CHAPTER ONE
INTRODUCTION

1.1 Background

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, and 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.

As defined by Economic and Social Commission for Asia and the Pacific, poverty is a complex phenomenon and its incidence is determined by many factors, including level of per capita income, distribution of assets and income, quality of governance, policies and institutions related to education, health and other aspects of human development (ESCAP, 2002).

The European Union's, working definition of poverty is: 'Persons, families and groups of persons whose resources (material, cultural and social) are so limited as to exclude them from the minimum acceptable way of life in the Member State to which

they belong'. This is now the most commonly used definition of poverty in the industrialized world. It recognizes that poverty is not just about income but about the effective exclusion of people living in poverty from ordinary living patterns, customs and activities (EU, 2003/04).

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 other hand, at macro level, poverty can be identified in terms of high level of population growth, low productivity, and 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.

1.2 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. In accordance with World Bank Report, Nepal's gross domestic product (GDP) per capita was US $ 290 per capita, and nearly one-third of the population lived on less than a dollar a day (WBR, 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. As per World Bank Report, 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 (WBR, 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 (HDR, 2007/08)

1.3 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), 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).

1.4 Statement of the Problem

Poverty is persistent in both developed as well as underdeveloped countries. The problem of poverty is more serious in developing country 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 by taking the case of rural areas of Gitanagar VDC of Chitwan district. This will help inform policy makers to devise policies for poverty reduction.

1.5 Objectives of the Study

The present study, in general, attempts to vividly portray the actual scenario of poverty specific respect to Gitanagar VDC of Chitwan district with the following specific objectives:

i. To analyze the nature of rural poverty in the study areas of Gitanagar VDC of Chitwan district.
ii. To analyze the incidence and extent of poverty.
iii. To examine the relationship between poverty and socio-economic characteristics.
iv. To suggest appropriate policies for alleviation of poverty especially in rural areas.

1.6 Significance of the Study

In spite of various effects made to reduce poverty, there is a wide regional disparity in socio-economic development of country. Before formulating and implementing poverty alleviation program, it is essential to identify the areas of poverty ridden and percentage of people living below the poverty line. Thus, the main problem of today is to suggest effective measures to reduce poverty. This study attempts to focus to depict the economic condition of people of Gitanagar VDC of Chitwan District. It

tries to analyze the nature and incidence of poverty and therefore it suggests some policies and recommendations for reducing poverty.

1.7 Limitations of the Study

The study is based on following limitations and assumptions:

i. The study concentrates to the specified area of Chitwan District (i.e. Gitanagar VDC) to determine and analyze the incidence, existence, nature, and other aspects relating with poverty in micro perspective.
ii. The generalizations made in the study may or may not be equally applicable to other areas of the country.
iii. The economic variables such as income, inequalities of distribution of income and wealth, unemployment are considered and analyzed as to show the cause of poverty whereas social-cultural variables such as caste, political power are ignored.
iv. The value of fixed assets and other current assets are not included in income, but income generating from these assets is included in the study.
v. The prices of all products are calculated on current price.
vi. Simple statistical tools are used to analyze data.
vii. The analysis completely depends upon primary and secondary data. Primary data were collected from household survey through structured questionnaire.

CHAPTER TWO
REVIEW OF LITERATURE

Economic growth with social equity has become one of the development agenda in the era of 21st century. In order to achieve this, rural poverty reduction program plays a vital role in the countries like Nepal. In today's world, poverty incorporates not only income, consumption and human development like education, health and sanitation but also the empowerment and social security against vulnerability. In this chapter, past poverty literatures are reviewed.

Rural Poverty Report published by International Fund for Agricultural Development (IFAD), has mentioned the fact that poverty in Nepal is a deeply entrenched and complex phenomenon. Approximately 40 percent of Nepalese live the poverty line of US$12 per person/per month. Despite some progress in poverty reduction in recent years and declining rates of urban poverty, the problem remains widespread and most indicators suggest that it is on the rise (IFAD, 2001).

Rural poor people in Nepal include:

- Destitute people, such as sick or disabled persons, abandoned children and displaced persons.
- Extremely poor people, including illiterate or landless persons or those with very few assets.
- Moderately poor people, such as those who have small farms but are often heavily indebted.
- people who are 'nearly poor', including small farmers who are at risk of slipping deeper into poverty as a result of factors such as conflict, debt and land degradation.

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 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 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, 2008/10)

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 peri-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 percentage points 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 (HDR, 2006).

The tenth plan had targeted normal economic growth rate to be an annual 4.3 percent on an average (Agricultural sector 2.8 and non-agricultural sector 5.2). However, during the plan period, the average annual growth rate remained 3.4 percent (agriculture sector 2.67 percent and non-agriculture sector 3.79 percent), gross value addition to be 3.4 percent. It is estimated that within non-agriculture sector growth rate estimates in the community and social services under agriculture sector, as well as electricity, gas and water sectors has remained higher compared to other sectors.

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 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.

Micro-Enterprise Development Program (MEDEP- Phase II), is a "nationally-executed" project of UNDP Nepal, aims to diversify the livelihoods and increase the income of low-income families. It takes an integrated and market oriented approach to micro-enterprise development, providing and coordinating entrepreneurship training, technical skills training, and micro-finance access for potential entrepreneurs. Local market and resource studies inform product and enterprise selection. MEDEP stresses the areas surrounding local market centers as the critical locales for identifying, training, and assisting selected poor women to initiate and grow their micro-enterprise. Additionally, MEDEP maintains its target of having 70 percent of its entrepreneurs are women.

The results and achievements of MEDEP program are as follows:

- Low income families acquire the skills necessary to develop and sustain micro-enterprise.
- Low income families able to secure financing to develop and sustain micro-enterprises.
- Micro-Entrepreneurs have continued access to business development services.
- Improve Policy and Regulatory Framework for Micro and Small Enterprise in Nepal.

A Statistics about the poverty, hunger and malnutrition published by Organization for Economic Co-operation and Development (OECD) on 2001 also reveals the nature and incidence of rural poverty around the world.

- More than one billion people in the world live on less than US$1 a day.

- 2.7 billion Struggle to survive on less than US$2 per day.
- More than 800 million people go to bed hungry every day, including 300 million children.
- Every 3.6 seconds a person dies of starvation, and most of those who die are children under age of 5 years.
- Every year 6 million children die from malnutrition before their fifth birthday.

"Roads to Poverty Alleviation" is an article written by S.K. Shrestha in The Rising Nepal. Mr. Shrestha has expressed views regarding poverty reduction through the improvement in economic field. Economic development leads to the raising of the people from the poverty line. Also, many Nepalese poor people live in rural areas. Local bodies have vital role in poverty reduction. The current plan has taken them as one of the pillars of development. Local expenditures should be increased and directed towards rural poverty alleviation. Poverty in Nepal is acute covering around 31 percent of the people below poverty line, only 62 years of life expectancy and around 50 percent of adult literacy. The poverty is concentrated mainly on rural areas of mountain and hilly regions covering women, Dalits, Janajatis. In the present world, local government is considered to play major role in solving different problems including rural poverty reduction. Decentralization experts have expressed their view that decentralization through intervention on allocation of resources can alleviate poverty. People can be empowered by providing them basic services and such action can reduce poverty. In Nepal, Decentralization has been exercised for many years. However, it has not been possible to reduce poverty substantially. The pattern of local government expenditure is basically, not poverty alleviation oriented. If central government wants to engage local bodies in alleviating poverty, it should be reoriented in future. In this case only, local bodies can be helpful in poverty alleviation. All the allocate functions should be devolved to local bodies and the expenditures should be designed considering the poverty status in the district (Shrestha, 2007).

Mathema mentioned that the 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 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)

Dulal (2006) in his dissertation paper “Rural Poverty and Environment” describes about the inextricable linkage between poverty and environment 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 (Dulal, 2006).

As per the Human Development Report, the Human Development Index (HDI) measures the average progress of a country in human development. Nepal (142^{nd} 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 84^{th} 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 (HDR, 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 (MDGs, 2007)

Tiwari has mentioned Challenges for the Attaining the MDGs in Nepal in his books “Reading in the Millennium Development Goals”. According to him, 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, 2005A). 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 atypical 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 (World Bank, 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 a 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 Gitanagar Village Development Committee of Chitwan District of Nepal. The present study specifically highlights the fact that Gitanagr VDC is still worrisomely crippled by poverty despite its easy access to the district headquaqrter.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Site Selection

The Gitanagar Village Development Committee of Chitwan District was selected purposively. The outlook of unhygienic living of the majority of the residents, lower percentage of school enrollment of children, poor infrastructure development of the VDC that is proximate to the district headquarter (i.e. Bharatpur) 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 December 29 to Janauary 09, 2007/08. The reference year for the study was October to December 2007. 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 (UN) were also utilized.

3.3 Method of Data Collection

A list of households of all the ward numbers of the study area was taken from the VDC office and CBS (Population Census 2001). And, those households were grouped into various strata viz. low income group (earning Rs. 1,000.00 and less), middle income group (earning Rs. 1000-1500) and high income group (earning above Rs. 1,500) per month. The desired information was collected through intensive field survey conducted in 376 households during the survey period. During the period, elder people, farmers, teachers, shopkeepers, house-wives, political bodies and other different professionals had been interviewed. Similarly, relevant books, journals and publications of different institutions are also being consulted for secondary data.

3.4 Sample Size and Sampling Procedure

Out of 2550 households of Gitanagar VDC, 376 households were selected by using of stratified random 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 14.75 percent of the total households which can be considered to be representative of the universe of the study.

3.5 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.

3.6 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.

Household Size:

It is composed of individuals related by blood, marriage, and linked together. Those persons such as occasional visitors or relatives staying together during reference period in the family and family members who are away from home for 6 months are not included in the present study.

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.

Economically Active Population:

For the present study, the members of the household between 15 -59 years and worked for any length of time are taken as economically active population.

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.

3.7 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.

3.7.1 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.

3.7.2 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:

$C_i=\alpha+\beta Y_i$

Where,

C_i=consumption of i^{th} household.

α=autonomous consumption.

β=marginal propensity to consume.

Y_i=Income.

b) Wolf point

In Keynesian consumption function wolf point implies the point of equality between income and expenditure that is $Y_i = C_i$

As, $C_i = \alpha + \beta Y_i$

$Y_i=\alpha + \beta Y_i$ (As $Y_i = C_i$)

Thus, wolf point = $\frac{\Im}{(1 Z \wp)}$

The wolf point gives the total poverty line.

3.7.3 Intensity of Poverty

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

a) With considering inequality

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

b) Without considering inequality

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

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.

3.8 Extent of Income Inequality and Distribution of Income

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

3.8.1 Range

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

$$\text{Range} = \frac{(\text{Max } Y - \text{Min } Y)}{\bar{Y}}$$

The limiting value of the range is 0≤Range≤1. As its value approaches to zero, it indicates equality in the distribution and vice-versa.

3.8.2 Relative Mean Deviation

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

$$M.D = \sum_{i=1}^{n} \frac{(Y_i - Y)}{N}$$

Where,

M.D = Mean Deviation

Yi= Income of an Individual

Y= Mean Income

N= No. of Observations

3.8.3 Variance

It is the square of standard deviation. It shows the relationship between arithmetic mean and standard deviation. Variance was 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:

$$V=\sigma^2 = \sum_{i=1}^{n} \frac{(Y_i - Y)^2}{N}$$

Where,

σ^2 = Variance

Y = Mean Income

Y_i = Income of the Individual

N = No. of observations

3.8.4 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:

$$C.V = \frac{\exists}{\overline{Y}}$$

Where,

C.V= co-efficient of variation

σ = standard deviation

$\overline{Y}$ = Mean income

3.8.5 Lorenz Curve

It is a graphical method which shows the inequality in income distribution. It shows the difference between actual distribution and equal distribution of income. In this method, degree of inequality is indicated by the area of concentration which is the area between equal distribution curve and Lorenz curve. The higher the area of concentration, the greater is the inequality and vice-versa.

