,56,410	88	63,141.02
5-6	28	17,15,100 (23.09)	57,12,250 (76.91)	74,27,350	154	48,229.54
7-8	15	10,37,890 (21.57)	22,42,000 (67.53)	32,79,890	106	30,942.36
9 above	4	3,50,500 (23.92)	11,14,500 (76.07)	14,65,000	36	40,694.44
Total	**80**	**4811400**	**13946450**	**18757850**	**400**	**247332.36**

Source: Field Survey, 2013

Data presented in table 5.9.3 indicate a positive relationship between total household size and level of total household income. The total household income is lowest (Rs.43, 050) for the smaller household size of the household. According to sample survey, the household size having more than 80 percent is earned from non-agriculture sector. Only 20 percent income is from agriculture. Share of agriculture as a source of income is less in all household size. It is because Limbu have no adequate land for farming and lack of modernization in agriculture sector. If held Limbu have low type of land in terms of not having irrigation facilities, pakha bari type and so on. In above data share of non-agriculture as a source of income is high. Mostly remittance, business and service contribute more for non-agriculture source of income

for Limbu or poor people of rural areas. Per capita income of Limbu is very low and which are very low as compared to national level per capita income.

5.9.4 Size Distribution of Household Income

The size distribution of household income can be explained by dividing household in different groups with fixed income range 70,000. There are 10-income group shown in the table 5.9.4.

Table 5.9.4

Size Distribution of Average Household Income (In Rs.'000' per year)

Income group	Household			Total Income	Income	
	No. of Household	Percent	Cumulative		Percent	Cumulative
0-70	8	10	10	604500	3.23	3.23
70-140	16	20	30	3212400	17.13	20.36
140-210	16	20	50	1028240	5.48	25.84
210-280	12	15	65	2427510	12.94	38.78
280-350	8	10	75	1927900	10.27	49.05
350-420	4	5	80	3490810	18.62	67.66
420-490	4	5	85	2052890	10.94	78.6
490-560	4	5	90	800600	4.27	82.87
560-630	4	5	95	800950	4.26	87.14
630 to above	4	5	100	2412050	12.86	100
Total	**80**	**100**		**18757850**	**100**	

Source: - Field Survey, 2013

Table 5.9.4 illustrates that 10 percent of households receives 3.23 percent of income. The largest percent of income lie in the income received group 350-420 thousand and largest households lies in the income received group 70-140 and 140-210. The average income of the sample household is 234473.125. There is some extent income inequality. The Gini coefficient of the sample household is 0.28. Hence, we can conclude that there is some extent income inequality in the study area. The table 5.9.4

is used to measure different measures 0f income inequality in this Savapokhari VDC such as Gini coefficient, variance and coefficient of variation.

5.9.5 Measurement of Income Inequality

Unequal distribution of income is serious problems in both developed and developing countries. There is no country in the world where inequality of income does not exist. The word income inequality is very familiar and interesting in economics literature. Economists and statisticians have propounded different types of methods to shows the concentration of income and wealth. Table 5.9.5 shows the different result of income inequality measures.

Table 5.9.5

Different Result of Income Inequality Measure

Inequality measures	Results
• Gini coefficient	0.28
• Range	747900
• Variance	27.49
• Coefficient of variation	16.58

Source: - Researcher's Calculation

Table 5.9.5 depicts that there is some extent of inequality in the distribution of income which is shown by Gini coefficient 0.28, range is 747900 which depicts there is large gap between lowest income group and highest income households, coefficient of variation is 16.58 %, variance is 27.49 all this indicators show inequality in income distribution.

5.9.6 Lorenz curve

Lorenz curve is one of the important methods of measuring inequality of income. First, this method was used by Max O. Lorenz to measure inequality. After him, it is known as Lorenz curve.

On the x-axis percent of household is measured while in the y-axis percent of income is mentioned.

