

INCOME INEQUALITY IN NEPAL
(A Study of Binamare VDC of Baglung District)

A Thesis

Submitted to the Central Department of Economics
in Partial Fulfillment of the Requirements for
the Degree of Master of Arts
in
Economics

By

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Central Department of Economics

Tribhuvan University, Kirtipur

Kathmandu, Nepal

August, 2014

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RECOMMENDATION LETTER

This thesis entitled "**Income Inequality in Nepal: A Study of Binamare VDC of Baglung District**", has been prepared by Rajendra Paudel for the Partial fulfillment of the requirements for the **Degree of Master of Arts in Economics** under my supervision. I forward it with recommendation for approval.

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APPROVAL LETTER

The thesis entitled "**Income Inequality in Nepal: A Study of Binamare VDC, Baglung District**", prepared by Rajendra Paudel has been accepted as a requirement for the partial fulfillment for the **Degree of Master of Arts in Economics.**

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Aug, 2014

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ABBREVIATIONS

CBS	: Central Bureau of Statistics
CV	: Coefficient of Variance
DDC	: District Development Committe
EVI	: Economic Vulnerability Index
GC	: Gini Coefficient
GDP	: Gross Domestic Product
HAI	: Human Asset Index
HDI	: Human Development Index
HDR	: Human Development Report
HHS	: Households
IMF	: International Monetary Fund
LDCS	: Least Developed Countries
MA	: Master of Arts.
May	: Maximum
Min	: Mean Deviation
NPC	: National Planning Comission
NRB	: Nepal Rastra Bank
NLSS	: Nepal Living Standard Survey
Pop ⁿ	: Population
Rs.	:Rupees.
SAARC	: South Asian Association for Regional co- operation.
T.U.	:Tribhuvan University
UNDP	: United Nation Development Programme
UN	: United Nation
UK	: United Kingdom
USA	: United state of America
Vol.	: Volume
WB	: World Bank
VDC	: Village Development Committee

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

Nepal is one of the less developed countries of the world. Thirteenth Anterium three year plan estimated that 23.8% of the people live below poverty line (NPC, 2013) . The main target of this plan is to reduce the people below poverty line in 18 percent by the end of this plan. The three year plan (2011-2013) also aims to enhance the living standards of the general populace and to reduce poverty level from a quarter (25.4Percent) to about 21 Percent through broad -based Sustainable economic growth and equitable inclusive national policies (NPC2011). This plan shows that though some reform on poverty 31 Percent to 25 Percent), the Gini coefficient, Which shows income inequality had been reached from 0.41 to 0.46 (NPC 2011). but Economic survey 2013/14, shows the gini coefficient reduced to 0.328 Although gini coefficient which measures the existing disparity in the country shows declining, still it is high which is caused by accessibility of limited groups to opportunities, low agricultural wage rate, rise in the number of internal conflict, displaced people are the major contributing factors to such a huge disparity.

Millennium Development Goal progress Report, 2013 shows poverty reduction rate in Nepal between 1996 and 2004 at 1.5 Percent, and 2.5 Percent between 2004 and 2013. Employment opportunities need to be created to capitalize the larger number of working age population in the demographic structure is for reducing in the poverty.

Inequality refers to the situation in which a particular variable under inquiry (research) does not show equality in its values. Many economic variables such as income, land and education level to mention a few are not distribution equality or proportionately.

Inequality is one of the most important issues in under developed countries like Nepal. Generally, inequality implies the situation of the country in which people are classified many economic categories on the basis of living standard such as assets land, educational attainment consumption etc.

Inequality of income refers to the unequal distribution of income among persons households in a country. It refers to the state of a society in which some get more income in comparison to others. This resulting from the unequal earning of the people in the society owing to the large unequal distribution of wealth and economic power. Due to the inadequate income, the poor families are going to be poorer and are unable to meet their basic needs (requirements) such as food, clothing, housing, housing, education and health, while the rich families are going to be richer and richer and are able to meet (enhance) their standard of living. Rural people are suffering form poverty as well as the grip of inequality in the distribution of economic (Jhingon, 1994). In this sense. Lewis uses Metaphor. "It is like riding the horse of economic inequality of feed for itself (Jhingon, 1994). This had been experienced of 18th century in England, 19th century in Western Europe and early 20th century in Japan, where wealth and income inequalities led to large saving on the part of the wealthy classes who used that for productive investment (ibid).

Earlier the classical economists were also in fever of income inequality. They argued that income equality means a higher income for the working classes and rise in their consumption. Classical economist, therefore, believed that inequality of income was necessary to provide the incentive for economic growth.

Contrary, Karl Marx a socialist economist optioned that income inequality would bring the doom of the poor masses.

In developing countries, inequality in income distribution is normal phenomenon unfortunately it is not an economic obstruction but is a human condition of despair grief and pain. So, developing countries now have to face it and some how find the solution.

Like other various developing countries, Nepal is also facing the problem of inequitable distribution of income, though one of the objectives of different government plans has been to remove the inequality of income; but this problem is serious day by day. Actually, it relates with all socio-economic conditions; and thus inequality and the trend towards rising inequality stand, as complex inhibitions and obstacles for the development of the country.

In Nepal 74% of the total population is engaged in agricultural sector (NPC 2011) so, the main occupation of the people is agriculture. But its role on GDP is 33% (NPC *ibid*). This implies that, productivity of agriculture sector is very low though it provides the maximum level of employment to the economically active population. There is no other alternatives. This is the symptom of poverty and inequalities. It is the hard fact that without expanding the industrial sector, we cannot generate additional employment which could be one of the important steps in reducing poverty.

Inequality relates to all social and economic relationships. Inequality and the trend toward inequality stand as a complex of inhibitions and obstacles to development. These inequalities and disparities in economic prospects have not important only on the present generation but on future once as well. Without equitable distribution of income, the consumption behaviors of the people will not be improved and their living standard will not be affected. In almost all under developed countries, economic inequality seems increasing instead to be decreasing. Widening gap in agriculture yields represent and important part of the widening gap.

The development of a country is impossible without adequate capital accumulation, appropriate technology and enlivening socio-economic structure. The capital accumulation is the function of saving of the population. The saving, again, is the function of income level and consumption pattern of the people. Greater the income level, greater will be the amount of saving which a part of capital accumulation. Thus for many reasons, the study of income distribution is more essential. That is why; it may help to make proper tools in the promotion of the socio-economic condition of the people of that country.

1.2 Statement of the Problem

Income inequality constitutes a curse of humility: it generates huge number of problems in every field and finally retards the pace of overall development of the country. This problem has been a serious topic and is creating controversial questions among various thinkers, policy makers and economists. All countries in the world (developing and developed) are suffering from this problem. But its impact, nature and magnitude is serious in developing countries like Nepal. Though, solving this problem

is not an easy task, but the planners, policy makers, thinkers and economists must find out the solution to it otherwise the advancement of income inequality in developing countries become worse day by day.

Nepal is one of the poorest countries in the world. There is wide gap between rural and urban incomes. The people of urban areas are more facilitated than rural areas while comparing with living standard such as, housing, education, health, drinking water, communication and other economic and social infrastructures.

Inequality leads to great economic wastage, due to this there is loss in human capital formation. Not only have these inequalities brought the economic crisis but also caused social unrest and dissatisfaction in the society. The unequal distribution of income is becoming one of the most important features in Nepalese context. So poverty is not new phenomenon in developing countries like Nepal but it is becoming serious and complex day by day.

According to the Nepal living standard survey (NLSS-2010/11), on the whole poverty is reduced by 16.36 percentage points between 1995/96 and 2010/11 and reached 25.4 percent but on the same survey, the Gini coefficient, the indicator of income inequality which was 0.34 in 1995/96 reached 0.41 in 2003/04 suggesting that the growth of income level of the rich people has been higher than that of the poor. On the basis of this survey the rate has been reached by 0.33 of an estimation of 2010/11

In this sense unequal distribution of income is becoming one of the most important features in Nepalese economy. On the other hand poor families are living hardly; care. They are deprived from basic needs such as, housing clothing, health, and hygienic care and education. This makes

poor families malnutrition, high infant mortality, inadequate shelter and high migration tendency etc.

Due to these above features poor families can not maintain their opportunities. Not only this, these features lead the social and economic criminality in the society. If there is heavy different between low income and high income group, then it continuously fed the rich people only.

In Nepalese context inequalities bases on income, health, gender race and other forms of inherited disadvantage as well as location which can make national averages a misleading indicator for human beings. That is why there is always low equilibrium in economy and would be subject to a trap. Thus for keeping well and peaceful environment in the society, for removing the regional disparities and for balanced growth in the economy, it is necessity to take the poor-oriented policy, structural and programmer level measures accompanied by the creation of short as well as long term income oriented employment opportunities may be applicable to other villages with similar socio-economic conditions. I hope it would be helpful for policy makers to identify the related problems of incomes inequality in rural areas of Nepal. Therefore the, research questions for the research work are :

- i) What is the socio-economic status of the study area?
- ii) What are the level and source of income?
- iii) In what extent the income inequality exists in the study area?

