CHAPTER ONE

INTRODUCTION

1.1 Background

The term poverty is as old as human civilization .It is a popular word commonly pronounced in the third world. But the meaning of the term poverty is not much clear, as it has been used frequently. This is because the meaning of this term is different in accordness with the difference in the stage of development. Poverty exists not only in the least developed countries but also in the developed countries. In the developed countries this term is used to mean the failure to come up to a desired level of living according to the prevailing standard of income in their countries. But in under developed countries, the term poverty reflects the situation of living below minimum subsistence level of income and expenditure consisting food, clothing and other services, which the society needs for subsistence.

Poverty in Nepal is a predominantly rural phenomenon with 86 percent of the population living in villages, whose main source of livelihood is agriculture. The understanding of poverty is necessary for reduction of poverty. Poverty needs to be understood in the broader context of development. The major factors, causing high level of rural poverty in Nepal include the low performance of the agricultural sector, high population growth with a particularly high proportion of young people, and high illiteracy.

The poverty level of people living in rural community can be easily ascertained on the basis of their housing, food, cloth and other living conditions. Poverty has been perceived from different perspectives. Income based poverty, weakness in different aspects of human development, and social exclusion are the main aspects of poverty. There is high incidence of poverty in rural areas. As the non-agricultural sector development activities are especially urban-oriented, income poverty is reducing in cities but its resultant impact in rural areas is very low.

Poverty is multifaceted and hence requires multi- sectoral approach to address it. It is a cause as well as an effect in itself. It is the consequence of both the economic as well as socio-institutional structure. It is chronic in Nepal, particularly in rural areas

and remote hills of the country. People simply have not been able to benefit from opportunities available and income has remained low with rural populace in Nepal. Poverty is primarily, a rural or agricultural phenomenon in developing economy. The income of many people in developing countries is so low so that they are living in the condition of permanent poverty. Poverty is burning and challenging issue of developed and under developed countries. The two third populations of LDCs are living below poverty line and with the low level of income.

Poverty in Nepal can be seen from two ways: micro and macro. At micro level, it focuses primarily upon individual's experience of extreme poverty, which is in terms of low caloric intake per day, lack of basic for health amenities, illiteracy, high infant mortality, inadequate shelter and low purchasing power. On the other hand, at macro level, poverty can be identified in terms of high level of population growth rate, low productivity, lack of employment opportunities, technological and administrative efficiency and lack of marketing facilities.

There are two types of poverty.

a) Absolute Poverty.

It is a situation where people receive income below minimum level required to survival and physical inefficiency. In other words, anyone without the set of minimum necessities or essentials for living is said to be in absolute poverty.

b) Relative Poverty

It is a situation where people have low income in comparison to the estimated average income.

1.1.1 Poverty Situation in Nepal

As per Millennium Development Goals Report, people those who live the minimum of their life and earn less than US $ 1 per day is considered to be poor. Worldwide, the number of people in developing countries living on less than $1 a day was 980 million in 2004, which fell down from 1.25 billion in 1990. The proportion of people living in extreme poverty fell from nearly a third to 19 percent over this period. As per the report, 24.1 percent of total population in

Nepal living on less than US$ 1 a day and 68.5 percent of total population are living on less than US$ 2 a day (MDG, 2007).

The overall average national poverty rate in Nepal has been estimated at 31.0 percent in 2003/04. But looking at its caste, region, and gender and society-wise, we find a wide disparity. An estimate puts that, amongst the Brahmins and Chhetris, it is around 19 percent and, amongst the Newars, it's only 14 percent. The situation is far worse in the case of high hill Janajatis and the Terai people, where it is 44 percent and around 40 percent respectively. Thus, while women generally lag behind men in terms of earning and living, people in remote western region such as Karnali are the poorest on the basis of geography. It is seen that these communities have limited access to the states resource, development investment and results. And, again, people in the urban areas are much better in comparison to those in the backward villages. Nepal's gross domestic product (GDP) per capita was US $ 290, and nearly one-third of the population lived on less than a dollar a day (WB, 2006).

The problem of poverty is widespread in Nepal. From the most recent estimate published in World Bank Report, the percentage of population below national poverty line is 31 percent. It also shows that urban population in Nepal is around 16 percent of total national population. Poverty incidence seems to be twice as high as urban, in rural areas. It also clearly shows that incidence of poverty is more concentrated in rural areas, particularly in remote areas and sector wise confined to agriculture. Out of total population, 81 percent are still depended on agriculture for their livelihood. Agriculture contributes approximately 39.5 percent of the GDP and about 84 percent of the people live in rural areas of the country. The diversification in the economy has not taken place leading to over concentration of the economy in agriculture. Agriculture has been facing the problem of unemployment. The productivity of the agriculture sector could not be increased (WB, 2006).

Similarly, as per Human Development Report, the Human Development Index of Nepal is 0.534 and Nepal is placed at 142nd position. As per the report, life expectancy index is 0.626; Education and GDP index are 0.518 and 0.458

respectively. The Human Poverty Index (HPI) is 38.1, which ranks 84th amongst 108 developing countries. The adult (15 years and older) literacy rate is 48.6 percent and youth (15-24 years) literacy rate of Nepal is 70.1 percent. The above indicators express the fact about the problem of poverty in Nepal. So far as the problem is concerned, it is more severe in rural areas than that of urban areas. Most of the rural people have miserable condition due to the lack of basic needs of subsistence of life (UN, 2007/08).

1.1.2 Poverty Alleviation Efforts under the Periodic Plans

The Seventh plan (1985/86-1990/91) made first attempt to formulate a distinct program with a long term perspective for poverty alleviation. The Eighth Plan (1992/93-1996/97) and the Ninth Plan (1997/98-2001/02) - specifically had poverty reduction as their main objective. The Ninth plan also established long-term targets and development indicators for all sectors based on their potential for alleviating poverty.

In the beginning of 8th plan, 49.0 percent of the total population lived below the absolute poverty line. Nepal Living Standard Survey (NLSS-I,1995/96), revealed that the initiatives towards the provision of infrastructure development, social justice and security together with the emphasis on utilization of the private's sector productive capacity helped to bring down the poverty level to 42.0 percent at the end of plan (NPC, 1992/93-1996/97).

Poverty Alleviation was the sole objective of the Ninth plan. The implementation of the Agriculture Perspective Plan (APP) was the major means to alleviate widespread poverty in rural areas. The review of Ninth Plan includes the analysis on the progress made in poverty alleviation, overall socio-economic development, physical infrastructures development, and sector-wise physical progress. The plan aimed at reducing the poverty level to 32.0 percent during the plan period (NPC, 1997/98-2001/02).

A major element of the poverty reduction strategy of the Tenth Plan is to close the gap as rapidly as possible by mainstreaming the deprived communities and regions in the development process. It has also the sole objective of poverty alleviation. It

targets to reduce the poverty level up to 30 percent at the end of plan period (NPC, 2002/03-2006-07).

At present, the three year interim plan has set its main goal to prepare a basis for economic and social transformation for building a prosperous, modern and Just Nepal. The main objectives of this plan are to realize changes in the life of people by reducing poverty and existing unemployment and establishing sustainable peace. It targets to reduce the poverty level from 31 to 24 percent at the end of three year's plan period. A large number of factors are responsible for the cause of poverty in Nepal amongst them are low productivity in agriculture, unemployment, illiteracy, high growth rate of population, low calorie intake, lack of basic health facilities, high infant mortality rate and low per capita income. Peace and security are the basic factors of development that affect the whole system of the country (NPC, 2007-2010).

1.2 Statement of the Problem

Poverty is persistent in both developed as well as underdeveloped countries. The problem of poverty is more serious in developing countries like Nepal. Poverty is one of the obstacles of overall development of a country. The agricultural sector is the backbone for the development of a country. Its development plays vital role to uplift the national economy. However, the productivity in rural agricultural sector has been declined on account of lack of irrigation, fertilizers and agricultural credit. Similarly, dualistic land ownership, unfavorable tenancy regulations, small size of landholding, seasonal nature of employment in agriculture, inefficient technology are the major causes of low agricultural productivity and resulting into lower income level of rural farmers.

The inequalities in the distribution of income and wealth have been the major causes for aggravating poverty. The fruits of development have not been received proportionally by poor due to wider inequality of income. The living condition of poor is deteriorating severely as time passed by. There is also widespread indebtness amongst the poor in rural areas at exploitive rate of interest. As a result, there is an increase in the number of absolute poor every year.

Most of the production resources of the rural areas are owned by the relatively well-off people. Because of the lower access to production resources by the poor people, there exists a vast inequality of income distribution that makes the poor further poorer over the period of time.

A deep and detailed understanding of the causes of poverty is necessary for reduction of poverty. Resolving poverty requires systematic efforts in properly understanding the issues and devising appropriate intervention strategies and programs in a phased but time bound manner.

Rural poverty is one of the burning problems of developing and agricultural country like Nepal. Due to prevalence of various factors in rural areas, people are forced to live in the poverty. Various programs have been made by the government and non-government organizations to raise the economic condition of the rural poor people, yet there has not been any significant change in the condition.

In order to reduce poverty, some targeted programs are implemented by the government. They have severe limitation including poor targeting, weak monitoring and limited coverage. In this context, it is expected that the present study attempts to analyze the Nature and Incidence of Rural Poverty of Ward No. 9 of Baluwa VDC., Kathmandu. This will help to inform policy makers to devise policies for poverty reduction.

1.3 Objectives of the Study

The main objectives of the study are to explore the nature of poverty of Ward No. 9 of Baluwa VDC of Kathmandu. The specific objectives are as follows.

i) To identify the extent and nature of poverty in the study area.

ii) To measure absolute and relative poverty in the study area.

iii) To identify viable policy measures to reduce the poverty level in the study area.

1.4 Significance of the Study

It is evident that poverty in Nepal is rural in nature because 86% of total population lives in rural areas and several estimates have been made the number of people living below the poverty line. In spite of various efforts made to reduce poverty, there is a wide and greater regional disparity in socio-economic development of the country. Thus, main problem of today is to suggest effective measure to curtail it. Hence, this research is mainly focus on it.

This study has attempted to identify the economic condition of Ward no. 9 of Baluwa VDC of Kathmandu district. It has analyzed the extent and nature of poverty and has become significant because it has given up-to-date information as vivid picture of poverty of the study area which will be useful for the planner and policy worker.

1.5 Limitations of the Study

The limitations of the study are as follows:

i) This study is concentrated only one 30 sample households of Baluwa VDC, Ward No- 9 of Kathmandu district, because of limit resources and time constraint.

ii) The monetary value of family members working in their own household land and house-rent occupies by themselves has not included in income.

iii) Prices of goods have been calculates on the basis of current price and local price in local area.

iv) The windfall gain has not been included.

v) Economic variable like income, inequalities of income and wealth, unemployment etc have analyzed whereas socio-cultural variables such as caste political power have ignored.

vi) Simple statistical tools have used to analyze data.

vii) The study is fully depending upon the study area i.e. primary sources of data. On the other hand, the magazine, newspapers, published and unpublished articles and reports have also used as secondary sources of data from literature point of view.

1.6 Organization of the Study

This thesis has been divided in to eight chapters. The first chapter deals with introduction of the subject matter, objectives and significance of the study. Similarly, various studies are made in the second chapter through review of the literature. The third chapter is about research methodology of the proposed study. The fourth chapter is the description of the setting of the study area. The fifth chapter is related to poverty situation of the study area. The sixth chapter describes poverty problem and its nature, the seventh chapter is focused income distribution and poverty and chapter eight consist major findings, conclusion and recommendation.

CHAPTER TWO

REVIEW OF LITERATURE

Today, poverty is burning issue and a serious concern in all over the world. The phenomenon of poverty is as old as the human society. It was considered as sin and had the belief that there was no escaping from it. "The presence of poverty anywhere is threat to prosperity of everywhere" (Kunwar, 2003). Poverty is not a only one phenomenon. It is multidimensional and complex phenomenon. It can be affected differently in different countries even within the nationalities.

Poverty is the characteristics of some people not having enough food to eat. Poverty is considered as deprivation. Education, health including reproductive health, nutrition and employment, social and political participation are supplementary elements of the deprivation, capability and empowerment. Poverty can be defined through various approaches, viz. inequality approach, biological approach, absolute and relative deprivation approach etc. In inequality approach, he says that poverty and inequality are very closely related with each other but neither of them including the other. So, it is related with a situation when people posses lose of some desired attribute be income, favorable employment condition etc. than to others. Biological approach to poverty is primarily related to biological requirement and nutritional norms, which provide the most elementary concepts of basic requirements. The nation of deprivation has to be considered in broader terms to grip with the modern understanding of poverty. Poverty also can be defined in democratic pattern. In this pattern democracy is the most important factor of poverty. (Sen, 1999). Through the examination of Sudan and North Korea, Sen found that there were vastly starvation, and wrote that there was not democracy. So, there was poverty. He views poorly a combination of both the absolute and relative deprivation.

Poverty is one form or another affecting the human society of both the developed and less developed economy. On the whole, poverty makes human beings weak, ignorant, discarded, ugly, shabby with sickly children. Ultimately learning to a state of hopelessness, Thus poverty is pain. It feels like a disease, it attacks a

person not only materially but also morally. It eats away one's dignity and drives one to total despair" (WB, 2006).

Various scholars have mentioned that poverty can be measured in relative and absolute term. Absolute poverty indicates that the situation when the people cannot get enough food to eat for their living. This statement relates to the measurement of nutrition.

In a report by UN 2006, it states that "It is generally acceptable thesis that sustainable development cannot be achieved without a sustainable reduction in the number of people who are poor. Much of the effort of the world summit on sustainable development will therefore be concentrated on elaborating policy frameworks and strategies aimed at poverty reduction. If not poverty reduction is essential for sustainable development, human rights are essential components of poverty reduction. This report has argues for a right-based approach to poverty reduction and has showed how human rights being underpinned by a comprehensive international legal framework and realized in a sustainable manner-can be employed as strategic tools in poverty reduction tools" (UN, 2006).

Human rights approach adds effort to eliminate poverty:

a) Empowerment of poor

b) Equality and non discrimination

c) The equal relevance of civil, political and economic and social and cultural rights to poverty reduction

d) Accountability

e) Participation (UN, 2006)

"The least developed countries report 2008" (UN,2008) shows that the incidence of extreme poverty (measures as the portion of the people living on less than $1a day) has decreased from peak of 44% in 1994 to 36% in 2005. But the number of extremely poor people continues to rise in the LDCs until 2003, when the upward trend leveled off poverty reduction has been much faster in Asian LDCs, where the absolute number of extremely poor people continues to rise.

In 2005 it is estimated that 277 million people lived on less than US$1 a day in LDCs, including 206 million in Africa LDCs, 71 million in Asia LDCs and 1 million in Island LDCs. Classifying LDCs according to their export specialization, poverty incidences highest in commodity exporters, i.e. those for which petroleum, mineral and agricultural products accounts for the majority of their exports.