Figure 1

Lorenz Curve Showing Inequality
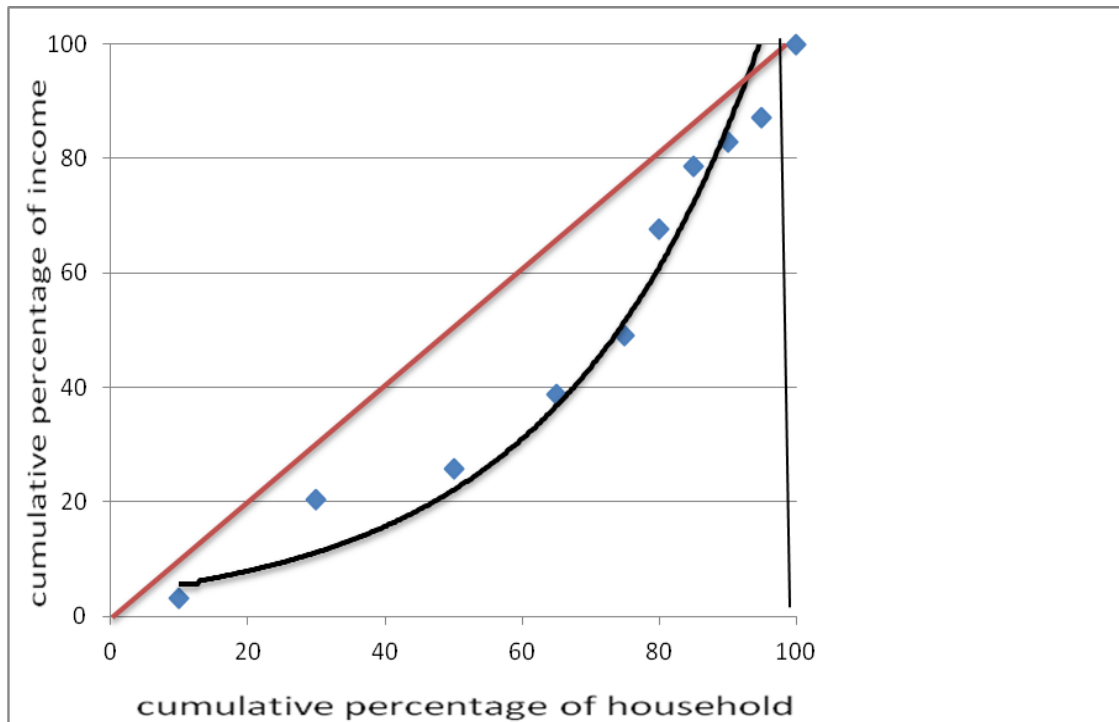
Source: - Based on Table 5.9.4

In the case of equal income of all household the Lorenz curve overlaps the line of perfect equality. The distance from line of perfect equality indicates the value of inequality.

5.10 Pattern of Consumption Expenditure by Household Categories

The consumption pattern in a society is generally determined by the income distribution, social tradition, income level, fashion, availability of goods, education status and similar other factors. It is difficult to list them all because of these facets. Similarly, various forms of traditions and modern animation are seen to be intermingled together and this situation is further aggravated by ever changing dynamism in the social framework. However, an attempt has been made analyze the expenditure pattern of the households in this section of the study.

5.10.1 Consumption Expenditure by Household Size

The consumption and level of consumption expenditure by household size of Limbu of Savapokhari VDC is presented in table 5.10.1.

Table 5.10.1

Level of Consumption Expenditure by Household Size

Household size	Number of household	Total population	Annual Household expenditure	Annual per capita expenditure	Expenditure in percent
1-2	8	16	7,38,095	46130.94	6.57
3-4	25	88	29,20,000	33181.82	26.04
5-6	28	154	4089743	26556.77	36.47
7-8	15	106	2566521	24212.46	22.88
9 above	4	36	901200	25033.33	8.04
Total	**80**	**400**	**11225559**	**155115.32**	**100**

Source: - Field Survey, 2013

Note: Expenditure and consumption are taken for the same meaning here

As shown in table 5.10.1 the annual per capita consumption of the respondents was found to be Rs 155115.32. The maximum expenditure (36.47) is of the household size 5-6 and the minimum (6.57) by the household size having 1-2, in terms of per capita expenditure per annual; the figure is highest (Rs 46,130.94) for 1-2 household size and lowest (Rs 2,421.46) for 7-8 household size. All the household has an expenditure is less than the average level. This suggests that there clear relationship between the per capita expenditure level and household size.