1.3 Objectives of the Study

The objectives of this study are:

- 1) To find the socio- economic status of the household in the study area .
- 2) To identify the level and source of household income in the study area.
- 3) To find the existing level of income inequality in the study area .

1.4 Significance of the Study

Though Nepal's commitment to reduce poverty and income inequality, the income inequality has been increasing in the most recent years. So the policy does not work efficiently in case of reducing income inequality. In this sense it well helps to a guideline for the policy makers too.

In Nepal, there have been several studies on the income distribution in reference to rural and urban areas. But few studies have been performed in the distribution of income in the micro sense. Thus these are not enough to determine the extent of inequality in different part of Nepal. This study is a case study of Binamare VDC, Baglung district which displays the socio-economic condition of the village and villagers. Generally this study is based on micro level which is more essential to find exact and reliable information. Thus this study may not represent the overall structure of income distribution in the country. As a hilly and rural VDC of Nepal, this study may be applicable to other villages with similar socio-economic condition. But certainly it will help to additional input for decision to the policy makers, planners, economists etc.

1.5 Limitations of this Study

The study has in following limitations:

These studies represent only the Binamare VDC, in Baglung district. It is micro level study conducted with in a limited time and financial constraints; so some necessary information might be omitted out. This study is based upon primary and secondary data of Binamare VDC in Baglung district during the time period of (March, 2014) So, if one does the longitudinal study of the some area in different time, it may not match.

CHAPTER-II

REVIEW OF LITERATURE

We know that income inequality is a burning problem in the world at present and it is one of the widely researched subject matters in economic discipline. Therefore many economists have been working hard to find the causes of income inequality and its impact on income, employment, production, distribution and also growth and development. International institution especially world Bank, Asian Development Bank and International labor organization have conducted several researches in this subject. Also some individual and professional researches have been done in this topic. Some relevant literatures are reviewed below.

2.1 Review of Literature: International context

Okigba (1968) in his article "The distribution of National income in African countries" examines functional as well as the personal distribution of income by size. He finds that greater inequality of income in the less developed countries than in the developed countries and that economic development generates force to make income distribution more equal. The African countries are more concerned with measuring the national income rather than measuring its distribution.

Subrata, (1978) "In development economic" long man group limited London has discussed in income inequality in those countries derives mainly from inequality in wage and not from the ownership of capital which is largely public land. According to him developing countries have more inequality than developed countries. He has studied comparatively of two countries i.e. Mexico and Brazil. He found that

inequalities increased in capitalist country than socialist system. Income inequality in those countries derives mainly wages and salary.

Sen (1985) in his book named "Economic inequality" has discussed about income inequality and social welfare and concludes that high degree of inequality shows lower level of social welfare of vice-verse.

Meier, (1995) in his book entitled "Leading Issues in Economic Development" has defined income in equality using Loren Z curve and Gini coefficient. He has used secondary data of various countries to illustrate income inequality. He has mentioned the views and studies of various persons and institutions to support his view; He has used Simmon Kuznets, inverted-v hypothesis. In his study he concludes that saving is positively related to income inequality. He has used secondary data published by World Bank, he further states that the "More equal income distribution has also contributed to rapid economic growth in East Asia through higher human capital formation from better health and education."

Kuznets, (1995) in his article "Economic growth & income inequality" has analyzed the relationship between income inequality & economic growth as well as factor affecting it. The author concludes that in the initial phase of economic growth i.e. transition state the income inequality becomes wider and then becomes narrower/decreases as the level of development increases. His study was based on cross-sectional data of united state of America (USA), United Kingdom (UK) and Germany for the developed countries and for LDCs case; he had used the date of India and Sri Lanka.

Lekhi (1996) in his book, "The economic Development and Planning" has defined the meaning of inequalities of income and told

"inequality of income is that disproportionate ownership of resource between different section of the society. That is minority having majority shares of national income while the majority of people have poor part of national income." He has discussed the cause's inequality of income such as social, economic and political life of the country. Inequality of income and wealth is vicious circle that was started during the earlier phases of the development.

He finds that, distribution of personal income (ownership of the income earning assets) is more unequal in the underdeveloped countries than in developed countries. He hypothesized in his study that the inequality first increases and than decreases with the level of development.

World Bank (2000) has published a book entitled "Beyond Economic Growth" has presented cross country compressions of income inequality in fifth chapter under the heading of income inequality. By using the statistical method Gini index & Lorenz curve, income inequality is nicely analyzed in this book. Some strong recommendation income inequality are presented at the end of the chapter.

Human development Report (2006) on "Income inequality" inequality raises important question rooted in normative ideas about social justice and fairness in all societies because income distribution pattern directly affect opportunities for nutrition, health and education. Income inequality is also intimately related to wider inequalities in capability and in some cases it affects absolute deprivation or exclusion. Income inequality on the basis of Region is very large. The Gini coefficient a measure of inequality celebrated on a scale from zero (0) (perfect equality) to hundred (100) (perfect inequality), ranges from 33 in

South Asia to 57 in Latin America and more than 70 in sub-Saharan Africa. This report carried out that the HDI provides a snap-shot of average national performance in human development 'However' averages can obscure large disparities within countries. Inequalities based on income wealth, gender, race and other inherited disadvantage as well as location can make national averages a misleading indicator for human wellbeing.

The entire society is divided into two classes "haves" and "haves not". The "haves" enjoy most of the facilities of luxuries but "haves not" are totally deprived even the basic needs of life. Further the discussed that today there is wide economic disparities among various countries of the world. The world can be categories into "rich" and ".poor" with regard to the nature, character and degree and magnitude of the development. Thus there is division of nation into two classes, developed and underdeveloped i.e. rich and poor country.

2.2 Review of Literature : Nepalese context

Many studies are conducted in the field of income distribution in Nepal. Some relevant literature in the case of Nepal in review below.

According to 13th plan (2013/14-2015/16) , Nepal government has aimed to upgrade Nepal from least developed country to developing country, till 2022. by reducing poverty and developing living standard of the people further more the objectives of this plan is to reduce the poverty to 18 percent by increasing the average annual growth rate to 6 Percent. Other goals are as follows ;

Table (2.1)**Some Goals of Thirteenth Three Years Plan (2013/14-2015/16)**

S.N	Index	status of (2069/70)	Three Years (2070/71-2072/73) goal
1.	Average Annual Economic Growth Rate	3.6	6
2.	Average Annual Agriculture Growth Rate	1.3	4.5
3.	Average Annual Non- agriculture Growth Rate	5	6.7
4.	life Expectory span (Year)	69.1	71
5.	Population Growth Rate (%)	1.35	1.35
6.	Population accen to drinking water(%)	85	96.25
7.	Primary education (class 1-5) Net Enrollment	95.3	100

Source : NPC (2013).

With the achievement of above target, human development Index (HDI) is supposed to increased from 0.463 to 0.508, Per -capita National Income from US\$ 721 to US\$ 902, human asset index (HAI) from 62.2 to 66.0 and economic vulnerability index (EVI) from 27.85 to 26.95 by the end of 13th plan (3 year) .

Sharma (1983) carried out a field research on “Income Distribution” in 18 urban areas of Nepal. In his research he has used mathematical tools i.e. Gini coefficient, Lorenz curve, Coefficient of variation etc to measure income inequality. This research is solely based

on secondary data carried out by Nepal Rastra Bank has found that urban areas because of greater degree of development activities have higher degree of inequality & concentration of income. This implies that the government investment plays a positive role to increase in income in equalities in the urban Nepal. In addition Tarai Region has the highest degree of inequalities as compared to that of hilly region.

Bhattra (1983), in his dissertation " Income Distribution and poverty in Rural Nepal " has nicely analyzed the distribution of income . He has used primary source of data the village of Dadeldhura district of Far West Nepal. He has used simple statistical tools such as Gini Co-efficient, variance and non-linear regression. In this research, he has found that the Gini concentration ratio is 0.552 in Far Western region and also found that the Gini concentration ratio in Rupal and Ghotal are 0.491 and 0.656 respectively.

David (1984) in his book "Nepal: A state of poverty" has discussed the causes and roots of poverty and inequality through economic and political changes in Nepal. The study has found that extensive population growth, wide gap in distribution of income, and crisis in agricultural sector were the major causes of poverty. This book is based on the primary data for analyzing the inequality & poverty through field survey on one decade (1972 to 1982), some relevant secondary data also used whether it is necessary. He suggests that problem may be solved through effective role of government.

K.C (1995) in his research "Income Inequality in Nepal" has analyzed income distribution. He has used primary sources of data taken from study area Tamsarigo VDC of Nawalparasi district. He has found

that Gini-coefficient in his study is 0.54033 which is slightly higher than the national level. He has also found disparity of landholding, the top 11 percent of household occupies 40 percent of land and bottom 60 percent household occupies only 28 percents of land. Furthermore, share of income in agriculture sector and non-agriculture sector is 33.94 and 66.06 respectively. Finally he had found that there is also wide disparity in the size of distribution of income, i.e. in the study area, nearly 40 percent of total income is earned by the top 10 percent of household whereas only 1.4 percent of total income is earned by bottom 10 percent household.