Although the incidence of extreme poverty is declining the portion of the population living on more than US$1 a day but less than US$2 a day has remains constant at approximately 40% of the population. The population living on less than $2 a day has been declining only very slowly. In 2005, five hundred eighty one (581) million people live under these conditions in the LDCs. This corresponds to three-quarters (3/4) of population, which shows that poverty continues to be pervasive in these countries" (UN, 2008).

Poverty is everywhere. It has presented as a burden of the government not only in LDCs but also in developed countries but the difference is in the extent or magnitude. Rural poverty is higher than urban poverty in most of the LDCs.

The group of people, whose income can not meet their minimum consumption requirement and suffer from under nutrition, starvation and disease and live in the boarder of survival, is conceptualized as a situation of poverty (Gewali, 1994:44).The economic development of developing countries like Nepal is quite impossible without developing the rural economy (R.C and Poudel, 2003).

Nepal is one of the poorest country in the world and the annual per-capita income is around US$240 .Agriculture is the main source of economic activity where more than 80 percent of the nations labor force involve on it. Over 60 percent of total household income comes from agriculture (Chhetry, 2003). According to mid-term evaluation of ninth ten year plan, it is estimated that during the first three years, poverty increased by 0.976 percent while per capita GDP increase by 2.13% and therefore poverty elasticity is estimated to remain at 0.46 percent. Taking into account per capita GDP in the Fy 2000/01 and decreased in per capita GDP in the FY 2001/02 remained at 1.7 percent (MOF, 2002).

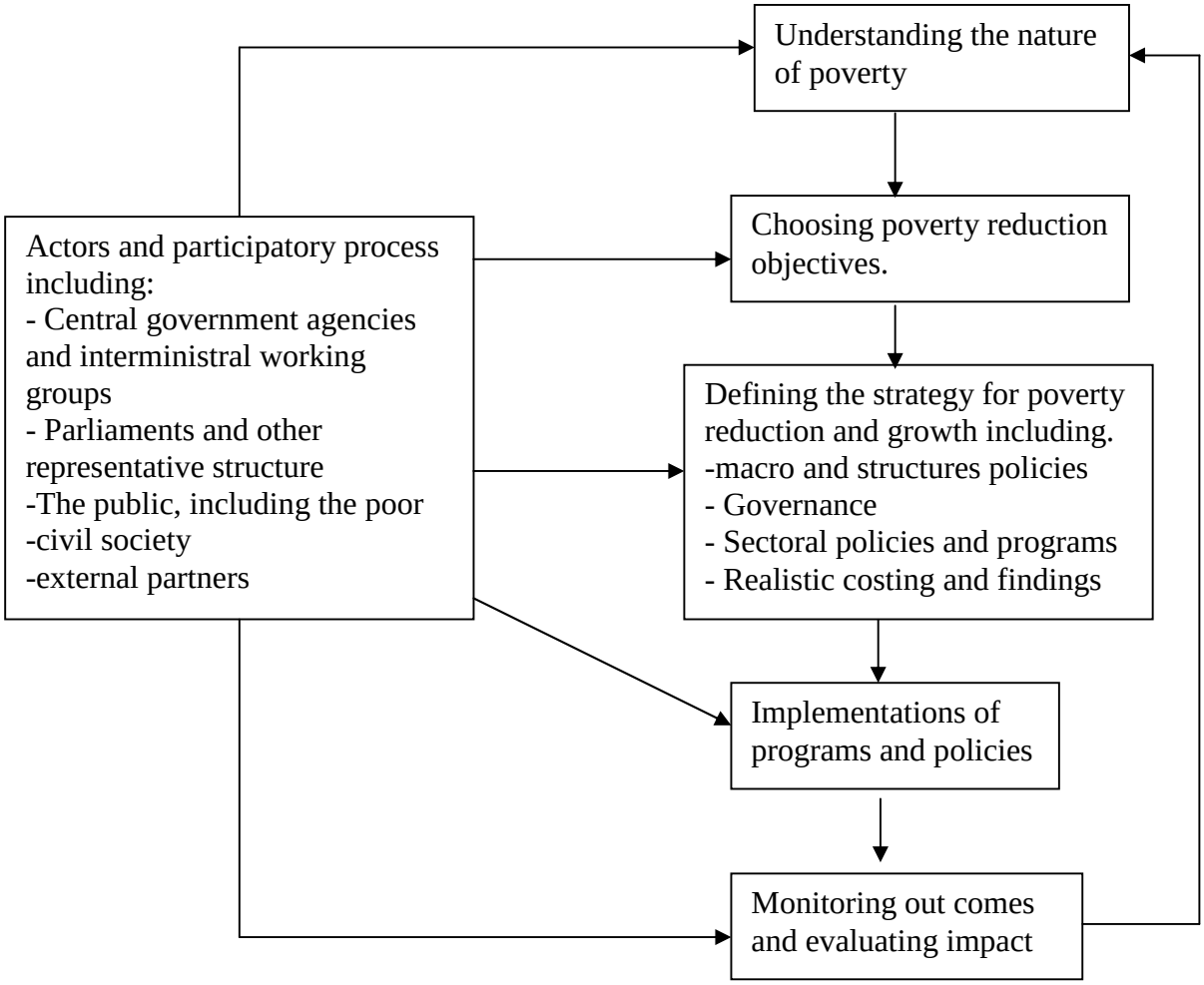
To alleviate the poverty and to increase the life standard of the poor people i.e. to uplift the living standard of rural people is the major challenge to developing

countries like Nepal as well as developed countries. Improving the investment climate and incentives for forms to invest productivity, create jobs and expand is the key to sustainable progress in attacking poverty and improving life standards of poor people. In a report by WDR, with rising populations, economic growth is the only sustainable mechanism for increasing a society's standard of living. Growth is not associated just with higher income but with better indicators of human development such as lower infant mortality, boarder education and longer life expectancy. It is also now widely understood that growth must be sustainable, safe guarding the value of national assets including environmental assets and the potential for further growth policy approaches might be tailored to better target the needs of poor people (UN, 2005:24).

In 2001 "Millennium Development Goals" project was lunched by UN for the reduction of poverty and increase the life standard of poor. The MDGs set targets for making progress in varied dimensions, which ranges from halving school poverty to putting all children into primary school stemming the spread of infectious disease by 2015 (UNDP, 2005).

The conceptual framework of poverty is multidimensional; therefore poverty reduction efforts have to be multi-targeted to show wide and diverse dimensions. The following frame work developed by WB shows that how a process of developing a poverty reduction strategy.

Process of Developing a Poverty Reduction Strategy



Source: Poverty reduction strategy (WB: 2001/02)

"Poverty not only affects the elderly, unemployed homeless people but also it affects the people from all walks of their life. Poverty exists when a particular person is not financially stable or do not have the right sources to stay on their feet. Poverty in Nepal is universally rural characteristic with extensively scattering. The poor people in Nepal are not poor by their choice. Most of them have been deprived of many of the opportunities that the non-poor have received. Thus poverty is considered as hunger, lack of shelter, being sick and not being able to see a doctor, not being able to go to school and not knowing how to read, not having a job, fear for the future losing a child to illness brought about by unclean water, powerlessness, lack of representation and freedom. Poverty is complex problem, which is not solving within short span of time. Cross-cultural caste/ethnicity, gender familial status, age, and place of residence are some but not

all of the characteristics that enhance the risk of being poor. Existing socio-demographic variable influence the poverty. But our expectation is to reduce poverty to a minimum level and reduce the gap between haves and have-nots (Aryal, 2006:110).

About four fifths of the working population live in rural areas and depend on subsistence farming for their livelihoods. In these areas household food security and poor nutrition are still major concerns. Most households have little or no access to primary health care, education, clean drinking water and sanitation services. Rural poor people are generally illiterate, have large families, and are landless or have very small landholdings. Small, fragmented subsistence farming is a characteristic of Nepalese agriculture, and the average landholding is only 0.8 hectares. Life is a constant struggle for survival. The most vulnerable groups are the lowest social castes, indigenous peoples and women.

Poverty Alleviation was the sole objective of the Ninth plan of National Planning Commission (NPC). The implementation of the Agriculture Perspective Plan (APP) was the major means to alleviate wide spread poverty in rural areas. The review of Ninth Plan includes the analysis on the progress made in poverty alleviation, overall socio-economic development, physical infrastructures development, and sector-wise physical progress.

The first scientific survey conducted for the estimation of poverty rate is the Nepal Living Standards survey (NLSS- I) in 1995/96. This was again conducted in 2003/04 to monitor the progress in poverty and other indicators. According to NLSS- I, 42 percent of population were below poverty line in 1995/96 (CBS, 2005). The mid-term evaluation of the Tenth-Plan has estimated that the percentage of population living under poverty line has fallen down to 31 percent. Similarly, on the HDI (Human Development Index) also target could not be met. Adult Literacy (15 years and above) is raised to 54.10 percent only against 63 percent targeted growth. The women literacy rate is mere 37.8 percent, while the net enrolment in primary classes reached only up to 87.4 percent against the target of 90 percent. But, the average life expectancy has crossed the target of 65.0 years to 63.4 years. The child mortality rate is still 48.0 percent against the target of 45.0

percent and the total fertility rate recorded 3.1 percent as against the target of 3.50 percent.

Table No. 2.1

The Target and Progress on Poverty and HDI during Tenth Plan (2002/03-2006/07)

S.No.	Indicator	Target	Progress
1	Population Poverty Line (%)	30.0	31.0
2.	Literacy Rate (%)- above 15 years	63.0	54.10
3.	Net enrollment rate at the primary class (%)	90.0	87.4
4.	Child Mortality Rate (per 1000 live births)	45.0	48.0
5.	Maternal Mortality Rate (per 1,00,000)	300.0	281.0
6.	Total Fertility Rate (Women aged 15-49) %	3.50	3.10
7.	Average Life Expectancy (yrs)	65.0	62.4
8.	Population with access to drinking water (%)	85.0	77.0

Source: NPC, Tenth Plan and Interim Plan

The plan could not meet the HDI targets due to ambitious targets, inaccessibility of the facilities and services to the target groups and poor quality of services, whatever delivered. Though progress in the HDI was not up to the target, the achievements were quite encouraging vis-à-vis other SAARC countries.

The Tenth plan has formulated a strategy based on four pillars- broad based high and sustainable growth, social sector development with emphasis on human development, targeted programs with emphasis on social inclusion, and improved governance. Its sole objective was to bring about a remarkable and sustainable reduction in the poverty level in Nepal (NPC, 2002/07).

Though poverty has always been an overriding concern of development efforts of Nepal, it was explicitly stated as an objective only from the Seventh Plan (1985/86-1989/90) onwards. The development plans which were formulated subsequently- the Eighth Plan (1992/93-1996/97) and the Ninth Plan (1997/98-

2001/02) - specifically had poverty reduction as their main objective. The Ninth plan also established long-term targets and development indicators for all sectors based on their potential for alleviating poverty.

A major element of the poverty reduction strategy of the Tenth Plan is to begin to close this gap as rapidly as possible by mainstreaming the deprived communities and regions in the development process.

Asian Development Bank (ADB), in its Country Operations Business Plan of Nepal during 2007, it has expressed the views regarding progress and achievements made by Nepal in the context of recent political and social developments. It stated that Nepal has made significant progress in poverty reduction and poverty incidence has declined from 42 percent in 1996 to 31 percent in 2004. However, poverty levels are unevenly distributed among various caste and ethnic groups and by region. For example, poverty in rural areas remains much higher than in urban areas. Despite the decade long conflict, Nepal has also made progress on some of the Millennium Development Goals (MDGs), such as those related to poverty, gender equality, tuberculosis, and child mortality. Although some improvement has also been made in primary education, maternal health, and HIV/AIDS, the corresponding MDG targets in these areas are unlikely to be met by 2015. However, with the end of the conflict and the peace process in progress, development space has increased considerably in Nepal, and the country has the opportunity to accelerate progress on poverty reduction and achievement of the MDGs (ADB, 2008).

The country program on the proposed lending program for 2008 of ADB is in line with Medium Term Strategy priority sectors and sub-sectors to address acute poverty and is also aligned with the Government's priority sectors. The goal of the project "Rural Employment Generation Sector Development Program" is to poverty reduction and livelihood improvement through facilitation of gainful employment opportunities, which contributes to rehabilitation and lasting stability of Nepal. The main purpose of the program is to facilitate rapid absorption of the rural unemployed or underemployed into formal sector labor markets, so as to realize significant improvements in livelihoods, and reduce poverty in urban and

rural areas. The program envisages significant employment-generation impacts for the same areas, which otherwise have very limited prospects to engage in formal or agricultural sector employment (ADB, 2006/08).

Three Year's Interim Plan has set its main goal to prepare a basis for economic and social transformation for building a prosperous, modern and Just Nepal. The main objectives of this plan are to realize changes in the life of people by reducing poverty and existing unemployment and establishing sustainable peace. The strategies of this Plan will be as followings:

- To give special emphasis to relief, reconstruction and reintegration.
- Creation and expansion of employment opportunities.
- To increase pro-poor and broad based economic growth.
- Promotion of good-governance and effective service delivery.
- Increase investment in physical infrastructures.
- Adopt an inclusive development process.
- Carry out targeted programs.

The primary challenge of the plan is to give continuity to poverty alleviation efforts and reduce the increasing gap between rich and poor. The following policies will be taken for poverty alleviation and employment promotion.

- Investment will be increased for reconstruction, rehabilitation, reintegration and infrastructure development.
- The strategy of economic growth based on inclusiveness will be made favorable to poverty alleviation.
- Inclusive, targeted and special region programs will be carried out in various sectors based on both geographical and social groups.
- A system of identifying population living below poverty line will be developed with the objective of making targeted programs reach the concerned groups effectively.

- To reduce the condition of employment and under-employment and production oriented employment will be promoted.
- In order to make employment more income generating, skill development and concessional loans will be provided to youth groups of the poor and targeted groups.
- Subsistence oriented production system will be commercialized by increasing small savings, ordinary skills and the productive use of limited land through co-operatives.

The vision of this plan is to build a Prosperous, Modern and Just Nepal. In the envisioned situation, Nepal will be free from absolute poverty and all Nepalese will have obtained full rights to live in suitable human conditions. The people will obtain equal rights, and economic and social opportunities to fully utilize their potential. The modern way of thinking will bring about changes in the social, cultural, educational, and economic and financial sectors; improve people's behavior and allow them to accept appropriate technology and new concepts. In a just situation, the gap between rich and poor will have reduced, and all kinds of discrimination and inequality, whether they are legal, social, cultural, linguistic, religious, economic, ethnic, gender, physical condition, and geographical, will have ended. It will ensure social justice, guarantee basic human rights, and good governance.

Some of the past programs have been implemented with the primary objective of poverty alleviation. Based on the past experience that the target of poverty alleviation can only be obtained if the overall economic indicators are positive, the Tenth plan categorized poverty into three dimensions, income poverty, human poverty and social exclusion. An analysis of analyzing all these dimensions in the past shows that overall poverty and human development indices of Nepal have considerably improved (NPC, 2007/10).