3.8.6 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:

$$G.C.\ X1\ \Gamma \frac{1}{n}\ Z \frac{2}{n^2 \overline{Y}}\ [ny_1 + (n-1)\ y_2 + (n-2)\ y_3 + \ldots\ldots\ldots\ldots\ldots + y_n)$$

Where,

$y_1 > y_2 > y_n$

G.C= Gini co-efficient

N= No. of income receiving units

y= Mean income

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

3.9 Relationship between Income and Consumption.

3.9.1 Correlation and Co-efficient of Determination

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.

$$r = \frac{N\phi C_i Y_i \; Z\phi Y_i \phi C_i}{\sqrt{N\phi C_i^{\,2} \; Z(\phi C_i)^2}\;\sqrt{N\phi Y_i^{\,2} \; Z(\phi Y_i)^2}}$$

Where,

r = correlation co-efficient

N = No. of observations

Y_i= Income of ith household

C_i= Consumption expenditure of i^{th} 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.

The co-efficient of determination is used to see the variation in the dependent variables that is expressed for by the independent variables. It is the square of the correlation co-efficient that is $r^2 = R^2$.

3.9.2 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.

$$C_i = \alpha + \beta Y_i$$

3.10 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

Gitanagar is one of the 36 VDCs of Chitwan District. This particular VDC had been selected to explore and to analyze various facts and status related with poverty as visualized in the objectives of the study.

Gitanagar is located in mid southern part from the district headquarter, Bharatpur. The village development committee is comprised of 9 wards, which lies to the east and north of Shivanagar, west of Patihani, and south of Bhatatpur Municipality. Gitanagar, having ward no. 7, is a small town and the VDC is named after that. The area covered by the VDC is 16.34 sq. km. This VDC is located about 10.5 kms south from district headquarter.

The name of the tole by ward as follows:

Ward No.	Name of the Tole
1	Ujjwalnagar
2	Champanagar
3	Prithivinagar
4	Devnagar
5	Amarbasti
6	Kesharbag
7	Gitanagar
8	Indrapuri
9	Parasnagar

4.2 Demographic Status

According to Central Bureau of Statistics (CBS) population census 2001, the total population of the VDC is 12,106, out of which 6,218 (51.36%) are females and 5,888 (48.64%) are males. The total household number is 2,550 and which shows the size of household is around 4.75, which is lower than average national household size of

5.45. The table presents the ward wise and sex-wise distribution of population and households of respective ward of the VDC.

Table 4.1: Population by Wards and Sex

Ward No.	Total Households	Population		
		Male	Female	Total
1	352	777	824	1,601
2	169	411	408	819
3	90	230	228	458
4	386	906	926	1,832
5	375	887	891	1,778
6	346	774	880	1,654
7	406	902	988	1,890
8	186	421	453	874
9	240	580	620	1,200
Total	**2,550**	**5,888**	**6,218**	**12,106**

Source: CBS Population Census, 2001

Table 4.1 shows that the total household and size of population is largest in Ward No: 7 and the smallest is Ward No: 3. As the national trend, numbers of females are higher than that of the number of males in the VDC.

Table 4.2: Sampled Households and Population by Wards and Sex

Ward No.	Total Households	Population		
		Male	Female	Total
1	52	121	139	260
2	25	73	78	151
3	17	39	43	82
4	55	147	158	305
5	54	149	153	302
6	51	137	149	286
7	61	159	167	326
8	25	76	89	165
9	36	93	98	191
Total	**376**	**994**	**1,074**	**2,068**

Source: Field Survey, 2008

Out of total 2,550 households of the VDC, 376 households have been selected for field survey. The selection of sample households in each ward is made on the basis of probability proportional to size. Out of the sample population, it is observed that 51.93% are females. The average household size of the sample households is 5.50. The table 5 presents the ward wise and sex wise distribution of sample households and population. Likewise, Table (No. 4.3) shows the population by sex and by 5 year age group and of Gitanagar VDC.

Table 4.3: Population by 5 Year Age Group and Sex

Age Group	Total Population	Population %	Male	Male %	Female	Female %
00-04	1120	9.25	574	9.75	546	8.78
05-09	1390	11.48	710	12.06	680	10.94
10-14	1515	12.51	763	12.96	752	12.09
15-19	1283	10.60	593	10.07	690	11.10
20-24	1266	10.46	566	9.61	700	11.26
25-29	988	8.16	435	7.39	553	8.89
30-34	774	6.39	385	6.54	389	6.26
35-39	726	6.00	325	5.52	401	6.45
40-44	663	5.48	313	5.32	350	5.63
45-49	522	4.31	275	4.67	247	3.97
50-54	457	3.77	218	3.70	239	3.84
55-59	374	3.09	193	3.28	181	2.91
60-64	312	2.58	172	2.92	140	2.25
65-69	250	2.07	130	2.21	120	1.93
70-74	176	1.45	103	1.75	73	1.17
75 & over	290	2.40	133	2.26	157	2.52
Total	**12,106**	**100.00**	**5,888**	**100.00**	**6,218**	**100.00**

Source: CBS Population Census, 2001

As seen from the table, it is evident that the high level of dependent population resides in the VDC. The population below 15 years of age group and above 60 years age group, around 39.34 percent, which implies a high dependency ratio. Out of

respective population, the dependent population of male and female is 38.72 percent and 34.91 percent respectively. This high degree of dependency further results into poverty.

4.3 Ethnic Composition

Brahmin, Chhetri, Newar, Gurung, Tamang, Magar. Kami, Damai, Tharu, Kumal, Sherpa, Sarki are main ethnic groups in this VDC. The ethnicity of the population also relates to the poverty of the concerned area. The table 4.4 shows ethnic composition of the whole population.

Table 4.4: Population by Ethnic Groups

Ethnic Group	Population	Percentage
Brahmin	5,770	47.66
Chhetri	1677	13.85
Newar	613	5.06
Gurung	571	4.72
Tamang	392	3.24
Magar	279	2.30
Kami	791	6.53
Damai/Dholi	492	4.06
Tharu	857	7.08
Kumal	81	0.67
Sherpa	65	0.54
Sarki	327	2.70
Others	191	1.58
Total	**12,106**	**100.00**

Source: CBS Population Census, 2001

The table 4.4 shows that approximately 33.42% i.e. 1/3rd of the population falls in other than Brahmin, Chhetri and Newar caste.

4.4 Economic Status

The economically active population and their major occupation clearly show the economic status of the population of overall VDC. As well as economically active

households, operating small scale non-agricultural economic activity by type of activity is shown in Table No: 4.5.

Table 4.5: Economically Active and Inactive Population by Sex

Economically Active		Economically Inactive		Total
Male	**Female**	**Male**	**Female**	
3,127	2,972	1,421	1,983	**9,503**

Source: CBS Population Census, 2001

Out of 9,503, the total number of economically inactive population is 3,404, which is around 35.82% of total population. As per the CBS Population Census, 2001, the economically active population is considered above 10 years of age and above only.

Table 4.6: Economically Active Households and by Major Occupations

Occupation Group	No. of Households
Manufacturing	32
Trade Business	206
Transport	40
Services	183
Others	265
Total	**726**

Source: CBS Population Census, 2001

Out of 2550 households, 726 households are having economic activities and remaining 1824 households are having non- economic activities. The table 6 shows that 71.53 percent of total households are still dependent either on agriculture or not actively participate in any economic activity.

4.5 Educational Status

Educational status of sampled population (above 4 years of age) has been shown in Table No: 4.7

Table 4.7: Educational Status of Sampled Population

Level	Male		Female		Total Number	Percent
	No.	%	No.	%		
Illiterate	287	32.07	497	51.34	784	42.08
Literate	132	14.75	175	18.08	307	16.48
Educated	476	53.18	296	30.58	772	41.44
Total	**895**	**100**	**968**	**100**	**1,863**	**100**

Source: Field Survey, 2008

Out of sampled population of 1,863, high percentage of population i.e. 42.08 percent are illiterate people in the study area. As far as literate are concerned, 16.48 percent of sampled population covers the people who can read only. The remaining 41.44 percent are educated population.

Table 4.8: Population by Status of School Attendance

Attending		Total	Not Attending		Total	Total
Male	Female		Male	Female		
1,449	1,515	2,964	478	813	1,291	**4,255**

Source: CBS Population Census, 2001

In accordance with census 2001, the table 4.8 shows that 30.34 percent of population above 6 years of age is still not attending the school in this particular VDC.

4.6 Agricultural Status

Agriculture is the predominant occupation of the people. Plain cultivable land is the characteristic of the area. In this VDC, cropping pattern is based on season. Farmers residing in this VDC produce rice, maize, wheat and other cash crops. At present, rice based cropping pattern is dominant. Due to surface and ground water irrigation, the productivity of major crops has been increased. Being adjacent to the district headquarters, the land began fragmented for residential purpose too.

4.7 Size of Landholding

In the study area, we have already discussed that the major population is depends on agriculture. However, there is an extreme inequality in the distribution of land. We

have surveyed the sample of households in this VDC. The following table (No: 4.9) represents the distribution of land amongst the sampled households.

Table 4.9: Distribution of Sampled Households According to the Size of Landholding for Cultivation

Size of Landholding	No. of Households	Percentage
Land less	53	14.09
Up to 0.34 hectare	88	23.40
0.35 to 0.68 hectare	95	25.27
0.69 to 1.36 hectare	67	17.82
1.37 to 2.01 hectare	35	9.31
2.02 to 2.68 hectare	25	6.65
2.69 to 3.35 hectare	9	2.39
Above 3.36 hectare	4	1.07
	376	**100.00**

Source: Field Survey, 2008

From the table 4.9, we have observed that out of the total sampled households (i.e. 376), 14.09 percent of families are landless in this VDC. Most of those lands less people even do not have any land for house. They used to live in huts in the land of jamindars (big land lords). These people earn their livelihood through their labor work. The condition of many of those landless people is very pathetic. As per our survey, it shows that 23.40 percent households have occupied only 0.34 hectare or less of cultivated land. These types of farmer are known as marginal farmers. Above 0.35 hectare to 1.36 hectare landowners are known as small farmers, those of which occupy 43.09 percent of cultivated land in this VDC. The large farmers, who occupies above 1.37 hectare to 3.35 hectare, are 18.35 percent of sampled households. Lastly, the top 1.07 percent of total sampled household possesses the large size of land; they are to be called as jamindars (big land lords). Thus, uneven distribution of holding of land is also the major cause of poverty in the study area.

CHAPTER FIVE

POVERTY SITUATION IN THE STUDY AREA

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 are 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.

For the alleviation of poverty, first of all it requires to know the nature of poverty. Studies have shown that poverty has been an important obstacle in the process of economic growth. There are several views on poverty expressed by different writers and researchers. According to Dahal and Shrestha, the nature of poverty is specifically determined by the socio-economic structure at the village level where the majority lives in poverty and are dominated, intimidated and exploited by well-to-do farmers, merchants and money lenders.