Khanal (2004), in his M.A dissertation, “Income inequality in Nepal” has nicely analyzed the income inequality in rural area of Kuwakot VDC, Syanga District. The main objectives of this study is to identify the level of household income and sources of income as well as measure the extent of income inequality in the study area. To measure the income inequality he has used some essential tools such as Range, Lorenz curve, Gini coefficient, Relative mean Deviation, and coefficient of variation. The study concludes that there are various kinds of inequalities such as production of crops, distribution of landholding, education and geographical structure etc. which resulting high inequality. The study also finds that higher educated people are very few in the study area. So they are not getting opportunity to be employee. In this study area, greater the size of landholding, greater will be the level of income.

Adhikari (2007), in his MA dissertation “Income inequality in Nepal” has analyzed the income inequality in Chailahi VDC of Dang district. The main objectives of this study are to assess the socio-economic status and to estimate etc. distribution of income of the study area. To measure the income inequality Range, variance, coefficient of variance, Relative mean deviation, Lorenz curve & Gini-coefficient have

been used. This study concludes that there is high inequality of income distributed across different socio-economic characters. There is a big gap between higher & lower caste group, literate & illiterate and agriculture & non-agriculture sector.

NLSS(III), (2010/11) presents a nation-wide household survey conducted year round through February 2010 to February 2011, which consists of multiple topics related to household welfare (demography, consumption, income, access to facilitation, housing, education, health, employment, credit, remittances & anthropometry etc.). Realizing the importance of time series data, the government of Nepal decided to conduct another round of Nepal living standard survey. Accordingly, the central Bureau of statistics for the third time conducted the survey in 2010/11 (NLSS-III). This survey was carried out with the assistance from the World Bank. The main objective of this survey is to update data on the living standards of the people and impact of various government policies and programs on the socio-economic changes in the country during the last few years. As in the previous two rounds of the NLSS, the NLSS-III followed the living standards measurement survey (LSMS) methodology developed and promoted by the World Bank (WB).

CHAPTER-III

RESEARCH METHODOLOGY

Methodology is presented in such a way that it includes various variable which supports to analyze income inequalities. The study will be based on primary as well as secondary data collection.

3.1 Research Design

The study shows mainly exploratory & innovative with some analytical basis. As the primary data is taken for analysis, the units of information are households and types of data collected for this study. The study is limited to micro level. The main objectives of this study is to find out the existing level of income inequality and its impact on nutrition, health, education, employment, consumption, opportunities participation & exclusion on development, and immigration in Binamare VDC of Baglung district.

3.2 Sampling Design

The sampling process consists of various steps. Various steps have been done to complete the sampling process. Some of the major steps are as follows:

3.2.1 Selection of VDC

Binamare VDC is one of the 59 VDC's of Baglung district of the Dhaulagiri zone. It lies around 20 km south from the headquarter. Binamare VDC is a typical village of Baglung district and represents other villages in almost all respects. So, this VDC has been taken as a sample VDC and is highly suitable in order to verify the hypothesis and to increase the accuracy level of this dissertation.

3.2.2 Selection of Household

In the study area, there are in total 651 households according to the VDC profile (2011), we have to decide the sample household size that gathers maximum possible information on the households. We have taken about 20 Percent or 130 household of the VDC by random sampling method from each ward with different ethnic / caste groups. The sample household are chosen from the help of the VDC profile list of the VDC. The ward wise sample households are presented as below.

Table 3.1

Word wise Distribution of Sample Households

Ward No .	Total households	Sample Households
1	86	17
2	56	11
3	55	11
4	109	22
5	90	18
6	46	9
7	87	17
8	64	13
9	58	12
Total	651	130

Source : Field Survey, 2014

i) Primary Data

Primary data is mainly collected through the structured schedule. Each sampling unit is selected by the methods of drawing random samples. This is done to obtain an unbiased & fair study.

ii) Secondary data

secondary data i.e. data published by central Bureau of statistics (CBS), Nepal Rastra Bank (NRB), National planning Commission (NPC), World Bank (WB), International Monetary Fund (IMF), United Nation Development Programme (UNDP), etc are used.

3.2.3 Sources of Data

The study is based on primary and secondary data as discussed below:

3.2.4 Method of Data collection

A questionnaire was designated for interview to collect the primary data from the respondents visiting door to door in the scattered and remote villages of Binamare VDC. Interview was conducted with the head of a family (male or female). If the head of household was absent, another senior member of the family was interviewed. Relevant books, Journals, publications of National Planning Commission, (NPC), Nepal Rastra Bank (NRB), World Bank (WB), International Monetary fund (IMF), United Nations Development Programmes (UNDP) & internet are also consulted.

3.2.5 Data Collection Techniques

The following Techniques were used to collect primary data.

i) Household survey

In the study area there are in total 651 households according to the VDC profile 2011. We have taken about 20 percent or 130 households of the VDC by random Sampling Method from each ward with different ethnic/caste groups.

ii) Observation

The observation was done to get the primary data and others relevant information. Despite the fact achieved from respondents reply, the researcher himself observes the housing condition, sanitation, dress and feeding condition etc.

iii) Key Information Interview

The primary data were also collected from key informant interview concerning with the title or subject matter. Community leaders, Teachers, VDC Secretary, I/NGOs people and Businessman were those key informants.

3.2.6 Data processing

All the information of the field survey is collected (systematized in different tables with the different socio-economic characteristic. Further data are processed for analysis with the help of MS-Excell.

3.2.7 Data Analysis

Data will be analyzed with various statistical tools. A brief introduction of these tools are as follows.

i) Range

Range is defined as the difference between the highest and lowest item of the given series of income as a ratio of its mean is used to measure the extent of inequality in the distribution of income, which is the simplest method of measuring inequality.

Symbolically

$$E = \frac{\text{Max Y} - \text{Min Y}}{\mu}$$

Where,

E = Range

Max y = Maximum level of Income

Min y = Minimum level of Income

μ = Average Income

As the value of E tends to zero, it signifies that there is equality in the distribution of income and vice-versa.

ii) Relative Mean Deviation

Mean Deviation is known as average deviation. The mean deviation is the sum of the absolute deviations from mean denoted by the number of observation. It is calculated by using the following formula.

$$MD = \frac{\sum[Y_i - \bar{Y}]}{n}$$

Where, MD = Mean Deviation

Y_i = Income of the individuals (i = 1, 2, 3 ...n)

n = Number of observations

\bar{Y} = Mean Income

iii) Coefficient of variation

The coefficient of variation is the relative measurement of dispersion: which is simply the square root of variance divided by mean income level. The formula for coefficient of variation can be stated as follows;

$$C.V = \frac{\text{Standard Deviation}}{\text{Mean}} \times 100\%$$

$$\text{i.e C.V} = \frac{\sigma}{\bar{Y}} \times 100\%$$

Where,

CV = Coefficient of variation

σ = Standard Deviation

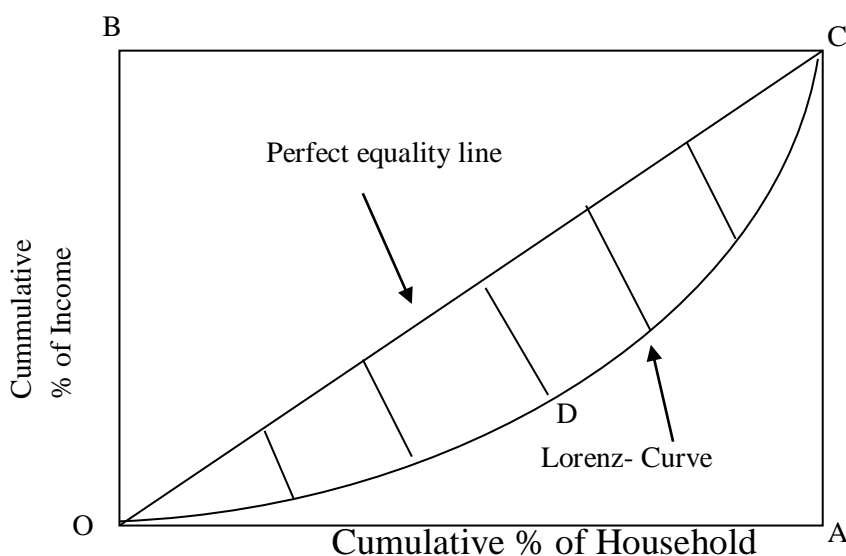
\bar{Y} = Mean Income

The higher value of C.V shows the higher inequality & vice-versa. It is sensitive to income transfer for all income level and can be used to compare two or more distribution.

iv) Lorenz Curve

Lorenz curve is a graphical or diagrammatic method of measuring the extant inequality in the distribution of income the percentage of population form minimum income to maximum income is systematically arranged on the horizontal axis and the percentage of income enjoyed by population is depicted in ascending order on the vertical axis. The cumulative percentage income is plotted. The curve derived from those two variables is called Lorenz curve. It shows the difference between equal distribution & actual distribution of income in the study area as the area between equal and actual distribution line increase the inequality in the distribution of income also increases and vice-versa.