According to Nepal Living Standards Survey (NLSS - II), 2003/04, absolute poverty has decreased by 11 percent from 42 to 31 in the last 10 years from 1995/96 to 2003/04. The reasons for such decrease in poverty are the wage increases in agricultural and non-agricultural sectors, increasing urbanization, the rise in the economically active population sector, and the large amount of remittances entering the country. However, during the same period, the Gini coefficient has increased from 0.34 to 0.41, in other words the difference between the rich and poor is seen to have increased (CBS, 2005).

Similarly, according to the Human Development Report, although Nepal's Human Development has grown to 0.527 from the previous year's 0.513, Nepal remains as the country with least human development in South Asia. Nepal remains on the 138th position in Human Development (UN, 2006).

Taking into account the current situation and potentiality of availability of internal and external resources, the annual average economic growth rate for the current Interim Plan is projected to be 5.5 percent, which will increase per capita income by 3.3 percent and employment by 3.5 percent on an average annually. On the basis of the elasticity of poverty with economic growth rate, growth in employment and achievements of targeted programs, the percentage of population living below the poverty line is projected to be 24 by the end of the Plan. Of the overall growth, the agriculture sector is estimated to grow by 3.6 percent and non-agriculture sector by 6.5 percent. During this Plan period, the average annual rate of inflation is estimated to be 5.6 percent (NPC, 2002/07).

The quantitative targets of major indices related to economic, social, and infrastructure development is given in Table No. 2.2.

Table No. 2.2

Various Indicators Index at the end of Tenth Plan and Target of Interim Plan

S. No	Indicator	At the end of Tenth plan	Interim's Plan Target
1.	Economic Growth Rate (%)	2.50	5.50
I)	Agriculture	0.70	3.60
II)	Non-Agriculture	3.60	6.50
2.	Population below Poverty Line (%)	31.0	24.0
3.	Employment Growth Rate	3.00	3.50
4.	Women receiving maternity services from health workers (%)	23.4	35.0
5.	Family Planning Users (%)	48.0	51.0
6.	Total Fertility Rate (Women aged 15-49) %	3.10	3.00
7.	Maternal Mortality Rate (per 1,00,000)	281.00	250.00
8.	Infant Mortality Rate (per 1000 live births)	34.00	30.00
9.	Child Mortality Rate (per 1000 live births)	48.00	42.00
10.	Population with access to drinking water (%)	77.00	85.00
11.	Population with sanitation service (%)	46.00	60.00
12.	Literacy Rate (%)- above 15 years	54.10	66.00
13.	Net enrollment rate at the primary level (%)	87.40	92.00
14.	Telephone, including mobile (per 100 density)	5.50	20.00
15.	Electricity generation (MW)	560.00	704.00
16.	Irrigation (Hectares)	1,168,144.00	1,263,824.00

Source: Poverty Reduction Strategy Paper, PRSP (Tenth Plan)

In Nepal, high incidence of poverty is found among dalit and indigenous nationalities. Some 46 percent dalit, 44 percent hill nationalities (Magar, Tamang, Gurung, Rai, Limbu) and 41 percent Muslim communities are found to be below

the poverty line. Since the incidence of poverty is very high compared to the national average of 31 percent, it is seen that these communities have limited access to the states resource, development investment and results.

Amongst the policies promulgated by the Mid-Term Plan to obtain the goals outlined by the Plan, one of them will be: Process will be started to identify people living under poverty line, and economic and social justice, economic growth and equitable distribution will be formed by focusing development efforts on poverty alleviation.

Remedy of poverty lies in the agricultural commercialization that would help raise agricultural productivity, which ultimately could reduce the incidence of poverty. There is every possibility that poverty would give way to prosperity particularly in the agricultural sector and in general in the overall economy. For this to happen, there is a need for timely provision of inputs in terms of improved seeds, fertilizer and irrigation at a price affordable by the farming community (Mathema, 2007).

Poverty Alleviation Fund (PAF) has been established as an autonomous institution, funded by World Bank. The Annual Report 2005/06 of PAF, express that nearly one third of the Nepali population is still living in absolute poverty-deprived of basic amenities of life such as food, clothing, shelter, health, education and drinking water. PAF is directly linked with the third pillar of the Tenth plan/PRSP of Government of Nepal that is the "Targeted Program" which emphasizes the need for special programs to bring the excluded communities in the mainstream of development. PAF intends to bring prosperity of the poor who are at the bottom of the economic ladder.

The achievements made by PAF during the fiscal year 2005/06 in various program components are:

- Social Mobilization
- Capacity Building "Help the community to help themselves" and Human Resource Development
- Income Generation and Micro Enterprises
- Community Infrastructure

- Innovative Special Window Program
- Coordination, Linkages and Partnership and
- Monitoring Evaluation and Research.

As per the survey (Income Poverty Indicators) conducted by World Bank (1999), based on the poverty line is of Rs. 4,404.00 per person per year, has estimated the population poverty line for different areas. The estimates are given in Table No: 2.3.

Table No. 2.3

Income Poverty Indicators for Different Areas

Ecological Zone	Poverty Incidence- % of People Living below Poverty Line (%)	Poverty Gap- Depth/Intensity of Poverty %	Severity of Poverty %
Mountain	56.0	18.5	8.2
Hill	41.0	13.6	6.1
Terai	42.0	9.9	3.4
Rural/Urban			
Urban	23.0	7.0	2.8
Rural	44.0	12.5	5.1
Nepal	42.0	12.1	5.0

Source: World Bank (1999)

Rural Poverty and Environment are interrelated and said that the two are self-enforcing. Poverty is a major cause and effect of environment problems. It is, therefore, futile to attempt to deal with environment problems without a broader perspective that encompasses the factors underlying poverty and inequality. As 31 percent of Nepal's populations are still below the poverty line, people can not afford to send their children to school. Education and health are at the bottom of their agenda. Their primary goal is to feed themselves and their family in order to survive. If the poverty is not alleviated or reduced, the cycle of poverty will continue without end. That is, if poverty is allowed to persist, this will lead to the

status quo in environmental awareness and environmental degradation, in the absence of environmental awareness, will continue unabated in the society.

As per the Human Development Report, the Human Development Index (HDI) measures the average progress of a country in human development. Nepal (142nd rank) has fallen under the category of Medium Human Development, whose HDI value is 0.534 in 2005.

The Human Poverty Index (HPI) for developing countries focuses on the proportion of people below a threshold level in the same dimensions of human development as the human development index living a long and healthy life, having access to education, and a decent standard of living. By looking beyond income deprivation, the HPI represents a multi-dimensional alternative to the $1 a day (PPP US$) poverty measure. The Human Poverty Index (HPI) is 38.1, which ranks 84th amongst 108 developing countries. The HPI measures severe deprivation in health by the proportion of people who are not expected to survive age 40. Education is measured by the adult illiteracy rate. And a decent standard of living is measured by the unweighted average of people without access to an improved water source and the proportion of children under age 5 who are underweight for their age (UNDP, 2007/08).

In the year 2000, all United Nation Member States including Nepal, have declared the Millennium Development Goals (MDGs) which have become a universal framework for development and means for developing countries and their development partners to work together in pursuit of a shared future for all. The goals of the Millennium Declaration and International Development Goals have been merged under the designation of MDGs.

Millennium Development Goals 2000 are as follows:

- Goal 1: Eradicate extreme Poverty & Hunger.
- Goal 2: Achieve Universal Primary Education.
- Goal 3: Promote Gender Equality and Empower Women.
- Goal 4: Reduce Child Mortality.
- Goal 5: Improve Maternal Health.

- Goal 6: Combat HIV/AIDS, Malaria & other Diseases.
- Goal 7: Ensure Environmental Sustainability.
- Goal 8: Develop a Global Partnership for Development.

As per the Millennium Development Goals Report, the United Nations (UN) has overviewed the progress at the MDG mid-point of the 15 year period (2000-2015). It also outlined peace, security and development concerns, including in the areas of environment, human rights and governance. The proportion of people living in extremely poverty fell from nearly a third to less than one fifth between 1990 and 2004. If the trend is sustained, the MDG poverty reduction target will be met for the world as a whole and for the most regions. As per the Survey (in Southern Asia), the proportion of people living on less than $ 1 a day is decreased to 29.5% in 2004 (In 1990: 41.1 percent and 1999: 33.4 percent). In most developing regions, the average income of those living on less than $ 1 a day has increased. Similarly, the poverty gap ratio has fallen to 6.7% in 2004, whereas it was 11% in 1990. This shows that the poorest are getting a little less poor in this region. The poverty gap ratio, which reflects the depth of poverty as well as its incidence, has decreased in this particular region (UN, 2007).

The Nepalese economy positively responded to the economic liberalization and reform initiated in the mid- 1980s with per capita income growing at the rate of 24.5 percent per annum between 1986 and 2001. Nepal has made progress in human development and poverty reduction after the restoration of democracy in 1990. The Nepal Living Standards Survey- II (2003/04) shows significant improvements in poverty levels between 1995/96 and 2003/04 with average annual real per capita income and expenditure growing at around 4.5 percent during that period. As a result, the proportion of people earning less than one dollar a day decreased from 34 to 24 percent between 1995/96 and 2003/04 (CBS, 2005). The trend shows that Nepal is only 7 percentage points away from the MDG target (17%) of halving the proportion of people earning less than one dollar a day. This clearly indicates that Nepal is on track to towards achieving the poverty target (Tiwari, 2006).

The root causes of high variations in poverty in Nepal are economic and social exclusion of women, disadvantaged ethnic and caste groups, powerlessness and risks, which mainly derive from socio-economic and natural characteristics, and a typical location of the country. Poverty in Nepal varies by geographical, economic and social factors. They have become the basic factors explaining poverty. On the aggregate, although the poverty has decreased over the period, from 1995/96 to 2003/04, the decrease was not proportional across regions, castes and ethnic groups. The World Bank's Nepal Country Assistance Strategy (2004-07) specifically outlines that progress towards attaining the MDGs in Nepal has been slow (WB, 2004).

To achieve the goals of MDGs, the country is in urgent need of a quality growth and an inclusive development. Thus, reaching MDGs needs: i) Policy changes that facilitate increased mobilization of domestic resources and foreign assistance; and ii) Enabling policies and institutional environment that will ensure that the resources are used efficiently and effectively. This necessitates proper planning, monitoring and optimal policy changes of Government of Nepal (GON) and its ministries. In this front, a concerted effort of the other constituents of Nepalese society including UN system, non- government organizations (NGOs), donors, civil society and communities at large is also the need of the day.

Tiwari has also brought forward the major challenges for monitoring the Millennium Development Goals in Nepal, based on his experience working with the preparation of the past two MDG progress reports of Nepal. They are as follows:

- Unavailability of data on the MDG indicators.
- Unavailability of values of the MDG indicators.
- Unavailability of updated data or values of indicators.
- Different values of same indicators
- Lack of disaggregated data.
- Need for 'localizing' indicators and targets.

In conclusion, social equity, economic growth and rural poverty reduction program in rural areas is one of the prime agenda in this century. To achieve the goal to prepare basis for economic and social transformation of Interim Plan, there

must be proper implementation of strategies like creation and expansion of employment opportunities, promotion of good governance, adoption of inclusive development process and to give special emphasis on relief, reconstruction and reintegration program.

It has been observed that the programs like Micro Enterprise Development Program (MEDEP) to diversify the livelihoods and increase the income of low income families and Rural Employment Generation Sector Development Program to reduce poverty and improvement of livelihood through facilitation of gainful employment opportunities must be initiated to carry out the targeted programs of Interim Plan. In addition to, it must be ensured that computation and reporting of MDGs indicators must be reported and should be included in the Poverty Monitoring and Analysis System (PMAS). And, last but not least, reaching the MDGs requires not only additional financial resources but also localizing them with enabling policies and institutional environment and developing national capacity.

The present review, in this way, contributes to certain intent in portraying the real scenario of rural poverty in different parts of the country. Along with this it has also presented the degree of success and failure in connection with the implementation and output of various poverty alleviation plans, projects and programms. In this line, the present study is an attempt to vividly portray the actual scenario of poverty specific respect to Ward No.9 of Baluwa Village Development Committee of Kathmandu District of Nepal.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Site Selection

The Ward No.9 of Baluwa Village Development Committee of Kathmandu District has selected purposively. The outlook of unhygienic living of the majority of the residents, poor infrastructure development of the VDC that is proximate to the centre of capital city made the area to be selected as the study site.

3.2 Sources of Data

The study was primarily based on primary sources of data collected through structured questionnaire along with an intensive field survey during January5 to January 18, 2009. The reference year for the study was January to March 2009. For comparative analysis, data from secondary sources (i.e. from National Planning Commission, Nepal Rastra Bank, World Bank, Poverty Alleviation Fund, Millennium Development Goals and Mid-Term Enterprise Development Program of United Nations) have also utilized.

3.3 Sample Size and Sampling Procedure

Out of 123households of Ward No. 9 of Baluwa VDC, 30 households were selected by using of lottery sampling method. In order to make the study meaningful and also complete the study within the limited time period, large sample size was not feasible. The sample size is about 24.39 percent of the total households which can be considered to be representative of the universe of the study.

3.4 Data Processing Method

A master table of information was prepared from information collected through completed interview schedule, incorporating all socio-economic characteristics such as income, land holding, family size, and level of education relevant to analysis. The information were further grouped and sub-grouped as per the requirements of the study.

3.5 Definitions

Household:

A household is a single economic unit which is mostly private and non-institutional where two or more members live, earn and share same kitchen. It is important because household is the basis for sampling procedure.

Total Household Income:

It is the income which is generated by family members in a year from different sources. It is the sum total of net income from agricultural production, income from livestock, and poultry farming, income from labor, business and services and income from borrowing.

Total net income is derived by subtracting the expenditure made or cost involved from the total income by the item.

Total Household Consumption:

It includes the expenses on food and non-food items made by the family members of a household within a given time frame.

Illiterate People:

The people who don't know how to read and write are considered as illiterate people.

Literate People:

The people who can read and write are considered as literate people.

Absolute Poverty Line:

The minimum subsistence notion is followed to estimate, absolute poverty line. The household, whose per capita income is minimum subsistence level, is termed as absolutely poor.

Relative Poverty Line:

The relative poverty line is estimated on the basis of wolf point and absolute poverty line. Those households whose income level is higher than minimum subsistence level but below the wolf point level are relatively poor.

Total Poverty Line:

The total poverty line is derived with the help of linear Keynesian consumption function and wolf point.

Non-Poor:

The households are considered to be non-poor whose income is above the break-even level of income that is above the equality points of expenses and income and who can save if so desire.

3.6 Methods and Tools Used for Data Analysis

In order to meet the objectives of the study, various analytical methods and statistical tools are used to analyze the data in the present study. Applying these tools, absolute, relative and total poverty line is found.