5.10.2 Expenditure on Cost of Agriculture, Cost of Livestock, Food and Non Food Items

In this study, expenditure is classified into four different categories, which are expenditure on agriculture, livestock, food items and non food items. The total expenditure of the entire sample stood at Rs 1,12,15,559 out of which agriculture expenditure was Rs 16,39,600, expenditure on livestock at Rs 302920, those on food items is Rs 2637225 and non food items expenditure Rs 6635814 (59.17 percent). The

table 5.10.2 makes clear that Limbu who are also vulnerable group have done more expenditure on food. In the categorization of basic needs, non food items to top list.

The present study intends to analyze the pattern of consumption on food, non food items and others. Table 5.10.2 shows household's expenditure on various items.

Table 5.10.2

Expenditure on Various Items

S.N	Expenditure	Total expenditure in Rs	Percent
1.	Agriculture	1639600	14.62
2.	Livestock	302920	2.70
3.	Food items	2637225	23.51
4.	Non food items	6635814	59.17
	Total	**11215559**	**100**

Source: - Field Study, 2013

5.10.3 Distribution of Household Annual Consumption

Table 5.10.3 shows the consumption expenditure and percentage of households according to ascending order.

Table 5.10.3

Distribution of Households Annuals Consumption (in Rs '000' per year)

| Expenditure group | Household | | | Total expenditure | Expenditure | |
	No of Household	Percent	Cumulative		Percent	Cumulative
Less than 80	5	6.25	6.25	357470	3.19	3.19
80-95	16	20	26.25	1403630	12.52	15.71
95-110	7	8.75	35	722060	6.44	22.15
110-125	15	18.75	53.75	1749993	15.60	37.75
125-140	4	5	58.75	527500	4.70	42.45
140-155	6	7.5	66.25	876135	7.81	50.26
155-170	8	10	76.25	1317760	11.75	62.01
170-185	5	6.25	82.5	887865	7.92	69.93
185-200	8	10	92.5	1519115	13.54	83.47
200 to above	6	7.5	100	1864031	16.53	100
Total	**80**	**100**		**11225559**	**100**	

Source: - Field Survey, 2013

Table 5.10.3 shows that the share of total expenditure to the first 6.25 percent of households with an average yearly expenditure is Rs 357470 and in context, the highest percent is 16.53 percent of average total yearly expenditure is 1854031 of total household surveyed. Table 5.10.3 shows that lower 50 percent of household has 35.59 percent of the total average expenditure, while the highest 50 percent 0f household expenditure 64.41 percent of total expenditure. There is also inequality of household consumption expenditure among Limbu households.

5.10.4 Income and Consumption Expenditure Gap

The income and consumption expenditure pattern of study area is can be shown in following table 5.10.4.

Table 5.10.4

Income and Consumption Expenditure Pattern Sampled Household (in Rs)

Source of income	Total Annual Average Income	Percent	Expenditure on various sector	Total Average Expenditure in Rs	Percent	Total Income Expenditure Gap
Agriculture	30,00,500	30.32	Agriculture cost	16,39,600	14.61	
Business	32,32,700	19.59	Livestock	3,02,920	2.70	
Service	30,00,300	18.19	Food items	26,37,225	23.51	
Foreign employment	40,60,200	24.61	Non food items	66,35,814	59.17	
Daily wages	15,75,450	3.47				
Other	6,25,000	3.72				
Total	180,60,950	100		1,12,15,559	100	68,45,391