Figure No. 1



Source: Basnet (2008)

Where, horizontal line shows the cumulative percentage of household and vertical line shows the cumulative percentage of income. OC is the equal distribution line and ODC is the actual distribution line and ODC is the actual distribution of income and ODCO is the area of Lorenz curve.

When area of Lorenz curve increases, the inequality in the distribution of income also increases and vice-versa.

v) Gini Coefficient

Gini coefficient is the measure of inequality of concentration based on Lorenz curve which is the proportion of the total area of the triangular under the diagonal and the Lorenz curve.

Gini coefficient is given by

$$G_c = \frac{\text{Area Between the Lorenz curve and equality Line (45°Line)}}{\text{Total area below the equality line (45° Line)}}$$

Mathematically,

$$G_c = \frac{1}{10000} [\sum(X_i Y_{i+1}) - \sum(X_{i+1} Y_i)]$$

Where, Gc = Gini coefficient

X_i - Cumulative percentage of household

Y_i = Cumulative percentage of income

iv) Variation

Variation is used to observe income inequality. It is calculated as;

$$V = \sigma^2 = \sum \left(\frac{\bar{Y} - Y_i}{N} \right)^2$$

Where,

V = Variance

N = Number of observation

Y_i = Income of the individual ($i=1, 2, \dots, n$)

\bar{Y} = Mean Income

v)

vi)

3.3 Definition of Terminology

i) Household

A household is defined as a group of family members, normally living together under one roof as one family and sharing a common kitchen. The household is taken as an ultimate unit in sampling procedure of the study.

ii) Income

In this study, income is defined as the earning of an individual or a household member from various sources of income in terms of current value of monetary unit.

iii) Total Net Income

Total net income is obtained by subtracting the sum of the expenditure on agriculture product, interest paid, taxes, etc. from gross total household income.

iv) Total Household Expenditure

The expenditure is an food and non-food items by the family members of household with the given time period is called total household expenditure.

v) Economically Active population

The economically active population who can produce goods & services within the economy in between age 15 to 59 years.

vi) Family

It is composed of individuals related by blood, marriage and linked together.

vii) Main occupation

Main occupation is defined as that particular occupation which plays major role in total annual income of the households.

viii) Earner

The economically active members of the household who do not receive but earn income are considered as earners.

ix) Food & non food consumption

The consumption of rice, flour, wheat, maize, meat, vegetables, milk, oil & ghee, salt, sugar, pulses, are defined as food items consumption and non food items included clothes, shoes & sandals, health care, education, festival, entertainment, transportations, electricity, firewood, drinking and smoking etc.

x) Literate

A person who can read & write simple sentence in any language

xi) Illiterate

A person who can not read and write easily.

xii) Higher Educated

A person who passed SLC or more are higher educated.

xiii) Household Head

In this study, a person who manages all the rules and regulations in the family is considered as the household head.

CHAPTER-IV

SOCIO ECONOMIC STATUS OF THE RESPONDENT OF THE STUDY AREA

4.1 General Introduction of Baglung District

Nepal is landlocked country situated in the southern part of Asia. It has 147181 square km area. It lies between two large countries India and China. People with so many castes, cultures and languages lives in this nation with its own identification as the birth place of Lord Buddha and Sita. From the administrative point of view, Nepal is divided into five development regions, fourteen zones, 75 districts, 58 municipalities and 3915 VDCs.

Among sixteen district of Western development region Baglung is one of the hilly and rural district of Dhawalagiri zone. It is situated on a terrace overlooking the Kaligandaki River which is famous for deep gorges and notorious bends. The district, with Baglung as its district headquarters, covers an area of 1325 km² and has a population of 2,68,613. (CBS, 2011) The population density of this district is 201 per sq.km.

Baglung is surrounded by Parvat, Myagdi, Rukum, Rolpa, Pyuthan and Gulmi districts. It has 59 Village Development Committees and one municipality. It has many rivers and streams and so many suspension bridges. Baglung is also known as the district of suspension bridges because of the large of number of bridges. It is a hilly district must of the population settled in the sides of the rivers. Fertile planes situated in the sides of the either side of the rivers are used for farming. Headquarter to Baglung district is Baglung Municipality which is also situate on the bank

of the holly river Kaligandaki. Like Nepal, Baglung also diverse in religion, culture, ethnicity, altitude, temperature etc. Hinduism and Buddhism are the major religious and Magar, Chhetri, Bramhan, Newar, Thakali, Gurung, Chhantyal, Damai, Kami, and Sarki are the main ethnic groups living in Baglung.

Baglung is rich in herbal medicine plants. Rice, corn, millet, wheat and potato are the major crops of Baglung. There were many mines in use in Baglung in the past; Iron and copper mines being the most prevalent. But they are not in use for long time because of the headlines of the government. There are numirian slates, mines in use in Baglung. There slates are excellent for roofing.

The major tourist attraction at Baglung is majestic views of the Himalayas along with the waterfalls, terraced fields, caves and deep gorges which are abundantly exposed to the visitors. Other interests include Mustang, Mt. Dhawalagiri, Dolpa and Baglung Kalika temple. This place is also famous for trekking, rafting and biking expeditions.

4.2 General Introduction of a Binamare VDC

Binamare is situated in the southern part of Baglung district which lies on the western bank of the Kaligandaki River. It is surrounded by Sarkuwa, Arjewa & Kusmisera VDC.

This VDC is inhabited mainly by Brahman, Kshetri, Magar, Damai, Kami, Sarki respectively. Other ethnic groups are Sanyasi (Giri, Puri), Thakuri, Bhujel (Gharti), Newar & Majhi, etc. All of them follow Hindu religion. Almost all of the people depend upon agriculture. Rice, corn, wheat & millet are the major crops.

Two branched of raw motorway have been extended. All of the villagers in this VDC have been electrified from central electricity. Telecommunication is also accessible in all villages.

4.3 Demographic status of study Area

This study is confined to the Binamare VDC of Baglung district. According to Village Development Profile, 2011 the total population of VDC is 3632, among them 1832 (50.44 percent) are male and 1800 (49.56%) are female. Total population is organized into 651 households. Table 4.1 present the distribution of population by ward and sex wise. The sex ratio is 101.77 in the total populating compare to female.

Table 4.1

Number of Household & Population by Ward & Sex

Ward No.	Total HH	population		Total	HH size
		Male	Female		
1	86	264	250	514	6
2	56	145	160	305	5.4
3	55	162	149	311	5.7
4	109	282	263	545	5
5	90	234	235	469	5.2
6	46	131	131	262	5.7
7	87	237	227	464	5.3
8	64	197	177	374	5.8
9	58	180	208	388	6.7
Total	651	1832	1800	3632	5.58

Source: VDC, Profile 2011

Table 4.1, clarifies that, the total population of the VDC is 3632, among them 1832 (50.44%) are male and 1800 (49.56%) are female. The total population is organized into 651 households. The sex-ratio is 101.77 (Number of males per hundred female) which indicates slightly more males compare to female. This table shows that average family size is 5.58 which are higher than national level (4.88) (NPC, 2011).

Table 4.2

Ward wise distribution of population by sample household

Ward No.	Total HH	Sample HHs	population		Total Population
			Male	Female	
1	86	17	52	46	98
2	56	11	27	30	57
3	55	11	32	28	60
4	109	22	55	47	102
5	90	18	44	48	92
6	46	9	28	26	54
7	87	17	42	46	88
8	64	13	36	42	78
9	58	12	32	33	65
Total	651	130	348	346	694

Source: Field Survey, 2014

Out of 651 household 130 households were selected for sample survey. Table 2 shows that number of male is slightly higher than female.

Table 4.3**Population distribution by Broad Age Groups**

Age Group	Male	Female	Total	percent
0-14 years	515	501	1016	28
15-59 years	1154	116	2270	62.5
60 and above	163	183	346	9.5
Total	1832	1800	3632	100

Source: VDC, Profile 2011

The economically active population (15-59 years) is higher, i.e. 62.5 percent. Economically inactive total population (below the 15 years and above 60 years) is 28 percent & 9.5 percent respectively in the Binamare VDC.

Table 4.4**Sample Population by Sex for Broad Age group**

Age Group	Male	Percent	Femal e	percent	Total	Perce nt
0-14 years	103	29.60	101	29.20	204	29.40
15-59 years	213	62.20	210	60.70	423	60.95
60 and above	32	9.20	35	10.10	67	9.65
Total	348	100	346	100	694	100

Source: Field Survey, 2014

The above table no 4.4 indicates that out of 694 people, 423 (60.95%) are economically active and the remaining (39.05%) are economically dependent. In the study are the dependency ratio between economically active (Productive age group) and dependent population is 64.066 percent. In other words, roughly about 100 persons in the productive age have to support 64 dependents in terms of the basic necessities of life. The dependency ratio of Nepal is 84.4 percent.(NLSS-III)

There is a wide difference between the dependency ratio in the rural areas (92) and in the urban areas (59). Among the ecological belts the mountain region has the highest ratio (101) while the hills have the lowest (91). The urban Kathmandu valley has the lowest dependency ratio (45). (CBS-NLSS 2010/11)

Table 4.5
Household Size and Distribution by Size

Family size	No of HHs	Percentage of HHs	Population	Percent
1-2	3	2.30	6	0.87
3-5	45	34.62	158	22.77
5-6	54	41.54	288	41.49
7-8	15	11.54	110	15.86
9-10	8	6.16	74	10.66
Above 10	5	3.84	58	8.35
Total	130	100	694	100

Source: Field Survey, 2014

Table 4.5 shows that the average household size in the sample household is 5.33, which is more than national level (4.88) (NPC, 2011). From tables the majority of the households (41.54%) have 5 to 6 family members and the minority of the households (2.30%) has 1-2 family members. Slightly more than one third (34.62%) of the households contain 3-4 persons. Similarly about 12 percent contain 7-8 persons,

another 6.16 percent contain 9-10 people and the rest (3.84 percent) have more 10 persons.