3.6.1 Absolute Poverty Line

To measure absolute poverty line, the minimum subsistence norm has been followed. According to the norm, calorie requirement per capita per day for survival for Nepal is 2256 calorie. For this calorie intake, net consumption of 605 grams of cereals and 60 grams of pulses are required daily. The per capita annual expense to purchase that calorie equivalent of food worded out to be Rs. 2,637. The Nepal living standard measurement survey had estimated annual per capita income of Rs. 4,404.00 to meet the expenses on daily minimum average of 2256 calories from food basket and other non-food items requirements too. The income level at the current prices of 2001 turns out to be Rs. 6,100.00. The average cost of these norms are required are estimated through using average market prices prevailing at the time of our field survey.

3.6.2 Computation of Total Poverty Line

For deriving it, two types of tools, Keynesian consumption function and wolf point are used. They are discussed below:

a) Keynesian Consumption Function

Keynesian consumption function considers consumption as the linear function of income expressed as:

$C = a + bY$

Where,

C=consumption of household.

a=autonomous consumption.

b=marginal propensity to consume.

Y=Income.

b) Wolf point

In Keynesian consumption function wolf point implies the point of equality between income and expenditure that is Y = C

As, $C = a + bY$

$Y = a + bY$ (As Y = C)

Thus, wolf point = $\frac{a}{(1 - b)}$

The wolf point gives the total poverty line.

3.6.3 Intensity of Poverty

Sen's poverty index has used to identify intensity of poverty. The index was computed with considering and without considering inequality among poor.

a) With considering inequality

$$P^* = \frac{X}{C^* P} [C^* P - C_P (1 - G_p)]$$

b) Without considering inequality

$$P^* = \frac{X}{C^* P} (C^* P - C_P)$$

Where,

P^*= Poverty index

X= Percentage of population living the poverty line

C*P= Poverty line per capita per day.

C_p= Mean income of the poor.

G_p= Gini co-efficient of the poor.

The theoretical notion is that if the calculated value of the index approaches near to zero, the intensity of poverty is low and if it approaches near to one, it indicates higher intensity of poverty.

3.7 Extent of Income Inequality and Distribution of Income

To measure the size of income distribution and extent of income inequality, following statistical tools have used.

3.7.1 Range

Range has used to find out the dispersion in income distribution. It shows the difference between maximum and minimum observations of the distribution. It was calculated by using the following formula.

$$\text{Range} = \frac{(Max\ Y\ Z\ Min\ Y)}{\overline{Y}}$$

The limiting value of the range is $0 \leq \text{Range} \leq +1$. As its value approaches to zero, it indicates equality in the distribution and vice-versa.

3.7.2 Coefficient of Mean Deviation

It is also known as the mean deviation. It shows the variation of each item from its main value. It has used to measure the equality in the distribution of income. It can be calculated with the help of following expression.

$$\text{C.M.D} = \frac{(\overline{Y}\ Z\ Y)}{N\overline{Y}}$$

Where,

M.D = Mean Deviation

Y= Income of an Individual

$\overline{Y}$ = Mean Income

N= No. of Observations

3.7.3 Variance

It is the square of standard deviation. It shows the relationship between arithmetic mean and standard deviation. Variance has used to measure the inequality in

income distribution. It also shows the deviation of data or individual items from the mean value.

It can be calculated as:

$$\sigma^2 = \frac{(Y - \bar{Y})^2}{N}$$

Where,

σ^2 = Variance

$\bar{Y}$ = Mean Income

Y = Income of the Individual

N = No. of observations

3.7.4 Co-efficient of Variation

To measure the dispersion, co-efficient of variation, which is the ratio of standard deviation to mean, was also used. It is calculated as:

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

Where,

C.V= co-efficient of variation

σ = standard deviation

$\bar{Y}$ = Mean income

3.7.5 Gini Co-efficient

Gini co-efficient also measures the inequality in the distribution of income. The limiting value of Gini co-efficient is such that $0 \leq G \leq 1$. As the value of Gini co-efficient approaches to one, the greater the inequality and if it approaches to zero, there is greater equality. It can be calculated from the formula as:

$$G.C. = \frac{1}{n} - \frac{2}{n^2 \bar{Y}} [ny_1 + (n-1)\, y_2 + (n-2)\, y_3 + \ldots\ldots\ldots\ldots\ldots + y_n)$$

Where,

$y_1 > y_2 > y_n$

G.C= Gini co-efficient

N= No. of income receiving units

$\overline{Y}$ = Mean income

$y_1, y_2 \ldots y_n$ = Percentage of income received by the corresponding units.

3.8 Relationship between Income and Consumption.

3.8.1 Correlation Co-efficient

In the present study, correlation co-efficient is computed to show the relationship between income and consumption expenditure. It is because there is high degree of correlation between income and expenditure (i.e. consumption). It is calculated by using the following formula.

$$r = \frac{N\phi CY \; \mathrm{Z}\phi Y \phi C}{\sqrt{N\phi C^2 \; \mathrm{Z}(\phi C)^2}\sqrt{N\phi Y^2 \; \mathrm{Z}(\phi Y)^2}}$$

Where,

r = correlation co-efficient

N = No. of observations

Y= Income of household

C= Consumption expenditure of household.

The value of r ranges from -1 to +1. If it is negative, it implies inverse relation between the variables and if it is positive, it implies the direct relationship between the variables.

3.8.2 Simple Regression Analysis

Simple regression analysis had been used to examine the degree of relationship between income and consumption. To measure the income consumption relationship, the following consumption function had been used.

C= a + bY

3.9 Study of Nature of Poverty

To analyze the nature of poverty, a descriptive and analytical method has been used. Absolute poor households are classified on the basis of occupation, caste and ethnicity, size of landholding, educational status of household head, household size, age group and employment status. To examine the nature of poverty, relationship between these socio-economic variables and poverty had been established.

Not only these, the observation during the field survey is also taken into consideration for making conclusion and recommendations.

CHAPTER FOUR

INTRODUCTION OF THE STUDY AREA

4.1 Location

Nepal is divided into 5 development regions with 14 zones and 75 districts. Kathmandu is one of the well -facilitated and developed district of Nepal. Though this district is well developed, there are also rural areas, which are out of development and facilities. Among the several rural areas of Kathmandu district, Baluwa VDC is one of them. This VDC is located at North- east part of Kathmandu district which is about 10 km from the centre of Kathmandu. The present study based on primary survey data was carried out in Baluwa VDC, ward no. 9. This ward is located at the North of Gokarneswor VDC, East of Kapan VDC and south east of Chunikhel VDC.

4.2. Population Size and Sample Population Size of the Study Area

According to record of Baluwa health post, the total population of ward no: 9 of Baluwa VDC is 718 and total HHs no. is 123.

Table No. 4.1

Size of Population of Study Area

Age (in yrs)	No: of population	Male	Female
2 yrs Below	27	13	14
2-5 yrs	30	12	18
6-59 yrs	126	66	60
Above 60 yrs	535	257	278
Total	718	348	370

Source: Baluwa Health Post, 2065

The above table indicates that female population is more than the male population. Out of 718 populations, 348 are males 370 are females. The following table shows age and sex structure of the sample population of the study area.

Table No. 4.2

Age and Sex Structure of the Sampled Population

Age group	Female	Male	Total
0-5 yrs	10	9	19
6-15 yrs	14	11	25
16-59 yrs	57	55	112
60 above	2	1	3
Total	83	76	159

Source: Field survey, 2009

For simplicity, total sampled population has divided into 4 age groups. Out of total sampled population 83 are females and 76 are males.

4.3 Ethnic Composition of Total Population and Sampled population

The following table shows the composition of ethnic group of total HHs of the study area.

Table No. 4.3

Ethnic Composition of Total HHs

S.N.	Ethnic group	No. HHs	No of population		Total	Percentage of ethnic group (HHs)
			Male	Female		
1	Brahman	36	89	92	181	29.26
2	Chhetri	38	98	102	200	30.89
3	Janajiti	47	124	136	260	38.21
4	Dalit	12	37	40	77	9.75
	Total	123	348	370	718	100

Source: Baluwa Health Post, 2065

Above table shows that 38.21 percent of total HHs covered by Janajati and only 9.75 percent of total HHs is covered by Dalit in the study area. Except this Brahaman and Chhetri are also in the study area. Brahaman covers 29.26 percent and Chhetry covers 30.89 percent of total HHs.

Table No. 4.4

Ethnic Composition of Sampled HHs

S.N.	Ethnic group	No. HHs	Number of population	Average family size	% of HHs
1	Brahman	6	35	5.83	20
2	Chhetri	8	39	4.87	26.22
3	Janajiti	14	73	5.21	46.66
4	Dalit	2	12	6	6.66
	Total	30	159	5.3	100

Source: Field Survey, 2009

Above table shows that the ethnic composition of sampled HHs and the main ethnic groups are Janajiti, Chhetri, Brahman and Dalits. Dalits are very few in this study area. The main group of the study area is Janajiti which covers 46.66% of total sample households. Dalits covers only 6.66 percent of the total sample households. Other two major ethnic group Brahaman and chhetry covers respectively 20 percent and 26.66 percent of the total sample households of the total sample households.Most of the HHs has 5 to 6 members in average. It is also found that most of HHs has more than two children.

4.4. Educational Status of Sampled Population

As the educational condition is considered in the study area 13.09 percent of total population are illiterate and 86.90 percent of total population are literate (VDC, 2008).The following table shows the distribution of the population and educational status of sampled population.

Table No. 4.5

Distribution of Population and Educational Status of Sampled Population

Level	Male		Female		Total	%
	No.	%	No.	%		
Illiterate	12	15.78	30	36.14	42	26.41
Literate	55	72.36	53	63.85	108	67.92
Educated	9	11.84	-	-	9	5.66
Total	76	100	83	100	159	100

Source: Field Survey, 2009

In the study area, majority of population is literate and the literacy of male is more than that of female. Literate percentage of the study area is higher but the educated population percentage is very low. In the study area, it was found that low income, domestic problems like to look after the agriculture etc are the causes of low level of educated mass.

4.5 Occupational Structure of the Total Sampled Households

Most of the people in this ward are also in other occupation such as manufacturing and construction, business, teaching and so on. Some people are in government service and some are in foreign labors. The following table shows the distribution of sample HHs according to main occupation.

Table No. 4.6

Distribution of Sampled HHs According to Major Occupation

S.N.	Major occupation	No of HHs	Percentage
1	Agriculture	9	30
2	Labors(wage)	10	33.33
3	Business	5	16.66
4	Service	6	20
	Total	30	100

Source: Field Survey, 2009

The above table shows that more people are wage earners. It was found on the time of survey that most of the people were engaged in construction of houses and other. Only few people are in business line.

4.6 Land Holding Status

Although most of the people's occupation is labor and agriculture, there seems an extreme inequality of the land distribution in the study area. The land is not sufficient to all the HHs for cultivation. In this area, the crops are paddy and wheat and other agricultural products are vegetables, potatoes mustard and etc. The productivity of land is low due to the lack of irrigation. Most of the people who engaged in agriculture are not sufficient to meet their annual consumption. Those HHs who have less agricultural product fulfill their deficit items buying from the market at the higher prices. They have to barrow from local money lender at rate of interest other wise they have to sell the land to fulfill their minimum requirements.

The following table shows that the distribution of land among sampled HHs.

Table No: 4.7

Distribution of Land among the Sample HHs

Size of land holding	No. of HHs	%	Amount of Land (Ropani)	Average land hold by HHs	Population	
					No.	%
Land less	1	3.33	-	-	5	3.14
Up to 4 Ropani	17	56.66	64.6	3.8	91	57.23
4-8 Ropani	6	26.66	50.4	6.3	40	25.17
8-12 Ropani	3	10	31.8	10.6	16	10.06
Above 12 Ropani	1	3.33	13	13	7	4.40
Total	30	100	159.8	5.32	159	100

Source: Field Survey, 2009

In the study area, the irrigation facility is not available. From the above land distribution table, it is found that unequal distribution of land asset among the 30

sampled HHs. Lower 60% of HHs occupies only 40.42 percent of total land where as approximately 3% house holds occupies 8.13 percent of land.

4.7 Sources of Income

Agriculture, labor and service are the main source of income of this study area. Live stock and poultry are also the sources of income. The present study concentrates on the different source of income as shown in the table.

Table No. 4.8

Source of income of Sampled HHs

S.N.	Sources	Total income yearly	Percentage
1	Agriculture	380840	16.72
2	Labor	936500	41.12
3	Service	480000	21.07
4	Business	180000	7.9
5	Line stock	150000	6.58
6	Poultry	90000	3.95
7	Borrowing	60000	2.63
	Total	2277340	100%

Source: Field Survey, 2009

Above table shows that labor is main source of income which covers 41.12 percent of annual income. The no. of people who are engaged in laboring is more than other. So, income from labor is more than service and agriculture. Income from labor covers only 41.12 percent of total annual income.

4.8 Annual Expenditure of Sampled HHs

Consumption is the most important variable. When income increases, consumption also increases and vice- versa. So, positive relationship is between income and consumption. The following table shows that the consumption pattern of sampled HHs.

Table No. 4.9

Annual consumption of the HHs

S.N.	Items	Yearly consumption (In. Rs)	Percentage
1	On food	1040375	43.24
2	Non- food	935142	38.87
3	On – cultural Festivals	250000	10.39
4	On- production	180000	7.48
	Total	2405517	100%

Source: Field Survey, 2009

Above table shows that 43.24% of the total expenditure of sampled HHs spend on food items. 38.87% of total expenditure on non- food items like education health, drinking water, electricity and so on, 10.39% of total expenditure spend on cultural festivals and customs, 7.48% of total expenditure spend on production of agricultural items.

CHAPTER FIVE

POVERTY SITUATION IN THE STUDY AREA

Baluwa VDC is one of the less developed VDC among the other VDCs of Kathmandu district. Out of total nine wards, poverty situation is also found in ward No.9. Though literacy rate is high, poverty situation is found in the study area because of unskilled labor, lack of irrigation, low land holding status and other social customs.

Except a few businessmen, professionals and high ranking officials almost every one in study area is poor. Regarding this statement all of the people of the study area may be easily considered as poor because they are not able to be high-ranking officials and so good businessman. It is still necessary to identify the poor in the study area by estimating the poverty line.

One of the objectives of the study is to determine the nature of poverty problem in the study area as already stated that poverty is a multi dimensional and multi-sectoral phenomenon. As we have already mentioned, poverty can be measured in terms of absolute and relative sense. Thus two types of poverty lines have been estimated in this analysis viz. absolute poverty line and relative poverty line.

The absolute poverty line indicates the situation when the people can not get enough food to eat for their living. This statement relates to the measurement of the nutrition. More precisely, the absolute poverty line indicates that the level of income that is termed as required for minimum subsistence or only for survival. An absolute poor is defined as an individual with minimum income and expenditure with a specified minimum called poverty line. To arrive at relative poverty line, break even point is called poor, but not relative poor. Here, we have assumed that if the income level of a person is below this point but above the absolute poverty line, the person is relatively poor. Thus, it should be clear that total poor are sum of absolute poor and relative poor. As compared to the relative poverty, absolute poverty can be a basis, which could be useful to identify the poor.