Source: - Field Survey, 2013

It is found that total average consumption expenditure is 140194.49 as shown in table 5.10.4. Most of the consumption expenditure has been done to non-food items i.e. 59.17 percent. Likewise, total average income is 18060950 where as agriculture sector is the main source of income i.e. 30.32 percent is also shown in table 5.10.4. The gap between average income and average consumption expenditure is 6845391. It means

that sampled households of Limbu are more earn compare to consumption expenditure by Rs 6845391. Likewise, per capita income is Rs 247332.36 and per capita expenditure is Rs 155115.32. Per capita income is more than expenditure by Rs 92217.04. Therefore, it has found that there is no problem in income and consumption expenditure pattern in the study area.

CHAPTER – SIX
SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary and conclusion are drawn from the previous chapters. This chapter presents major findings from the research with some recommendations for policy implications.

6.1   Summary

The present study entailed "Income and Consumption Pattern of Limbu Community: A case study of Savapokhari VDC of Sankhuwasava district" is based on 80 households of Limbu out of 404 households. The specific objectives of the study are: to identify source and pattern of the income of Limbu people, to find out consumption expenditure of Limbu in the study area and to identify the gap between income and consumption expenditure pattern.

To carry out the study effectively, questionnaire related to their source of income, expenditure, educational status and other social status were used. By using simple random sampling method, observation, interview methods were also used. For secondary data, it is used data of CBS, VDC, DDC, NDC and other national and international publications. The study is conducted using both descriptive and analytical method. To analysis the data statistical tools like Gini coefficient, range, variance and coefficient of variance etc have been employed.

On the part of consumption, the share of expenditure on non food items is found to be higher than that of the food items. The household expenditure on non food items is 59.17 percent the of total consumption. There is positive gap between income and consumption expenditure. Moreover, on the basis of total income and consumption expenditure of sampled households, household earns more income than their expenditure.

The main summary of the major findings of the study are as follows.

- In the field survey, total sample population is 400 consisting 199, 201 male and female respectively.

- In the study area: 33% population remains below 14 years of age. 39%, 23.5%, 4.5% lies in 15-39, 40-59 and above 60 of age respectively.

- In the study area, 32 percent of sample populations are illiterate where the number of male 60 and 68 are female. About 68 percent of sample populations are found to be literate where the number of male is 139 and female is 133.

- Most of the literate people study below SLC 31.75 followed by SLC 10.5, above SLC 14.25 and literate only is 11.5 percent.

- The average family size of the household is five.

- Out of 80 sample households, 35% of the sample population has 5-6 family members, followed by 30% having 3-4 members, 20% having 7-8 members, 10% having 1-2 members and 5% having above 9 members.

- Out of 80 sample households, 40% are engaged in agriculture, in the same way 18.75% in service, 12.5% in business, 22.5% in foreign employment and 6.25% in other sectors.

- In the study area, 30.32% of total income is received from agriculture, followed by 24.61% from foreign employment, 18.19% from service, 19.59% from business and 3.7% from other sectors.

- Household having family size 1-2 persons has earned the highest per capita income of 64325. Followed by 63141.02 by 3-4, 48229.54 by 5-6 persons, 40694.44 by 9 above and 30942.36 by 7-8 persons.

- In the study area, 2.5% are landless and the remaining about 97% holds a significant amount of land consisting 6-9 ropani by 56.25%, 10-14 ropani by 16.25%, below 5 ropani by 15% and above 15 ropani by 10%.

- Gini coefficient between deciles household group is 0.28, range, variance and coefficient of variance are 747900, 27.49 and 16.58 percent respectively, which shows the inequality in the distribution of income.

- The total consumption expenditure made of the food items is 23.51%, non food items is 59.17%, agriculture cost is 14.62% and livestock expenditure is 2.70%.

- Expenditure on education and entertainment is found to be the highest.

- There is positive income and consumption expenditure gap total sampled household income is 1,80,60,950 and consumption expenditure is 1,12,25,559.