National figure shows that the lowest household size is in the urban Kathmandu valley (4.1) while it is the highest in the western rural Tarai (5.7). During the last fifteen years, the proportion of households with less than five persons have increased while the proportion of households with more than four persons has decreased. (NLSS, 2010/11).

4.4 Ethnic composition

Ethnically, Binamare VDC has a mixed composition of population. More than 10 caste groups live here viz. Brahmin, Kshetri, Magar, Kami, Sarki, Dami, Thakali, Puri, Majhi, Gharti (Bhujel), Newar. Mostly all casts speak national language Nepali.

Table 4.6
Ethnic Composition of Population

S.N.	Ethnic group	No. of population	percent
1.	Brahmin	1327	36.53
2.	Kshetri	713	19.64
3.	Sarki	457	12.58
4.	Kami	419	11.54
5.	Magar	367	10.10
6.	Dargi	218	6.01
7.	Othrs	131	3.60
Total		3632	100

Source: VDC Profile 2011

The majority of the people belongs to Brahmin community (36.53%) & followed by Kshetri 19.64 percent and so on. Regarding the religion of the people. The study has been observed that the majority of them belong to Hindu religion like in national level.

Table 4.7

Ethnic Composition of Sampled households and total population

Ethnic Group	No. of Sample households	Male	Female	Total population	percentage
Brahmin/Kshetri/ Thakuri	78	201	207	408	58.78
Sarki/Damai/Kami (Dalit)	35	96	97	193	27.80
Janajati	11	35	29	64	9.22
Others	6	16	13	29	4.2
Total	130	348	346	694	100

Source: Field Survey 2014.

Note: Sanyasi, Gharti are known as other caste in the study.

Table No. 4.7 clearly shows that 58.73 percent of total population is covered by Brahmin & Kshetri, the second position is covered by the Dalits (Sarki, Damai, Kami etc.) i.e. share of Dalit population is 27.80 percent. Similarly 9.22 percent of population is covered by Janajati and remaining 4.2 percent of total population is covered by others caste i.e. (Giri, Puri, Bhujel).

4.5 Education and Literacy Status

Both literacy and education attainment are important determinants of individual and household living standards and welfare. They affect the level and pace of economic development in a given country. Literacy has a positive impact on health and nutritional status and overall well being of the individual and the society. Educational attainment, among other

things is directly related to the economic status of the individual as well as the household.

Literacy has been defined as the ability both to read and write. A literate person is one who can both read and write a short, simple statement in any language on his or her everyday life.

4.6 Education Status

This VDC is quite ahead in the field of education compared to the other VDCs of this district. There are altogether seven schools i.e. one higher secondary school, five primary schools and one private lower secondary boarding school. Table 4.8 shows the educational status of sampled population.

Table 4.8

Educational Status of Sampled Population

Education level	Male	Female	Total	Percent
Illiterate	46	66	112	18.30
Literate	54	44	98	16.01
Primary	62	60	122	19.94
Lower secondary	87	85	172	28.10
Higher	56	52	108	17.65
Total	305	307	612	100

Source: Field Survey, 2014

Table no. 4.8 that 18.30 percent of total sample population (aged 6 years and above) is illiterate. Among them females illiteracy's rate is greater than that of males. Similarly 16.01 percent of total sample

population is literate. Among them males literacy is higher than females. Table also shows 19.94 percent of total sample population has received primary education. Lower secondary and secondary level educated population percentage is higher than other level; i.e. this share is 28.10 percent. People receiving higher level education is 17.65 percent of total sample population.

For the survey, if educational level is categorized into (a) literate (b) illiterate, overall 81.70 percent of the population aged 6 years and above is literate and only 18.30 percent population is illiterate. But there are marked gender disparities in literacy status; 84.92 percent of males aged 6 years and older are literate as opposed to 78.50 percent of females. Disparities will exist across the ethnic groups, With respect to educational status, females are comparatively more disadvantaged than their male counter parts. But literacy rates have improved over the national level (65.5, CBS, 2011).

Table 4.9

Literacy Status

Male			Female		
Population	Literate	Percentage	Population	Literate	Percentage
305	259	84.92	307	241	78.50

Source: Field Survey, 2014

4.7 Occupation Status

Table 4.10

Distribution of labour force by main Occupation

S.N.	Main occupation	Male	Female	Total	Percentage
1.	Agricultures	70	138	208	49.17
2.	Business	14	12	26	17.02
3.	Service	25	10	35	15.13
4.	Study	30	34	64	8.27
5.	Foreign job (Aboard)	66	6	72	6.14
6.	Labour (construction)	10	8	18	4.27
Total		215	208	423	100

Source: Field Survey, 2014

The majority of the labour force is engaged in agriculture (49.17%) like in the national level. The percentage of service holder and businessman is 8.27 percent and 6.14 percent respectively. Similarly the population engaged on study is 15.13 percent. Out of total labour force 17.02 percent people are engaged (involved) on foreign job and only 4.27 percent are engaged on labour (construction) sector.

4.8 Distribution of Labour force by Ethnic Groups

The distribution of labour force by ethnic groups in the study area is given below.

Table 4.11
Distribution of Labour Force by Ethnic Groups

Main occupation	Brahman/Ks hetri		Dalit		Janajati		Others	
	No.	%	No.	%	No.	%	No.	%
Agriculture	121	48.20	63	54.32	16	42.10	8	44.44
Business	17	6.78	4	3.45	4	10.52	1	5.56
Service	28	11.15	3	2.59	3	7.90	1	5.56
Study	43	17.13	12	10.34	6	15.79	3	16.66
Foreign job	40	15.94	21	18.10	7	18.43	4	22.22
Labour (construction)	2	0.80	13	11.20	2	5.26	1	5.56
Total	251	100%	116	100%	38	100%	18	100%

Source: Field Survey, 2014

Table no. 4.11 clears that the labour force of sample household includes only 15-59 years age group. It shows that agriculture is adopted as the main occupation by all casts. The percentage involved in this occupation by different coasts such as Brahman /Kshetri, Dalit, Janajati and others is 48.20, 54.32, 42.10 and 44.44 respectively. The occupation service and study is adopted more by Brahman/Kshetri than other casts.

Similarly, this table also depicts that most of the population engaged in business are 10.52 percent Janajati and only 3.35 percent of Dalit. The population engaged on foreign job of Brahman/Kshetri, Dalit,

Janajati, and others is 15.94, 18.10, 18.43 and 22.22 percent respectively. The occupation labour (construction) is adopted more by Dalit than other casts.

4.9 Structure of Landholding

Land is an important factor of production. In this VDC the main occupation of the people is agriculture and there is no appreciable involvement of people in any industrial & business sector. Therefore land is most important source of income in the study area. In this study land is mainly of three types i.e. 'Khet', 'Bari' and 'Pakho'. Well irrigated, fertile (more productive land is called 'Khet'. And second type of land is 'Bari' which is not well irrigated land and third type of land in 'Pakho' which is nominal land and rather unproductive.

Table 4.12
Size Distribution of landholding in Ropani

Size of landholding	No. of HHs	% of HHs	Land, holding (In Ropani)	% of landholding	Average landholding
Landless	-	-	-	-	-
Below 5 Ropani	28	21.54	98	7.23	3.5
6-10 Ropani	48	36.93	360	26.57	7.5
11-15 Ropani	25	19.24	310	22.87	12.4
16-20 Ropani	16	12.30	265	19.56	16.56
21-25 Ropani	8	6.15	182	13.44	22.75
Above 25 Ropani	5	3.84	140	10.33	28.00
Total	130	100	1355	100	10.42

Source: Field Survey, 2014

Table no. 4.12 shows that the total land covered by sample household are 1355 Ropani. The average land of sample household is 10.42 Ropani. There is no landless farmer in the sample households. Out of 130 households 21.54 percent of households have 7.23 percent of total land, lower caste group lies among this group. Their land is not sufficient for their settle, so that these groups are considered as poor household in the study area. Who are engaged on laboring and completed foreign job to maintenance their livelihood on the other hand 3.84 percent of household have 10.33 percent of total land. Specially Brahman / kshetri & Sanyasi caste groups lies in this group who have 28 Ropani on an average land per household. 6.15 percent household has 13.44 percent, 12.30 percent have 19.56 percent, 19.24 percent household have 22.87 percent and 36.93 percent household have 26.57 percent of land. Therefore above table indicates the disparities on distribution of land in the study area.