5.1 Educational Status and the Poor

The nature of poverty is also influenced by the literacy status. The lack of education is a major cause of poverty. There is positive relationship between income level of households and educational status. Lack of education means limited skills that mean insufficient education and limited employment opportunities. These can be serious cause of individual poverty. Thus, if people are educated, their income is generally higher than that of just literate and illiterate.

Table No. 5.1

Educational Status of Household Heads among the Total Sampled Households and Poor Households

Level	No. of HHS head	% of HHS head	Poor HHs	% of poor HHs	Non-Poor HHs	% of Non-poor HHs
Illiterate	4	13.33	4	23.52	-	-
Primary	13	43.33	8	47.05	4	30.76
Up to S.L.C	9	30	5	29.41	6	46.15
Higher Education	4	13.33	-	-	3	23.07
Total	30	100	17	100	13	100

Source: Field Survey, 2009

Above table show that out of total 30 sampled households 4 (13.33percent) are household heads are illiterate, 13(43.33percent) household head are in primary level education and 9 (30 percent) are up to S.L.C only and 4 (13.33 percent) household heads are educated. The table clearly shows that the poverty problem is higher among the illiterate than that of literate of households with literate heads. Out of total 17 poor houses, 4 (23.52%) households are poor among the illiterate household group. Amongst the literate group, only 13 (i.e. 43.33%) household heads are found to be poor. Out of 30household head, only 9 (30%) are holding the education up to S.L.C levels. And, Out of them, 4 (13.13%) household heads have achieved higher education.

Another significant conclusion is that there is a positive relationship between level of education and income. The table 5.2 shows that the relationship between level of education of the total poor and their cash income.

Table No. 5.2

Level of Education of Poor Households and Mean Per-Capita Daily Income

Level of Education	Household Head		Population		Daily Per Capita Mean Income(Rs.)
	No.	Percent	No.	Percent	
Illiterate	4	23.52	22	24.44	37.02
Literate (Primary Education)	8	47.05	39	43.33	74.3
Literate (up to S.L.C)	5	29.41	29	32.22	111.33
Higher Education	-	-	-	-	
Total	17	100	90	100	

Source: Field Survey, 2009

From this, it is clear that those households which have illiterate households head have very low mean income per capita per day. The 23.52percent of total poor household heads are illiterate and their mean income per capita daily is only Rs 37.02which are far below than the income required for minimum subsistence. As the level of education increases, the income per capita also increases. Thus, in the present study, the per capita mean daily income of the households having up to primary and up to S.l.C. education is Rs 74.30 and Rs 111.33 respectively.

5.2 Occupational Structure and the Poor

There is a relationship between the occupational status and the poverty. It is because individual economic status is determined by his occupation. Table 5.3 shows the relationship between occupational status and the per capita mean income of the total poor households.

Table No. 5.3

Distribution of Total Poor Households and the Population

S.N.	Occupation	Absolute/Relative poor Households		Population		Daily per capita mean income(Rs.)
		No	Percent	No	Percent	
1	Labor	7	41.17	36	40	75.30
2	Agriculture	5	29.41	28	31.11	59.43
3	Business	2	11.76	10	11.11	79.62
4	Service	3	17.64	16	17.77	78.24
	Total	17	100.00	90	100	

Source: Field Survey, 2009

The Table 5.3 shows that the income level of those households is very low whose main occupation is labor and agriculture and income level of those households is relatively higher who are engaged in business and service. The main cause of having the lowest income level of those households whose occupation is labor worker is the lack of opportunities and regular work, seasonal working, low wage rate. Households basically engaged in agriculture is also low due to low productivity of agriculture, small size of land holding, traditional farming technique, lack of regular irrigation. But income level of the households whose main occupation is business and service is relatively higher due to regular and high earning.

5.3 Ethnic Group and the Poor

It is a common belief that the so called lower caste people are generally poor. In rural society, caste is a major determination of socio-economic status of the people. Those who belong to lower caste are socially as well as economically backward as compared to those who belong to higher caste. Various studies have shown that poor people are mostly those belonging to lower caste.

In the study area, there are various caste and ethnic groups like Brahmin, Chhetri, Newar, Gurung, Tamang, Kami, Damai, . Among these ethnic groups, Brahmin and Chhetri are known as upper caste group. Newar, Gurung, Tamang, are middle

caste group and Damai, Kami are known as lower caste group. Table 5.4 shows ethnic profile of the absolute poor households.

Table No. 5.4

Distribution of Total Poor Households According to Ethnic Groups

S.N.	Ethnic group	Total Sampled HHS		Absolute /Relative Poor Households	
		No	Percent	No	Percent
1	Brahmin	6	20	3	17.64
2	Chhetri	8	26.66	5	29.41
3	Janajati	14	46.66	7	41.14
4	Dalit	2	6.66	2	11.76
	Total	30	100	17	100

Source: Field Survey, 2009

From the surveyed data, it is found that out of total sampled households (30), 20 and 20.66 percent are Brahmin and Chhetri respectively. However, of the proportion of poor households, only 17.64 percent are Brahmin and 29.41 percent are Chhetri. 41.41 percent of total poor is covered by Janajiti and 11.76 covered by Dalits.

5.4 Family Size and Poverty

Poverty also relates with family size. In general concept, larger the family size, larger will be the household income but lesser may be the per capita daily income. If the family members are unskilled and unemployed, then there is negative relationship between family size and income, but if the family members are employed and skilled, then there is positive relationship between level of income and size of family.

In the study area, the nature of poverty, relationship between household size and level of income is also examined. For this purpose, we have divided the household size into four categories. They are household with 1 to 4 family size, 5 to 8 family

size, 9 to 12family size. The Table 5.5 shows the relationship between poverty problem and household size.

Table No. 5.5

Distribution of Poor Households and Population by Household Size

S.N	Family Size	Household		Population		Daily Per Capita Mean Income
		No.	Percent	No.	Percent	
1	1 to 4	8	47.05	29	32.22	73.38
2	5 to 8	8	47.05	52	57.77	74.61
3	9 to 12	1	5.88	9	10	115.21
	Total	17	100	90	100	

Source: Field Survey, 2009

The above table reveals that the household with family members 1 to 4 have daily per capita mean income is Rs 73.38, the family having 5 to 8 members have daily per capita income is Rs 74.61 and the family having 9 members and above have the daily per capita income is Rs 115.21.From the table above, we can conclude that the income is positively correlated to family size because the main income source being labor.

5.5 Size of Landholding and the Poor

Land is one of the important sources of income and employment. It is economic assets that indicate economic status of the people. The nature of poverty is highly affected by the size of landholding. Thus, the size of landholding and the poor are co-related. It is seen that there is always positive relationship between size of landholding and the income level but inverse relationship between size of landholding and poverty.

The Table 5.6 shows the relationship between the size of landholding and income level of the poor in the study area.

Table No. 5.6

Size of Landholding and Daily per Capita Mean Income of Total Poor Households

S.N	Size of Landholding	Households		Population		Daily Per Capita Mean Income
		No.	Percent	No.	Percent	
1	Land less	1	5.88	6	6.66	59.84
2	Up to 4 Ropani	14	82.35	75	83.33	73.13
3	5 to 8 Ropani	2	11.76	9	10	107.73
4	9 to 12 Ropani	-	-		-	-
5	12 Ropani above	-	-		-	-
		17	100	90	100	

Source: Field Survey, 2009

The table 5.6 shows that there is positive correlation between size of landholding and the income level. The mean income of the landless household is Rs. 59.84which is lower than that of larger size of landholding. Thus, poverty is more dominant on those poor people who have small landholding.

5.6 Age Group and the Poor

Age group also determines the nature of poverty. If the household has large number of active family member, the income level will be higher. On the other hand, if the household has high number of dependent member in the family, the income level will be lower. Thus, the household with high dependent member will have more incidence of poverty than the household with low dependent members. The following table shows the ratio of dependent population in the total poor households of the study area.

Table No. 5.7

Age Group and the Total Poor

S.N.	Age Group	Number	Percentage
1	0-14 years	44	27.67
2	15-59 years	112	70.44
3	59 years above	3	1.88
	Total	159	100

Source: Field Survey, 2009

In the table 5.7, the age between 15-59 years is taken as economically active population and the rest belong to dependent population. The dependency rate is 29.55 percent of sampled poor population. Thus, the dependent population in the family affects the income level to greater extent.

CHAPTER SIX

MEASUREMENT OF POVERTY

6.1 Introduction

The main aim of the present study is to analyze the extent of poverty in the study area i.e. Ward No .9 of Baluwa VDC of Kathmandu District. In order to determine the extent of poverty, two types of poverty lines are estimated in the analysis, which are absolute poverty line and relative poverty line. The present study intended to identify the extent of poverty by taking the absolute, relative and total poor of the study area in consideration.

The purpose of measuring the incidence of poverty is to answer the question of "how poor are the poor". Sen's poverty index has been calculated to deal with the poverty incidence. It can be calculated in two ways, viz. estimating Gini co-efficient and without estimating Gini co-efficient. In this context, both the methods have been applied to calculate Sen's poverty index. Gini co-efficient actually represents the inequality of income. Also, simple statistical tools have been applied to show how poor are the poor, and for this purpose, field survey has been used.

6.2 Absolute Poverty Line and Absolute Poor

Absolute poverty line is the level of income just sufficient for the survival. The level of income only sufficient for survival is the income required to purchase a basic need bundle of goods and services. Thus, for the computation of the absolute poverty line, minimum subsistence norm is followed. Absolute poor are those whose level of income is not enough to maintain a minimum standard of living defined by minimum subsistence norm. To identify the minimum subsistence level of income, specific food caloric requirement is derived. Minimum caloric requirement per day has been considered in the present study. However, it is noticeable that there is no special study that has been carried out so far as to fix caloric requirement per capita per day in the Ward No.9 of Baluwa VDC.

In order to determine the absolute poverty line, the minimum subsistence norm of earlier studies is followed. In accordance with the study of Food and Agriculture

Organization (FAO), the estimated caloric intake for the survival in Nepal is 2256 per capita per day. The study has indicated that the net consumption of 605 grams of cereals and 60 grams of pulses provides 2042 calorie and 214 calorie respectively, to fulfill the essential requirement of 2256 calories.

Various institutions have identified the basic need income for survival. According to National Planning Commission (NPC), the minimum daily caloric requirement for the national level is 2250 calories. Also, it has fixed 2140 calories for Terai and 2340 calories for mountains/hills. The national level caloric requirement is the average of requirement for Mountains, Hills and Terai. National Planning Commission has assumed that in 'poverty bundle' of goods and services, expenditure on food items covers only 65 percent of total expenditure and non-food items covers 35 percent of the total consumption expenditure. NPC has calculated basic need income per capita per day as Rs. 5.94 for hill and Rs. 4.75 for Terai.

In the present study, the method of NPC for calculating subsistence level of income has been followed. Although, the study area lies in Terai region, the minimum caloric requirement of 2250 as national average has been considered to perform the study.

In the study area, the cereal items include rice like Mansuli, Basmati, Masino, wheat, and maize. Regarding pulses, black gram, lentil (mushor), soyabean, pea were commonly used by the people and were also easily available in the local market. The value of 605 grams of cereals and 60 grams of pulses are calculated as Rs. 26.86 and Rs. 4.56 respectively on the basis of prevailing local market price. Thus, the value of 2256 calorie requirement per capita per day is estimated to be Rs. 31.42(See Annex- 1).

It has been already mentioned above that NPC assumes 65 percent of total expenditure on only food items and 35 percent of expenditure on non-food items and others. Hence, Rs. 31.42 per capita per day is the expenditure required for only food items which only covers 65 percent of total expenditure. The minimum average actual consumption expenditure per capita per day on non-food items and others found to be Rs. 16.91. The non-food items and others include expenditure

on clothes, education, footwear, health etc. By summing up the expenditure on food items and non-food items, the total subsistence consumption expenditure was valued at Rs. 48.33per capita per day, which was the absolute poverty line for the study area for the year 2009. (Annex – 1)

Once the above poverty line is calculated, population poverty line can be identified. Thus, that household who's per capita per day income is less than Rs. 48.33are known as absolutely poor households. Various researchers have estimated absolute poverty line in different time and different places of Nepal. The comparison of the absolute poverty line of the present study and some other past studies are shown in Table 6.1.

Table No. 6.1

Comparison of Absolute Poverty Lines Estimated in Different Studies

S.N	Study Area	Year	Average daily value of 2256 calories from 605 grams of cereals & 60 grams of pulses (Rs.)	Lowest average actual daily consumption expenditure on non- food items (Rs.)	Absolute Poverty Line (Rs.)
1	Rural Nepal	1978	1.32	0.72	2.02
2	Mountains/Hill Nepal	1988	3.86	2.08	5.94
3	Markhu, Makwanpur	1994	7.41	3.99	11.4
4	Tarigaun, Dang	1998	7.93	4.27	12.2
5	Dohari, Bara	2000	11.9	6.4	18.3
6	Sundarijal, KTM	2001	13.26	7.14	20.04
7	Fulbari, Chitwan	2002	12.43	6.69	19.12
8	Ward No.9,Baluwa VDC	2009	31.42	16.91	48.33

Source: NPC (1978), NRB (1988); Shrestha (1994), Acharya (1998), Adhikari (2000), Regmi (2001), Sapkota (2002), Field Survey by Author (2009).

From the Table 6.1, it is observed that absolute poverty line is estimated by the present study is highest compared to previous studies due to time lag between present and previous studies, inflation. Again, the geographical location of the study area tends to make the absolute poverty line higher. Thus, the calculated absolute poverty line is quite reasonable in the study area. If the poverty lines of different studies are converted to real value, they will not be much different.

6.3 Relative Poor and Relative Poverty Level

Relative poverty is measured in terms of general standards of living and the accepted quality of life in the society and class. It means that when the people have money below their capacity for required goods as compared to others in the society are called relatively poor.

Relative poverty line is that level of income, which lies between wolf point and absolute poverty line. Therefore, the households or population, whose income level lies below this point and above the absolute poverty line are called relatively poor, such households are just able to meet the minimum subsistence expenditure. Therefore, the wolf point can be taken as the total poverty line (Annex-4).

In the present study, the point for comparing to others in society has been referred to the wolf point. So, to estimate relative poor, we compute the wolf point. The wolf point level of income is that income where the total consumption expenditure is just equal to the income level. Wolf point gives the total poverty line. In linear Keynesian Consumption function, the mathematical expression of wolf point is a/1-b. The households with income level below the wolf point have to maintain the livelihood by drawing their past savings. Thus, the households and population whose income level is below the wolf point of income and is above the absolute poverty line are known as relatively poor.