6.2   Conclusion

The main conclusions of the study area are as follows,

- In the study area, total sample population of female is greater than male.

- It is found that the high proportion of sample population lies in the age group 15 to 39.

- In the study area, high proportion of sample population is literate.

- Most of the literate people are studying under SLC.

- The family size of the sample household is found to be average.

- Most of the sample households are involved in agricultural sector.

- The higher income yielding source of Savapokhari VDC is agriculture.

- Most of the Limbu are engaged in foreign employment, trade and agriculture.

- The distribution of land is unequal in Savapokhari VDC.

- The distribution of income is unequal in Savapokhari VDC.

- The share of expenditure on non food items is higher than that of the food items.

6.3   Recommendations

In the Savapokhari VDC, there is unequal distribution of income as found in this research. The study also found that only few Limbu are involved in administration and politics. Thus, to improve the unequal distribution of income and increase the involvement of Limbu in administration and policy level following recommendations are presented.

- There is a difference between earners from agriculture and earners from other sectors household income; poverty level is also slightly high of the earners from agriculture. So, it should be given priority to implement measures to reduce poverty of earners from agriculture.

- The government should lunch an effective income generating program, infrastructure development and vocational guidance so that they can easily fulfill at least their basic needs.

- Among the Limbu unequal distribution of land is found to be the major causes of income inequality. Thus the government should pay key attention for the effective implementation of land reform programs.

- Major remedies to poverty alleviation in Nepal are generation of employment opportunities on different sectors of the economy. Skill upgrading training programs would help a lot for enhancing capacity of people, which results in better growth of the income and factory also.

- Labor force should be utilized in productive sectors.

- Most of the households invest their saving on unproductive sectors like house and ornaments etc. So, the productive investment should be created to discourage unproductive investment.

- Expenditure on smoking, entertainment and unnecessary expenditure on tradition and festivals should be minimized.

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APPENDIX - A

QUATIONNAIRE

Date of interview: Serial No:

(1)   General Information

Name of the household head ……………………….. Age: - 15-39 (   ), 40-59(   ),

    60 above (   )

Ward No…………Sex: - Male (   ), Female (   )

 Religion: - Buddhist (   ), Hindu ( ), Christian (   ), Kirati (   )

Others ( )

Name of Respondent………………………….Age:- 15-39 ( ),

40-59 (   ),   60 above (   )

Sex: - Male   (   ),   Female (   ) Relation with household

head…………………

 (2)   Structure of population

Age group	Male	Female	Total
0-4 years			
5-14			
15-44			
45-60			
60 above			

(3)   Education status:

Education	Male	Female	Total
Illiterate			
Literate			
Under SLC			
SLC			
Above SLC			

(4)   Occupational Status of Economically active population:

Occupation	Male	Female	Total
Agriculture			
a) self			
b) hired/rented			
Business/Trade			
Service			
a) Government			
b) Non Govt			
Foreign job			
Unemployment			
Others			

(5)   Type of house

(a) jastako (   ) (b) chhanako (   ) (c) falyakko (   )

(6)   Ownership of House

(a) Own house (   )   (b) Rented from other   (   )

(7)   Type of Toilets

(a) General   (   ) (b) Deep Hole (   ) (c) Open   (   )

(8)   Electricity Facility

(a) Yes (   )   (b) No (   )

If yes source

(a) From Govt (   ) (b) Solar (   )   (c) Others (   )

(9)   What is the source of drinking water?

(a) kholako (   ) (b) dharako (   ) (c) kuwako (   )

(10)   Have any member of your family become sick in the last year?

(a) Yes (   )   (b) No (   )

If yes give the following information.

S.N		Name of disease	Died	Type of Treatment			Treatment Exp
				Doctor	Ayurvedic	Dhami/Jhakri	
1	Male						
2	Female						
3	Boy						
4	Girl						

(11) Annual source of income

(a) Income from agriculture

S.N	Crops	Quantity (kg)	Value (in Rs.)
1	Paddy		
2	Wheat		
3	Potato		
4	Maize		
5	Vegetable		
6	Fruits		
7	Millet		
8	Other		
9	Total		

(b) Income from Non-Agriculture Sectors

(i) Income from service……………………………………………………..