4.10 Size Distribution of Landholding by Ethnic Groups

In the study area the distribution of land in caste is quite unequal. Most of the cultivable land is occupied by the Brahman Kshetri and Sanyasi. In the study area Dalit group occupied a small portion of cultivable land than others caste group.

Table 4.13**Size, Distribution of Landholding by Ethnic Groups in Ropani**

Ethnic groups	No. of HHs	Total landholding	% of landholding	Average landholding
Brahman/Kshetri	78	1094	80.73	14.02
Dalit	6	54	3.99	9.00
Janajati (Magar, Newar)	11	79	5.84	7.18
Others (Giri, Puri, Bhujel)	35	128	9.44	3.65
Total	130	1355	100	

Source: Field Survey, 2014

The above table 4.13 shows that 78 sample households of Brahman/Kshetri occupied 80.73 percent of total cultivable land & they have an average 14.02 Ropanies of land per household whereas Dalit 35 sample households occupied only 9.44 percent of total land with 3.65 Ropanies of average land, which is very negligible land. Similarly 11 households of Janajati (Magar, Newar), who occupied 79 Ropani (i.e. 9.44 Percent) of total land. 6 households of others (Giri, Puri, Bhujel) occupied 54 Ropani of total land with 9.00 Ropani of land per family, which is higher than the average land holding of Dalit and Janajati. Hence, size distribution of landholding is very unequal among ethnic group. In this way, land is the basic asset that creates initially the inequality of wealth & finally the inequality of income.

CHAPTER -V

DISTRIBUTION OF HOUSEHOLD INCOME AND INCOME INEQUALITY

This chapter focuses on the household income by socio-economic characteristics. The structure of income has been analyzed by occupation, education, family size, ethnic group and size of landholding of sampled household in Binamare VDC.

5.1 Household Mean Income by different sector.

An Individual's occupation plays a vital role to determine the living standard. In other words it, influenced to the level of income. In Binamare VDC most of the households heads (50.53) are engaged in agriculture. However traditional type of cultivation system, low productivity land, lack of irrigation, lack of fertilizers, and improved seeds, lack of technical knowledge and lack of access to the market the agriculture field is very low and hence, the share of income on agriculture is only 36.92 percent

Table No .5.1
Distribution of Yearly per capita Mean Income by Difference Source of Income in Sample Households

S.N	Main Source of Income	total Income Rs	Percent.	No Of HHS	Perce nt	Populatio n	Mean Income
1	Agriculture	1,10,00,000	36.92	67	51.53	362	30386.74
2.	Business	19,00,000	6.38	9	6.92	46	41304.34
3.	Service	54,00,000	18.12	17	13.07	92	58695.65
4	Foreign Job	77,00,000	25.83	20	15.39	102	75490.19
5.	Labour (construction)	14,00,000	4.70	7	5.39	40	35000.00
6.	Pension	24,00,000	8.05	10	7.70	52	46153.84
	Total	2,98,00,000	100	130	100	694	

Source; Field survey 2014

Table 1 shows that the agriculture sector has lowest per capita mean income (Rs.30386.74) compared to other sectors of income. The level of mean income is highest for the foreign job, i.e (Rs 75490.19). Table also depicts that, second highest mean income is found by service sector (58695.65). similarly mean income obtained from Labor sector is (35000.00), Which is higher than agriculture sector and lowest per capital mean income compared to other sectors of income. These facts show that the level of mean income is higher for non - agricultural sectors than that of agricultural sector.

5.2 Mean Income by family size

Family size is also closely related with income, there will be positive or negative relationship between level of income and size of family. In this sense there is correlation between family size and income level. If all family members are skilled, and employed, there will have high level of income and if the family members are unskilled and unemployed, there will be high dependency ratio as well as low level of income. Table 5.2 shows the relationship between mean income and family size in the study area.

Table No. 5.2
Mean Income by Family Size

Family size	Household Population				Total Annual income	Annual per capita mean income
	no.	%	No.	%		
1 -2	3	2.30	6	0.87	113400	18900
3 -4	45	34.62	158	22.77	7236795	45802.5
5-6	54	41.54	288	41.49	13203674	45846.09
7-8	15	11.54	110	15.86	4949665	44996.95
9-10	8	6.16	74	10.66	2631054	35554.78
Above 10	5	3.84	58	8.35	1665412	28714
	130	100	694	100	29800000	

Source; Field Survey, 2014.

Table 5.2 shows that 2.30 percent of household with family size 1 to 2 has received high annual per-capita income Rs. 45846.09 followed by the 4 to 5 family size (Rs. 45802.5). It implies that, the household that has middle family size and employed, income is also high. Similarly the families with size 7 to 8 and 9 to 10 receive the annual per-capita income of Rs. 44996.95 and Rs. 35554.78 respectively. The table also shows that above 10 family size income is 28714, which is very low than other family size except family size with 1 to 2 members. In this sense we can say that average household income is closely related to the size of family.

5.3 Distribution of Mean Income by Ethnicity.

The living standard is influenced by the socio structure of caste society in Nepal, caste hierarchy is prevalent in the Nepalese society and generally people practiced different occupations, according to their caste. The great extent of income disparity is found in different ethnic groups.

In the study area there are various ethnic groups like, Brahman, Kshetri, Thakuri, Magar, Sanyasi, Bhujel, damai, Kami, Sarki, Majhi etc. For convenience this study categorized 4 different caste groups i.e. Brahman/Kshetri, Dalit, Janajati and others. Table 16 displays the distribution of annual per-capita income by different ethnic groups on the Binamare VDC.

Table No. 5.3
Distribution of Mean Income by Ethnic Groups

Ethnic Groups	HHS	Percent	Population	Total Income (Rs)	Percent	Per-capita Annual Income (Rs)
Brahman/Kshetri/ Thakuri	78	58.78	408	19757400	66.3	48425
Dalit (Damai, Kami, Sarki)	35	27.80	193	6019600	20.2	31189.63
Janajati (Magar, Newar, majhi)	11	9.22	64	2652200	8.9	41440.62
Others (Giri, Puri, Bhujel)	6	4.2	29	1370800	4.6	47268.96
Total	130	100	694	29800000	100	

Source; Field Survey, 2014

Above table shows that the distribution of income among different ethnic group is unequal in the study area. 66.3 percent of total income of sample household is received by Brahman/Kshetri with per-capita annual income 48425, which is highest percent of total income as well as mean income comparing with other ethnic groups. Per-capita income of others (Giri, Puri, bhujel) is 47268.96, which is also greater than other caste groups Janajati and Dalit. Per-capita average income of Janajati is 41440.62 which is higher than Dalit. Per-capita income of dalit is 31189.63, which is the lowest than other caste groups. They have not sufficient land and other sources of income generating. Neither they are educated nor have

skilled trained, so that they can not engaged in services & other profit earning activities. Hence, the distribution of income among different caste groups is unequal in the study area.

5.4 Distribution of Income by size of Landholding.

Agriculture is the backbone in agricultural country like Nepal. The agriculture is the most important economic activity and land plays crucial role in determining the economic condition. There is a positive relationship between landholding size and income level. Table No 5.4 shows the relationship between size of landholding and the income level in the study area.

Table No 5.4

Distribution of Annual Mean Income by Landholding size

Size of landholding in Ropani)	Household		Population		Total Income (Rs)	Annual per capita Income (Rs)
	No	%	No	%		
Below 5 Ropani	28	21.54	134	19.30	3887000	29007.46
6-10	48	36.93	242	34.88	9735000	40227.27
11-15	25	19.24	142	20.47	6952000	48957.74
16-20	16	12.30	93	13.40	4741000	50978.49
21-25	8	6.15	49	7.06	2597000	53000
Above 25 Ropani	5	3.84	34	4.89	1888000	55529.41
Total	130	100	694	100	2980000	

Source; Field survey, 2014.

Table No 5.4 shows that the relationship between size of landholding and the income level. No-one sample household is landless in the study area. Below 5 Ropani landholding households members per capita income is Rs. 29007.46, which is very low per capita income compared to other higher landholding groups. Similarly, households holding above 25 Ropani of land were found to have high per capita income of Rs 55529.41, hence, there is positive relationship between size of landholding and per-capita income in the study area .

5.5 Income Distribution And Inequality

The unequal distribution of income is a worldwide problem. Nepal is one of the developing countries, which is not far from this problem. In the rural areas of Nepal there is wide disparity between haves & have not, which results to poor people getting poorer and rich people getting richer day by day. The standard of living is mainly determined by level of income. To examine the actual pattern of income and wealth distribution in the study area some statistical tools are used in this chapter.

5.6 Distribution of Income among Sampled Households.

In this study, the distribution of income and inequality of the sample household is divided into ten income groups. Each group contain 10 percent of total sample households. It has been ranked low income groups. Thus first (1st) deciles covers 10 percent of households of low-income groups and last deciles groups covers 10 percent of household of high income group..