In the present section, the nature of poverty and its relation with other variables such as level of education, income, unemployment, family size of land holding are analyzed.

The analysis is focused on socio-economic characteristics of the study area and their relationship with the problem of poverty.

5.1 Education 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 means 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.

In our study area, there are many of the households, who were found illiterate. In the field survey, it is found that there is high degree of illiteracy among the lower caste group (Tharu, Kami, Damai, Magar, Tamang and Sarki) There are rarely a lower caste people who have passed even the secondary level of education. Thus, most of them fall amongst the absolute poor category. Table 5.1 shows the educational status and the poor among the total sampled households.

Table 5.1: Educational Status of Household Heads among the Total Sampled Households and Poor Households

Level	**No. of HHS head**	**% of HHS head**	**Poor**	**% of poor**	**Non-Poor**	**% of Non-poor**
Illiterate	109	28.98	71	59.16	37	14.45
Primary	137	36.44	29	24.17	81	31.64
Upto S.L.C	55	14.63	17	14.17	64	25.00
Higher Education	75	19.95	3	2.50	74	28.91
Total	**376**	**100.00**	**120**	**100.00**	**256**	**100.00**

Source: Field Survey, 2008

Table 5.1 shows that out of total 376 sampled households 109 (28.98 percent) are household heads are illiterate, 137 (36.44 percent) household head are in primary level education and 55 (14.63 percent) are up to S.L.C only and 75 (19.95 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 120 absolute poor houses, 71 (59.16%) households are poor among the illiterate household group. Amongst the literate group, only 29 (i.e. 24.17%)

household heads are found to be poor. Out of 120 household head, only 17 (14.17%) are holding the education up to S.L.C levels. And, Out of them, 3 (2.50%) household heads have achieved higher education level from the above table. It is also concluded that nearly 59.16 percent of household heads are illiterate where as very low percent of 2.50 percent household heads have higher education. It is conclusion that there is interrelation between illiteracy and poverty.

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 poor and their cash income.

Table 5.2: Level of Education of Poor Household and Mean Per-Capita Daily Income

Level of Education	Household Head		Population		Daily Per Capita Mean Income(Rs.)
	No.	Percent	No.	Percent	
Illiterate	64	53.33	451	56.73	15.25
Literate (Primary	30	25.00	203	25.53	23.32
Education)	18	15.00	108	13.58	27.50
Literate (up to S.L.C)	8	6.67	33	4.16	31.12
Higher Education					
Total	**120**	**100.00**	**795**	**100.00**	

Source: Field Survey, 2008

From this, it is clear that those households which have illiterate households head have very low mean income per capita per day. The 53.33 percent of total poor household heads are illiterate and their mean income per capita daily is only 15.25 which 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 S.L.C. and higher education is 27.50 and 31.12 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 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	Labour	29	24.17	217	27.30	13.25
2	Agriculture	71	59.16	445	55.97	26.32
3	Business	9	7.5	75	9.43	31.12
4	Service	11	9.17	58	7.30	37.50
	Total	**120**	**100.00**	**795**	**100.00**	

Source: Field Survey, 2008

The Table 5.3 shows that the income level of those households is very low whose main occupation is labour 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 labour 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, Tharu, Kami, Damai, Sherpa. Among these ethnic groups, Brahmin and Chhetri are known as upper caste group. Newar, Gurung, Tamang, are middle caste group and Tharu, Damai, Kami are known as lower caste group. Table 5.4 shows ethnic profile of the absolute poor households.

Table 5.4: Distribution of Absolute Poor Households According to Ethnic Groups

S.N.	Ethnic group	Total Sampled HHS		Absolute /Relative Poor Households	
		No	Percent	No	Percent
1	Brahmin	167	44.41	24	14.37
2	Chhetri	53	14.10	11	20.75
3	Newar	26	6.91	6	23.08
4	Gurung	21	5.59	5	23.81
5	Tamang	17	4.52	7	41.18
6	Magar	8	2.13	4	50.00
7	Kami	29	7.71	25	86.21
8	Damai/Dholi	15	3.99	10	66.67
9	Tharu	27	7.18	17	62.96
10	Kumal	3	0.80	1	33.33
11	Sherpa	2	0.53	2	100.00
12	Sarki	8	2.13	8	100.00
	Total	**376**	**100.00**	**120**	

Source: Field Survey, 2008

From the surveyed data, it is found that out of total sampled households (376), 44.41 and 14.10 percent are Brahmin and Chhetri respectively. However, of the proportion of poor households, only 14.37 percent are Brahmin and 20.75 percent are Chhetri. For all other case, the share of poor is higher than their share in total population, for example, the proportion of Tamang and Magar households in total sampled households is 4.52 and 2.13 percent respectively, whereas their ratio among the absolute poor households (i.e. 120) is much higher- 41.18 percent of Tamang and 50

percent of Magar. This indicates that a larger proportion of households other than Brahmin are poor in the study area.

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 7 family size, 8 to 10 family size and above 10 family size. The Table 5.5 shows the relationship between poverty problem and household size.

Table 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	24	14.17	98	7.70	14.71
2	5 to 7	57	44.17	297	35.57	11.45
3	8 to 10	22	22.50	198	26.95	16.78
4	11 and over	17	19.16	202	29.78	15.04
	Total	**120**	**100.00**	**795**	**100.00**	

Source: Field Survey, 2008

The above table reveals that the household with family size 1 to 4 have higher income than the family size with 5 to 7 members because these family members are illiterate and unskilled. The income level is higher in case of households with 8 to 10 family size because these family members are employed and skilled, which help them to earn more income.

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 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	17	14.17	124	14.31	7.34
2	Up to 0.34 hectare	43	35.83	287	35.56	12.25
3	0.35 to 0.68 hectare	49	40.83	317	40.46	17.45
4	0.69 to 1.36 hectare	11	9.17	67	9.67	23.56
5	1.37 to 2.01 hectare	-	-	-	-	-
6	2.02 to 2.68 hectare	-	-	-	-	-
7	2.69 to 3.35 hectare	-	-	-	-	-
8	Above 3.36 hectare	-	-	-	-	-
		120	**100.00**	**795**	**100.00**	

Source: Field Survey, 2008

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. 7.34 which 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. Table 5.7 shows the ratio of dependent population in the sampled poor households.

Table 5.7: Age Group and the Total Poor

S.N.	Age Group	Number	Percentage
1	0-14 years	305	38.36
2	15-59 years	362	45.53
3	59 years and above	128	16.11
	Total	**795**	**100.00**

Source: Field Survey, 2008

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 higher i.e. 54.47 percent of sampled poor population. Thus, the higher 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. Gitanagar VDC of Chitwan District. In order to determine the extent of poverty, two types of poverty lines are estimated in the analysis, which is nothing but 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 Gitanagar 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, Sabitri, Ohar, Anadi, Masino, wheat, and maize. Regarding pulses, black gram, lentil (mushor) soyabean, pea, Erplise (rajama) 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. 13.92 and Rs. 2.23 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. 16.15 (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. 16.15 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. 8.70. 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. 24.85 per

capita per day, which was the absolute poverty line for the study area for the year 2008. (Annex – 1)

Once the above poverty line is calculated, population poverty line can be identified. Thus, those households whose per capita per day income is less than Rs. 24.85 are 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 6.1: 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	11.40
4	Tarigaun, Dang	1998	7.93	4.27	12.20
5	Dohari, Bara	2000	11.90	6.40	18.30
6	Sundarijal, KTM	2001	13.26	7.14	20.04
7	Fulbari, Chitwan	2002	12.43	6.69	19.12
8	Gitanagar VDC	2008	16.15	8.70	24.85

Source: NPC (1978), NRB (1988); Shrestha (1994), Acharya (1998), Adhikari (2000), Regmi (2001), Sapkota (2002), Field Survey by Author (2008).

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-3).

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 Keynessian 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. 36.33 per capita per day and the absolute poverty line is Rs. 24.85 per 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 1.09 and 0.97 respectively. Thus, wolf point level of income for Gitanagar VDC is Rs. 36.33 per capita per day.

6.4 The Incidence and Extent of the Poverty

In the present study, Rs. 24.85 per capita per day is the absolute poverty line. 77 out of 376 sampled households (20.48%) were found below this poverty line. These 77 households are absolute poor households with 527 people. Thus, 20.48 percent of population is below poverty line in Gitanagar VDC.

Considering Rs. 36.33 per capita per day as wolf point level of income and Rs. 24.85 as absolute poverty line, 43 households out of 120 falls in between the two levels, i.e wolf point as upper level and absolute poverty line as lower level. Similarly, out of 2068 sampled population, 268 people are receiving income above Rs. 24.85 per capita per day and Rs. 36.33 per capita per day. Thus, 11.44 percent of the households and 12.96 percent of population are relatively poor in the study area.

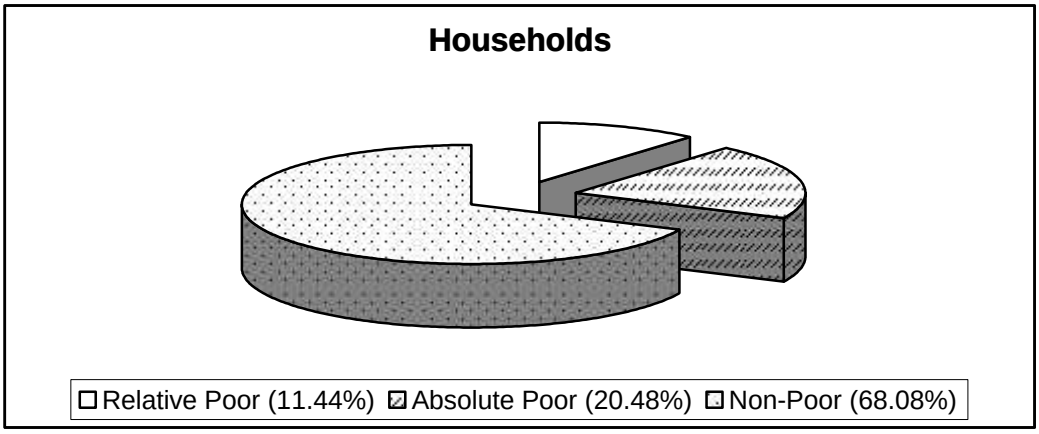
The households and population with income level below the wolf point level of income i.e. Rs. 36.33 per capita per day are termed as total poor households and population respectively. Hence, summation of absolute poor and relative poor are as total poor. Thus, out of 376 sampled households, 120 households and out of 2068 sampled population, 795 people are total number of poor. The table 6.2 shows the poverty situation of the study area.