In the present study, the value of wolf point is found to be Rs. 117.26per capita per day and the absolute poverty line is Rs. 48.33per capita per day for the study area. In order to compute the wolf point, we have assumed a linear consumption function as c= a + by subjected to c = f(y) and using the least square method, regression is computed to find the value of ‘a’ and ‘b’ through determinant method. After solving the equation, we have derived the value of ‘a’ and ‘b’ as

64.99and 0.4458 respectively. Thus, wolf point level of income for Ward No.9 of Baluwa VDC is Rs. 117.26per capita per day.

6.4 The Incidence and Extent of the Poverty

In the present study, Rs. 48.33per capita per day is the absolute poverty line.5 out of 30 sampled households (16.66%) were found below this poverty line. These 5households are absolute poor households with 25 people. Thus, 15.72 percent of population is below poverty line in Ward No.9 of BaluwaVDC.

Considering Rs. 117.26 per capita per day as wolf point level of income and Rs. 48.33 as absolute poverty line, 12households out of 17 falls in between the two levels, i.e wolf point as upper level and absolute poverty line as lower level. Similarly, out of 159 sampled populations, 65 people are receiving income above Rs. 48.33 per capita per day and below Rs.117.26 per capita per day. Thus, 40 percent of the households and 40.88 percent of population are relatively poor in the study area.

The households and population with income level below the wolf point level of income i.e. Rs. 117.26per capita per day are termed as total poor households and population respectively. Hence, summation of absolute poor and relative poor are as total poor. Thus, out of 30 sampled households, 30 households and out of 159 sampled populations, 90 people are total poor. The table 6.2 shows the poverty situation of the study area.

Table No. 6.2

Distribution of Sampled Households and Population According to Living Standard

Category	Sampled HHS	Percent	Total Population	Percent
Relative Poor HHs	12	40	65	40.88
Absolute Poor HHs	5	16.66	25	15.72
Total Poor HHs	17	56.66	90	56.6
Non- Poor HHs	13	43.33	69	43.39
Total	30	100	159	100

Source: Field Survey, 2009

From the above table, we can see 12HHs (i.e. 40 percent) are relative poor.

Out of total sample population 65(40.88 percent) peoples are relative poor. Similarly, 5 households (16.66 percent) and 25 people (15.72 percent) people are absolute poor. The number of total poor households is 17 which is 56.66 percent of total sample households and 90 people (i.e. 56.60 percent of total sampled population) are total poor. Number of non-poor is 69 (i.e. 43.33 percent and number of non-poor households is 13 of the study area.

The Nepal Living Standard Survey (NLSS), launched by Central Bureau of Statistics (CBS) in 1996 has made detailed study of the condition in which the people below the poverty line lived. Taking into account, situation of poverty and the process of impoverishment based upon the consumption expenditure of the poor, the size of the population falling below the poverty line has been estimated.

While working out per capita consumption expenditure, the total expenditure which included expenses on food, housing and other items have been taken into account.

In Nepal, while estimating the size of people living below the poverty line, per capita consumption level has been treated as the criterion. The Nepal Living Standard Survey has determined 2124 calorie as per capita per day necessity. The per capita annual expense to purchase that calorie equivalent of food worked out to be Rs. 2637. If the expenditure on non- food items is added to it, the per capita annual expenditure is estimated to stand at Rs. 4404. Based on this, the size of population living below the poverty line has been found 42 percent in 1996. Of this, 24.9 percent is the poor and 17.1 percent is estimated to be ultra poor.

Population under the poverty line has been described in the table no. 6.3 according to their geographical distribution, Geographic region-wise, 41.0 and 42.0 percent of the population is below the poverty line in hills and Terai, and as much as 56 percent people live below the poverty line in the mountains. Similarly, 23.0 percent in the urban and 44.0 percent people in the rural area live below the poverty line revealing high poverty concentration in the rural than in the urban area.

Table No. 6.3

Population under the Poverty Line

Region wise Description	Population under the Poverty Line (in percent)		
	Total	Poor	Ultra-Poor
A) According to Geographic Region			
i) Mountains	56.0	29.3	26.7
ii) Hills	41.0	21.3	19.7
iii) Terai	42.0	28.7	13.3
B) Urban & Rural Areas			
i) Urban Area	23.0	13.2	9.8
ii) Rural Area	44.0	26.4	17.6
C) National Average	42.0	24.9	17.1

Source: Living Standard Survey (1996)

The findings of the present study in terms of household living standard have been compared to the other studies and are shown in the table 6.4.

Table No. 6.4

Comparison of Absolute Poor Households and Population in Different Studies

Study Area	Household poverty line		Total Sampled Population	Population poverty line	
	No.	Percent		No.	Percent
Rural Nepal	8,60,769	40.3	12,44,536	4,50,483	36.2
Markhu	48	60	469	280	40.8
Tarigaun	55	78.57	432	358	82.87
Dohari	48	53.33	730	395	54.1
Sundarijal	22	36.6	305	103	33.7
Fulbari	30	33.33	633	223	35.23
Ward No.9, Baluwa	5	16.66	159	25	15.72

Source: NPC(1978), CBS (1996), NRB(1988); Shrestha(1994), Acharya(1998), Adhikari(2000), Regmi(2001), Sapkota(2002), Field Survey by Author(2009).

The table 6.4 shows that proportion of absolute poor households and population in this study are lower than other studies. It may be due to relativity of time factors as well as reduction in the poverty as the time passed by.

The study area links to the Kathmandu Metro-Politian city. So, there are alternative income generating opportunities for the person who tends to uplift the socio economic status of the people and ultimately the income level. The most remarkable factor is that there is lack of proper accounting income from various sources and expenditure on various sectors. This magnifies the error due to which the actual situation may not be reflected in the study.

CHAPTER SEVEN

INCOME DISTRIBUTION IN THE STUDY AREA

One of the causes of poverty is unequal distribution of wealth and properties income. The concept of poverty is closely related to the problem of income inequalities given a fixed level of average notional income. An inequality in the distribution of income is the common problem for Least Development Countries (LDCs). Nepal is one of the developing countries and it is not far from this problem. In the rural areas of Nepal, there is a wide gap between rich and poor people in the distribution of income. As a result, poor people are getting poorer and rich people are getting richer.

Income is one of the major factors of the poverty. Income level of the people shows the level of poverty. As income is the main determinant of standard of living of household, there should not be inequality in the distribution of income and wealth, otherwise it will be the major cause of social injustice and evils like poverty, unemployment and inequality, etc. Hence, one of the major factors determining the poverty is inequality in the distribution of income. Therefore, it is necessary to analyze the existing pattern of income distribution and inequality. In this chapter, the distributions of income among poor and non-poor households are examined. To analyze the actual pattern of income and wealth distribution, the Gini co-efficient has used. The sampled households and poor households are studied separately in following topics.

7.1 Income Distribution among Sampled Households and Population

To measure the pattern of income distribution of the study area, 30 sampled households (out of 123 households) have divided into five income groups, taking 6 households in each group. The per capita daily income is taken to estimate the value of Gini co-efficient. The following table presents the income distribution per capita per day of sampled households of the study area.

Table No. 7.1

Income Distribution among Sampled Households Per Capita per Day by Different Groups

S.No.	No. of Household	% of HHs	Cum % of HHs	Total daily household income by group (Rs.)	% of income by the group	Cum % of income
1	6	20	20	243.9	7.24	7.24
2	6	20	40	498.36	14.8	21.24
3	6	20	60	691.8	20.54	41.78
4	6	20	80	896.16	26.61	68.31
5	6	20	100	1036.9	30.79	100
Total	30	100		3367.1	100	

Source: Field Survey, 2009

Above table show the gap in the distribution of income of the present study. The total household daily income of each group is derived from summing up each household's daily income in the group. From the table, it is seen that the top 20 percent of households (6households) receives 30.79 percent of total daily income whereas bottom 20 percent of households (6 households) earns 7.24 percent of total income. In the same manner, more than 50 percent households (i.e. 60 percent), secures only 41.78 percent in the total income whereas remaining (i.e. 40 percent) households receives 58.22 percent of total income. It clearly indicates that there is a inequality in the distribution of income amongst the sampled households.

Table No. 7.2

Income Distribution among Sample Population

Groups	No. of population in the group	% of the population	Cum. % of population	Total daily per capita income (Rs)	% of total group income	Cum. % of income
1	30	18.86	18.86	1219.5	6.78	6.78
2	31	19.49	38.35	2574.9	14.31	20.91
3	35	22.01	60.36	4036.8	22.44	43.35
4	31	19.49	79.85	4625	25.71	69.06
5	32	20.12	100	5530.4	30.74	100
Total	159	100		17987	100	

Source: Field Survey, 2009

The lowest 18.86 percent population receives only 6.78 percent of total income of sampled population, whereas 20.21 percent population receives 30.74percent of total income. Similarly, bottom 60.36 percent of population receives only 43.35percent of total income, whereas top 39.64 percent of population receives 56.65percent of total income. Thus, from the table 7.2, it is seen that there is high inequality in the distribution of income among the population.

7.2 Income Distribution among the Absolute Poor

Inequality in the distribution of income is a major factor of poverty situation. The present study shows that there are a large number of absolute poor in the study area whose income level is less than the average income of the absolute poor. In the present study, out of 30 households, 5 households are absolute poor.

In order to examine the income distribution among absolute poor households, total 5 absolute poor households are divided into 8 groups. The 5 groups contain 1 household in each.

Table No. 7.3

Income Distribution among Absolute Poor Households

Group	No. of HHs	Percent of HHs	Cum. % of HHs	Total Daily Income of HHs group	% of Total Daily Income	Cum. % of Income
1	1	20	20	24.38	12.42	12.42
2	1	20	40	31.26	16	28.42
3	1	20	60	45.34	23.2	51.62
4	1	20	80	47.13	24.12	75.74
5	1	20	100	47.26	24.18	100
Total		100		195.37	100	

Source: Field Survey, 2009

The table 7.3 shows that out of the total absolute poor households, 20 percent households with lower income level share only 12.42percent of total daily household income. However, the top 20 percent of households receives 24.18 percent of total income. This indicates that there is some disparity in the income distribution among the absolute poor households.

The Gini co-efficient among the absolute poor households according to daily households income is 0.1256(Annex 10). This is less than the Gini co-efficient of all 30 sampled households, implying that there is less inequality in the distribution of income among the absolute poor households.

Similarly, the calculated value of Range 0.5856, Mean deviation 9.007, variance 89.62, and co-efficient of variation 0.242 also show that there is some inequality among total sampled households in the study area. (Annex 13).

CHAPTER EIGHT

SUMMARY, CONCLUSION AND RECOMMENDATIONS

8.1 Summary

Poverty has become the burning problem in the country. It is more dominant in rural area than that of urban areas. But the problem of poverty is not same in all the rural area because of different socio- economic structure. It is different in different village and regions.

The main objectives of this study are to analyze the nature and incidence of poverty in the study area and to recommend appropriate measures.

To analyze the poverty problem, Ward No. 9 of Baluwa VDC of Kathmandu district has been taken as the study area. The following are major findings.

1) The sample size of the study is 30 households with 159 populations.

2) There is higher dependency ratio in the study area.

3) Ratio of illiteracy of women is higher than of man.

4) There is positive relationship between households' size and the household income of the poor.

5) To fulfill 2256 calories the per capita per day required for food items is found to be Rs. 31.42 and for the non-food item to be Rs. 16.91. Thus, absolute poverty line for the study area has been estimated as Rs. 48.33per capita per day.

6) The household and population as absolute poor are 16.66percent and 15.72percent respectively.

7) The total poverty line for the study area is found to be Rs 117.26 per capita per day. It is the wolf point level of income and expenditure. Based on Rs. 117.26 as total poverty line and Rs. 48.33 as absolute poverty line, 40 percent households and 40.88 percent population are relatively poor.

8) It is observed that the total number of poor household is 17 (56.66 percent of sampled households) which has 90 people (56.60 percent of sampled population).

9) 13households (43.33 percent of total) and 69 population (43.39 percent of total) are non-poor in this study.

10) The value of Gini co-efficient is calculated as 0.236 for the study area and this shows inequality in the distribution of income among the sampled households..

11) The marginal propensity to consume (MPC) of the total sampled households is 0.4458 and the marginal propensity to consume of the absolute poor households is 0.7566. It is shown that MPC of poor households is greater than that of the sampled households.

12) The mean income of the total sampled households is Rs.112.23 per capita per day and the mean income of the absolute poor households is Rs.39.07 per capita per day.

13) The value of range, variance, coefficient of mean deviation, and co-efficient of variation among the total sampled households is 1.3430, 2266.75, 0.3591, 41.85, respectively. All of these values show that there is some inequality in the distribution of income among sampled households.

14) Similarly, the value of range, variance, mean deviation, and co-efficient of variation among the absolute poor households is 0.5856, 89.62, 39.07, 24.2 respectively. They show that there is existence of income inequality in the distribution of income among absolute poor households. However, compared to total sample households the inequality was found less among the absolute poor households.

15) The problem of poverty is higher among the illiterate people in the study area. It is found that out of 159 total sampled poor population, 56.73 percent of total sampled households are illiterate.

16) In the study area, households with labor and agriculture as the main occupation have found with low income, whereas the households with business and services were found with high income.

17) The people of the study area are poor because of unemployment or underemployment.

18) Among the households,14 households are from higher caste group and 16 households are from lower caste group that is only 47.05 percent poor households belong to higher caste group and remaining 52.95 percent belong to lower caste group.

19) Among the total poor 24.44 percent are illiterate, 43.33 percent are literate (pass up to grade 5) and 32.22 percent are literate (pass up to S.L.C.).

20) Among the total poor, 40 percent, 31.11 percent, 11.11 percent and 17.77 percent are engaged respectively in labor, agriculture, business and service.

8.2 Conclusion

The present study concludes that poverty as in other parts of Nepal is the major characteristic in the study area. Though the extent of absolute poverty in the study area is quite lower (16.66%) as compared to other parts of the country, the situation is still not good. Being in a part of capital city, Ward No.9 of Baluwa VDC still has many poor households. The rural phenomenon of poverty indicates subsistence nature of agriculture, majority of the people depending on small size holding. The poverty of the area is also due to underemployment and disguised employment of the people in the contrary to their access to the development infrastructure. People have some employment alternatives in the nearby municipality but the higher rate of competition limited the scope.

Higher rate of literacy, higher access to development infrastructure and low wage but some employment opportunity in near by town is some contributing factors of the reduced level of poverty of the study area. Furthermore, government and non-government sectors have provided services with the goal of reducing poverty.

It is also observed that the people in the rural areas are not serious about their condition and how they became poor and what should be done to overcome the problem. They usually generalize and compare their problem with their neighbors.

It is necessary to reduce incidence of poverty. For this, a number of policies and programs have already been adopted and initiated. But these programs, policies and attempts have not been much effective. The current three year interim plan has also taken policies to move the development process ahead by using opportunities from the continuity of successful programs of poverty alleviation strategy, commitment to millennium development goals (MDGs). Unless the country takes bold measures and adopts policies backed up with full commitment of all sides from now on, it will be difficult to attain all the MDGs. However, the success depends on how effectively the programs and policies are implemented.

8.3 Recommendations

From this study, it is observed that there is poverty in the study area. On the basis of findings of the study, some specific policies and suggestions have been recommended as follows. In order to overcome the problems the following recommendations have been made.

Maximum group of community have been doing labor. This profession is main source of income of people. But the income regarding to their working hours is very low because of unskilled man- power. So the training for the labor is essential and the government and local NGOs and INGOs should focus on it.

Agriculture is another major source of income and employment of poor people in the study area. As the study area facing problems in agriculture, integrated programs to increase the production are to be implemented with intensive agricultural practice, multiple cropping system, well-equipped technology, and irrigation facilities, agricultural credit, fertilizer supplement, trained manpower etc. Training and guidelines should be given to all farmers. The marketing aspect should also be promoted.

In the study area, many poor people are less land holders and some are land less. They should be provided with land for cultivation .Although most of the people in

the study area are engaged in agriculture, high rate of unemployment exists in agriculture. There is a need for increase in employment opportunities through the establishment of production as well service sector industries like poultry farming, animal husbandry, beekeeping, cottage industry etc.

Most of the families have Cow, Buffalos, Goat, Hen and Ducks. It is found that, they keep these pet animals as hobby and that production from live stock and poultry is only for their own consumption. Nevertheless, there are great opportunities of livestock and poultry for marketing and high demand of livestock production such as Milk, Egg, Ghee, and Meet due to capital city. Therefore, to increase the level of income, livestock production and poultry production should be grown in commercial way. It may be support to reduce unemployment and poverty.

Banks and other financial institutions should be established in the study areas which would provide credits and loans at low interest rate as well as provides an easy access to loan.

The government can encourage the surplus labor by providing various facilities to start various types of agro- based, forest-based and other available resource-based cottage and small-scale industries in this district.

The illiterate population should be educated through non-formal education programs and compulsory education for children should be instituted. After operation of education to the oppressed minorities, technical and vocational training should be given to them, so that they can generate income themselves. Saving and Credit groups should be formed which can help them to save the earnings and utilize that in appropriate small scale business.

Similarly, the status of women in the study area is worsening due to the illiteracy and unemployment. So, non-formal education and vocational training must be provided to uplift their condition.

To improve the quality of life of the people, drinking water, sanitation, electricity, health and education such as other basic facilities should be provided. The spread of education especially, higher education tends to have significant impact to

increase rural income and hence to reduce poverty. Thus, policies should be emphasized for the provision of secondary and higher education at free cost.

Awareness programs should be implementing in the area so that the expenditure on traditional and superstitious customs can be reduced.

There should be a strong commitment of leaders and government toward reducing poverty. For this, there is a need of people's co-operation in the program initiated in this direction.

Last but not least, government must initiate fruitful steps solving the current conflict situation in the country. Development works should be performed even during the current transition phase.

BIBLIOGRAPHY

ADB (Asian Development Bank). (2007). *Country Operation Business Plan 2008-10*. Kathmandu: Asian Development Bank.

Aryal, T.R. (2006). Linkages of poverty and socio-demographic variables in Nepal. *Nepalese journal of Development and Rural Studies*, 3(1), 109-124.

BHP (Baluwa Health Post). (2065). Health *Report 2065*. Baluwa Health Post.

CBS(Central Bureau of Statistics). (1996). *Nepal Living Standards Survey (1995/96).* Kathmandu: Central Bureau of Statistics.

CBS(Central Bureau of Statistics). (2001). *Population Census 2001*. Kathmandu: Central Bureau of Statistics.

CBS(Central Bureau of Statistics). (2004). *Nepal Living Standard Survey (2003/04).* Kathmandu : Central Bureau of Statistics.

CBS(Central Bureau of Statistics). (2005). *Poverty Trends in Nepal (1995-96 and 2003-04).* Kathmandu: Central Bureau of Statistics.

Chhetry,D.(2003).*Understanding Rural Poverty, Defining an Agenda for Poverty Reduction:* Proceeding of the First Asia and Pacific Forum on Poverty,Vol.1:293-314.

Gewali, G.P.(1994).*Poverty Alleviation Measures in Nepal: Commitments and Review*. Kathmandu: Nepal Rastra Bank.

Kunwar, K.B.(2003).*The Himalayan Poverty: Prosperity through Rural Development.* Kathmandu : Meena Prakashan.

Mathema, K. B. (2007). An Agricultural Perspective on Poverty Reduction in Nepal. *The Economic Journal of Nepal*,27(3),126-139.

MOF(Ministry of Finance).(2064).*Economic Survey 2063/64*.Kathmandu: Nepal Government.

NPC(National Planning Commission). (1998). *Ninth Plan (1997-2002).* Kathmandu: National Planning Commission

NPC(National Planning Commission).(2002). *Tenth Plan (2002-07), Poverty Reduction Strategy Paper.*Kathmandu: National Planning Commission.

NPC(National Planning Commission).((2007). *Three Year's Interim Plan (2007-10).*Kathmandu: National Planning Commission.

NRB(Nepal Rastra Bank). (1988). *Multipurpose Household Budget Survey: A study on Income Distribution Employment and Consumption Pattern in Nepal*. Kathmandu: Nepal Rastra Bank.

NRB (Nepal Rastra Bank). (2005). *Macroeconomic Indicators of Nepal.* Kathmandu: Nepal Rastra Bank.

Paudel R.C and L.P.(2003).*Rural Economics*. Kathmandu: Ratna Pustak Bhandar.

Regmi, B. (2001). *The Extent and Nature of Rural Poverty: A case Study of Sundarjal VDC*, Unpublished master's thesis in Economics, Tribhuvan University, Nepal.

Sapkota, A. R. (2002). *Poverty in Rural Nepal*: *A case Study of Fulbari VDC, Chitawan*. Unpublished master's thesis in economics, Tribhuvan University, Nepal.

Sen, A.(1999). *Development as Freedom*. New York: Oxford University Press.

Tiwari, B. N. (2006). *Reading in the Millennium Development Goals: Challenges for Attaining the MDGs in Nepal*. Tribhuvan University. : Department of Economics.

UN(United Nations).(2007). *The Millennium Development Goals Report.* NewYork: United Nations.

UN(United Nations).(2008). *Fighting Climate Change: Human Solidarity in Divided World Human Development Report*. New York: United Nations Development Program.

UNDP(United Nations Development Program)(2006). *Supporting Progress through Equality: Annual Report.* New York: United Nations Development Program.

UNDP(United Nations Development Program). (2006). Mid Term Review – Phase II*: Micro-Enterprise Development Program*. Kathmandu: United Nations Development Program.

WB(World Bank). (1999). *Nepal: Poverty at the turn of Twenty First Century.* Washington DC: World Bank.

WB(World Bank). (2004). *Nepal Country Assistance Strategy, 2004-07.*Washington DC: World Bank

WB(World Bank). (2006). *Annual Report of Poverty Alleviation Fund.* Washington DC: World Bank.

ANNEX – 1

Calculation of Minimum Subsistence Level of Income

S.N.	Cereals item	Price per kg (in Rs)
1	Rice Basmati	80
2	Rice Mansuli	35
3	Rice Moto	60
4	Wheat	22
5	Maize	25
Total		222

From the table,

5000 grams of cereals cost = Rs 222

1 grams of cereals cost = $\text{Rs}\frac{222}{5000}$

605 grams of cereals cost = $\text{Rs}\frac{222}{5000} \mid 605$

= 26.86

Similarly,

S.N.	Pulse items	Price per kg (in NRs)
1	Black pulse	95
2	Mushor	85
3	Sayabean	60
4	Mugi	80
5	Gahat	60
Total		380

5000 grams of pulses cost = Rs 380

1 grams of price cost = Rs 380

60 grams of pulse cost = $\text{Rs}\frac{380}{5000} \mid 60$

= Rs 4.56

So, the total cost requires 605 grams cereals and 60 grams of

Pulse = Rs (26.86+4.56)

= Rs 31.42

According to national planning commission, only 65% of basic minimum food requirement can be covered by the above expenditure and remaining 35 percentage of subsistence consumption expenditure will be spent on the other food and non-food items.

Thus,

65% of subsistence expenditure cost = Rs 31.42

1% of subsistence expenditure cost = $\text{Rs.}\frac{31.42}{65}$

35% of subsistence expenditure = $\text{Rs.}\frac{31.42}{65} \mid 35$

= 16.91

Total required expenditure per capita per-day is Rs (16.91+31.42) = Rs 48.33

Thus, the absolute poverty line is = 48.32 x 365

= Rs 17638.8

ANNEX - 2

Work Sheet, Income and Expenditure in the Study Area

S.N.	No. of person in HHs	Per capita per day HHs income(y)	Per capita per day HHs consumption (c)	y^2	c^2	y | c
1	7	24.38	88.53	594.38	7837.56	2158.36
2	3	31.26	92.31	977.18	8521.13	2885.61
3	4	45.34	102.46	2055.71	10489.05	4645.53
4	8	47.13	104.21	221.23	10859.72	4911.41
5	3	47.26	103.86	2233.50	10786.89	4908.42
6	5	48.53	68.29	2355.16	4663.52	3314.19
7	6	59.84	72.13	3580.82	5202.73	4316.25
8	4	72.93	70.34	5318.78	4947.79	5129.89
9	3	81.41	90.21	6627.58	8137.84	7343.99
10	4	90.63	89.21	8213.79	7958.42	8085.10
11	8	92.41	90.34	8489.77	8161.31	8323.92
12	6	101.42	118.15	10286.01	13959.42	11982.77
13	4	106.11	104.28	11259.33	10874.31	11065.15
14	5	109.36	106.34	11959.60	11308.19	11629.34
15	4	112.12	109.82	12570.89	12060.43	12313.01
16	7	113.86	117.83	12964.09	13883.90	13416.12
17	9	115.21	126.35	13273.34	15964.32	14556.78
18	6	135.36	111.21	18322.32	12367.66	15053.38
19	4	140.12	148.91	19633.61	22174.18	20865.26
20	5	142.13	162.34	20200.93	26354.27	23073.38
21	6	148.16	119.86	21951.38	14366.41	17758.45
22	5	151.22	115.21	22867.48	13273.34	17422.05
23	5	153.12	140.21	23445.73	19658.84	21468.95
24	6	160.41	119.52	25731.36	14285.03	19172.20
25	4	170.68	116.81	29131.66	13644.57	19937.13
26	4	171.12	159.26	29282.05	25363.74	27252.57
27	5	172.52	128.38	29763.15	16481.42	22148.11
28	6	173.31	135.26	30036.35	18295.26	23441.95
29	7	174.21	186.24	30349.19	34685.33	32444.87
30	6	175.11	153.12	30663.58	23445.73	26812.84
Total	**159**	**3366.4**	**3450.99**	**446359.81**	**420021.23**	**417836.86**

ANNEX – 3

Income and consumption relationship among the total sample HHs and their MPC.

Since, c=f(y)

Where, c= consumption

y=income

In the linear form,

c = a + by.....(i)

To find the value of a and b we should apply the least square method by introducing following equations;

ϕ c = na + b ϕ y.....(ii)

ϕ CY = a ϕ y +b ϕ y^2.....9iii)

Here, ϕ c=3450.99, ϕ y=3366.4, ϕ cy=417836.86

n= 30, ϕ y^2=446359.81

Let's substitute the value in the (ii) and (iii) we gets 3450.99=30a+3366.4b

And, 417836.86 = 3366.4a+446359.81b

Arranging in matrix form:

$$\begin{matrix}3450.99\\417836.86\end{matrix} = \begin{bmatrix}30 & 3366.4\\3366.4 & 446359.81\end{bmatrix} \begin{matrix}a\\b\end{matrix}$$

$$\therefore \begin{matrix}a\\b\end{matrix} = \begin{bmatrix}30 & 3366.4\\3366.4 & 446359.81\end{bmatrix}^{-1} \begin{matrix}3450.99\\417836.86\end{matrix} \quad \text{……..(iv)}$$

$$\text{Let, } A = \begin{bmatrix}30 & 3366.4\\3366.4 & 446359.81\end{bmatrix}$$

| A | = 30 x 446359.8 – 3366.4 x 3366.4

= 2058145.04

The cofactors of the matrix are,

$C_{11} = 446359.81$

$C_{12} = -3366.4$

$C_{21} = -3366.4$

$C_{22} = 30$

∴ The cofactors matrix = $\begin{bmatrix} 446359.81 & -3366.4 \\ -3366.4 & 30 \end{bmatrix}$

∴ Adj. of A = $\begin{bmatrix} 446359.81 & -3366.4 \\ -3366.4 & 30 \end{bmatrix}$

We know $A^{-1} = \frac{adj.A}{|A|} = \frac{1}{2058145.04} \begin{bmatrix} 446359.81 & -3366.4 \\ -3366.4 & 30 \end{bmatrix}$

Substituting the value of A^{-1} in equation (iv)

$$\begin{matrix} a \\ b \end{matrix} = \frac{1}{2058145.04} \begin{bmatrix} 446359.81 & -3366.4 \\ -3366.4 & 30 \end{bmatrix} \begin{matrix} 3450.99 \\ 417836.86 \end{matrix}$$

$$= \begin{matrix} 64.99 \\ 0.4458 \end{matrix}$$

∴ a = 64.99

b = 0.4458

ANNEX - 4

Derivation of Wolf Point

The wolf point is defined as a point that shows the level of income and expenditure per capita per day is equal in the Keynesian function.

so, $c = a + by$

$c = y$, this gives wolf point

$c-by = a$, where $c = y$

Thus the wolf point is.....

$c-bc = a$

or, $c(1-b) = a$

$\therefore c = \frac{a}{1-b}$

From annex -3, we have

$a=64.99$

And $b= 0.4458$

Substituting these values, we have,

$$c = \frac{64.99}{1-0.4458}$$

$= 117.26$

$\therefore$ Total poverty line is 117.26

ANNEX - 5

Gini coefficient among absolute poor HHs according to the per capita daily income

For calculating the Gini-coefficient we can use the following formula.

$$G.C. = \frac{2}{n^2 \bar{y}} (y_1+2y_2+3y_3+.....+nYn) - \frac{1}{n} - 1$$

Here, G.C. = Gini-coefficient

n = Number of observed absolute poor HHs

Y = Observed HHs per capita daily income

$\bar{y}$ = mean income levels.

We have,

ϕ y =195.37, n = 5

$$\therefore \bar{y} = \frac{\phi y}{n} = \frac{195.37}{5} = 39.074$$

ϕny_n X $y_1+2y_2+.....+ ny_n$

= 647.74

Substituting these values in the formula of G.C.

$$G.C. = \frac{2}{52 \mid 39.07} (647.74) Z \frac{1}{5} Z1$$

$\therefore$ G.C. = 0.1263

Per-capita per day income of the absolute poor HHs is considered.

ANNEX - 6

Calculation of Sen's poverty index considering inequality (i.e. G.C. among absolute poor HHs).

We know,

$$p^* = \frac{x}{c^* p}[c^*p - cp(1-GP)]$$

Where, X = Percentage of population below the poverty line (percentage of poor population = 15.72%)

c*p = absolute poverty line income (per capita daily income = Rs 48.33)

G.P = Gini-coefficient among the absolute poor

C.P = Per capita daily mean income of the absolute poor.

We have,

X = 15.72%, c*p = 48.33, G.P. = 0.1263

C.P. = 39.07

Substituting these values in the formula,

$$P^* = \frac{0.1572}{48.33}\ [48.33 - 39.07 \text{ x } (1-0.1263)]$$

$$= 0.0461$$

ANNEX - 7

Sen's poverty index without considering inequality

$$P^* = \frac{X}{C * P} (c^*p\text{-}cp)$$

Where, p* = poverty index

x = percentage of population below the poverty line.

C*P = Absolute poverty line

CP = per capita mean daily income

We have,

X= 0.1572

C*P = 48.33

CP = 39.07

$$\ldots P^* = \frac{X}{C * P} (C^*P\text{-}CP)$$

$$= \frac{0.1572}{48.33}(48.33\,Z39.07)$$

$$= 0.0301$$

ANNEX - 8

Gini Coefficient among the total sample HHs according to per-capita daily HHs income.

For the purpose the sample HHs of the study area are distributed into 5 income groups. Each groups occupies 20% of total sample HHs (that is 1 HHs in each groups). It has ranked from low income group to high income group. Thus, the first group covers 20% HHs of low income group and last group covers 20 percentage HHs of high income group. The table mentions below shows the income distribution among the sample HHs according to daily HHs income.

Income Distribution among the sample HHs

S.N.	No. of HHs	% of the HHs in the group	Total daily HHs income by the group	% of the income by the group
1	6	20	1207.27	6.68
2	6	20	2603.15	14.41
3	6	20	4065.79	22.51
4	6	20	4644.25	25.71
5	6	20	5539.75	30.67
Total	30	100	18.60.21	100

Source: Field Survey, 2009.

We have computed the Gin-coefficient of individual series by the formula where the data are arranged in the ascending order.

$$G.C. = \frac{2}{n^2 \bar{y}}(y_1+2y_2+3y_3+.....+ny_n) - \frac{1}{n} -1$$

So, we have,

$y_1+2y_2+3y_3+.....+5y_5 = 359.22$

$n=5,\ \phi y \text{ X}100,\ \bar{y} = \frac{\phi y}{n} = \frac{100}{5} = 20$

Substituting the above values in the formula, we get,

$$G.C. = \frac{2}{5^2 \mid 20}(359.22) - \frac{1}{5} Z1$$

$= 0.236$

ANNEX - 9

Gini-coefficient among the total Sampled HHS (according to per capita daily income)

S.N.	No. of population in the group	Total daily income by the group	Percentage of total income by the group of population
1	30	1219.5	6.78
2	31	2574.91	14.31
3	35	4036.78	22.44
4	31	4624.99	25.71
5	32	5530.4	30.74
Total	159	17986.58	100

Source: Field Survey, 2009

$$G.C = \frac{2}{n^2 \bar{y}}(y_1+2y_2+3y_3+.....+ny_n) - \frac{1}{n} -1$$

So, we have,

$y_1+2y_2+3y_3+4y_4+5y_5=358.9$

$n=5, \ \phi y \ X100, \quad \bar{y} = \frac{\phi y}{n} = \frac{100}{5} = 20$

Substituting the above values in the formula, we get,

$$G.C. = \frac{2}{5^2 \mid 20}(358.9) - \frac{1}{5} Z1$$

… G.C. = 0.2356

ANNEX - 10

Gini-coefficient among the absolute poor HHS (according to daily HHs income by the group)

S.N.	No. of HHs	Total HHs daily income by the group	Percentage of daily income
1	1	24.38	12.42
2	1	31.26	16
3	1	45.34	23.20
4	1	47.13	24.12
5	1	47.26	24.18
Total	5	195.37	100

Source: Field Survey, 2009

$$G.C = \frac{2}{n^2 \bar{y}}(y_1+2y_2+3y_3+.....+ny_n)$$

So, we have,

$y_1+2y_2+3y_3+4y_4+5y_5=331.4$

$n=5,\ \phi y \text{ X}100,\ \bar{y} = \frac{\phi y}{n} = \frac{100}{5} = 20$

Substituting the above values in the formula, we get,

$$G.C. = \frac{2}{5^2 \mid 20}(331.4) - \frac{1}{5} Z1$$

… G.C. = 0.1256

ANNEX - 11

Gini Coefficient among the absolute poor population according to per capita daily income.

S.N.	No. of population	Total daily income	Percentage of income
1	7	170.66	17.69
2	3	93.78	9.72
3	4	181.36	18.80
4	8	377.04	39.08
5	3	141.78	14.69
Total	25	964.62	100

Source: Field Survey, 2009

$$G.C = \frac{2}{n^2 \bar{y}}(y_1+2y_2+3y_3+.....+ny_n)$$

So, we have,

$y_1+2y_2+3y_3+4y_4+5y_5=323.3$

$n=5, \ \phi y \ X100, \quad \bar{y} = \frac{\phi y}{n} = \frac{100}{5} = 20$

Substituting the above values in the formula of G.C. we get,

$$G.C. = \frac{2}{5^2 \mid 20}(323.3) - \frac{1}{5} Z1$$

… G.C. = 0.0932

ANNEX - 12

Computation of coefficient of mean deviation, variance, Coefficient of variance and range among sample HHs.

S.N.	Income (y)	$(\bar{y}-y)$	$(\bar{y}-y)^2$	Group
1	40.65	71.58	5123.69	6
2	83.06	29.17	850.88	6
3	115.3	3.07	9.42	6
4	149.36	37.13	1378.63	6
5	172.82	60.59	3671.14	6
Total	561.19	201.54	11033.76	30

Source: Field Survey, 2009

Here,

ϕy =561.19, $\phi(\bar{y}-y)$ = 201.54 and $\phi(\bar{y}-y)$ =11033.76

n=5

$\therefore \bar{y} = \frac{\phi y}{n} = \frac{561.19}{5} = 112.23$

i. Computation of coefficient of mean deviation

C. M.D. = $\frac{f\bar{y}\_yA}{n\bar{y}} = \frac{201.54}{5 \mid 112.23} = 0.3591$

ii. Computation of variation

Var. = $\frac{f\bar{y}\_yA^2}{n} = \frac{11033.76}{5} = 2266.75$

iii. Computation of coefficient of Variation

C.V. = $\frac{\sqrt{var.}}{\bar{y}} \times 100\% = \frac{\sqrt{2206.75}}{112.23} \times 100\% = 41.85\%$

iv. Computation of range

Range = $\frac{\max y - \min y}{\bar{y}} = \frac{175.11 - 24.38}{112.23} = 1.3430$

Where, max. y = 175.11, min y = 24.38

ANNEX - 13

Computation of coefficient of mean deviation, variance, coefficient of variation and range among absolute poor HHs.

S.N.	Income (y)	$(\bar{y}$ -y)	$(\bar{y}$ -y)^2
1	24.38	14.69	215.79
2	31.26	7.81	60.99
3	45.34	6.27	39.31
4	47.13	8.06	64.96
5	47.26	8.19	67.07
Total	195.37	45.02	448.12

Source: Field survey, 2009

$$\bar{y} = \frac{\phi y}{n} = \frac{195.37}{5} = 39.07$$

i. Computation of coefficient of mean deviation

$$CMD = \frac{\int Y Z \bar{Y} A}{N\bar{Y}} X \frac{45.02}{5 \mid 39.07} X0.230$$

ii. Computation of variation

$$Var. = \frac{\int \bar{Y} Z Y A^2}{N} X \frac{448.12}{5} = 89.62$$

iii. Computation of coefficient of variation

$$C.V = \frac{\sqrt{var.}}{\bar{y}} \times 100\% = \frac{\sqrt{89.62}}{39.07} \times 100\% = 24.2\%$$

iv. Computation of range

$$Range = \frac{\max y \, Z \min y}{\bar{y}}$$

$$= \frac{47.26 \;\; 24.38}{39.07}$$

$$= 0.5856$$

ANNEX - 14

Correlation between income and consumption expenditure among the total, sample HHs.

$$r = \frac{N\phi yc \, Z\phi y.\phi c}{\sqrt{N\phi y^2 \, Z(\phi y)^2}\sqrt{N\phi C^2 \, Z(\phi C)^2}}$$

Where,

r = correlation coefficient

ϕy = total income of the sample HHs

ϕc = total consumption expenditure of sample HHs

n = no. of (sample HHs) observation.

Then,

Substituting the value of those factors in the above from (annex-2), we get,

$$r = \frac{30x417836.86 \, Z3366.4x3450.99}{\sqrt{30x446359.81 \, Z(3366.4)^2}\sqrt{30x420021.23 \, Z(3450.99)^2}}$$

$$= \frac{917693.064}{831.44 \mid 1434.62}$$

$$= 0.7693$$

… r = 0.7693

ANNEX - 15

Correlation between income and consumption expenditure among the absolute poor HHs.

$$r = \frac{N\phi yc \; Z\phi y.\phi c}{\sqrt{N\phi y^2 \; Z(\phi y)^2}\sqrt{N\phi C^2 \; Z(\phi C)^2}}$$

Where,

r = correlation coefficient

ϕy = total income (per capita per day of the absolute poor)

ϕc = total consumption expenditure (per capita per day of the absolute poor HHs)

n = no. of absolute poor.

Then, values of the factors are,

$\Sigma y = 195.37, \quad \Sigma c = 491.37, \quad \Sigma y^2 = 8082.032$

$\Sigma c^2 = 48503.37, \quad \Sigma yc = 19509.34$

Substituting these values in the formula, we get

$$r = \frac{5 \mid 19509.34 \; Z195.37 \mid 491.37}{\sqrt{5 \mid 8082.032 \; Z(195.37)^2}\sqrt{5 \mid 48503.37 \; Z(491.37)^2}}$$

$= 0.9984$

$\therefore r = 0.9984$

ANNEX - 16

Estimation of consumption function among the absolute poor HHs and their MPC.

Consumption is the function if income,

So,

C = f(y), where

C = consumption

y = income

Since,

c = a + b(y) .....(i)

a = autonomous consumption

b = marginal propensity to consume (MPC)

When,

(0 < MPC < 1)

To calculate the value of and b we should use the following regression equations.

ϕC = na + b ϕy ..... (ii)

ϕCY = a ϕ y + b ϕ y^2 .....(iii)

Here,

ϕC = 491.37, ϕy = 195.37

ϕCY = 19509.34, ϕy^2 = 8082.032

Substituting these values in (ii) and (iii) we get.

491.37 = 5a +195.37b

19509.34 = 195.37a+8082.032b

Arranging in matrix form,

$$\begin{matrix} 491.37 \\ 19509.34 \end{matrix} \text{ X } \begin{matrix} 5 & 195.37 \\ 195.37 & 8082.032 \end{matrix} \begin{matrix} a \\ b \end{matrix}$$

$$\begin{matrix} a \\ b \end{matrix} \begin{matrix} 5 & 195.37 \\ 195.37 & 8082.032 \end{matrix} \overset{Z1}{} \begin{matrix} 491.37 \\ 19509.34 \end{matrix} \quad \text{…… (iv)}$$

Let, $A = \begin{matrix} 5 & 195.37 \\ 195.37 & 8082.032 \end{matrix}$

$|A| = 5 \times 8082.032 - 195.37 \times 195.37$

$= 2240.71$

For the cofactors of matrix A,

$C_{11} = 8082.032$ $C_{12} = -195.37$

$C_{21} = -195.37$ $C_{22} = 5$

$\therefore$ Cofactor matrix of $A = \begin{matrix} 8082.032 & Z195.37 \\ Z195.37 & 5 \end{matrix}$

$\therefore$ Adj. $A = \begin{matrix} 8082.032 & Z195.37 \\ Z195.37 & 5 \end{matrix}$

$$\therefore A^{-1} = \frac{Adj.A}{/A/} = \frac{\begin{matrix} 8082.032 & Z195.37 \\ Z195.37 & 5 \end{matrix}}{2240.7}$$

$$= \begin{matrix} 3.606 & Z0.087 \\ Z0.087 & 0.00223 \end{matrix}$$

Substituting this value in (iv)

$$= \begin{matrix} a \\ b \end{matrix} X \begin{matrix} 3.606 & Z0.087 \\ Z0.087 & 0.0023 \end{matrix} \begin{matrix} 491.37 \\ 19509.34 \end{matrix}$$

$\therefore$ $a = 74.56$

$b = 0.7566$

QUESTIONNAIRE

1. General Information

Name of Respondent:- Gender:-

Age:- Sex:- Ward No. :-

Occupation of Respondent:-

2. Individual Information

				6 years and above		10 years and above				
S.N	Name of the family member	Sex Male Female	Age	Are you literate? 1. Yes 2. No	Which Grade did you pass?	What do you do? 1. Agriculture 2. Other Income Generating work 3. Not Active			Duration of work. 1. Agriculture M/Y 2. Others Hrs/ Day	
1	**2**	**3**	**4**	**5**	**6**	**7.1**	**7.2**	**7.3**	**8.1**	**8.2**
1										
2										
3										
4										
5										

3. Family Physical Facilities

a) Where do you get drinking water from ?

i) Piped water ii) Well / Kuwa

iii) Stone Spout iv) River / Stream

v) Tubewell / Rower Pump vi) Others

b) Does your household get sufficient drinking water from the source mentioned above?

i) Sufficient all the year around

ii) Sufficient except during the dry season

iii) Not sufficient all the year around.

c) What kind of fuel is often used by your household for cooking?

i) Firewood ii) Kerosene iii) Bio Gas

iv) Electricity v) others

d) What type of house you are living in?

i) Made of Baked bricks ii) Made of Unbaked bricks

iii) Made of Stone iv) Cemented

v) Made of other raw materials

e) What kind of roof does your house have?

i) Jhingati / Tile / Slate ii) Thatch / Straw / Stalk

iii) Galvanised Iron / Corrugated She

et iv) RBC / RCC

v) Others

4. Ownership of the House

i) Owned ii) Rented from others

iii) Rented from other without any payment

5. Landholding (in Ropani- Aana – Paisa)

(4 Paisa = 1 Aana, 16 Aana = 1 Ropani)

Types of holding	**Khet**	**Pakho (Bari)**	**Total**
Own Land			
Land rented in			
Land rented out			

Total			

6. Sources of Income

a) Income from agricultural Production

Crops	**Quantity Produced**	**Local Unit Price**	**Total**
Paddy			
Maize			
Wheat			
Millet			
Soya bean			
Ginger			
Oil-seed			
Vegetables			
Pulses			
Fruits			
Others			
Total			

Is agricultural production sufficient for consumption?

Yes…….No……Just to survive……..

If any saving how much (in Rs.)……

If not sufficient how much (in Rs.)……..