Table No 5.5

Income Distribution among sampled Household

Percent of HHS	No. of HHS	% of HHS in groups	Cumulative % of HH in group	Total Annual income by group	Percent income by decile group	Cumulative % of income
0-10	13	10	10	663860	2.23	2.23
10-20	13	10	20	1161540	3.90	6.13
20-30	13	10	30	1973377	6.63	12.76
30-40	13	10	40	2449336	8.22	20.98
40-50	13	10	50	2670996	8.93	29.91
50-60	13	10	60	2891000	9.70	39.61
60-70	13	10	70	3343978	11.23	50.84
70-80	13	10	80	3877339	13.02	63.86
80-90	13	10	90	4647713	15.60	79.46
90-100	13	10	100	6120861	20.54	100
Total	130	100		29800000	100.00	

Source, Field Survey, 2014

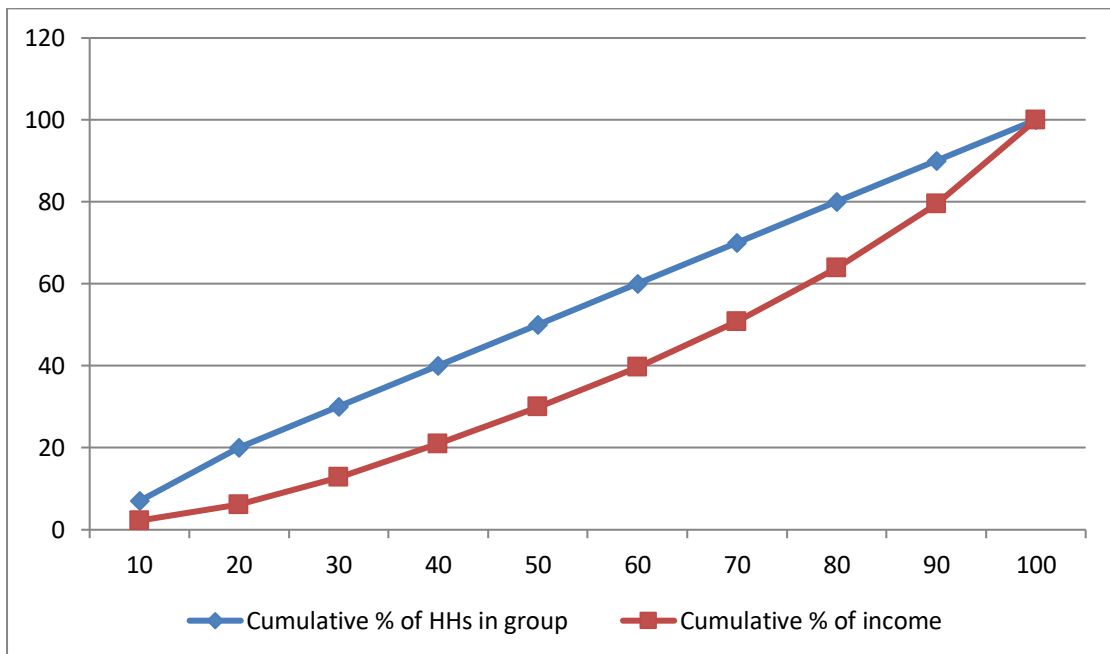
The above table shows that income is not distributed equally among the deciles groups. Bottom to percent households have received only 2.23 percent of the total income on the other hand top ten percent of households have received 20.54 percent of the total income.

According to above data income distribution in sampled household can be presented and interpreted in graph (Lorenz curve). In the graph cumulative percentage of income is plotted in vertical axis and cumulative percentage of household is plotted in horizontal axis.

obviously, zero percent of the households enjoys zero percent of income and 100 percent of household enjoys all the income . So a Lorenz curve runs from one corner of the unit square to the diametrically opposite corner. The 45 % diagonal line shows perfect equality in the distribution of income. But in the absence of percent equality the bottom income groups will enjoy proportionally lower share of income. Therefore it is obvious the diagonal (45%line). Hence, the Lerner curve show that difference between equal distribution of income and actual distribution of income, the area between Lorenz curve and the equal distribution curve is called the area of concentration. The basis notion is that the greater the area of concentration, the large income inequality.

FIG -2

Income Inequality in Sample Households



Source: Table No. 5.5

The above fig No-2 shows that there is vast income inequality in the study area because there is long distance between the line of perfect equality and Lorenz curve.

5.7 Income Inequality Measures by Various Indicators.

Table 5.6

Degree of Inequality According to Annual Household Income.

Methods	Results
Range	3.516
Relative Mean Deviation	4.108
Variance	26.85
Coefficient of Variance	51.8
Gini coefficient	0.28

Source: Appendix

Table 5.6 shows that various results of inequality . It shows that the range income distribution is 3.516 which shows high income inequality among the sample household. Similarly relative roan deviation is 4.108, variance 26.85 and coefficient of variance is 51.8

Giri coefficient is one of the bet statistical tool to measure the inequality that prevails on any variable which is derived from the Lorenz curve . So it is the ratio of area between Lorenz curve & line of perfect distribution to area below the line of perfect distribution. Gini coefficient lies between 0&1 i.e $0 \leq g.c \leq 1$. If Gini coefficient will be Zero which implies perfect equality i.e the concerned variable (income in our study) is evenly distributed and if Gini coefficient will one that implies perfect inequality . That is a situation in which one person receives the whole value of

concern variable (income) and other receive nothing. When the degree of concentration in the concerned variable (income) increases, the gap between line of perfect distribution and Lorenz curve increases and there by value of Gini coefficient increases and vice-versa.

In the study area Gini coefficient of household income is 0.28 which shows the inequality in the distribution of income in the study area.

But Gini coefficient of household income in Nepal is 0.33 (Economic Survey (2014/15) It shows that high degree of income inequality in Nepal. It indicates that rich person are richer and poor persons are also poorer day by day. It shows that value of GC in study area is slightly less than national figure

CHAPTER-VI

SUMMARY, CONCLUSION AND RECOMMENDATION

6.1 Summary

This study attempts to explain the measuring income inequality in Binamare VDC of Baglung district. The common objective of the study is to find out the income distribution by occupation, ethnic groups, land holding size, literacy and family size. To get this target, 130 (about 20%) households have been taken as a sample size out of 651 by using stratified simple random sampling method. Primary data were taken from field survey with the help of structure questionnaire and necessary data were collected from different documents of I/NGOs. In order to test the inequality on income distribution; range, variance, coefficient of variance, relative mean deviation, Lorenze Curve and Gini coefficient have been used.

The total sample population is 694, among them 348 are male and 346 are female. The total sample population is divided into three different age group, i.e. below 15 years, is 28 percent, 15 to 59 years is 62.5 percent and above 60 years is 9.5 percent. The average household size is 5.33, which is higher than national level (4.88). The major occupation of the study area is agriculture, 49.17% population is engaged in agriculture. In the study area majority of the people belongs to Brahmin Kshetri community (56.17%). The average landholding size is 10.42 Ropani. In the study area the distribution of land in caste is unequal. Most of the cultivate land is occupied by the Brahman/Kshetri & Sanyasi. In the study area Dalit group occupied a small portion of cultivate land than other caste group.

In the Binamare VDC, there is vast disparity in income distribution. The bottom 10 percent households have received only 2.23 percent of the total income, on the other hand top 10 percent of households have received 20.54 percent of the total income. The Gini concentration and range in the study area is found 0.28 and 3.516 respectively.

6.2 Conclusion

The present concern of the developing country has become to promote mainly the overall economic growth rate, generally, by reducing unemployment, poverty and inequalities in income distribution raising the living standard and there by to provide the population maximum benefit. In this regard Nepal also in not an exception. Nepal has attempted in this concern through development plan but could not reach the goal.

In the present study, we conclude that there is high inequality in the income distribution in Binamare VDC. There are various kinds of inequalities, such as agricultural productivity, distribution of landholding, education, health, job status etc. which results in high income inequality. The main occupation of the people is agriculture (49.17%, but the share of this sector in the total income is (36.92%). Which indicates that agriculture sector is less productive. It is because people are still using traditional methods for agriculture, lack of access to the market & basic infrastructure, lack of fertilizer facilities, lack of irrigation facilities etc. Moreover agriculture is subsistence type rather than profit oriented unemployment and disguised unemployment is found everywhere in this VDC. There is no any industrial sector for people to get good job. So a large number of youths have gone abroad seeking better jobs. Therefore

income from remittance is comparatively higher than income from service, pension and business.

From ethnic point of view, majority of people are Brahman and Kshetri (56.17 percent). These caste groups are generally literate and engaged in service sector of gets comparatively better job than other caste. Thus, income inequality is high in this area.

6.3 Recommendation

Based on the study findings the following recommendations are given as follows:

1. Most of the people are obligated to involve in agriculture due to lacking of alternative employment opportunities. The employment opportunities in agriculture are seasonal. Excess labor force (Surplus labor force) which is engaged in agriculture should be transferred to other productive sectors.
2. Land reform policy should be implemented strictly and widely. The ceiling of land should be reduced. Real farmers should be provided the ownership of land, so that farmers, possessing small land holdings may also be able to raise their income level.
3. To increase the productivity in the agriculture, high yielding technology i.e. improved seeds, chemical fertilizers, insecticides, pesticides and qualified technicians like J.T., J.T.A should be provided.
4. Credit facilities should be spread to increase agricultural production.
5. The average family size of the study area is 5.33, which is higher than the national average of 4.88, which creates an unemployment problem.

and this may lead the unequal distribution of income in the study area. So the family planning and other population control awareness programme should be implemented.