(ii) Income from pension……………………………………………………

(iii) Income from foreign job………………………………………………

(iv) Income from laboring ……………………………………………………

(v) Income from Trade/Business……………………………………………

(vi) Income from other source…………………………………………………..

(12)   Income from livestock and animal

S.N	Items	Sales quantity(kg)	Value (in Rs.)
1	Milk		
2	Ghee		
3	Meat		
4	Eggs		
5	Cow		
6	Buffalo		
7	Goats		
8	Pig		
9	Hen		
10	Others		

(13)   Sector of Expenditure (last year)

(a)   Expenditure on food items.

S.N	Items	Expenditure (Rs.)
1	Paddy/ rice	
2	Wheat	
3	Dal	
4	Salt	
5	Vegetable	
6	Milk	
7	Meat	
8	Eggs	
9	Tea/sugar	
10	Oil	
11	Fruits	
12	Cigarette/wine	
13	Total	

(b)   Expenditure on Non Food Items.

S.N	Items	Expenditure (in Rs.)
1	Education	
2	Clothes	
3	Footwear	
4	Health/medicine	
5	Festival	
6	Transportation	
7	Firing/Kerosene	
8	Government tax	
9	Electricity	
10	Others/entertainment	
11	Total	

(c)   Expenditure on agriculture production

S.N	Items	Expenditure (in Rs.)
1	Seeds	
2	Fertilizer	
3	Harvesting	
4	Insecticides	
5	Irrigation	
6	Others	
7	Total	

(d)   Expenditure on livestock production.

S.N	Livestock	Feeding	Medicine	Other Exp	Total
1	Cow				
2	Buffalo				
3	Goats				
4	Pigs				
5	Hen/cocks				
6	Oxen				
7	Others				

Group	Percentage share of income range
10	3.23
30	17.13
50	5.48
65	12.94
75	10.27
80	18.62
85	10.94
90	4.27
95	4.26
100	12.86

Let, X_i = cumulative percentage of households in its class interval

Y_i = cumulative percentage of share of income and its class interval

1. This is the class of group data therefore, formula for grouped data is,

$$GC = \frac{1}{100^2} [\sum X_iY_i + 1 - \sum X_i + 1Y_i]$$

HHs	Income	Xi	Yi	Xi+1	Yi+1	XiYi+1	Xi+1Yi
10	3.23	10	3.23	-	-	-	96.9
20	17.13	30	20.37	30	20.37	203.6	1018
20	5.48	50	25.84	50	25.84	775.2	1679.6
15	12.94	65	38.78	65	38.78	1939	2908.5
10	10.27	75	49.05	75	49.05	3188.24	3924
5	18.62	80	67.66	80	67.66	574.5	5751.1
5	10.94	85	78.6	85	78.6	6288	7074
5	4.27	90	32.87	90	82.87	7043.95	7872.65
5	4.26	95	87.14	95	87.14	7842.6	8714
5	12.86	100	100	100	100	9500	-
100						41855.1	39038.75

Here,

$$\sum X_1 Y_{i+1} = 41855.1, \sum X_{i+1} Y_i = 39038.75$$

Putting the corresponding values in to the above formula we get,

$$GC = \frac{1}{100^2} [\sum X_i Y_{i+1} - \sum X_{i+1} Y_i]$$

$$= \frac{1}{100^2} [41855.1 - 39038.75]$$

$$= \frac{2816.35}{10000}$$

$$= 0.28$$

2. Calculation of range of household annual income

    Max Y = 790950

    Min Y = 43050

    Range = Max Y – Min Y

        = 790950-43050

        = 747900

3. Different result of income inequality size distribution of income is taken

Yi	$(Y - \bar{y})$	$(Y - \bar{y})^2$
3.23	-6.77	45.83
17.13	7.13	50.84
5.48	-4.52	20.43
12.94	2.94	8.64
10.27	0.27	0.07
18.62	8.62	74.30
10.94	0.94	0.88
4.27	-5.73	32.83
4.26	-5.74	32.95
12.86	2.86	8.18
100		274.95

Here, $\sum Yi = 100, n = 10$

$$\therefore \bar{y} = \frac{\sum Yi}{n}$$

$$= \frac{100}{10}$$

$$= 10$$

(a) Variance (V)

We have the formula

$$V = \frac{\Sigma(Y - \bar{y})^2}{n}$$

Here, n = 10, $\sum(Y - \bar{y})^2 = 274.95$

Now, $V = \frac{274}{10}$

$$= 27.49$$

$\therefore$ V = 27.49

(b) Coefficient of variation (cv)

We have the formula

$$C.V = \sqrt{\frac{V \times 100}{\bar{y}}}$$

$\therefore$ $C.V = \sqrt{\frac{27.49 \times 100}{10}}$

$$= 16.58\%$$

APPENDIX- C

S.N	Food items	Non food items	Total	Annual income
1	38820	94950	133770	255000
2	49700	22985	72685	209700
3	47900	37900	85800	108600
4	42830	35940	78770	188100
5	7740	68900	90640	93600
6	47960	8455	56415	43050
7	42780	30475	73255	52700
8	48570	98190	146760	68450
9	56350	35255	91605	133000
10	63280	27495	90775	199650
11	69010	39115	108125	129600
12	59550	96640	156190	228300
13	66490	37965	104455	415950
14	32470	43875	76345	348450
15	489900	31325	80225	146000
16	74560	123200	197760	474800
17	45520	144135	189655	276500
18	58320	172960	231280	297200
19	56660	101670	158330	122150
20	42830	107220	150050	159500
21	65400	106230	171630	151550
22	52300	28150	80450	127200
23	51440	30510	81950	141500
24	40420	48235	88655	380000
25	61010	33695	94705	111100
26	53220	32495	85715	121800
27	55760	35530	91290	114100
28	58560	39155	97715	341160
29	60120	30300	90420	209450

30	51810	29445	81255	223350
31	59780	65125	124905	209900
32	62920	13425	82345	352100
33	60770	53400	114170	210300
34	62660	42460	105120	113500
35	52260	55185	107445	121850
36	54210	58355	112565	124050
37	68350	94255	162605	231300
38	50530	96770	147300	130500
39	63560	38900	102460	296150
40	78000	55940	133940	82650
41	45494	72914	118408	820000
42	75110	21630	96740	148200
43	77190	117385	194575	359600
44	61550	109765	171315	204400
45	55780	38680	94460	119800
46	46380	139690	186070	254150
47	73400	111780	185180	532750
48	64840	117440	182280	409750
49	67750	101040	168790	415750
50	63250	119795	183145	258150
51	39170	271690	310860	344600
52	46030	212210	258240	373550
53	60730	58835	119565	109100
54	72270	59530	131800	224600
55	59010	54345	113355	339600
56	71240	73460	144700	790950
57	59590	33750	93340	106950
58	65610	51650	117260	86500
59	63300	51240	114540	88800
60	62510	57360	119870	102300
61	59790	54025	113815	237850

62	44540	150590	195130	350400
63	65240	130290	195530	173840
64	46246	202105	248351	406100
65	67760	100515	168275	123150
66	57470	109730	167200	290750
67	54680	92320	147000	301350
68	45990	325445	371435	486000
69	55210	57515	112725	138700
70	62840	65150	127990	215700
71	58090	53585	111675	112700
72	75430	104065	179495	224800
73	61560	59090	120650	133000
74	56330	83995	140325	78750
75	56530	112425	168955	155600
76	63740	58045	121785	129150
77	62805	371060	433865	781100
78	63230	51475	114705	120000
79	71140	114075	185215	439500
80	53500	113915	167415	124400