Table 6.2: Distribution of Sampled Households and Population According to Living Standard

Category	Sampled HHS	Percent	Total Population	Percent
Relative Poor HHs	43	11.44	268	12.96
Absolute Poor HHs	77	20.48	527	25.48
Total Poor HHs	120	31.92	795	38.44
Non- Poor HHs	256	68.08	1273	61.56
Total	**376**	**100.00**	**2068**	**100.00**

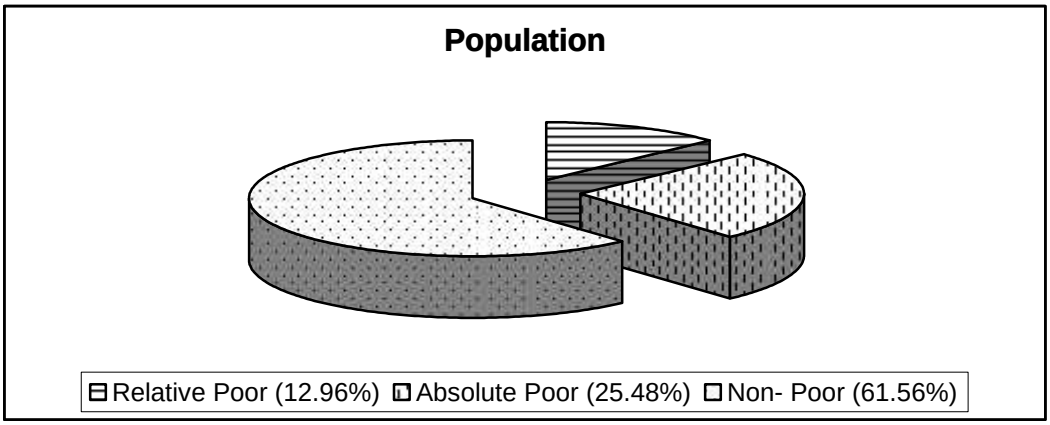
Source: Field Survey, 2008

Chart No. 6.1: Distribution of Sampled Households According to Living Standard



Source: Field Survey, 2008

Chart No. 6.2: Distribution of Sampled Population According to Living Standard



Source: Field Survey, 2008

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 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 6.4: Absolute Poor Households and Population

Study Area	**Household poverty line**		**Total Sampled Population**	**Population poverty line**	
	No.	**Percent**		**No.**	**Percent**
Rural Nepal	8,60,769	40.30	12,44,536	4,50,483	36.20
Markhu	48	60.00	469	280	40.80
Tarigaun	55	78.57	432	358	82.87
Dohari	48	53.33	730	395	54.10
Sundarijal	22	36.60	305	103	33.70
Fulbari	30	33.33	633	223	35.23
Gitanagar	77	20.48	2068	527	25.48

Source: NPC(1978), CBS (1996), NRB(1988); Shrestha(1994), Acharya(1998), Adhikari(2000), Regmi(2001), Sapkota(2002), Field Survey by Author(2008).

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 Bharatpur Municipality. 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.

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 and Lorenz curves were 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, 376 sampled households (out of 2,550 households) are divided into fifteen income groups, taking 25 households in each group. The per capita daily income is taken to drive Lorenz curve as well as to estimate the value of Gini co-efficient. Table 7.1 presents the income distribution per capita per day of sampled households.

Table7.1: Income Distribution among Sampled Households Per Capita per Day by Different Groups.

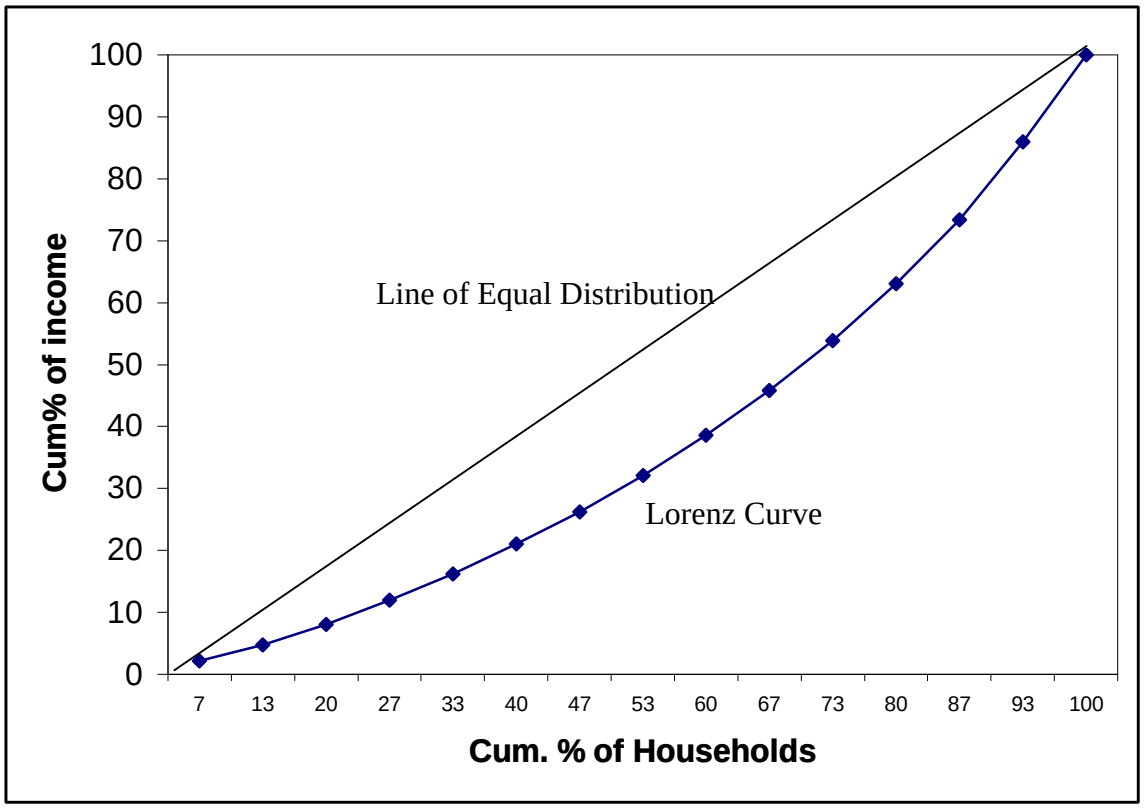
S.No.	No. of Household	% of HHs	Cum % of HHs	Total daily household income by group (Rs.)	% of income by the group	Cum % of income
1	25	6.67	6.67	951.00	2.13	2.13
2	25	6.67	13.34	1173.00	2.63	4.76
3	25	6.67	20.01	1471.00	3.30	8.06
4	25	6.67	26.68	1723.00	3.87	11.93
5	25	6.67	33.35	1927.00	4.32	16.25
6	25	6.67	40.02	2149.00	4.82	21.07
7	25	6.67	46.69	2277.00	5.11	26.18
8	25	6.67	53.36	2629.00	5.90	32.08
9	25	6.67	60.03	2922.00	6.55	38.63
10	25	6.67	66.7	3221.00	7.22	45.85
11	25	6.66	73.36	3578.00	8.03	53.88
12	25	6.66	80.02	4079.00	9.15	63.03
13	25	6.66	86.68	4607.00	10.33	73.36
14	25	6.66	93.34	5626.00	12.62	85.98
15	25	6.66	100	6251.00	14.02	100.00
Total	**375**	**100.00**		**44,584.00**	**100.00**	

Source: Field Survey, 2008

The Table 7.1 shows 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 6.67 percent of households (25 households) receives 14.02 percent of total daily income whereas bottom 6.67 percent of households (25 households) earns 2.13 percent of total income. In the same manner, more than 50 percent households (i.e. 53.36 percent), secures only 32.08 percent in the total income whereas remaining (i.e. 46.64 percent) households receives 67.92 percent of total income. It clearly indicates that there is a higher degree of inequality in the distribution of income amongst the

sampled households. Similarly, in the graphical representation shown in Figure 1, the line of actual distribution curve (Lorenz Curve) is deviated from the line of equal distribution. It indicates the fact that there is high inequality in the income distribution in the study area.

Figure No. 7.1: Lorenz Curve Showing Income Distribution Among Sampled Households



Source: Field Survey, 2008

The area between Lorenz curve (as shown in Figure No. 7.1) and line of equal distribution is known as the area of concentration. The basic notion is that the greater the area of concentration, the larger magnitude of income inequality and vice-versa.

The figure of Lorenz curve presented in figure 7.1 shows that there is existence of income inequality in the Gitanagar VDC. For the measurement of the extent of income inequality, we have to find out Gini Co-efficient according to per capita daily income. The value of Gini co-efficient is 0.453 among the total sampled households which shows high inequality in the distribution of income. (See Annex 6).

Similarly, the calculated value of Range 1.93, Mean deviation 0.647, variance 21.67, and co-efficient of variation 0.70 also show that there is high degree of inequality among total sampled households in the study area. (Annex 8)

Likewise, Table 7.2 shows the distribution of income among the sampled population according to daily average per capita income.

Table 7.2: Income Distribution among Sample Population

Groups	No. of population in the group	% of the population	Cum. % of population	Average daily per capita income (Rs.)	% of total group income	Cum. % of income
1	117	7.24	7.24	957.00	2.15	2.15
2	114	7.06	14.30	1167.00	2.62	4.77
3	119	7.37	21.67	1477.00	3.31	8.08
4	121	7.49	29.16	1714.00	3.84	11.92
5	108	6.69	35.85	1922.00	4.31	16.23
6	109	6.75	42.60	2158.00	4.84	21.07
7	105	6.50	49.10	2267.00	5.09	26.16
8	102	6.32	55.42	2635.00	5.91	32.07
9	108	6.69	62.11	2918.00	6.55	38.62
10	111	6.87	69.98	3212.00	7.21	45.83
11	107	6.63	75.61	3587.00	8.05	53.88
12	98	6.07	81.68	4071.00	9.13	63.01
13	101	6.25	87.93	4615.00	10.35	73.36
14	95	5.88	93.81	5621.00	12.60	85.96
15	100	6.19	100.00	6258.00	14.04	100.00
Total	**1615**			**44,579.00**	**100.00**	

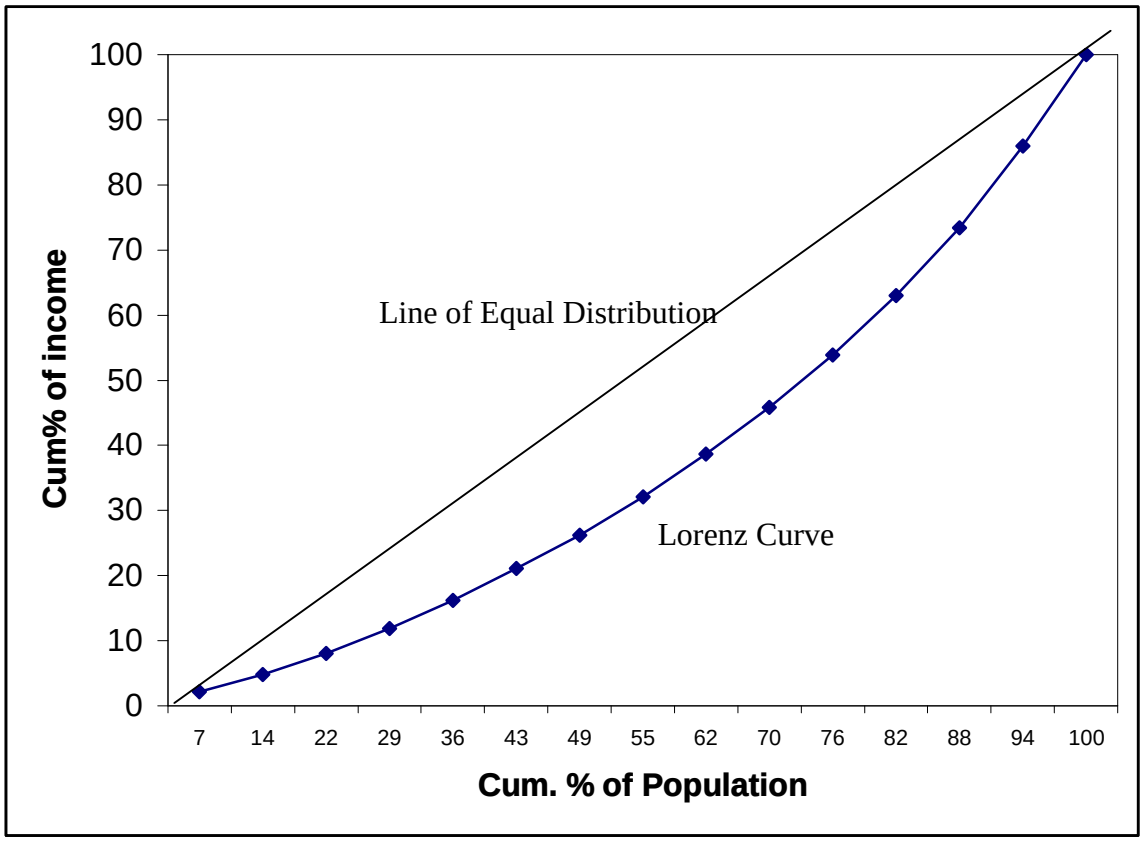
Source: Field Survey, 2008

In the Table 7.2, average daily per capita income of all the population of a group is derived by multiplying the number of population with the average daily income of the group. The lowest 7.24 percent population receives only 2.15 percent of total income of sampled population, whereas 6.19 percent population receives 14.04 percent of total income. Similarly, bottom 55.42 percent of population receives only 32.07

percent of total income, whereas top 44.58 percent of population receives 67.93 percent 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.

Income distribution among sample population according to daily per capita income is shown in Lorenz Curve. The Lorenz Curve does not coincide with the line of equal distribution. This shows that there is inequality in the distribution of income among the sample population.

Figure No. 7.2: Income Distribution Among Sampled Population



Source: Field Survey, 2008

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 376 households, 77 households are absolute poor.

In order to examine the income distribution among absolute poor households, total 77 absolute poor households are divided into 8 groups. The 7 groups contain 10 households and last group contains 7 households as there are only 77 absolute poor households.

Table 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	10	12.99	12.99	173	10.88	10.88
2	10	12.99	25.98	184	11.57	22.45
3	10	12.99	38.97	191	12.01	34.46
4	10	12.99	51.96	211	13.27	47.73
5	10	12.99	64.95	204	12.84	60.57
6	10	12.98	77.93	219	13.77	74.34
7	10	12.98	90.91	234	14.72	89.06
8	7	9.09	100.00	174	10.94	100.00
Total	**77**	**100.00**		**1590**	**100.00**	

Source: Field Survey, 2008

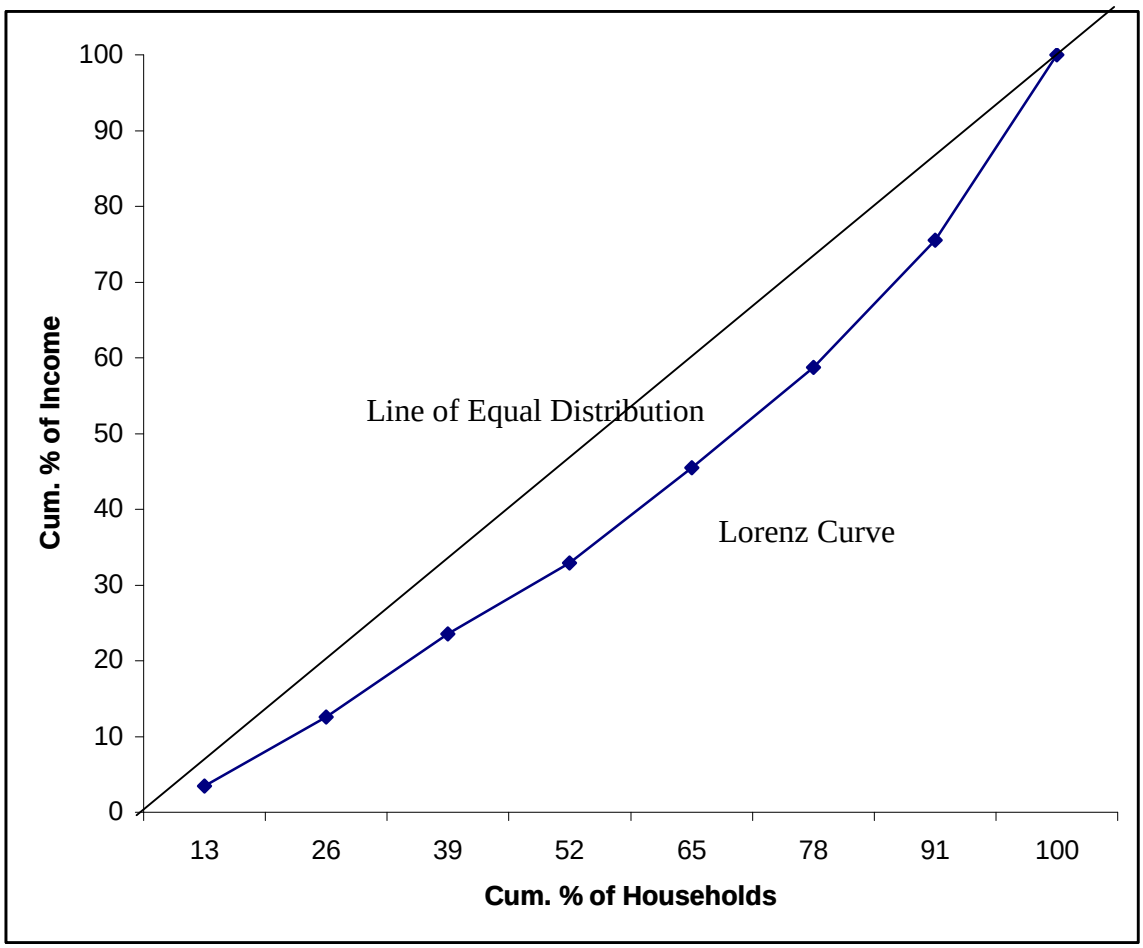
The table 7.3 shows that of the total absolute poor households, 12.99 percent households with lower income level share only 10.88 percent of total daily household income. However, the top 9.09 percent of households receives 10.94 percent of total income. This indicates that there is some disparity in the income distribution among the absolute poor households.

The Gini co-efficient among the absolute poor households according to daily households income is 0.173 (Annex 4). This is less than the Gini co-efficient of all 376 sampled households, implying that there is less inequality in the distribution of income among the poor 77 households.

Similarly, the calculated value of Range 0.96, Mean deviation 0.275, variance 23.37, and co-efficient of variation 0.31 also show that there is some inequality among total sampled households in the study area. (Annex 9).

The above table of income distribution is reflects in Lorenz Curve.

Figure No.7.3: Income Distribution Among Absolute Poor Households



Source: Field Survey, 2008

The gap between the Lorenz Curve and all the line of perfect equality is narrow, showing a low level of inequality among poor households.

CHAPTER EIGHT
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

8.1 Summary of Findings

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, Gitanagar VDC of Chitwan district has been taken as the study area. The following are major findings.

1) The sample size of the study is 376 households with 2068 population.
2) There is higher dependency ratio in the study area.
3) Women are more illiterate and children from poor households usually are not enrolled in school.
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. 16.15 and for the non-food item to be Rs. 8.70. Thus, absolute poverty line for the study area has been estimated as Rs. 24.85 per capita per day.
6) The household and population as absolute poor are 20.48 percent and 25.48 percent respectively.
7) The total poverty line for the study area is found to be Rs 36.33 per capita per day. It is the wolf point level of income and expenditure. Based on Rs. 36.33 as total poverty line and Rs. 24.85 as absolute poverty line, 11.44 percent households and 12.96 percent population are relatively poor.

8) It is observed that the total number of poor household is 120 (31.92 percent of sampled households) which has 795 people (38.44 percent of sampled population).

9) 256 households (68.08 percent of total) and 1273 population (61.56 percent of total) are non-poor in this study.

10) The value of Gini co-efficient is calculated as 0.453 for the study area and this shows high degree of inequality in the distribution of income among the sampled households. The value of range is 1.93.

11) The marginal propensity to consume (MPC) of the total sampled households is 0.97 and the marginal propensity to consume of the absolute poor households is 0.85. It is shown that MPC of poor households is less than that of the sampled households.

12) The mean income of the total sampled households is Rs.42.20 per capita per day and the mean income of the absolute poor households is Rs.15.56 per capita per day.

13) The value of range, variance, mean deviation, and co-efficient of variation among the total sampled households is 1.93, 21.67, 0.647, 0.70 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 0.96, 23.37, 0.275, 0.31 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) Similarly, the value of range, variance, mean deviation, and co-efficient of variation among the relative poor households is 0.31, 9.23, 0.087 and 0.10 respectively. They show that there is existence of income inequality in the distribution of income among total relative poor households.

16) The problem of poverty is higher among the illiterate people in the study area. It is found that out of 795 total sampled poor population, 56.73 percent of total sampled households are illiterate.

17) 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.

18) Nearly 59.16 percent households depend on agriculture, and small land holding and high disparities in land distribution is cause of poverty.

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

20) Among the households, 220 households are from higher caste group and 156 households are from lower caste group that is only 35.12 percent poor households belong to higher caste group and remaining 64.88 percent belong to lower caste group.

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 (25.48%) as compared to other parts of the country, the situation is still not good. Being in the adjacent to municipality, Gitanagar 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.

Agriculture is the 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 landless and some of them have not their own house. They should be provided with land for cultivation and house to live.

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.

There is excess labor force engaged in agriculture sector. It should be transformed into other productive sectors. Agro-based industries are to be established. This will help increase employment and income of the people.

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.

Transportation facilities should be expanded as it plays a key role to reduce the poverty both directly and indirectly and to boost the standard of living of the poor.

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.

The problem of poverty is also directly co-related with population growth rate. An effective program to alleviate the poverty is to curb the population growth rate through the promotion of both temporary as well as permanent method of contraception.

High rate of inflation is also the responsible factor to increase poverty. During some years, the prices of goods and services have been increased at higher rate, which have made more people below poverty line. Thus, high rate of inflation must be checked by the government.

A proper wage rate policy should be determined for the agricultural laborers. There should not be seasonal variation in wage rates. Working hour should also be fixed.

Electricity, transportation, and communication facilities should be expanded in the study area because these facilities can develop the market for local production and

these facilities can also help to establish the cottage industries which can raise the living standard of the poor.

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

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

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

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

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

Dulal, Hari Bansha (2006), "Rural Poverty and Environment" (Economist), *The Rising Nepal.*

ESCAP (2002), *Population and Development (Selected Issues)*, Economic and Social Commission for Asia and the Pacific, Bangkok, Thailand.

HDR (2007/08), "Fighting Climate Change: Human Solidarity in Divided World" *Human Development Report*, United Nations Development Program, New York.

IFAD(2001), *Rural Poverty Report, 2001*, International Fund for Agricultural Development, Rome, Italy.

Karki, Buddhi Bahadur (2002), *Poverty in Rural, Nepal: A Case Study of Jagatpur VDC, Chitwan*, an unpublished M.A. thesis in Economics, TU, Kirtipur, Kathmandu.

MEDEP (2006), "Mid Term Review – Phase II", *Micro-Enterprise Development Program*, UNDP, Kathmandu, Nepal.

MDGs (2007), *The Millennium Development Goals Report*, United Nations, NewYork.

Mathema, Kanhiya B. (2007), "An Agricultural Perspective on Poverty Reduction in Nepal", *The Economic Journal of Nepal.* July, Sept. 2004 Vol. 27. No. 3, Issue No. 107, Central Department of Economics, TU, Kirtipur, Kathmandu, Nepal.

NPC (1998), *Ninth Plan (1997-2002),* National Planning Commission, HMG/N, Kathmandu, Nepal.

NPC (2002), *Tenth Plan (2002-07), Poverty Reduction Strategy Paper*, National Planning Commission, HMG/N, Kathmandu, Nepal.

NPC (2007), *Three Year's Interim Plan (2007-10),* National Planning Commission, HMG/N, Kathmandu, Nepal.

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

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

OECD (2001), "Promoting Pro-Poor Growth-Policy statement*" Organization for Economic Co-operation and Development.*

PAF (2005/06), *A Report on Rate of Return and Benefits Study of the Completed Community Organizations Sub-Projects,* Final Report, Poverty Alleviation Fund, Nepal.

Regmi, Bipin (2001), *The Extent and Nature of Rural Poverty*: *A case Study Sundarjal VDC, Kathmandu*, an unpublished M.A. thesis in Economics, TU, Kirtipur, Kathmandu.

Shrestha, S. K. (2007), "Roads to Poverty Alleviation", *The Rising Nepal*.

Sapkota, Aananda Raj, (2002), *Poverty in Rural Nepal*: *A case Study of Fulbari VDC, Chitawan*, Unpublished M.A. thesis in Economics, TU, Kirtipur, Kathmandu.

Tiwari, Bishwa Nath (2006), *Reading in the Millennium Development Goals-Challenges for Attaining the MDGs in Nepal*, Department of Economics, Tribhuvan University, Kirtipur, Nepal.

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

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

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

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

ANNEXES

ANNEX-1

Computation of Minimum Subsistence Level of Income

S.N	Cereal Items	Price per kg (in Rs)
1	Rice 'Mansuli'	26.00
2	Rice 'Mota'	22.50
3	Rice 'Basmati'	32.00
4	Wheat	18.50
5	Maize	16.00
	Total	**115.00**

From the above table,		Rs.
5000 gms. of cereals cost		115.00
1 gm. of cereals cost	115/5000 =	0.023
605 gms of cereals cost	0.023*605 =	13.91

Hence, Rs. 13.92 will be spending for 605 grams of cereals.

S.N	Pulses items	Price per kg. (in Rs.)
1.	Mushoor	38
2.	Black Gram (Maas)	46
3.	Pea	26
4.	Rajma	44
5.	Soyabean	35
6.	Bodi	34
	Total	**223**

From the above table,		Rs.
6000 gms. of pulses cost		223
1 gm. of pulses cost	223/6000=	0.037
60 gms of pulses cost	0.0.37*60=	2.23

Hence, Rs. 2.23 will be spending for 60 gms of pulses.

Therefore, total cost required for 605 grams of cereals and 60 grams of pulses = Rs. 13.92+Rs. 2.23= Rs. 16.15

According to National Planning Commission, expenditure on minimum food requirement covers only 65 percent of subsistence consumption expenditures and remaining 35 percent of subsistence consumption expenditure on non-food items and others. Thus,

		Rs.
65% of subsistence expenditure =		16.15
1% of subsistence expenditure=	16.15/65=	0.25
35% of subsistence expenditure=	0.25*35=	8.70

Hence, Rs. 8.70 will be spending for non-food items.

Therefore, totals required subsistence consumption expenditure per capita per day= Rs. 16.15+ Rs. 8.70= Rs.24.85.

Thus, absolute poverty line = Rs. 24.85 per capita per day.

Now, total expenditure for a year= Rs. 24.85* 365 days= Rs. 9,070.25

So, Absolute Poverty Line= Rs. 9,070.25 per capita per year.

Annex 2

Estimation of Consumption Function Among Total Sample Households

Worksheet for Estimation of the Consumption Function

N	Yi	Ci	Yi^2	Ci . Yi
1	8.13	9.45	66.10	76.83
2	11.45	12.44	131.10	142.44
3	14.78	15.47	218.45	228.65
4	18.25	19.85	333.06	362.26
5	21.47	22.12	460.96	474.92
6	24.78	25.74	614.05	637.84
7	35.47	37.87	1,258.12	1,343.25
8	40.12	41.72	1,609.61	1,673.81
9	47.78	43.52	2,282.93	2,079.39
10	55.42	48.51	3,071.38	2,688.42
11	67.85	69.87	4,603.62	4,740.68
12	72.87	69.85	5,310.04	5,089.97
13	88.52	86.52	7,835.79	7,658.75
14	101.25	100.45	10,251.56	10,170.56
15	123.24	122.45	15,188.10	15,090.74
N= 15	**$\sum Y_i$= 731.38**	**$\sum C_i$= 725.83**	**$\sum Y_i^2$= 53234.87**	**$\sum C_i Y_i$= 52458.49**

Since C= f (Y)

Where,

C= Consumption

Y= Income

As we have calculated that.

$\sum Y_i = 731.38$, $\sum Y_i^2 = 53234.87$,

$\sum C_i = 725.83$ $\sum C_i Y_i = 52458.49$

We can derive that, $\bar{C} = \sum C_i / N = 725.83/ 15 = 48.38$

$\bar{C}^2 = (48.38)^2 = 2340.62$

$\bar{Y} = \sum Yi / N = 731.38 / 15 = 48.76$

$\bar{Y}^2 = (48.76)^2 = 2377.54$

Also, we know that,

$\sum y_i^{2=} \sum Yi^2 - N^* \overline{Y}^2 = 53234.87- (15^* 2377.54)$

$= 53234.87-35663.10$

$=17571.77$

$\sum y_i cv_i = \sum C_i Y_i - N \overline{Y} \overline{C} = 52458.49 – (15^*48.38^*48.76)$

$= 52458.49- 35385.13$

$= 17073.36$

Now, Estimation of α and β

$$\beta = \frac{\phi y_i c_i}{\phi y_i^2}$$

$= 17073.36/ 17571.77$

$= 0.97$

$\alpha = \overline{C} - \beta \overline{Y}$

$= 48.38– 0.97^* 48.76$

$= 48.38 – 47.29$

$= 1.09$

Therefore, α = 1.09 (Autonomous consumption)

β = 0.97 Marginal Propensity to Consume (MPC)

Annex - 3

Calculation of Wolf Point

In Keynessian consumption function, the equality point between income and expenditure (i.e. Y=C), is called Wolf-point or Break Even point.

$C_i = \alpha + \beta Y_i$

If, $C_i = Y_i$, this gives wolf point value

$C_i = \alpha + \beta C_i \; [Y_i = C_i]$

Or, $C_i - \beta C_i = \alpha$

Or, $C_i (1-\beta) = \alpha$

Or, $C_i = \frac{\alpha}{(1-\beta)}$ where, $[Y_i = C_i]$

Thus, the wolf point $= \frac{\alpha}{(1-\beta)}$

$= 1.09 / (1-0.97)$

$= 1.09 / 0.03$

$= 36.33$

Therefore, the wolf point= **Rs. 36.33**

Hence, this is the value of Total Poverty Line.

Annex - 4

The Value of Gini Co-efficient Amongst Absolute Poor Households According to Daily Per Capita Income.

We compute Gini co-efficient of individual series by using the formula, where the data are arranged in the ascending order.

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

Where,

$y_1 \geq y_2 \geq \ldots\ldots\ldots \geq y_n$

Where,

G.C = Gini-coeffcient (0<G<1)

n = Number of observations

$\bar{y}$ = Mean value of variable(y)

y_i = Variable value for the i^{th} observation

Computation:

$\sum y_i = 1017.15$

n = 77

$\bar{y}$ = 1328.25 / 77 = 13.21

We know that,

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

i.e. G.C. = (1+ 1/ 77) – 2 / $(77)^2$ * 13.21 [32877.43]

= 1.013 – 2 / 5929 * 13.21 [32877.43]

= 1.013 – 65754.86/ 78322.09

= 1.013 – 0.84

= 0.173

Hence G.C= 0.173

Annex - 5

The Value of Gini Co-efficient Amongst Relative Poor Households According to Daily Per Capita Income.

We compute Gini co-efficient of individual series by using the formula, where the data are arranged in the ascending order.

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

Where,

$y_1 \geq y_2 \geq \ldots\ldots\ldots \geq y_n$

Where,

G.C = Gini-coeffcient (0<G<1)

n = Number of observations

$\bar{y}$ = Mean value of variable(y)

y_i = Variable value for the i^{th} observation

Computation:

$\sum y_i = 1017.15$

n = 77

$\bar{y}$ = 1328.25 / 77 = 13.21

We know that,

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

i.e. G.C. = $(1+ 1/ 43) – 2 / (43)^2 * 28.95 [24618.09]$

= 1.023 – 2 / 1849 * 28.95 [24618.09]

= 1.013 – 49236.18 / 53528.55

= 1.013 – 0.913

= 0.10

Hence G.C= 0.10

Annex - 6

The Value of Gini Co-efficient Amongst Total Sampled Households According to Daily Per Capita Income.

We compute Gini co-efficient of individual series by using the formula, where the data are arranged in the ascending order.

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

Where,

$y_1 \geq y_2 \geq \ldots\ldots\ldots \geq y_n$

Where,

G.C = Gini-coeffcient (0<G<1)

n = Number of observations

$\bar{y}$ = Mean value of variable(y)

y_i = Variable value for the i^{th} observation

Computation:

$\sum y_i = 1017.15$

n = 77

$\bar{y}$ = 1328.25 / 77 = 13.21

We know that,

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

i.e. G.C. = $(1+ 1/ 375) – 2 / (375)^2 * 73.85 [2856804.98]$

= 1.003 – 2 / 140625* 73.85 [2856804.98]

= 1.003 – 2/ 10385156.25*[2856804.98]

= 1.003 – 5713609.96/ 10385156.25

= 1.003- 0.550

Hence G.C = 0.453

Annex – 7

Computation of Sen.'s Poverty Index Among the Absolute Poor

We compute Sen.'s poverty index in two ways i.e. considering inequality and without considering inequality among the absolute poor.

c) Considering inequality (i.e. Gini co-efficient among the absolute poor)

$$P^* = \frac{X}{C^* P} [C^* P \, Z C_p \, (1 Z G_p)]$$

Where,

X	=	Percentage of Popⁿ absolute poverty line	=	0.255
C* P	=	Absolute Poverty line income per capita daily	=	24.85
C_p	=	Mean Income of the Poor per capita daily	=	13.21
G_p	=	Gini co-efficient of the absolute poverty	=	0.173
P*	=	Absolute Poverty Index.		

Thus, P* = 0. 255 / 24.85 [24.85 – 13.21 (1- 0.173)

= 0.01[24.85 – 10.92]

= 0.01 * 13.93

= 0.140

Therefore, P* = **0.140**

d) Without considering inequality (i.e. Gini co-efficient among the absolute poor)

$$P^* = \frac{X}{C^* P} (C^* P \, Z C_p)$$

= 0.255 / 24.85 [24.85 – 13.21]

= 0.01* 11.64

= 0.116

Therefore, P* = **0.116**

Annex 8

Computation of Relative Mean Deviation, Variance, Co-efficient of Variation and Range Among Sampled Households.

Groups	Percentage of Income (Yi)	/ $\overline{Y}$ - Yi /	/ $\overline{Y}$ - Yi /²
1	0.80	5.87	34.51
2	1.32	5.35	28.64
3	1.65	5.02	25.25
4	2.14	4.53	20.52
5	2.42	4.25	18.04
6	3.27	3.40	11.54
7	4.04	2.63	6.93
8	5.34	1.33	1.76
9	6.97	0.30	0.09
10	10.72	4.05	16.41
11	11.01	4.34	18.79
12	11.46	4.79	22.98
13	12.21	5.54	30.74
14	12.98	6.31	39.79
15	13.67	7.00	48.99
N= 15	$\sum Y_i$= 100.00	$\sum$ / $\overline{Y}$ - Y_i / = 64.72	$\sum$ / $\overline{Y}$ - Yi/^{2}= 324.98

Where,

Y= Average Daily per capita income of the Group

N= Group Numbers

$$\overline{Y} = \frac{\phi Yi}{N} = 100/15 = 6.67$$

A) Calculation of Mean Deviation

As we know that,

$$M.D = \frac{n}{\phi} \sum_{i=1} (Y - Y_i) / N * \overline{Y} = 64.72 / 15 * 6.67 \qquad = 64.72 / 100.00 = \mathbf{0.647}$$

B) Calculation of Variance

As we know that,

$$\text{Var} = \sum_{i=1}^{n} \frac{(Y - \bar{Y}_i)}{N} = 324.98 / 15 \quad = 324.98 / 15 = \mathbf{21.67}$$

C) Calculation of Co-efficient of Variation

$$\text{C.V} = \frac{\sqrt{\text{Variance}}}{\bar{Y}}$$

$$= \sqrt{21.67} / 6.67$$

$$= 4.66 / 6.67$$

$$= \mathbf{0.70}$$

D) Calculation of Range

$$\text{Range} = \frac{(\text{Max } Y - \text{Min } Y)}{\bar{Y}}$$

As we have,

Max Y= 13.67

Min. Y= 0.80

Y = 6.67

Therefore, Range = 13.67- 0.80 / 6.67

= 12.87 / 6.67

= 1.93

(The highest and the lowest percentage per capital daily income are considered)

Annex 9

Computation of Mean Deviation, Variance, Co-efficient of Variation and Range Among Absolute Poor Households.

S.N.	Yi	/ $\overline{Y}$ - Yi /	/ $\overline{Y}$ - Yi /²
1	8.54	7.02	49.28
2	10.52	5.04	25.40
3	12.05	3.51	12.32
4	13.98	1.58	2.50
5	16.87	1.31	1.72
6	18.51	2.95	8.70
7	20.54	4.98	24.80
8	23.45	7.89	62.25
N= 8	∑Yi= 124.46	∑ / Ỹ- Yi / = 34.28	∑ / Ỹ- Yi /² = 186.97

Where,

Y= Average Daily per capita income of the Group

N= Group Numbers

$$\overline{Y} = \frac{\phi Yi}{N} = 124.46/8 = 15.56$$

A) Calculation of Mean Deviation

As we know that,

$$M.D = \sum_{iZ1}^{n} \frac{(Y\ ZY_i)}{N\overline{Y}} = 34.28 / 8 * 15.56 = 34.28 / 124.48 = \mathbf{0.275}$$

B) Calculation of Variance

As we know that,

$$Var = \sum_{iZ1}^{n} \frac{(Y\ ZY_i)}{N} = 186.97 / 8 = \mathbf{23.37}$$

i=1

C) Calculation of Co-efficient of Variation

$$C.V = \frac{\sqrt{Variance}}{\overline{Y}}$$

= √23.37 / 15.56

= 4.83 / 15.56

= 0.31

D) Calculation of Range

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

As we have,

Max Y= 23.45

Min. Y= 8.54

Y = 15.56

Therefore, Range = 23.45 – 8.54 / 15.56

= 14.91 / 15.56

= 0.96

(The highest and the lowest per capital daily income of group are considered)

Annex 10

Estimation of Consumption Function Among Total Absolute Poor Households

Worksheet for Estimation of the Consumption Function

N	Yi	Ci	Yi^2	Ci . Yi
1	8.54	10.47	72.93	89.41
2	10.52	11.96	110.67	125.82
3	12.05	13.78	145.20	166.05
4	13.98	16.17	195.44	226.06
5	16.87	17.12	284.60	288.81
6	18.51	18.65	342.62	345.21
7	20.54	20.71	421.89	425.38
8	23.45	23.52	549.90	551.54
N= 8	∑Yi= 124.46	∑Ci= 132.38	$\sum Yi^2$= 2123.26	∑CiYi= 2218.29

Since C= f (Y)

Where,

C= Consumption

Y= Income

As we have calculated that.

$\sum Yi$ = 124.46, $\sum Yi^2$ = 2123.26,

$\sum Ci$ = 132.38 $\sum CiYi$ = 2218.29

We can derive that, $\overline{C} = \sum Ci / N = 132.38 / 8 = 16.55$

$\overline{Y} = \sum Yi / N = 124.46 / 8 = 15.56$

$\overline{Y}^{2} = (15.56)^2 = 242.04$

Also, we know that,

$\sum y_i^2 = \sum Yi^2 - N * \overline{Y}^2 = 2123.26 - (8 * 242.04)$

$= 2123.26 - 1936.32$

$= 186.94$

$\sum y_i c_i = \sum C_i Y_i - N \overline{Y}\,\overline{C} = 2218.29 - (8 * 15.56 * 16.55)$

$= 2218.29 - 2059.50$

$= 158.79$

Now, Estimation of α and β

$$\beta = \frac{\phi C_i Y_i}{\phi Y_i^2}$$

$= 158.79 / 186.94$

$= 0.85$

$\alpha = \bar{C} - \beta \bar{Y}$

$= 16.55 – 0.85* 15.56$

$= 16.55 – 13.23$

$= 3.32$

Therefore, α = 3.32 (Autonomous consumption)

β = 0.85 Marginal Propensity to Consume (MPC)

Annex 11

Computation of Mean Deviation, Variance, Co-efficient of Variation and Range Among Relative Poor Households.

S.N.	Yi	/ Ỹ- Yi /	/ Ỹ- Yi /²
1	25.03	4.92	24.21
2	27.84	2.11	4.45
3	29.13	0.82	0.67
4	30.98	1.03	1.06
5	32.47	2.52	6.35
6	34.27	4.32	18.66
N= 6	∑Yi= 179.72	∑ / Ỹ- Yi / = 15.72	∑ / Ỹ- Yi /² = 55.40

Where,

Y= Average Daily per capita income of the Group

N= Group Numbers

$\overline{Y} = \frac{\phi Yi}{N} = 179.72/6 = 29.95$

A) Calculation of Mean Deviation

As we know that,

$M.D = \sum_{iZ1}^{n} \frac{(Y\ ZY_i)}{N\overline{Y}} = 15.72 / (6 * 29.95) = 15.72/ 179.70 =$ **0.087**

B) Calculation of Variance

As we know that,

$Var = \sum_{iZ1}^{n} \frac{(Y\ ZY_i)}{N} = 55.40/ 6 =$ **9.23**

C) Calculation of Co-efficient of Variation

$C.V = \frac{\sqrt{Variance}}{\overline{Y}}$

$= \sqrt{9.23}/ 29.95$

$= 3.04 / 29.95$

$= 0.10$

D) Calculation of Range

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

As we have,

Max Y= 34.27

Min. Y= 25.03

$\overline{Y} = 29.95$

Therefore, Range = 34.27- 25.03 / 29.95

= 9.24 / 29.95

= 0.31

(The highest and the lowest per capital daily income of group are considered)

Annex 12

Households Size, Per Capita Daily Household Income and Expenditure

S. N	Size of HHS	Per Capita Income (Rs.)	Per Capita Expenditure (Rs.)	Per Capita Saving (Rs.)
1	6	8.21	12.84	(4.63)
2	7	8.29	12.92	(4.62)
3	5	8.38	12.99	(4.62)
4	4	8.46	13.07	(4.61)
5	6	8.54	13.15	(4.61)
6	8	8.63	13.23	(4.60)
7	7	8.72	13.31	(4.59)
8	9	8.80	13.39	(4.59)
9	10	8.89	13.47	(4.58)
10	6	8.98	13.55	(4.57)
11	4	9.07	13.63	(4.56)
12	8	9.16	13.71	(4.55)
13	6	9.25	13.80	(4.54)
14	9	9.34	13.88	(4.53)
15	6	9.44	13.96	(4.52)
16	6	9.53	14.05	(4.51)
17	9	9.63	14.13	(4.50)
18	11	9.72	14.21	(4.49)
19	8	9.82	14.30	(4.48)
20	6	9.92	14.39	(4.47)
21	9	10.02	14.47	(4.45)
22	6	10.12	14.56	(4.44)
23	4	10.22	14.65	(4.43)
24	6	10.32	14.73	(4.41)
25	8	10.42	14.82	(4.40)

26	9	10.53	14.91	(4.38)
27	7	10.63	15.00	(4.37)
28	10	10.74	15.09	(4.35)
29	5	10.85	15.18	(4.33)
30	9	10.96	15.27	(4.32)
31	10	11.07	15.36	(4.30)
32	6	11.18	15.46	(4.28)
33	8	11.29	15.55	(4.26)
34	7	11.40	15.64	(4.24)
35	9	11.52	15.74	(4.22)
36	7	11.63	15.83	(4.20)
37	6	11.75	15.93	(4.18)
38	7	11.86	16.02	(4.16)
39	9	11.98	16.12	(4.13)
40	6	12.10	16.21	(4.11)
41	7	12.22	16.31	(4.09)
42	8	12.35	16.41	(4.06)
43	9	12.47	16.51	(4.04)
44	7	12.59	16.61	(4.01)
45	6	12.72	16.71	(3.99)
46	10	12.85	16.81	(3.96)
47	8	12.98	16.91	(3.93)
48	6	13.11	17.01	(3.90)
49	7	13.24	17.11	(3.87)
50	5	13.47	17.21	(3.74)
51	8	13.72	17.39	(3.67)
52	6	13.96	17.56	(3.60)
53	9	14.22	17.73	(3.52)
54	10	14.47	17.91	(3.44)
55	6	14.73	18.09	(3.36)
56	9	15.00	18.27	(3.28)
57	8	15.27	18.46	(3.19)

58	6	15.54	18.64	(3.10)
59	10	15.82	18.83	(3.00)
60	8	16.14	19.15	(3.01)
61	9	16.46	19.43	(2.97)
62	5	16.79	19.72	(2.93)
63	5	17.13	20.02	(2.89)
64	8	17.47	20.32	(2.85)
65	7	17.90	20.63	(2.72)
66	6	18.35	20.94	(2.58)
67	9	18.81	21.25	(2.44)
68	6	19.28	21.57	(2.29)
69	4	19.76	21.89	(2.13)
70	9	20.26	22.22	(1.96)
71	9	20.76	22.66	(1.90)
72	10	21.28	23.12	(1.83)
73	8	21.82	23.58	(1.76)
74	6	22.36	24.05	(1.69)
75	5	22.92	24.53	(1.61)
76	6	23.49	25.02	(1.53)
77	11	24.08	25.52	(1.44)
78	9	24.25	25.68	(1.43)
79	7	24.42	25.85	(1.43)
80	6	24.59	26.01	(1.42)
81	5	24.76	26.16	(1.40)
82	4	24.93	26.32	(1.38)
83	6	25.11	26.48	(1.37)
84	7	25.29	26.64	(1.35)
85	8	25.46	26.80	(1.33)
86	9	25.64	26.96	(1.32)
87	6	25.82	27.12	(1.30)
88	7	26.00	27.28	(1.28)
89	7	26.18	27.44	(1.26)

90	8	26.37	27.61	(1.24)
91	11	26.55	27.78	(1.22)
92	9	26.74	27.94	(1.21)
93	10	26.92	28.11	(1.19)
94	5	27.11	28.28	(1.17)
95	6	27.30	28.45	(1.15)
96	6	27.49	28.62	(1.13)
97	7	27.69	28.79	(1.11)
98	9	27.88	28.96	(1.08)
99	10	28.07	29.14	(1.06)
100	12	28.35	29.34	(0.99)
101	6	28.71	29.63	(0.92)
102	11	29.07	29.93	(0.86)
103	7	29.43	30.23	(0.80)
104	8	29.80	30.53	(0.73)
105	9	30.17	30.84	(0.67)
106	6	30.55	31.15	(0.60)
107	6	30.93	31.46	(0.53)
108	7	31.32	31.77	(0.45)
109	6	31.71	32.09	(0.38)
110	7	32.03	32.25	(0.22)
111	5	32.35	32.57	(0.23)
112	8	32.67	32.90	(0.23)
113	9	33.00	33.23	(0.23)
114	6	33.33	33.56	(0.23)
115	5	33.66	33.90	(0.24)
116	7	34.00	34.23	(0.24)
117	8	34.34	34.58	(0.24)
118	10	34.68	34.92	(0.24)
119	11	35.03	35.27	(0.24)
120	12	35.38	35.62	(0.25)
121	3	35.55	35.51	0.04

122	4	35.73	35.65	0.08
123	5	35.91	35.79	0.12
124	6	36.09	35.94	0.15
125	4	36.27	36.08	0.19
126	3	36.45	36.23	0.23
127	5	36.63	36.37	0.26
128	3	36.82	36.52	0.30
129	4	37.00	36.66	0.34
130	5	37.19	36.81	0.38
131	5	37.37	36.96	0.42
132	4	37.56	37.10	0.45
133	4	37.75	37.25	0.49
134	3	37.94	37.40	0.53
135	6	38.12	37.55	0.57
136	4	38.32	37.70	0.61
137	3	38.51	37.85	0.66
138	5	38.70	38.00	0.70
139	3	38.89	38.16	0.74
140	4	39.09	38.31	0.78
141	5	39.28	38.46	0.82
142	5	39.48	38.62	0.86
143	4	39.68	38.77	0.91
144	4	39.88	38.92	0.95
145	3	40.07	39.08	0.99
146	3	40.28	39.24	1.04
147	4	40.48	39.39	1.08
148	5	40.68	39.55	1.13
149	3	40.88	39.71	1.17
150	4	41.09	39.87	1.22
151	5	41.29	40.03	1.26
152	3	41.50	40.19	1.31
153	4	41.71	40.35	1.36

154	5	41.91	40.51	1.40
155	3	42.12	40.67	1.45
156	4	42.33	40.83	1.50
157	5	42.55	41.00	1.55
158	3	42.76	41.16	1.60
159	4	42.97	41.33	1.65
160	5	43.19	41.49	1.70
161	3	43.40	41.66	1.75
162	4	43.62	41.82	1.80
163	5	43.84	41.99	1.85
164	3	44.06	42.16	1.90
165	4	44.28	42.33	1.95
166	5	44.50	42.50	2.00
167	4	44.72	42.67	2.05
168	3	44.95	42.84	2.11
169	3	45.17	43.01	2.16
170	4	45.40	43.18	2.21
171	3	45.62	43.35	2.27
172	5	45.85	43.53	2.32
173	4	46.08	43.70	2.38
174	3	46.31	43.88	2.43
175	4	46.54	44.05	2.49
176	3	46.78	44.23	2.55
177	4	47.01	44.41	2.60
178	5	47.24	44.58	2.66
179	3	47.60	44.76	2.84
180	4	47.96	44.94	3.01
181	4	48.32	45.12	3.19
182	3	48.68	45.30	3.38
183	4	49.04	45.48	3.56
184	3	49.41	45.66	3.75
185	3	49.78	45.85	3.93

186	4	50.15	46.03	4.12
187	5	50.53	46.21	4.32
188	4	50.91	46.40	4.51
189	5	51.29	46.58	4.71
190	5	51.68	46.77	4.91
191	3	52.06	46.96	5.11
192	4	52.45	47.15	5.31
193	4	52.85	47.33	5.51
194	5	53.24	47.52	5.72
195	6	53.64	47.71	5.93
196	6	54.05	47.90	6.14
197	5	54.45	48.10	6.35
198	4	54.86	48.29	6.57
199	6	55.27	48.48	6.79
200	4	55.69	48.68	7.01
201	3	56.10	48.87	7.23
202	5	56.52	49.07	7.46
203	5	56.95	49.26	7.69
204	7	57.37	49.46	7.92
205	6	57.81	49.66	8.15
206	8	58.24	49.86	8.38
207	3	58.68	50.06	8.62
208	3	59.12	50.26	8.86
209	5	59.56	50.46	9.10
210	4	60.01	50.66	9.35
211	3	60.46	50.86	9.59
212	4	60.91	51.06	9.84
213	5	61.37	51.27	10.10
214	6	61.83	51.47	10.35
215	3	62.29	51.68	10.61
216	4	62.76	51.89	10.87
217	5	63.23	52.09	11.13

218	4	63.70	52.30	11.40
219	3	64.18	52.51	11.67
220	5	64.66	52.72	11.94
221	4	65.15	52.93	12.21
222	3	65.63	53.14	12.49
223	6	66.13	53.36	12.77
224	4	66.62	53.57	13.05
225	5	67.12	53.78	13.34
226	6	67.63	54.00	13.63
227	7	68.13	54.22	13.92
228	4	68.64	54.43	14.21
229	5	69.16	54.65	14.51
230	4	69.68	54.87	14.81
231	3	70.20	55.09	15.11
232	5	70.73	55.31	15.42
233	3	71.26	55.53	15.73
234	3	71.79	55.75	16.04
235	5	72.33	55.97	16.35
236	3	72.87	56.20	16.67
237	4	73.42	56.42	17.00
238	3	73.97	56.65	17.32
239	4	74.52	56.88	17.65
240	4	75.08	57.10	17.98
241	5	75.65	57.33	18.31
242	6	76.21	57.56	18.65
243	7	76.79	57.79	18.99
244	5	77.36	58.02	19.34
245	3	77.94	58.25	19.69
246	4	78.53	58.49	20.04
247	4	79.11	58.72	20.39
248	4	79.71	58.96	20.75
249	5	80.31	59.19	21.11

250	3	80.91	59.43	21.48
251	3	81.52	59.67	21.85
252	6	82.13	59.91	22.22
253	4	82.74	60.15	22.60
254	7	83.36	60.39	22.98
255	5	83.99	60.63	23.36
256	4	84.62	60.87	23.75
257	4	85.25	61.11	24.14
258	3	85.89	61.36	24.53
259	4	86.54	61.60	24.93
260	3	87.19	61.85	25.34
261	6	87.84	62.10	25.74
262	4	88.50	62.35	26.15
263	7	89.16	62.59	26.57
264	4	89.83	62.85	26.99
265	5	90.50	63.10	27.41
266	6	91.18	63.35	27.83
267	4	91.87	63.60	28.26
268	6	92.56	63.86	28.70
269	5	93.25	64.11	29.14
270	5	93.95	64.37	29.58
271	6	94.65	64.63	30.03
272	6	95.36	64.88	30.48
273	7	96.08	65.14	30.94
274	4	96.80	65.40	31.40
275	8	97.53	65.67	31.86
276	6	98.26	65.93	32.33
277	5	98.99	66.19	32.80
278	4	99.74	66.46	33.28
279	7	100.48	66.72	33.76
280	5	101.24	66.99	34.25
281	8	102.00	67.26	34.74

282	5	102.76	67.53	35.24
283	6	103.53	67.80	35.74
284	4	104.31	68.07	36.24
285	4	105.09	68.34	36.75
286	9	105.88	68.61	37.27
287	4	106.67	68.89	37.79
288	5	107.47	69.16	38.31
289	5	108.28	69.44	38.84
290	3	109.09	69.72	39.37
291	3	109.91	70.00	39.91
292	8	110.74	70.28	40.46
293	5	111.57	70.56	41.01
294	5	112.40	70.84	41.56
295	4	113.25	71.12	42.12
296	4	114.09	71.41	42.69
297	5	114.95	71.69	43.26
298	7	115.81	71.98	43.83
299	6	116.68	72.27	44.41
300	5	117.56	72.56	45.00
301	4	118.44	72.85	45.59
302	3	119.33	73.14	46.19
303	8	120.22	73.43	46.79
304	5	121.12	73.73	47.40
305	6	122.03	74.02	48.01
306	4	122.95	74.32	48.63
307	5	123.87	74.61	49.25
308	6	124.80	74.91	49.89
309	4	125.73	75.21	50.52
310	5	126.68	75.51	51.16
311	4	127.63	75.82	51.81
312	5	128.58	76.12	52.47
313	8	129.55	76.42	53.13

314	4	130.52	76.73	53.79
315	5	131.50	77.04	54.46
316	3	132.49	77.34	55.14
317	4	133.48	77.65	55.83
318	4	134.48	77.96	56.52
319	5	135.49	78.28	57.21
320	6	136.50	78.59	57.92
321	5	138.21	78.90	59.31
322	6	139.94	79.22	60.72
323	8	141.69	79.54	62.15
324	4	143.46	79.85	63.61
325	3	145.25	80.17	65.08
326	5	147.07	80.49	66.57
327	7	148.91	80.82	68.09
328	4	150.77	81.14	69.63
329	5	152.65	81.46	71.19
330	6	154.56	81.79	72.77
331	7	156.49	82.12	74.38
332	4	158.45	82.44	76.00
333	7	160.43	82.77	77.65
334	5	162.43	83.11	79.33
335	3	164.46	83.44	81.03
336	5	166.52	83.77	82.75
337	4	168.60	84.11	84.50
338	3	170.71	84.44	86.27
339	4	172.84	84.78	88.06
340	5	175.00	85.12	89.88
341	6	177.19	85.46	91.73
342	4	179.41	85.80	93.60
343	4	181.65	86.15	95.50
344	8	183.92	86.49	97.43
345	4	186.22	86.84	99.38

346	4	188.55	87.18	101.36
347	5	190.90	87.53	103.37
348	6	193.29	87.88	105.41
349	4	195.71	88.23	107.47
350	5	198.64	88.59	110.05
351	5	201.62	88.94	112.68
352	6	204.65	89.30	115.35
353	4	207.71	89.65	118.06
354	5	210.83	90.01	120.82
355	3	213.99	90.37	123.62
356	8	217.20	90.73	126.47
357	3	220.46	91.10	129.36
358	4	223.77	91.46	132.31
359	4	227.12	91.83	135.30
360	5	230.53	92.20	138.34
361	6	233.99	92.56	141.43
362	5	237.50	92.93	144.56
363	6	241.06	93.31	147.76
364	3	244.68	93.68	151.00
365	6	248.35	94.05	154.29
366	4	252.07	94.43	157.64
367	3	255.85	94.81	161.05
368	4	259.69	95.19	164.50
369	3	263.59	95.57	168.02
370	5	267.54	95.95	171.59
371	4	271.55	96.33	175.22
372	5	275.63	96.72	178.91
373	6	279.76	97.11	182.66
374	7	283.96	97.49	186.46
375	6	288.22	97.88	190.33
Total	**2068**			

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 memeber	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 Sheet 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 Bigha- Kattha – Dhur)

(20 Dhur= 1 Kattha, 20 Kattha = 1 Bigha)

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.)……..