6. The literate people have relatively higher income than the illiterate one. Therefore, to reduce income inequality there should be provide the education to all as compulsory.
7. The middle & lower caste people spend large portion of their income in unproductive consumption as cigarette, tobacco and wine. This should be discouraged and the social organization should play active role to control it.
8. The government should provide the technical support ot establish the cottage industry in the study area.
9. The financial institutions should provide low level interest rate lone facilities to establish cottage industries in the study area.
10. Government should implement the development programme directly benefited to the people who have low income.
11. Educational status plays vital role to economic development. So some technical educational programmes should be implemented which helps to push the lower income groups to increase their income level.
12. In this VDC, social and economic status of the lower caste groups is very low. Their living standard is very miserable compared to other caste groups. So government should try to provide such type of economic and social services and programs which directly help to raise the economic status of those groups.

13. To reduce inequality in income government should provide additional job opportunities in such a way that it should help the lower income groups to increase their income level.
14. I/NGOs should implement immediately skill development oriented programmes and income generating activities on the basis of market and capacity of the people in the study area.
15. The concept of co-operative should be introduced among the people so that they can collect their small capital and start their own business.

This recommendations play vital role in the increment of productivity and level of income. So, if all these recommendation are accepted positively and practiced in the concerned areas there will be less difficulty to reduce the income inequality.

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APPENDIX -1

Annual Household income in Ascending order.

S.N	Annual Household Income	HH Size
1	36430	2
2	37210	2
3	39760	2
4	41520	4
5	44814	3
6	47459	5
7	49210	5
8	51452	4
9	53654	5
10	59216	6
11	62465	3
12	68210	3
13	72415	5
Total	663860	49
14	74560	4
15	76210	6
16	76876	3
17	77575	5
18	78219	4
19	80568	3
20	82293	4
21	83487	5
22	95289	3
23	105873	7

24	108870	3
25	109220	7
26	112560	3
Total	1161540	57
27	112480	4
28	127295	5
29	129348	3
30	135470	3
31	142395	7
32	148242	3
33	154420	4
34	159215	5
35	163604	3
36	164809	4
37	168708	5
38	177210	3
39	180181	4
Total	1973377	53
40	182210	6
41	183580	4
42	184974	5
43	185645	4
44	186210	6
45	186580	4
46	187575	5
47	188293	3
48	189570	4
49	191215	5

50	193512	4
51	194874	5
52	19548	4
Total	2449336	59
53	196210	4
54	196885	5
55	19745	3
56	198874	4
57	202348	8
58	205542	3
59	207809	4
60	208332	5
61	209944	3
62	210219	4
63	211351	5
64	212875	3
65	213392	8
Total	2670996	59
66	214880	3
67	215547	6
68	216828	5
69	217720	4
70	219542	6
71	220820	4
72	221450	9
73	223230	5
74	224910	3
75	227428	4

76	228210	5
77	229985	5
78	230450	11
Total	289100	70
79	242430	5
80	244580	9
81	245639	6
82	248450	5
83	249516	3
84	251485	12
85	253810	5
86	258208	6
87	262475	5
88	267338	6
89	269330	5
90	274230	4
91	276487	9
Total	3343978	80
92	281305	6
93	282406	5
94	286309	5
95	289204	6
96	292805	3
97	294607	9
98	296408	6
99	299818	7
100	302515	9
101	309218	5

102	311419	5
103	314810	7
104	316515	5
Total	3877339	78
105	318412	7
106	321915	6
107	324667	5
108	328412	5
109	342318	11
110	348615	7
111	358414	6
112	368618	9
113	372810	7
114	374905	5
115	388789	8
116	394628	6
117	405210	7
Total	4647713	89
118	408512	11
119	413520	6
120	421228	8
121	427580	6
122	428181	5
123	432647	13
124	438921	5
125	446576	10
126	452210	5
127	464221	7

128	468520	6
129	476221	10
130	842524	8
Total	6120861	100

APENDIX -2

Calculation of Range

$$\text{Range} = \frac{\text{Maxy} - \text{Miny}}{\bar{Y}}$$

$$\bar{Y} = (\text{Total income of household}) / (\text{Total no of household})$$

$$= \frac{29800000}{130}$$

$$= 229230.76$$

Now, We have,

$$\text{Maxy} = 842524$$

$$\text{Miny} = 36430$$

Substituting the values in above formula

$$R = \frac{842524 - 36430}{229230.76}$$

$$= 3.516$$

It shows that there is high inequality in the distribution of income between the sample household in Binamare VDC of Baglung district.

APPENDIX -3

Computation of variance, coefficient of variation and relative mean deviation among sample household

Y _i	\bar{Y}	Y _i - \bar{y}	(y _i - \bar{y}) ²
2.23	10	7.77	60.37
3.90	10	6.1	37.21
6.33	10	3.67	13.46
8.22	10	1.78	3.16
8.93	10	1.07	1.14
9.70	10	0.3	0.09
11.23	10	1.23	1.51
13.02	10	3.02	9.12
15.60	10	5.6	31.36
20.54	10	10.54	111.09
	100	41.08	268.51

Where n=10

$$\text{Now } \bar{y} = \frac{\sum y_i}{n} = \frac{100}{10} = 10$$

$$\bar{y}$$

b) Calculation of Relative Mean Deviation

$$\text{M.D} = \frac{\sum_{i=1}^n |Y_i - \bar{y}|}{n}$$

i=1

$$= \frac{41.08}{10}$$

There fore, M.D = 4.108

c) Calculation of Variance

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

$$= \frac{268.51}{10}$$

$$V=26.85$$

d) Calculation of Coefficient of variance

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

$$\frac{\sqrt{26.85}}{10} \times 100$$

$$= \frac{5.18 \times 100}{10}$$

$$= 51.8\%$$

APPENDIX -4

Computation of Gini Coefficient

Let X_i and Y_i be the Cumulative percentage of household and income respectively .

Table No 5.7

X_i	Y_i	$X_i Y_{i+1}$	$X_{i+1} Y_i$
10	2.23	-	44.6
20	6.13	61.3	183.9
30	12.76	255.2	540.4
40	20.98	629.4	1049
50	29.91	1196.4	1794.6
60	39.61	1980.5	2772.7
70	50.84	3050.4	4067.2
80	63.86	4470.2	5747.4
90	79.46	6356.8	7946
100	100	9000	-
		27000.2	24115.8

Using the data from table No

Formula for Gini Coefficient (group data)

$$\begin{aligned} GC &= \frac{1}{(100)^2} [\sum_{i=1}^n X_i Y_{i+1} - \sum_{i=1}^n X_{i+1} Y_i] \\ &= \frac{1}{(100)^2} [27000.2 - 24115.8] \\ &= \frac{2884.4}{10000} \\ &= 0.28 \end{aligned}$$

Thus, Gini Coefficient between different sample household is 0.28.

Hence, the inequality ratio of Binamare VDC is less than that of national level (0.33), (NLSS- III, 2011)

8. Annual income from Service

a) Income from Agriculture:

Crops	Quantity (Qtl)	Value in Rs.
Paddy		
Maize		
Wheat		
Potato		
Oil Seeds		
Vegeables		
Pluses		
Fruits		
Other		

b) Annual income from livestock and animal Product:

Items	sales Unit	Value in Rs
Milk		
Ghee		
Mutton		
Eggs		
Cows		
Bufallos		
Goats		
Pigs		
Poultry		
Others		
Total		

9) Income from non-agriculture sector:

- a) Income from service:.....
- b) Income from Pension:.....
- c) Income from remittance:.....
- d) Income from laboring:.....
- e)Income from trade/business:.....
- f) Income from small and cottage scale industries:.....
- g) Income from other sources :.....
- h) Income from non-agriculture sector.....

i) Does you family's total income suffice to fulfill your general necessities:

yes No

If yes, saving Rs:.....

If No, Loan Rs:.....

10. Sector of expenditure:

a) Expenditure on food items (Yearly)

Items	Expenditure (in Rs)
Paddy	
Maize	
Wheat	
Potatoes	
Milk	
Cooking Oil	
Meat / Eggs	
Fruits	
Tea	
Others	
Total	

a) Expenditure on non food items (Yearly)

Items	Expenditure (in Rs.)
Education	
Clothes	
Health	
Festival	
Transportation	
Electricity	
Others	
Total	

c) Expenditure on agriculture

Items	Expenditure (in Rs.)
Seeds	
Fertilizers	
Harvesting	
Insecticides	
Irrigation	
Others	
Total	

d) Expenditure on livestock:

Livestock	Feeding	Medicine	Other exp.	Total
Cow				
Buffalo				
Pig				
Goat				
Poultry				
Others				

11. In your opinion, what are the causes of Income inequality?

.....

12. In your opinion, what is the solution to reduce income inequality?

.....

13. Do you have any social problems due to Income inequality? (If yes)

.....

14) If your have any comment regarding your income and expenditure please mention:

