

# CHAPTER ONE

## INTRODUCTION

### 1.1 General Background

Nepal is a landlocked mountainous country bordered by China on the North and India on the east, west and south. It has covered the area of 1,47,181 sq. km. Different ethnic and religious people live in Nepal. Nepal's topography varies from 59 m to 8848 m and temperature changes in the difference of each 100m. Because of that many ethnic people are living in different part of the country.

Historically, Nepal is a multi-ethnic nation, with different religions, cultures, languages, races and castes. Nepal has four casts: Brahmin, Chetris, Vaishyas and Shudras (Hindu jati ko autthan ra patan.) The Nepalese government officially recognizes 28 Dalits castes, but Jagaran Media, an NGO promoting Dalits through the Media, has identified around 60 nationwide casts (Smarika of National Dalit Commission, 2065).

Traditionally, Dalits are illiterate and perform skilled labor, unskilled labor and services jobs. Dalits are blacksmiths, tailors, laborers, shoemakers, artisans, musicians, farmers, butchers and prostitutes.

Discrimination exists on all levels. Most non-dalits still refuse to eat or drink anything touched by a Dalit. In the 18<sup>th</sup> century, the civil court passed discriminatory laws against untouchables, forbidding them from receiving education, using public spaces, entering temples, or marrying people from others castes. In 1963, King Mahendra abolished these laws, declaring that Nepal as a nation was against the caste system. However, Mahendra's provisions were only legal and nominal, and no practical programs were implemented to empower Dalits or reforms culture attitudes. In 1991, the constitution of Nepal rejected the caste system, linked Dalit problem with human rights, and guaranteed equal rights to Dalits. The National Dalit Commission established in 2002.

The status of Dalit is still very low in Nepalese society. Dalit continue to suffer from social, economic, and political discrimination. Resources and professional jobs are still dominated by the higher castes. Dalit birth rate is high, while their living standards remain very low. The per-capita income of Nepal is \$642 (Economic

Survey 20010/11). The GDP per capita for Dalits is only 50.3 years (Economic Survey 2009/10). According to the CBS 2001, the total population of Nepal is 2,31,51,423 and in total male are 49.96 percent and female are 50.04 percent. But total population of Dalit is 13.02 percent (CBS 2001). Nepal Dalit Commission has identified 28 Dalits castes. The total Dalit population is 29,46,652, with Kami the largest group with 30.41 percent and Halkar the smallest group with 0.02 percent. However, according to the CBS 2001, the total population of Kami, Damai and Sarki is 3.94, 1.72 and 1.40 percent respectively of the total population of Nepal.

Manual labor and Small farming are the main occupations of Dalit community. They have only a few land and some are land less so that they always fail to meet their needs for existing life by farming on own land. They have got crops only for six to seven months to live. Remaining other months Dalit people must to go to India for searching job.

This study is important because the source of income and consumption pattern of the Dalit is quite different than other caste. The main occupation of the Dalit in the past was '*khalo uthauna*'. In the present time, Dalits are dependent on their traditional occupation such as farming, cloth-swings, iron work, leather work etc. There are quite differences between income and consumption pattern of Dalit cast and non Dalit casts. Dalit people's marginal propensity to consume is very high and saving is very low. They spend in unproductive sector. Inequality brings social conflict and that hampers welfare of the society.

The study is focused on the income and consumption pattern of Dalit community of Dhangadhi municipality. There are fourteen Wards. The study area is only ward No. 6. The study is limited to the consumption and income of Dalit community in Dhangadhi municipality of Kailali district of Far Western Terai in Nepal. The Dalit people are migrated from far western hilly region of Nepal.

## **1.2 Statement of the Problem**

Nepal is a poor country in the world but it is rich in the respect of the potentiality of natural resources, however, these resources are not used because of the lack of knowledge, skill, and economic condition. Low level of production, income, purchasing power, capital formation, and inefficient administration are the major problem for the existing state of the economy. As a result, resources are not utilized in

the productive purposes. There is not any proper assessment of the consumption and saving pattern of people which is the most important factor for the proper utilization of resources. Developing countries highly depend on the subsistence agriculture. In these countries MPC is very high thereby low saving rate. Thus, domestic saving is very low in the developing countries.

Everyone knows that Nepal is one of the world's poorest countries. A large number of people live below the poverty line. Most of them do not have land. Among them, the economic condition of Dalit is very bad. The relationship between income and consumption may play vital role to create good or bad economic condition. Employment is the main sources of income generation, which is frequently determined by the amount of productive investment. These kinds of investment must be supported by the sustainable increasing amount of saving. On the other hand, such saving is determined by two factors: ability to save and desire to save of individuals. Certainly higher the level of income generation is necessary condition for higher level saving but it is not sufficient.

According to Keynes, propensity to consume is related with income and consumption, when income increases consumption also increases but by less than the increment in income. The higher MPC of consumer will rise the level of income through productive activities but there may arise a suspicion that every spending will be spent on unproductive activities. If people spend on unproductive sector, it will give a bad impact on economic prosperity.

To allocate the resources properly and implementing the plan or project effectively in a particular field in the developing countries like Nepal, it is necessary to find out the pattern of the income and consumption of people.

Hence, to estimate the relationship between income and consumption of Dalit community in Nepal is the main statement of the problem of this study, which will be useful for policy makers to develop the economy with sustainable growth rate.

### **1.3 Objectives of the Study**

The general objective of the study is to identify the income and consumption pattern of the Dalit community in Dhangadhi municipality.

The specific objectives of the study are as follows:

- To analyze the sources and level of income of Dalit community.
- To analyze the relation between income and consumption of Dalit community in the study area.

#### **1.4 Significance of the Study**

This study has been associated with the income and consumption pattern of Dalit community of Dhangadhi municipality of Kailali district. So, this study has attempted to analyze the income and consumption of Dalit through micro level study. Many studies have been carried out in distribution of income of Nepal. Most of the people want to know about Dalit and their existing problems.

This study has been important for the ethnic explorer and policy maker. It has also importance for the investigators, social workers and donors. It will help to know on Dalit, who concern about them. It is also helps to local government for the arranging the local level development program. It is an important for the National Dalit Commission to now the micro level of economic status of Dalit.

#### **1.5 Limitation of the Study**

This study have been concentrated only one particular ethnic group i.e. Dalits. It is attempted to analyze the income and consumption of the Dalit community in Nepal. There are varieties of economic variables for the measurement of the economic condition. But information on some of these variables is not available while some are impossible to measure. Similarly, time and cost factors also restrict the collection for more information. This study has been limited to income and consumption pattern of Dalit of the Dhangadhi municipality.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Income and Consumption: Origin of the Concept**

The concept of income and consumption was first evolved from the economic theory. This theory is related to human behavior in nature. At first, Earnest Angel (1857) estimated the relationship between income and consumption expenditure of the kingdom of Sarony with the help of econometric tools (Acharya, K.R. 1998). Later, during and after the publication of *The General Theory of Employment, Interest and Money* (1936) by Keynes, various studies have been made in the field of income and consumption function. Till now, there are various treaties focusing on the estimation of consumption function fitted to time series data as well as cross-sectional data.

Keynes, state in his book stated that "Men are disposed of as a rule and on the average, to increase their consumption as their income increases but not as much as the increase in their income" (Keynes, J.M. 1936).

To verify this relationship, various theoretical as well as empirical studies on consumption function have been developed. Among the theoretical consumption function, absolute income hypothesis, relative income hypothesis, permanent income hypothesis and life-cycle hypothesis are famous.

#### **2.2 Theoretical Development**

The concept of the income and consumption was developed from the economic theory that is related with human behavior and nature. According to classical economists, there is always full employment in the economy and income constant. Classical economists believed that the main determinant of consumption is rate of interest. When interest rate goes up, higher portion of income is allocated for saving, so consumption declines. Consumption was regarded to be a negative function of rate of interest and saving was assumed to be a positive function or rate of interest.

After the publication of Keynes' book "*The General Theory of Employment, Interest and Money* (1936)", various studies have been done in the field of consumption. Keynes stated the fundamental psychological law of consumption. He argued that

when the income of a community rises, consumption also rises. How much consumption rises in response to a given increase in income depends upon the marginal propensity to consume (MPC). However the consumption increases less than the increase in income. It means, the value of MPC is greater than zero and less than unity and there is positive relationship between income and consumption. According to Keynes, consumption is the function of income.

Mathematically, it can be expressed as

$$C = f(Y_d) \dots\dots\dots (i)$$

Where, C = Consumption

$Y_d$  = Disposable income

This equation (i) expresses that the consumption is a function of income. This relationship is measured by average and marginal propensity to consume. The average propensity to consume shows the ratio of aggregate consumption expenditure to aggregate income. Mathematically, it is expressed as:

$$APC = C/Y$$

Where,

APC = Average propensity to consume

Y = Income

C = Consumption

On the other hand, marginal propensity to consume indicates the ratio of change in consumption due to the change in income. Mathematically it is expressed as:

$$MPC = \frac{\Delta C}{\Delta Y}$$

Where,

MPC = Marginal propensity to consume.

$\Delta C$  = Small incremental change in consumption.

$\Delta Y$  = Small incremental change in income.

As income increases, consumption also increases but not by as much as the increase in income i.e. marginal propensity to consume is greater than zero but less than unity

when the consumption function is linear. Keynesian linear consumption function can be written as:

$$C = a + bY_d \dots\dots\dots (ii)$$

Where,

C = Consumption

a = Autonomous consumption

b = Marginal propensity to consume

$Y_d$  = Disposable Income

Equation (ii) is a short-run linear consumption function. As income is zero in short-run, he or she consumes from previous saving. Therefore, when  $y = 0$ , i.e.  $c = a$ . This amount is known as autonomous consumption.

The other type of consumption function is known as long-run consumption function, which shows a proportional relationship between income and consumption. Symbolically, it can be expressed as:

$$C = bY_d$$

Where,

C = Consumption

b = MPC

$Y_d$  = Disposal income

In the long run case if  $Y = 0$  then  $C = 0$ . In this case, consumption function begins from the origin. In this case both APC & MPC are equal & constant.

According to classical economists, consumption is mainly determined by the rate of interest not by the level of income. They regarded consumption as a negative function of the rate of interest. That means if rate of interest increases, the level of consumption decreases and vice versa. But at that time, their base of analysis was a full employment economy in which income was considered as constant or they assumed there is always full employment in economy and not variable in determining consumption.

J.M. Keynes, the propounder of consumption function, emphasizes the importance of income in the argument of consumption function, neglecting other factors. According to him as income increases, consumption also increases but less than the increase in income. It can be expressed in other way that as income increases both average propensity to consume and marginal propensity to consume decreases.

Income plays a prominent role in determining consumption as expressed by J.M. Keynes was criticized by A.C. Pigou arguing that consumers' decision about consumption spending greatly influenced by the stock of wealth.

There are mainly four hypothesis related with consumption which are propounded by different economists that are analyzed here.

### **2.2.1 Absolute Income Hypothesis (AIH)**

AIH was developed by J.M. Keynes based on a fundamental psychological law of consumption. According to him, current consumption depends upon the current and absolute level of income and there is positive relationship between consumption and income.

That is,  $C = f(y)$

In specific form, Keynesian consumption function can be written as:

$$C = a + by_d$$

Where,

C = Consumption

a = autonomous consumption

$b = \frac{\Delta C}{\Delta Y}$  marginal propensity to consume (MPC)

$Y_d$  = disposable income.

As income of the people increases, consumption also increases but less than proportionally. The main properties of absolute income hypothesis are as follows:

1. Marginal propensity to consume is positive i.e.  $(MPC > 0)$ .
2. MPC is always smaller than APC i.e.  $(MPC < APC)$ .



3. The APC declines as income increases.

Keynes analyzed only short term consumption function. Later Simon Kuznets studied the post war data based on the USA from 1868 to 1929 and result showed doubt on the validity of the simple Keynesian consumption function. Kuznets' study found that APC had remained constant over a long period despite the substantial increase in income and  $MPC = APC$ . Keynesian consumption function applied to the pre-war data predicted a consumption level that was much higher than that of the aggregate income. This is impossible under normal condition (Dwivedi, 2008).

Although Keynes has not explained about the long run consumption behaviour, Simon Kuznets by taking the time series data of income and consumption expenditure tested his hypothesis. The empirical study shows that individual's consumption expenditure varies proportionally when income increases along the trend line in the long run (Shapiro, 2009).

### **2.2.2 Relative Income Hypothesis (RIH)**

Relative income hypothesis of consumption was propounded by an American economist, J.S. Duesenberry. According to RIH, consumption of any household is not the function of his absolute income but of his relative position in the income distribution in a society. It means that consumption depends on his income relative to the income of other households in a society. If the income of all households in a society increases by same percentage, then the relative income would remain the same, and their average propensity to consume will remain the same, though his income would have increased. Household consumption expenditure is determined by his neighbors' consumption level not by the absolute income.

He has also used to two different terms; demonstrative effect and ratchet effect. People are influenced by their neighbors of society so they try to copy the consumption level. This effect is called demonstrative effect. On the other side, individual or family want to maintain their previous high life standard in long term. When their income falls, consumption does not fall in proportion to the fall in income. This is called ratchet effect.

Relative income hypothesis suggests that individuals try to imitate the consumption level of their neighbors in a community. This is called demonstration effect. When income of the household falls, their consumption does not fall proportionately because of ratchet effect. They try to maintain their earlier high life standard by reducing their saving. Duesenberry argues that when absolute income increases, absolute consumption increases, but when absolute income decreases, the households do not allow their consumption to fall in proportion to the fall in their income. It is so because household get used to certain standard of living in the long run and hence when their income falls, their consumption falls less than proportionately. When consumption does not fall in proportion to the fall in income then APC rises and MPC falls. This is called ratchet effect (Dwivedi, 2008).

RIH focuses on relative income; this hypothesis emphasizes the imitative or cumulative nature of consumption. A family with any given level of income will typically spend more on consumption if it lives in a community in which that income is relatively low than if it lives in a community in which that income is relatively high. This tendency arises in part from the pressures on the family to "keep up with the Joneses" and in part from the fact, that as the family observed what seem to be superior goods of other families, it will tempt to spend as a result of what J.s. Duesenberry calls the "demonstration" effect (Shapiro, 2009).

### **2.2.3 Permanent Income Hypothesis (PIH)**

An American well known economist, Milton Friedman developed permanent income hypothesis of consumption. According to Friedman, consumption is determined by long-term expected income rather than current income. This long term average expected income which is called by Friedman as permanent income on the basis of which people make their consumption plan. According to Friedman, an individual who is paid or receives income only once a week, say on Friday, he would not concentrate his consumption on one day with zero consumption on all other days on the week. He argues that an individual would prepare a smooth consumption flow per day rather than plenty of consumption today and little consumption tomorrow. Thus, people plan their consumption on the basis of expected average income over a long period which Friedman calls permanent income (Ahuja, 2009).

Each consumer arrives at an approximation of his or her permanent income on the basis of his or her total wealth human and non human (Shapiro, 2009).

#### **2.2.4 Life-Cycle Hypothesis (LCH)**

The life cycle hypothesis was developed by Franco Modigliani, Richard E Brumberg and Albert Ando. According to this hypothesis, consumption of an individual in any given time period does not depend to a significant degree on his income during that period but depends on the present value of his expected income or his wealth (Shapiro, 2009).

The consumption in any period is not the function of current income of that but of the whole life time expected income. Thus, in LCH, the individual consumption expenditure pattern is determined by expected income in their entire lifetime. They have argued that individual maintains a more or less constant or slightly increasing level of consumption pattern. However, this level of consumption is limited by his expectations of lifetime income. According to LCH, a rational consumer plans to consume based on his lifetime income of consumption overtime and he maximizes his total utility over his life time. A typical individual in this theory in his early years of life spends on consumption either by borrowing from other or family assets, in his middle years; he accumulates wealth, which he consumes in the future years. In his lifetime after retirement he again dissaves, that is, consumes more than his income in these later years of his life but is able to maintain or even slightly increases his consumption in the lifetime after retirement.

The fundamental idea of the life cycle theory is that people make their consumption plans for their entire lifetime income. Thus, in the life cycle model, consumption is not a function of current income but a function of the expected lifetime income. The general consumption behavior as suggested by Ando Modigliani life cycle hypothesis (Ahuja, 2009: 147) can be expressed in the following functional form:

$$\text{i.e. } C_t = b_1 Y_{Lt} + b_2 Y_L^e + b_3 W_t$$

Where,

$C_t$  = Consumption expenditure in a period 't'.

$Y_{Lt}$  = Income earned from doing some labor in the current period 't'

- $Y_L^e$  = The average annual income expected to be earned from labor during the further years or working life
- $W_t$  = Wealth currently owned.
- $b_1$  = Represents marginal propensity to consume out of current income
- $b_2$  = Marginal propensity to consume out of expected lifetime income
- $b_3$  = Marginal propensity to consume out of wealth

According to LCH, a rational consumer plans consumption on the basis of all his resources and allocates his income to consumption over time so that his total utility over his lifetime will be maximum (Dwivedi, 2008).

### **2.3 Empirical Studies: International Context**

The various empirical studies on income and consumption expenditure have been made. Here, some selected studies are explained separately:

William H Branson in his book, "Macro Theory and Policy suggested "Assets as well as level of income have something to do with consumption for a given level of income consumption may also be a function of assets or wealth "(1972, P: 172).

Milton Friedman in his paper accepts that basic relationship between consumption and income is proportional, but the relationship is between permanent consumption and permanent income. (Friedman, Milton 1957)

Radhakrishna and G.K. Mishra, has jointly analyzed "A Regional Approach to Consumption Pattern in India". The study shows that consumption is influenced by the income level. This paper has shown that the regional variation in consumption pattern and the Engle elasticities of major consumption items. They have used many tools to make this analysis such as semi-log and double log-linear model to show the function and their elasticities.

This study is related with Bihar of India. This study had concluded that the expenditure elasticities for good items in rural are higher in Bihar and low on urban area of Bihar. It has concluded that as income of households increases from their subsistence level then the demand of non-food items increases but demand of food items decreases (Radhakrishna, R. and Misra, G.K. 1970).

J.S. Duesenberry in his famous book "Income Saving and Theory of Consumer Behavior (1952)" gave a new concept about the determinant of consumption expenditure. According to him, the fraction of families income sacrifice for the consumption depends on the relation to the income of neighbouring families but not on the absolute level or current level of income. This theory has focused on the relative aspect of income rather than other component and emphasized the initiative and emulative nature of consumption. He calls it the "Demonstration effect" (Duesenberry, J.S. 1952).

Gurapada Chakrabaty in his article, "Estimation of Engle Elasticities through Concentration Curve (1979)" has tried to estimate Engle elasticities of various item of consumption based on the method of Lyonger (1955) i.e. through concentration curve and specific concentration curve. These concentrations show the interrelation between income and expenditure which take place on particular items (Chakrabaty, G. 1979).

## **2.4 Empirical Studies: Nepalese Context**

In the context of Nepal, there are few studies in the field of income and consumption expenditure and major finding of the specific studies are reviewed in the following section:

The household budget survey had been conducted by Nepal Rastra Bank during mid-November 2005 to mid November 2006 and it's report was published in 2008 (2065 B.S.). The main objectives of the household budget survey was to identify the details of expenditure pattern and consumption items and services of the Nepalese households.

This household Budget survey covered Kathmandu valley, Hill region, Mountain and the Terai region. This survey has found to be the average households size in rural and urban were 5.21 and 5.49 respectively. It has reported the average monthly household income in rural market, urban market center and average monthly income of Nepalese household were Rs.22225, Rs.31935, and Rs.5110 respectively. This survey has recorded the average monthly income of poorest and richest were Rs.10751 and Rs.47767 respectively (Nepal Rastra Bank, 2008).

Kanel (1991), in his Ph.D. Dissertation titled "Life-Cycle Analysis of Household Consumption and Family Consumption Behavior (A Case Study of Kathmandu, District)" is based on primary data. The main objective of this study was to assess the demographic impact of household consumption on consumption behavior of Nepali households over the family lifecycle. He had taken 614 households from Kathmandu valley and collected data through household survey by using structured interview questionnaires. He had used various statistical tools, economic model and as well as hypothesis to verify the findings. He found that there are some differences in the living arrangements between rural and urban areas. The larger proportion of people living in urban areas. His findings suggest a greater role of household composition in consumption, which in turn affects saving and economic development.

Timsina (2010, in her M.A. dissertation entitled "Income and Expenditure Patterns in Rural Area: In Byarbana Village Development Committee, Morang District", has specified the nature of income and expenditure patterns in his study area. The main objective of her thesis is to investigate the income distribution and expenditure pattern of villagers. She has used collected information from 120 households using random sampling technique. Both primary and secondary data were used to fulfill the specified objectives of the study. The primary data have been collected through direct personal interview using questionnaire and secondary data were collected from Nepal Rastra Bank, Nepal Planning Commission, UNDP, World Bank, household budget survey, and Central Bureau of Statistics etc. She has used Gini coefficient, Lorenz curve, range, variance, standard deviation, relative mean deviation, regression etc as the tools of analysis.

She has estimated average annual household income, per capita income, per capita expenditure, household expenditure equal to Rs.94777.35, Rs.10762.143, Rs.14363.32 and Rs.10341593.00 respectively. The Gini coefficient estimated by this study is based on household income and per capita income level is 0.2077 and 0.144 respectively. She has found to be 68 households engaged in agriculture sector and remaining engaged in non agriculture sector. 56.67 percent households earn their income mainly from agriculture. So, the main source of income in Bayarbana VDC is agriculture.

Ghimire, P. (2010), in his M.A. dissertation entitled "Consumption and Spending behaviour of Households in Damak Municipality (A Case Study of Jhapa District)" has analysed the income and consumption pattern in Damak Municipality. In his study area, there were 762 households. Out of them, he has selected 164 households randomly. To collect information, he has used primary and secondary data to find out socio-economic condition. Primary data have been collected through household survey by using interview questionnaires and the sources of secondary data were government offices, municipality, visiting different website etc. To analyze data, he has used range, variance, method of estimation, Gini coefficient, regression analysis etc.

He has estimated average annual household income, per household expenditure and per capita income equal to Rs.37662355, Rs.128353.64 and Rs.115370.77 respectively. The Gini-coefficient estimated by this study is 0.255. It depicts the less inequality in the size of distribution of income and range, variance, and coefficient of variation is 46000, 47.9 and 2.98 respectively which shows the inequality in the distribution of income. He has also recommended to improve the unequal distribution of income between different households and modernized in agriculture system.

Acharya, K.R.(1998), in his M.A. dissertation entitled "Income and Consumption Pattern of Bote Community in Nepal (A Case Study of Patihani VDC of Chitwan District)". He has used primary as well as secondary data to meet the causes of inequality in their income and consumption. Primary data have been collected through direct personal interview using questionnaire and secondary data collected from different sector. He has used range, Lorenz curve, Gini coefficient, Standard deviation, Regression etc.

He has estimated annual average household consumption and per capita consumption was found to be Rs.15197 and Rs.3021 respectively. Marginal propensity to Consume (MPC) and Gini coefficient for the study area was found to be 0.92 and 0.1944 respectively. In his study area, the total populations of Bote were 302, among them half of the population are engaged in fishing activities. Lastly, he recommended different types of training to help them to increase their income and productivity.

Other dissertation about income and consumption of Terai (1986), Nepal written by Danda Pani Lamichhani: A Case Study of Gitanagar Village Panchayat; he has taken 74 households in his study out of 750 households. He has used random sampling in selecting the 74 households. This study is based on primary level of information. To analyze data, simple log linear regression, Lorenz curve and Gini coefficient were used.

He found that the average member of households of 7 persons, 69 percent people were engaged in agriculture sector while remaining part of labor engaged in service and small and cottage industries. The marginal propensity to consume and Gini coefficient for the study was found to be 0.6 and 0.56 respectively.

To raise the income, the employment opportunities other than agriculture sectors need to be explored. To which development of cottage industries has been suggested.

Free schooling for the lower income section is suggested in order to uplift their income thereby in narrowing the income disparity between "haves" and "haves not" because the people of household with higher education are found to have earning more income.

Tripathi, C.N.(2002). in his M.A. dissertation entitled "Income and Consumption Pattern in Rural Nepal (A Case Study of Ratmate VDC Okhaldhunga)" has used primary as well as secondary data to meet the specified objectives of the study. Primary data have been collected through direct personal interview using questionnaire. Secondary data were collected from CBS and Economic Survey. This study is qualitative, explanatory, and descriptive in nature. He has used Lorenz curve, Gini coefficient, range etc. In his study area, there were 484 households and he has selected 70 households randomly.

He has estimated MPC, Gini coefficient and coefficient of range as 0.376, 0.404 and 0.90 respectively. He has found that 50.76 percent of the total expenditure is on food items and remaining 49.24 percent on non food items. In his study area, major sources of income are agriculture and service. Service is the main source of cash income which helps rural people for their external spending and to buy house and land in the urban area. Agriculture is for livelihood. It provides them food and nutrition. Total households of his study area involved in agriculture but some households get income



from services. At last, he has recommended to management of local weekly hatt bazar is necessary in his field area (Tripathi, 2002).

Lamichhane, D.P. (2002). in his M.A. Dissertation entitled "Income and Consumption Pattern in Jagatpur VDC of Chitwan District in the Central Inner Terai" based on primary and secondary data to meet the specified objectives. Primary data have been collected through direct personal interview using questionnaire while secondary data collected from VDC and other offices. He has used common statistical tools viz. range, Gini coefficient, Lorenz curve, regression analysis etc.

In his study area, he has selected 10 percent of the households randomly to collect information. He has estimated the value of Gini coefficient, range, regression is 0.18, 1.95 and 0.83 respectively. He has found that 67.78 percent population was engaged in agriculture sector and remaining in other sectors. At last, he has concluded that there is high inequality in the assets distribution. To reduce this inequality, it is necessary to re-adjust the asset-structure in more productive channel. Saving should be mobilized to high return yielding sectors like industries, business from traditional assets like land. Agriculture sector is the major sources of income. Modern farming methods, techniques and irrigation family should be enhanced for the development of agriculture in his study area.

Another study conducted by Krishna Kumar Acharya titled "Income Inequality and Expenditure Pattern in Rural Nepal: (A Case Study in Manpur VDC, Dang) is based on primary data to meet the specified objectives. He found that the average annual household income is Rs. 80414.75.

He has found that 42.3 percent population is involved in agriculture, 16.34 percent involved in non agriculture. He concluded that there was highly disparity in asset distribution in his study area. At last, he has recommended that the modern technology should be applied in farming system and to manage irrigation system to increase productivity of both land and labor resources.

Bhattarai, T.P.(1993) in his M.A. dissertation entitled "Income and Consumption Behaviour of Rajbansi in Jhapa (A Case Study of Chandragadhi Village). Is based on primary data. His study covered whole area of Rajbansi community only. A sample of 60 households is taken drawing 6 households randomly.

He has estimated the value of Gini coefficient; MPC and APC were 0.3474, 0.83 and 0.9446 respectively. The saving potentiality is negligible because the MPC is very high. He has used statistical tools such as variance, coefficient of variance, standard deviation, Lorenz curve etc.

He has found that 44.33 percent households were engaged in agriculture sector. Agriculture is the main sources of income in his field area. At last, he recommended government sector emphasis on the irrigation facilities, agro-based cottage and small industries should be established.

Rijal, P. (2002) in his M.A. dissertation entitled "Income and Consumption Pattern in Kjhajuri Village Development Committe, Dhanusa District", is based on primary data in order to meet the specified objectives. He has taken sample 110 households out of 1110. Agriculture is the main sources of income while 55.45 percent People are engaged in this sector. He has found to be MPC and Gini coefficient are 0.57 and 33.58 respectively.

He has estimated average annual household income, expenditure, per capita income, and per capita expenditure equal to Rs.52725.04, Rs.46378.10, Rs.7702.2 and Rs.6775.02 respectively. He has found that 68.57 percent of the total expenditure is on food items and remaining 31.43 percent is made on non food items. He comes to a conclusion that there is the problem of low productivity in his field area. He has recommended farming system should be modernized for high productivity, government should provide fertilizer to farmer and to improve irrigation facilities.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

This study is based on primary information. However, some of the secondary information has also been used whenever necessary. Primary data have been collected from households by interviewing with a structured questionnaire from the study area. The simple random sampling procedure without replacement is used to fill up the questionnaire. Secondary data are collected from municipality, CBS and other offices.

#### **3.1 Sampling**

The study area is in Dhangadhi municipality covering only Ward No. 6 of Kailali district. There are 189 Dalit HH among 737 HH. From the Dalit HH for sample 57 households are randomly drawn by lottery system and have been interviewed them for data collection. The units of information are the households and the type of data collected is cross-sectional data. This study is descriptive and analytical in nature.

#### **3.2 Research Design**

This study is descriptive in nature. It is mainly based on the micro study of income and consumption pattern of the Dalit community in Terai region of Nepal. To make the study more rigorous, literature concerning to the Dalit community and the theoretical concerning to the Dalit community and the theoretical development of consumption function and the empirical studies made in the past in the concerned area has also been extensively reviewed.

#### **3.3 Data Processing**

All the information contained in the questionnaire was first tabulated to obtain a master table on the basis of which analytical tables were derived. The study period covered past one-year data. All the variables were valued in terms of money considering the prices of the respective variables existed during the study period.

### 3.4 Statistical Tools

Simple statistical tools have been used to analyze the inequality in the size distribution of income. A brief introduction of inequality measures that are used in this study is given as follows:

#### 3.4.1 Range

Range is one of the important ways of measuring inequality. It is a measure of the degree of dispersion of the value of variance. The difference between the highest and the lowest income level as a ratio of mean income is defined as range.

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

#### 3.4.2 Gini Coefficient

The Gini coefficient method of measuring inequality is considered as a powerful tool for the study of size distribution of income.

Mathematically,

$$GC = \frac{\text{Area between the lorenze curve and } 45^0 \text{ line}}{\text{Total area below the } 45^0 \text{ line}}$$

This method is a more direct method of measuring inequality. The Gini concentration, ratio is the ratio of the area concentration, shown by the Lorenz curve to the area to minimum possible concentration. This ratio can be calculated by different methods such as algebraic and arithmetic formulations. If the Lorenz curve coincides on the  $45^0$  line, the value of GC is zero i.e. there is equal distribution of concerned variable whereas, if the Lorenz curve covers the whole area below the  $45^0$  line, GC will be equal to unity i.e. there is the highest inequality in the distribution of concerned variable. Hence the value GC is always positive and less than one on notation  $0 \leq GC \leq 1$ .

The formula for the computation of GC is classified into two categories as:

(i) For grouped data:

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

Where,

GC = Gini coefficient

X<sub>i</sub> = Cumulative of variable on X.

Y<sub>i</sub> = Cumulative of variable on Y.

### 3.4.3 Lorenz Curve

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

### 3.4.4 Regression Analysis

Regression is the technique of study how the variations in one series are related to variations in another series. The regression analysis is a statistical method for determining the nature of relationship that exist among two or more variables and making estimate or predictions from that relationship. The unknown variable that we are going to predict (estimate) is called dependent variable or explained variable or regressed. The known variable whose values used to predict, the values or unknown variable is called independent variable or explanatory variable or regressor.

The relationship between the dependent and independent variables may appear in various forms such as linear, non linear, parabolic etc. The linear relationship is given by the linear equations.

$$Y = a + b_1X_1 + b_2X_2 + \dots + b_nX_n.$$

The linear model is used to perform the regression analysis of (i) simple regressions model (ii) multiple regression model involving three variables.

In simple regression model the regression equation of Y on X is expressed as:

$$Y = a + bx$$

Where,

Y = dependent variable

X = Independent variable

a = y intercepts

b = slope regression line or MPC ( $0 < b < 1$ )

### 3.5 Selection of Variables

Some variables are selected for the study which are given below:

- (a) **Assets:** It includes land, livestock, holding, physical instruments, cottage industries etc.
- (b) **Income:** It is the cash money received from agriculture, industry, business profit, pension, salaries, wage. etc.
- (c) **Expenditure:** In this study expenditure means consumption expenditure refers food items and non-food items. Food items consist of cereal, pulses, meat, vegetable, milk etc. Non-food items include tobacco, tea, education, health care, clothing etc.
- (d) **Earners:** The household members who are 14 to 59 years old including in earning members.
- (e) **Household:** It is defined as the group of people related by blood, marriage and two live together and take meal in the same kitchen.
- (f) **Castes:** Castes, classified according to our Hindu religion, are Brahmin, Chhetri, Tharu, Magar, Kami, Rai, Gurung, Damai, Badi, Sarki etc.
- (g) **Household Categories (Income Size):** In this study, the total sample households are categorized in three income group as

**Low Income Group:** Income generate below Rs.75000 per annum.

**Medium Income Group:** Income generates Rs.75000-150000 per annum.

**High Income Group:** Income generates above Rs.175000 per annum

## **CHAPTER FOUR**

### **A GENERAL PROFILE OF STUDY AREA**

#### **4.1 A General Profile of Study Area**

##### **4.1.1 Physical Aspect of Kailali**

Kailali, one of the five districts of Seti zone, lies in the far western development region of Nepal. It is situated at distance of about 750 km. west-south from Kathmandu. It is bordered by Karnali Surkhet and Barrdiya districts in the east, by Kanchanpur and Dadeldhura in the west by Doti in the North and by Mohana river and Uttar Pradesh. of India in the South. It is located between 28<sup>0</sup>22' north and 29<sup>0</sup>5' north latitude and 80<sup>0</sup>30' east and 81<sup>0</sup>18' east longitude and covers a total area of 3235 square km.

The headquarter of Kailali is Dhangadhi. There are 42 VDCs and two municipalities namely Dhangadhi and Tikapur. The district also contains Tikapur park, one of the biggest parks in Nepal and Godha-Ghodi Lake. There are six election regions. Kailali District is located 109 m above the sea level. It covers chure region and terai region. It includes both hills and plain, but most of part is in the form of plain. A tropical to subtropical prevails in the district from its plain area to hill side.

The mean temperature vary between maximum 19<sup>0</sup>C - 44<sup>0</sup>C and minimum 7<sup>0</sup>C - 23.5<sup>0</sup>C. Average annual rainfall is 1940 mm.

##### **(a) Climate**

Kailali is a plain Terai district which is 64.83 percent covered by forests, streams, lake and rock etc. Only in 27.80% cultivated for agriculture. The climate is not a same in Kailali. There are mainly two types of climates as mentioned below:

##### **(i) Warm Tropical Climate**

Below high hill and above the plains areas the sub typical climate can be found. People feel very cold from December to January but in the other seasons there is warm. Such type of climate can be found almost all hill area of Kailali district.

## **(ii) Tropical Monsoon Climate**

This type of climate can be found in plan area which is 109 m from mean sea level. People feel very hot in summer season and in winter season flow seat lahar. So that this climate is more heated to the western terai region.

## **(b) Natural Resources**

### **i) Rivers / Streams**

Mohana, Karnali and Khutiya rivers are the main river of this district. Mohana is originated from Mahabharat lake. This river flows the border of India. Godawari river is the major stream of Mohan river which is also started from Mahabharat lake and Dodo Khola is the minor stream of Mohana river. The Karnali river which flows along the eastern part of Kailali district. Khutia, Shivaganga are the branch stream of Karnali. Mohana is boarded in its south side by the natural boundary with India. Godha Ghodi Tal, and Jokhar Tal are major lake.

### **ii. Forest**

The forest vegetation can be also found in different types as various climate. In the tropical evergreen forest, sal, sissoo, Khayar, simal etc. are famous tree and salla, debdar, chanp, kmatus, okhar, Rodhodandron, badar, amala are also found. Besides these, there can grow different kinds of herbs grasses and wild flowers. These forests consist different kinds of animals such as, elephant, rhinoceros, tiger, bear, leopard, deer etc.

## **4.1.2 Socio-economic Aspect of Kailali**

### **4.1.2.1 Demographic Aspect**

According to the population census of 2001, the total population of Kailali district is 6,16,697 of which male 3,12,311 and female 304386. The total number of household is 94430 and average household size is 6.53 persons. The density of population of the Kailali district is 190.63 persons per sq. km. which is higher than the density of



population of the whole country. There are various caste and ethnics residence can be found in Kailali.

**Table 1**  
**Ethnic Composition of Population in Kailali District**

Caste / Ethnic group	Population	Percent
Chhetri	107398	17.90
Brahmin	66197	11.03
Tharu	269521	44.93
Magar	23913	3.98
Newar	2759	0.46
Muslim	3357	0.56
Dalit	59257	9.88
Tamang	1382	0.23
Other	66081	11.02
Total	599865	100.00

Source: CBS, Population Census (2001) Nepal.

Note: Dalit includes Kami, Damai, Sarki, Badi, Sonar and undefined dalits. Other including Rai, Limbu, Sanyasi etc.

The caste / ethnic composition (Table 1) shows that the main ethnic groups are Tharu, Magar, Newar, Tamang, Muslim and Dalits: Kami, Damai, Sarki are also can be found. 43.93 percent Tharu settle in Kailali district. The total number of Dalits are 9.88 percent. Religiously Hindus and Buddhist mainly prevail in the district. Chhetri, Brahmin and other Aryan use Nepali language as mother tongue. The other ethnic groups have their own language as a mother tongue in each ethnic group.

#### **4.1.2.2 Agriculture**

More than 90 percent people of Kailali depend on agriculture. Some educated youth are engaged in government and private sector services and the uneducated youth go to Bharat to generate income by physical laboring. In this district, 89935 hectare land

can be used to cultivate. In Kailali district, paddy, wheat, vegetables and different kinds of pulses can be grown. There are fruits garden. Under ground water (Bor) is the main sources of irrigation. Most of the farmers depend on monsoon. The farming system consists of traditional as well as modern improved methods. The improved seeds, fertilizer, equipments and agro technical adviser are available easily there.

#### **4.1.2.3 Education and Health**

The maximum people of Kailali are suffering from vicious circle of Poverty so the maximum people are far away from the proper education. Only 48 percent of total population are literate. There are 9 private / institutional campuses. Nowadays, some private CMA, ANM, JTA training centre are being established at Kailali. Now in whole district there are 23 Higher Secondary, 101 secondary, 123 lower secondary and 323 primary schools.

There is only one Govt. hospital in Dhangadhi, one eye hospital in Geta Kailali, Two Ayurvedic hospital and five health center in Kailali District. But these hospitals, health post and health centers are not used effectively. In these health posts and hospitals, the doctors and physicians are not working regularly and there is always crisis of proper medicines.

#### **4.1.2.4 Transportation / Communication and Banking**

In transportation sector, there is only one highway named Mahendra Highway 750 km. which helps to link. Dhangadhi and capital city Kathmandu. For internal transportation there are some highway namely, Bhimdatta Pant (135 km.) that links Dhangadhi, and Dadeldhura, K.I. Singh (65 km.), Jaya Prithivibnahadur Singh (110 km) and Dashrath Chand (105 km) that links Dadeldhura - Jhulaghat.

In communication sector, distributed telephone line has been fitted in Kailali district. The total number of telephone line is 7852. Wireless phone service is available at Kailali. Nowadays internet and Email services are also available. For mail service, there is one district post office, 13 area post offices and 33 additional post offices.

To provide banking services, there is a branch office of Nepal Rastra Bank at Dhangadhi, Nepal Bank Limited, and its sub-branch offices have been extended to Tikapur and Attarya Bazar. The branch office of Rastriya Banijya Bank has been established at Dhangadhi and Tikapur municipality. The branch offices of Agriculture Development Bank have been established at Dhangadhi, Attariya and Tikapur Bazar.

## **4.2 Dhangadhi Municipality: Physical and Socio-Economic Profile**

### **4.2.1 Physical Aspect of Dhangadhi Municipality**

#### **4.2.1.1 Introduction**

Dhangadhi municipality, Dhangadhi is situated in the seti zone of the far western development region. Dhangadhi is the head quarter of Kailali district. It is a city in western Nepal on the border to Bharat. It is the largest city in the Far western region of Nepal. The municipality is divided into 14 wards and the total population of the municipality is 74356 of which 32810 (47.77 percent) are females and 35870 (52.23 percent) males recorded by Dhangadhi municipality office in 2066. The average size of the family size is 6.03 persons. The total number of households is 12330. The covered area of municipality is 95 sq. km. It is located 109 m above the sea level. It is bordered by Urma VDC and Khutia river in the east, by Mohana river in the west by Geta and Beladevipur VDC in north and by Mohana river, Bharat in southern side. The municipality was established in 2033 B.S.

The main occupation is agriculture where 93 percent people are engaged in farming, 2.5 percent people are on service sector and 4.5 percent are in the others sectors. The majority of the group of people residing in the municipality are Brahmin, Chhetri, Newar, Tharu, Gurung, Magars, Damai, Kami and Sarki etc. The religion practiced mostly are Hinduism and Buddhism.

There are five campuses, 16 higher secondary schools, 25 secondary schools, 24 lower secondary schools and 26 primary schools. All the zonal offices, district level office and regional office are established. Dhangadhi is the main market center of the district. In the municipality, there is 70 km. pitch road, 140.4 km gravelled road, 6817

telephone lined, 3800 private water pipe, 13 public water pipe and 12353 households, facilitate electricity.

#### **a) Climate and Land**

The climate of the municipality is tropical with the hottest period. From April to June leading upto the monsoon the weather is better but very dry. The winter season begins from December. The municipality is covered with thick layers of mist in all days from December to February. From March, the hot season begins again. The annual rainfall occurs around 1550 mm. The temperature varies between 7<sup>0</sup>C in winter to 43<sup>0</sup>C in summer.

The municipality is plain landscape with gentle slope from north to south. The covered area of municipality is 95 sq. km. Most of the land of the municipality is completely under cultivation.

#### **b) River/Streams**

Dhangadhi municipality is bordered by two big rivers; Mohana and Shivganga which is known as the origin of Mahabharat lake and biggest river of Khutia. Besides these, there are other smaller streams like Kailali Khola and Seti Khola which are starts from the Chura Parbat. They flows north to south where thy combined with Mohana river.

#### **c) Forest and Vegetation**

The main forests are; Jali, Jai, Matayari, Boradad, etc. Now a days these forest are as form of community forest. In this forest, the main vegetations are sal, sissou, khayar, jamuno, asana etc.

### **4.2.2 Socio-economic Aspect of Dhangadhi Municipality**

#### **4.2.2.1 Demographic Aspect of Study Area**

According to the population census of 2001, the total population of Dhangadhi municipality was 67447 of which 53228 (52.23 percent) male and 32219 (47.77

percent) females. The total population organized into 12330 households. The average household size is 5.5. The wardwise population is presented in the following table.

**Table 2**

**Population Distribution of Dhangadhi Municipality by Wards**

Wards	No. of HHs	Male	Female	Total	percent	Average family size
1	1517	5128	4369	9497	14.08	6.3
2	1404	4419	3992	8411	12.47	6.00
3	1452	4230	3938	8168	12.11	5.60
4	942	2530	2202	4732	7.01	5.02
5	1553	4022	3495	7517	11.15	4.84
6	737	1964	1840	3804	5.64	5.20
7	1024	2885	2646	5531	8.20	5.40
8	640	2308	1974	4282	6.35	6.70
9	319	877	808	1685	2.50	5.30
10	207	789	766	1555	2.30	7.50
11	276	994	968	1965	2.90	7.10
12	1606	3337	3493	6830	10.13	4.30
13	390	1099	1022	2121	3.14	5.40
14	263	646	706	1352	2.00	5.14
Total	12330	35228	32219	67447	100	5.5

Source: Dhangadhi Municipality, Dhangadhi, 2066.

Table 2 shows that Ward No. 1 has the highest population whereas 14.08 percent of the people of the municipality live followed by ward no. 2 and 3. Ward No. 14 is the lowest population ward where number of households and average family size is 263 and 5.14 respectively. The ward no. 6 having the total population is 3804 and including 1964 male and 1840 female. The percentage covered by this population is 5.64 percent. The average household size is 5.2 persons and total number of household is 737. Similarly, the ward no 5 having the population 7517 and including 4022 male and 3495 female. The percentage covered by this ward is 15 percent.

The lowest households ward is ward no. 10 having population 1555 including 789 male and 766 female and average household size is 7.50. The percentage covered by this ward is 2.30 percent.

### **4.2.3 Natural Resources**

Water: Mohana river, Shiva Ganga, Khutia river and Godawari river are the major water resources of the Dhangadhi municipality. Besides these, there are other very smaller streams like, Kailali nala, Seti khola etc. which are useful to irrigate the land by pump set. This type of river has too much water in rainy season than other time.

Forest: Before late 1950, most of the land was covered by dense forest with the eradication of malaria, the forest was cleared by new settlers. Today the villagers made community forest and protection themselves. Public are available grass, fuel, firewood from forest. In this forest the main vegetations are sal, sissoo, kahyar, jamun and bakaino etc.

### **4.2.4 Socio-economic Aspect of Dhangadhi Municipality**

#### **4.2.4.1 Demographic Aspect of Study Area**

According to population census of 2001, the total population of Dhangadhi municipality was 67447 of which the total number of males and females are 35228 and 32219 respectively. There are 12330 households in the municipality. Average size of household size is 5.5.

The total population of the Dhangadhi municipality belongs to different age groups. The demographic composition of the municipality is shown in the following table 3.

**Table 3****Population Distribution According to Age and Sex for Dhangadhi Municipality**

Age group in year	Total population			Percentage
	Total	Male	Female	
0-4	7810	4048	3762	11.58
5-9	9407	4926	4481	13.95
10-14	9628	5077	4551	14.27
15-19	7858	4135	3723	11.65
20-24	6899	3543	3356	10.23
25-29	5585	2770	2815	8.28
30-34	4594	2369	2225	6.81
35-39	3936	2059	1877	5.83
40-44	3113	1665	1448	4.62
45-49	2418	1364	1054	3.58
50-54	1921	1045	867	2.85
55-59	1331	745	586	1.97
60-64	1151	564	590	1.71
65-69	711	389	322	1.05
70-74	503	273	230	0.76
75 and above	579	256	323	0.86
Total	67447	35228	32219	100.00

Source: Dhangadhi Municipality, Dhangadhi, 2066.

The table 3 shows that the age group up 0-14 years or below 15 years is the economically dependent group having the population 26845 including 14051 male and 12794 female which occupies 39.8 percent of the total population of this municipality.

Similarly, the age group between 15 to 59 years is an economically self dependent group having the population size 37655 including 19695 male and 17951 female which occupies 55.82 percent of the total population. The age group above the 60

years is also economically dependent group. This group having 1082 people including 529 male and 650 female which is 1.62 percent of the total population.

**Table 4**  
**Population Distribution by Cast**

Caste/ethnic group	Population	Population in %
Brahmin	12211	18.10
Tharu	21174	31.39
Chhetr	13242	19.64
Kami, Damai, Sarki, Badi	2523	3.75
Newar	1365	2.05
Magar	939	1.39
Muslim	1104	1.64
Others	14889	22.07
Total	67447	100.00

Note: Other include Rai, Tamang, Sonar, Hajam etc.

Source: Dhangadhi Municipality Office, 2066.

Table 4 shows that the population of various caste/ethnic group. According to Dhangadhi municipality 2066, the population of Tharu are 21174 which occupies 31.39 percent. The Chhetri and Brahmin people of the municipality, ranks second and third order respectively. The population of Dalits is relatively low and spread over in all wards of the municipality.

According to Dhangadhi municipality office 2066, more than 60 percent of the total population speak Nepali as their mother tongue and 28.82 percent of total population use Tharu language in their home. The following table helps to know the language pattern in this municipality.



**Table 5**  
**Language Distribution by Cast**

Language	Population	Percentage
Nepali	41088	60.92
Hindi	1381	2.05
Tharu	19436	28.82
Maithali	1537	2.27
Newari	452	0.67
Magar	650	0.96
Others	2903	4.30
Total	67447	100.00

Source: Dhangadhi Municipality Office, 2066.

Note: Other include Gurung, Bhojpuri, Urdu etc.

#### 4.2.4.2 Educational Status

According to the population census, 2001 39.47 percent are literate and 60.53 percent are illiterate. However, there is variation in male and female literacy level. It is presented in the table 6. According to table 5, 48.46% of total female population is illiterate while male illiteracy rate is 71.66 percent (CBS 2001).

**Table 6**  
**Population (6 years of Age and Above) by Literacy and Sex**

Sex	Population	Literate	Illiterate
Male	30057	8538 (28.4%)	21519 (71.60%)
Female	27527	14188 (28.4%)	13339 (48.46%)
Total	57583	27726 (39.47%)	34858 (60.53%)

Source: CBS, Population Census, 2001.

#### **4.2.4.3 Health**

Most of the Dalit people are drinking impure and arsenic water taken from hand pump and deep well. Maximum people haven't used toilet. By the cause of dirty and arsenic water and the lack of clean or pollution environment around the houses the people became ill in all time. People mostly suffered by diarrhea, jaundice, typhoid, fever etc.

To provide health service, there are some government hospital, health posts and many private clinics. Seti zone hospital is one of the biggest hospital which has 150 bed. There are four ayurvedic hospital one nursing home, and eight health post.

The health seeking behaviour of the families in the municipality area shows that nearly three four of the families (74 percent) visit health care facilities. Like hospitals, health posts and private clinics for treatment. The ward wise data further reveal that in ward no. 11 about 98 percent families visit health care facilities. In Ward No. 1, 2, 4, 6, 9, 10 and 14 the number of such families exceeds 80 percent. However, in ward no. 13 only 3 percent of the households visit to health care facilities (Poverty profile of Dhangadhi municipality, 2008).

## CHAPTER FIVE

### SOCIO-ECONOMIC CONDITION OF DALIT COMMUNITY

#### 5.1 Social Condition

##### 5.1.1 Demographic Aspect of Dalit Community

The income level of the households is highly affected by the demographic composition. To improve the economic condition, the dependency ratio must be low. The dependency ratio is the ratio of persons in the "dependent" ages (under 15 years and over 59 years). The people who are of the ages (15-59) years is called economically productive group.

The total population of Dalit community belongs to different age groups. The demographic composition that in distribution of population by age and sex in general. The study shows the proportion with the national population census 2001.

**Table 7**  
**Distribution of Population by Age and Sex of Dalit Community**

Age group	Male		Female		Total	Percent
	Number	Percent	Number	Percent		
0-14	80	43.24	54	34.62	134	39.29
15-59	97	52.43	98	62.82	195	57.18
above 60	8	4.33	4	2.56	12	3.52
Total	185	100.00	156	100.00	341	99.99 $\cong$ 100

Source: Field Survey, 2011.

Table 7 shows that the economically active population of (under age group 15-59) the study is about 57.18 percent. It is slightly more than the national average of 54.15 percent. Among the total active population, proportion of female is greater than male nearly by 10 percent which is not consistent with the national of 49.9 which is nearer about national of 49.9 which shows nearer about national average 39.35 percent which is not consistent with the national of 49.9 which is nearer about national average and 50.1 respectively. The population under the age group 0-14 is about 40 percent and 4 percent population falls above 60, which is significantly high.

Similarly, the age between 15 to 59 years is an economically self dependent group having the population size 195 including 97 males and 98 female which occupies 57.18 percent of the total population. The age group above the 60 above is also economically dependent group. This group having 12 people including 8 male and 4 female which is 3.52 percent of the total population.

There are various reasons responsible for high dependency in the society. The main reason for high ratio of children and therefore the dependency burden is the traditional view of viewing children as an income earning assets by their parents and lack of awareness about small family. Similarly, the main implication of high dependency ratio is the vicious circle of poverty not only in the family but as a whole society.

It can be concluded that 42.81 percent are economically dependent and 57.18 percentage economically self dependent.

### **5.1.2 Educational Status of Dalit Community**

Education is one of the indicators of development of nation. Literacy is the critical choice uplifting lifestyle. It also develops perception power and increases the potentiality of person. It changes all people into good civilization. It will not only help in individual development but also provides knowledge and skills to develop the community and nation as well.

The educational status of Dalit community has been shows in the following table.

**Table 8**  
**Distribution of Population by Education**

Educational status	Male	Female	Total
Illiterate	60 (41.09)	86 (58.90)	146 (42.82)
School level	108 (60.11)	72 (40)	180 (52.78)
Higher education	12 (8)	3 (20)	15 (4.39)

Note: Number in parenthesis indicate the percentage.

Source: Field Survey, 2011.

In this study education level is categorized in three groups. They are higher education (above SLC), school level (from class 1 to 10) and illiterate (who were unable to read and write). The table shows that 42.82 percent which is quite good than the national average of 46 percent of the total population are illiterate, 52.78 percent of Dalit people are school level and 4.39 percent people are higher education including 80 percent male and 20 percent female. The total population literate is 57.17 percent which is near about national literate population rate (57.6 percent).

It shows that most of the people are still illiterate in the study area. In the case of literate status male population is higher than female. The status of higher education is not good which is very less. The parents were not aware of the importance of education and they had no access to school / college. The main cause of Dalit people, poor economic condition compelled them to dropout for higher education, so they are economically weak which affects their livelihood.

### 5.1.3 Family Size Distribution of Households

**Table No. 9**

**Family Size Distribution of Households**

Family size	No. of household	% of HH	Total population	Percentage
1-4	12	21.05	42	12.32
5-8	40	70.18	249	73.02
9 and above	5	8.77	50	14.66
Total	57	100	341	100

Source: Field Survey, 2011.

The table 9 shows that the three category of households, small household have 4 members, medium have 5 to 8 and then large household have above 9 members. 21.05 percent household have 4 members, 70.18 percent have less than 8 members and 8.77 percent have more than 9 members. The table clearly shows that the majority of people (73.02 percent) have medium size of family. The percentage of small and large families size is 12 and 5 respectively.

Dalits also becoming educated and the available of contraceptives, the family size is becoming smaller in the study area. Due to the lack of awareness, most of the Dalits have 4 children. So, they cannot teach them. Old generations are superstitious, but young generation are not aware, lack of communication, deprived from the health service and lack of health education.

### 5.1.4 Housing

**Table 10**  
**Pattern of Housing Condition**

Types of houses	No. of house	Percentage	Type of roof	No. of household	Percentage
Jhupadi	14	24.56	Tyle	41	71.93
Kachhi	31	54.38	Dry grass	8	14.03
Pakki	12	21.06	Other	8	14.03
Total	57	100.00	Total	57	99.99 $\approx$ 100

Source: Field Survey, 2011.

Table 10 shows that out of 57 households 41 houses were made of by wood and use tyle in roof. 8 houses made of by dry grass and other 8 houses were made of break, cement and other materials. In the Dalit community, 14 percent houses are Jhupadi and remaining 31 and 12 houses are Kachhi and Pakki respectively.

### 5.1.5 Use of Electricity by the Households

**Table 11**  
**Use of Electricity by the Households**

Electricity	No. of HH	Percentage
User	51	89.47
Non user	6	10.53
Total	57	100.00

Source: Field Survey, 2011.

Table 11 shows that the most of Dalits household user electricity and some household non user. 89.47 percent of the total household are using electricity facility which is

more than the national average of 60 percent and only 10.53 percent households are not found electricity facility but in the national context 40 percent are deprived from electricity facility. Some Dalits are newly migrated from hill side and they settle the edge of forest where the government does not provide the electricity line and the lack of economic condition is the main reason of being deprived from electricity facility.

### **5.1.6 Drinking Water and Toilet Facility**

In the study area, 100% of households use drinking water from hand pump that means nobody gets drinking water facility. In the national level, 80 percent people get drinking water service. Most of Dalits have made general toilet, rest of the other take water from hand pump and they use open toilet.

### **5.2 Income Pattern of Dalit Community**

There are different sources of households' income. Households' income comes from the farm and non farm sector. Farm includes value of total crop-production, values of livestock product etc. Non-farm income includes gross home enterprises and other sector includes rent from building, financial assets and pension etc. The following table shows the source of households' income from different sources of Dalit community.

**Table 12**  
**Main Sources of Income of Dalit Community**

Items	No. of HHs	Total income	Percentage
Agriculture	almost all	207802	3.19
Manual labor	almost all	1209800	18.62
Business	16	600540	9.24
Services	12	1310000	20.15
Livestock	27	190414	2.93
Foreign job	29	2583940	39.75
Other	-	397915	6.12
Total	57	6499911	100

Source: Field Survey, 2011.

### 5.2.1 Agriculture

The main occupation of Dalit community is agriculture. Generally all the members of their family are engaged in this sector. However, they have taken land on rent from other. Although they have not any leisure time in cropping period but they can have food only for 6-7 months, which covers 3.19 percent of their total income.

**Table 13**  
**Land Ownership (in Kattha)**

Land ownership (in Kattha)	No. of Households	percent
Landless	2	3.5
0-5	47	82.46
5-10	7	12.28
Above 10	1	1.75
Total	57	99.99 $\cong$ 100

Source: Field Survey, 2011.

The field survey found that 2 HHs were landless and remaining households were found as land owners. There was no registered land owner. There was no registered land under Dalits' name. They are living by the edge of community forest.

About 82.46 percent people had below 5 Kattha land which is only used for housing purpose, 12.28 percent people had 5-10 Kattha land and only one household people had above to Kattha land. Land is the main source of income of farmers but they have small pieces of land which are not efficient to produce necessary crops / food items for them.

### 5.2.2 Livestock

Livestock is necessary for farmer because they use cow, oxen, buffalo, goats etc. to produce compost fertilizer and for ploughing. They can have bullock from livestock.



In addition, the farmers may have milk, meat etc. from livestock. It covers 2.93% of total income.

### **5.2.3 Foreign Job (Specially India)**

Foreign job is one of the main sources of income for Dalit community. They have less agriculture land which is insufficient for their survival. Thus, they go to Bharat to earn money. After farming season, they go to Bharat. The share of income from foreign job is 39.75 percent.

### **5.2.4 Manual Labor**

Table 10 shows that in Dalit community manual labor plays an important role because it is also main source of their income. After farming season, they depend upon manual labor. They have to go for laboring to the neighboring village city. They drive Riksha in the city. It covers 18.62 percent of total income.

### **5.2.5 Business, Services and Other**

These are other nominal sources of income of Dalit community. Only 16 households are engaged in business sector which occupies 14.57 percent of the household income. Similarly, 12 households are engaged in Services. 20.15 percent of the households' income is obtained from services (salaries). Likewise, 6.12 percent of the households' income is obtained from services (salaries) and 6.12 percent is from other sectors including pension, rent, cell firewood etc.

## **5.3 Household Expenditure**

### **5.3.1 Household Expenditure Pattern**

About 7.5 percent of households' expenditure of Dalit community is on food items as their basic requirements. Rest of other their income was spent on other items such as meat, alcohol, clothing, education and health medicine.

The expenditure pattern of Dalit community was composed as given in the table 14.

**Table 14**  
**Expenditure on Rice / Crops, Wheat and Salt Oil (in Rupees)**  
**per Annum**

Income level ('000)	No. of HH	Expenditure on rice and wheat	%	Average	Expenditure on salt, oil	%	Average
0-50	8	31700	11.58	3962.5	25020	9.14	3127.5
50-100	26	147824	6.87	5685.54	88246	4.10	3394.07
100-150	10	80400	6.54	8040	33204	2.70	3320.4
150-200	6	130250	11.97	21708.33	21980	2.02	3663.33
Above 200	7	96600	5.49	13800	29896	1.69	4270.85
Total	57	486774	7.48	531296.37	198346	3.05	17731.15

Source: Field Survey, 2011.

As shown in table 14, as income of the household increases, expenditure on rice, wheat falls. The low income level group people spend more money than the higher level of income group people on food items of their total income. This shows the negative relationship between share of total expenditure on rice and wheat and level of income.

The average yearly consumption expenditure of Dalit households was found Rs.53916.37 in Rice and Wheat and Rs.17731.15 in oil and salt. The low level of income group people spent less money than the higher level of income group people. This type of expenditure shows that positive relationship between level of income and expenditure.

### 5.3.2 Expenditure on the Vegetables / Pulse Items

**Table 15**

**Expenditure on the Vegetables and Pulse Items (in Rupees) per Annum**

Income level ('000)	No. of HH	Expenditure of vegetable, pulse	Average	Percentage in total income
0-50	8	15520	1940	5.67
50-100	26	72700	2796.15	3.38
100-150	10	41570	4157	3.38
150-200	6	41720	6953.33	3.84
Above 200	7	75060	10722.85	4.27
Total	57	246570	26569.33	3.79

Source: Field Survey, 2011.

Table 15 shows that in this study area of Dalit community doesn't spend more. They grow vegetable in their own land and they bagging from other too.

### 5.3.3 Expenditure on Clothing

The Dalit people use simple type of cloth. Old people only wear Daura Surwal and young generation used fashionable clothes. Old generation did not buy clothes every year because they have not more money. But young generation buy clothes on Dashain and Tihar every year. So, young generation more spend on clothes than old generation.

**Table 16**

**Expenditure in Clothing (in Rupees) per Annum**

Income level ('000)	No. of HH	Expenditure	Average expenditure	Percentage in its total income
0-50	8	25100	3137.5	9.17
50-100	26	154640	5947.69	7.19
100-150	10	73300	7330	5.96
150-200	6	56600	9433.33	5.20
Above 200	7	92100	13157.14	5.19
Total	57		39005.66	6.18

Source: Field Survey, 2011.

Table 16 shows that in this study, the total household expenditure about 6.18 percent is spent for clothing items. The low income people spent more proportion on clothing than the high income people but in absolute expenditure the average spending of high income people spend more than low income people because MPC is high on low income group.

### 5.3.4 Expenditure on Alcohol

People of Dalit community like to drink either by spending their own money or by begging alcohol from others. Males drink more than the females. Females advise the males not to drink alcohol but males usually ignore this advice. Especially at feast and festivals, they use to drink too much.

**Table 17**  
**Expenditure on Alcohol (in Rupees) per Annum**

Income level ('000)	No. of HH	Expenditure	Average expenditure	Percentage in its total income
0-50	8	27600	3450	10.08
50-100	26	201970	7768.07	9.39
100-150	10	66888	6688.8	5.44
150-200	6	34350	5725	4.17
Above 200	7	94550	13507.14	5.37
Total	57	427358	37215.94	6.57

Source: Field Survey, 2011.

Table 17 shows that the total household expenditure about 6.57 percent is spent for alcohol. In this community, people start to drink from their childhood because they are free from their family. Their parents do not careful about their health and future. So, they are free to drink alcohol.

### 5.3.5 Expenditure on Meat

**Table 18**  
**Expenditure in Meat (in Rupees) per Annum**

Income level ('000)	No. of HH	Expenditure	Average expenditure	Percentage in it's total income
0-50	8	20600	2575	7.53
50-100	26	146805	5646.35	6.83
100-150	10	58740	5874	4.78
150-200	6	59420	9903.33	5.46
Above 200	7	95820	13688.57	5.45
Total	57	381385	37687.25	5.86

Source: Field Survey, 2011.

Table 18 shows that people of this community spend on meat about 5 to 7 percent of their total income. They can have meat at least twice a month and specially in feast and festivals. As absolute income increases, meat expenditure also rises.

### 5.3.6 Factors of Households Expenditure

Household expenditure is determined by different factors. The most important factor among them is level of income. As level of income increases, the level of consumption also increases. The main factors of household expenditure are as following:

#### (a) Income Level

Income level is the main determinant of household expenditure. How much amount of transaction will be paid for household expenditure by the household may be dependent on the income of it members of family. If a family earned more income of its members, they will spend more amount on consumer goods and services but if a family has low income level, then its household expenditure will fall below. The family with low-income level spends on his basic requirements such as food, housing

and clothing for survival but the family with high income level will initiate to spend on some comfortable and luxurious goods including their basic needs.

**(b) Interest Rate**

Generally to operate productive activities people borrow some debt but in some cases, a number of households will use to borrow to fulfill their basic households requirements if they fail to maintain their needs by own income source in this condition the household expenditure must be affected by the interest rate. If interest rate is low, the household may spend high and if the rate of interest is high, the household will not initiate to spend more on consumer goods because the expenditure in consumption is taken as unproductive.

**(c) Social Customs and Practice**

Social customs and practices are two other determinant factors for influencing level of consumption. At feasts and festivals some household of a particular community must spend more than their affordability to protect their customs and culture. At special time and ceremony such as birth, wedding, death, people have own customs and practices.

**(d) Availability of Debt**

If people fail to maintain their needs by their own income source, they must borrow the debt but in this situation if there is no availability of debt for households, then they may not spend more on goods. As a result, the household expenditure falls below.

**(e) Value of Assets/ Capital**

The household expenditure has been also affected by its value of assets and capital because the same quality of capital goods will be valid more or less on the basis of its location. For instance in the rural remote area people cannot afford more on goods and services because the houses can't be rented and the rural land has low value but with same amount of capital stock or assets in urban area may be valued at high rate. So that in remote area there is less household expenditure than in urban area even in remote area if there would have been linked by road and electricity facility and trading center the household expenditure would be risen.

**(f) Demonstration Effect**

Demonstration effect is another important factor which is related with the level or income. Man is a social being. He cannot move easily far away from the society. To adjust in society, man has to accept the social behavior, culture, tradition and the living style, which is applied by the society where he is living. Any particular household expenditure will be higher than its affordability following his neighbor. In this case, there arises the demonstration effect. If an individual migrates from rural to urban areas, essentially his expenditure will be raised to adjust with modern city life style.

**(g) Habit**

The habit of man may influence his household expenditure. For instance, if the members of a family have drinking habit, then its expenditure will be higher than the family which has not any habit of drinking because habit makes consumers to consume some particular things compulsorily.

**(h) Price level**

If the price level of consumer goods rises in the market, it will result in the fall of the purchasing power of consumer, which leads to cut off some purchases of goods if income of consumer will not rise during that period instead. If the price level is low, people can buy more amount of goods and the household expenditure will rise.

**(j) Quality of Goods**

Each consumer pays prices for goods for its quality because there is an existence of quality or utility in goods, which helps to satisfy human wants. If the price is low but there is not any additional demand since the quality of that goods have been same at low level. On the other hand, the consumer ready to pay high price for such goods which have high quality.

## **CHAPTER SIX**

### **INCOME EXPENDITURE ANALYSIS**

#### **6.1 Factors of Income Determinant**

##### **6.1.1 Investment**

Level of income is a prime factor in determining economic well of a household. Investment is a necessary condition to create income. There are two types of assets: physical and capital assets.

If entrepreneurs invested in different sectors, there would be a number of opportunities of employment as a result there would be available not only the large amount of production but also the consumer will facilitate by cheap and better goods so that the appearance of investment initiates the productive activities. The productive activities make the factors of production active by giving compensation. The bound of factors production, there consists of men and man-made objects so that productive activities may be initiated by investment. Finally, it may increase income generation of household member. Hence to increase investment means to operate productive activities which means to increase the option of income generation to the factors of production or to have opportunity of employment and it will raise income level.

##### **6.1.2 Human Resource Development**

The human resource development is also known as a determinant of income level of a family in community of everywhere. Human resources development implies to provide perfect manpower for different sectors as their necessities. If household members are skillful and educated, the level of income of that household increases. The physical infrastructure consists of developing roads, building, bridges, machinery plants etc. In the present time factor for the prosperity of human being, human resource development is necessary thing as well as physical infrastructure. If there are trained persons in the family, then its income level will be high as compared with a family with untrained members. It is because perfect and trained worker will be praised with higher salary than imperfect worker.



### **6.1.3 Employment**

Production depends upon investment while the employment depends upon the efficiency of labor. Employment creates peaceful environment in the family or in the society. On the other hand, unemployed also needs food, houses and cloth to survive but to afford all these wants, there will not be enough income level so that unemployed person brings disorder in his family, which gives the bad impact in the society. Hence, higher employment will give higher income and several problems can be solved easily.

### **6.1.4 Asset / Property**

Nepal is an agriculture country. So that land is taken as a main source of income. The expected income from land depends upon the fertility of land. The production from lands depends upon the fertility of land, irrigation, fertilizer, improved seeds and pesticides to the cultivated land. All these facilities are not available in Nepal where more than 80 percent Nepalese are working on the agriculture sector. Maximum fertile land is located in the Terai belt and almost all the facilities provided by the government also centralize only in the Terai belt so that the farmers in hilly region are hardly suffered by the crisis of necessary materials and equipments for proper farming as a result of unfertile soil they work hard but they cannot succeed to maintain the annual necessary amount of foods for their family. In addition, in the Himalaya belt, most of the land is covered by snow and this region is also deprived from agriculture inputs i.e. fertilizer, irrigation seeds etc.

## **6.2 In the Context of Dalit Community**

Kailali district is also situated in the Terai belt of Nepal. Dhangadhi municipality is in the west and southern part of Kailali district. Ward No. 6 is field area which is located towards north side of Dhangadhi municipality where Dalit are living. Agriculture and manual labor is main source of their income. They are working in the field for the whole year. However, they cannot grow sufficient food because they have less land. Then in the point of view of income source, their farming activities do not take place in the first position. Including farming, they have tamed cattle too. Agriculture of this study area is fully dependent on monsoon rainfall. Rest of the farming season, they

use to involve in manual labor such as driving Riksa and laboring in other's field. In addition, some Dalit female and child work other agriculture field in farming season for daily wage and males drive Riksa in Dhangadhi town. They carry goods on Riksa from one place to another place daily and the other Dalit youth people go to Bharat leaving their village as well as district for searching job opportunity.

The main occupation of Dalit community is farming, foreign job livestock and manual labor. In addition, they are engaged nominally in business and service sector. But some Dalit people are involved in services whose economic condition is well. The maximum Dalits, the first source of income has been foreign job and the next important source is income from manual labor.

Some Dalit are doing business such as small shop, iron work, sewing clothes. Selling firewood which is carried out from Jali community forest is another source of income. This community forest is open for 4 days in a month to fulfill the demand of firewood, and grass. So, they must be dependent on their selling firewood to maintain household expenditure.

### **6.3 Factors Determining Expenditure Level**

Income and expenditure are two faces of a coin. In the absence of one part, there is no existence of another part. Income is a prime determinant of expenditure level. A person with higher income level can spend more than with low income level because income level determines purchasing power of the consumer and expenditure depends on the consumer's purchasing power.

Expenditure level is also determined by custom culture and tradition. For instance in social ceremony of a particular community, people have a special part where drinks and other expensive foods should be bought. So, people give the continuity on their custom and culture and it makes the higher level of expenditure. For example, expenditure on food and non food items increases in the Dashain and Tihar festival because it is Hindu's tradition.

The individual nature and habits may also influence their expenditure level. Some people may prepare to be involved in social services who give less priority to his life

but more on other self, in this case the level of expenditure will be higher such type of social service oriented person than selfish.

The level of expenditure of any person may also be influenced by the life style prevailing at the society where he is living so that the level of expenditure of an individual in urban areas is higher than rural or remote area because when he adjusts with modern society, living standard of people must be maintained by to spending more than the traditional society.

The condition of health also determines the level of expenditure. The level of expenditure of a healthy person may be less than unhealthy people because healthy people will be sufficient for productive activities or he can do his work physically as well as mentally properly. On the other hand, unhealthy people may not work on productive activities instead of this he should use expensive medicine for this treatment daily.

**Table 19**  
**Population Dependency in Dalit Community**

Type of population	Number of population	Percentage	Remarks
Dependent	146	42.82	< 14 > 60
Independent	195	57.18	< 14 < 60
Total	341	100	

Source: Field Survey, 2011.

Table 19 shows that 42.82 percent people are dependent on other while they were unproductive. Either they are old who cannot work or they are children. Out of total population 57.18 percent people are independent who can do work they were productive.

#### **6.4 Income Expenditure Relationship**

There is positive relationship between income and expenditure. Expenditure either it may be for consumption or it may be for investment or saving. Mathematically,

$$Y = C + I \dots\dots\dots (i)$$

Where,

Y = Income

C = Consumption

I = Investment

The measure of inequalities is one of the most important sources of income expenditure analysis. For this the range, mean, median, mode, the standard deviation, variance, the Lorenz curve, Gini coefficient etc. are the important instrument used.

### 6.4.1 Variance

It is an important statistical tool and is defined as the square of standard deviation taken from the mean of the given series. Symbolically variance

$$V = \frac{\sum (X - \bar{X})^2}{n} = \sigma^2$$

Where,

V = Variance

X = Stands for the values of individual items.

$\bar{X}$  = Stands for the mean of the series and

n = Stands for the total number of items.

Variance is a frequently used measure of variation.

### 6.4.2 Range

Range is one of the important ways of measuring inequality of incomes. It is the difference of highest and lowest value of income and expenditure.

Mathematically,

$$R = H - L$$

Where,

R = Range

H = Higher value

L = Lowest value

Which can be shown in the table 20.

**Table 20**  
**Measuring of Inequality**

	Standard Deviation	Range	Variance	Maximum	Coefficient of variation
Income	67185.7	279900	4513918384.49	301900	58.92
Expenditure	49661.3	189796	2466244718.69	210954	54.43

Source: Field Survey, 2011.

Range of income is high in the comparison of expenditure which suggests that the level of expenditure seems to be similar than the amount of income.

**Table 21**  
**Mean and Median of Income and Expenditure in Dalit Community (in Rs.)**  
**per annum**

	Minimum	Sum	mean	Median	Mode
Income	22000	6499911	114033.53	106730.77	73529.41
Expenditure	21158	5200313	91233.56	81896.55	74358.97

Source: Field Survey, 2011.

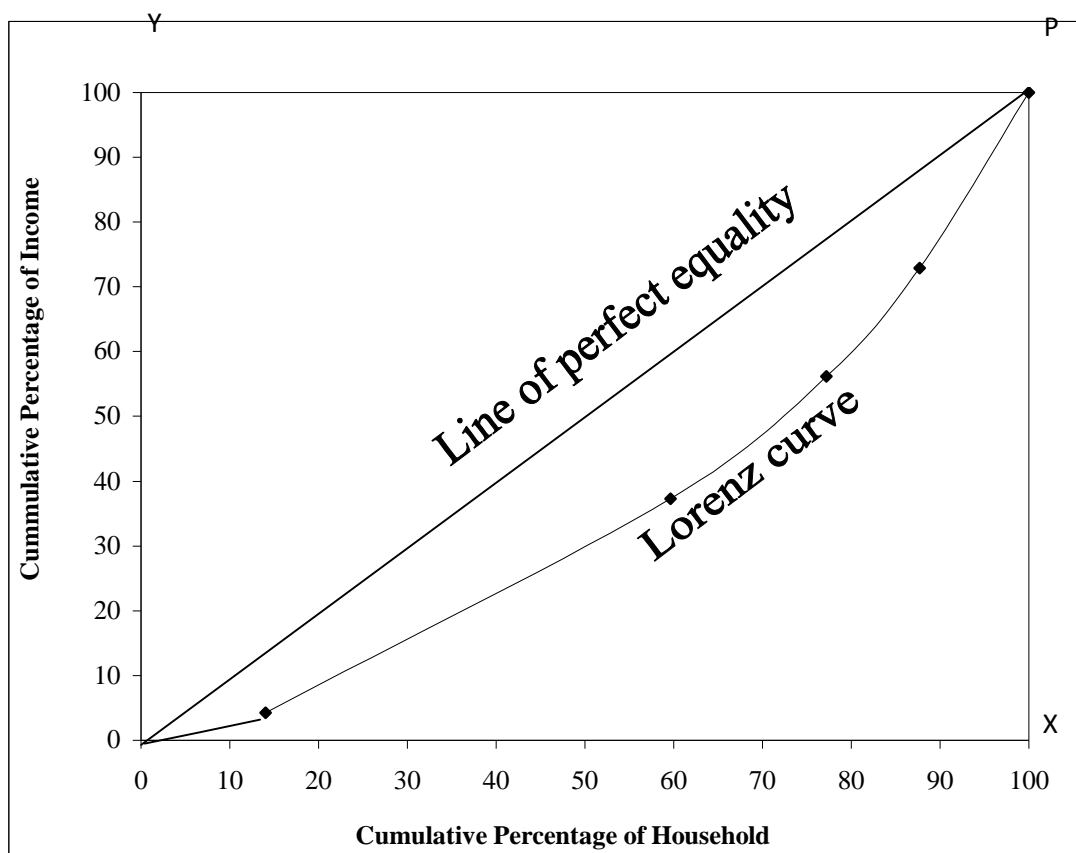
From above table it clears that mean, median, mode of income are 114033.53, 106730.77, 73527.41 and the mean, median, mode of expenditure are 91233.56, 81896.55 and 74358.97 respectively.

### **6.4.3 Lorenz Curve**

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

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

**Figure 1**  
**Lorenz Curve Showing Inequality**



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

**Table 22**  
**Calculate of Gini-coefficient (In Rupees) per annum**

Income	No. of HH	% of HH	Cumulative % of HH	Total income (Rs.)	% of income	Cumulative % of income
0-50000	8	14.04	14.04	273655	4.21	4.21
50000-100000	26	45.61	59.65	2150746	33.08	37.29
100000-150000	10	17.54	77.19	1228610	18.91	56.2
150000-200000	6	10.53	87.72	1087700	16.74	72.94
Above 200000	7	12.28	100	1759200	27.06	100
Total	57	100		6499911	100	

Source: Field Survey, 2011.

Let,  $X_i$  be the cumulative % of HH and  $Y_i$  be the cumulative % of income.

Cum % of HH ( $X_i$ )	Cum % of income ( $Y_i$ )	$X_i Y_{i+1}$	$X_{i+1} Y_i$
14.04	4.21	-	251.13
59.65	37.27	523.55	2878.41
77.19	56.2	3352.33	4929.86
87.72	72.94	5630.24	72.94
100	100	8872	-
		$\Sigma X_i Y_{i+1} = 18278.12$	$\Sigma X_{i+1} Y_i = 15353.4$

$$\begin{aligned}
 G_c &= \frac{1}{100} [\Sigma X_i Y_{i+1} - \Sigma X_{i+1} Y_i] \% \\
 &= \frac{1}{100} [18278.12 - 15373.4] \% \\
 &= \frac{2924.72\%}{100} \\
 &= 29.25\%
 \end{aligned}$$

$$\therefore G_c = 0.2925$$

#### 6.4.4 Gini Coefficient

Gini coefficient is an important way of measuring inequality. The Gini coefficient is defined as the area a between the Lorenz curve and the line of perfect equality.

$$GC = \frac{A}{A + B}$$

Where,

A = Area between Lorenz curve and diagonal line.

B = The area between diagonal line.

In discrete series with ascending order data, to calculate Gini-coefficient, we use the following formula

$$G_c = \left(1 + \frac{1}{n}\right) - \frac{2}{n^2 - \bar{y}} (ny_1 + (n-1)y_2 + \dots + y_n)$$

Where,

n = Number of observation

$\bar{y}$  = Mean value

The Gini coefficient calculated for the income distribution of the surveyed households was 0.2925, which is less than national figure 0.46. This shows that although living condition prevailing in Dalit community is bad, the comparative income distribution situation is not very worse. This implies that there is no much difference between the 'haves' and 'haves not' in the Dalit community under this study.

### 6.5 Regression Equation

It is an important statistical tool. This analysis is used to estimate value of marginal propensity to consume and income consumption relation of the households.

Mathematically,

$$Y = a + b X + U$$

Where,

Y = consumption Expenditure

a = Intercept

b = MPC ( $0 < b < 1$ )

X = Income and

U = error term

As the result of the study from the income expenditure relationship of Dalit community, the simple regression lines fitted are as follows:

- **Total Households**

The consumption income relationship result estimated for the total 57 households is:

$$Y = 9701.1 + 0.71499 X$$

(0.005)      (0.000)

$$R^2 = 0.935 \qquad \bar{R}^2 = 0.934$$

$$F = 799.696 (0.000) \quad DW = 1.75$$

The figures in the parenthesis are the probabilities of the respective t and F ratios. The results show that the individual parameter estimates of autonomous consumption and mpc are highly significant even at 1% level of significance. The estimated value of



marginal propensity to consume is  $0.71499 \cong 0.72$  which implies that increase in income by Rs.1 leads to increase in consumption by 72 paisa. Not whole of their income is consumed; it is either used for saving or used for further production. A high  $R^2$  shows the very good fit of the model to the data. Similarly, the F ratio is highly significant implying that the regression line estimated is highly significant. Finally, the DW-test for shows no autocorrelation in the error term of the regression model. (for  $\alpha = 5\%$ , then values of  $d_l$  and  $d_u$  for  $k=1$  and  $n=57$  are respectively 1.54 and 1.61.

- **Lower Income Group**

A similar result follows the lower income group, where also income appears as a significant determinant of consumption. The results below show that the mpc of the poor is greater than the mpc of the total households.

$$Y = 4937.6 + 0.850 X$$

$$(0.219) \quad (0.000)$$

$$R^2 = 0.916 \quad \bar{R}^2 = 0.909$$

$$F = 120.96 (0.000) \quad DW = 1.54$$

The results show that the individual parameter estimates mpc is highly significant even at 1% level of significance. The estimated value of marginal propensity to consume is 0.85 which implies that increase in income by Rs.1 leads to increase in consumption by 85 paisa. A high  $R^2$  shows the very good fit of the model to the data. Similarly, the F ratio is highly significant implying that the regression line estimated is highly significant. The DW test shows no presence of autocorrelation in the error term.

( $\alpha = 5\%$ , then values of  $d_l$  and  $d_u$  for  $k=1$  and  $n=13$  are respectively 1.01 and 1.34).

- **Middle Income Group**

For middle group also, income level is a highly significant determinant of consumption expenditure. The other statistical results are same as the poor income group except the mpc which is lower for this group than the lower income group and a lower value of  $R^2$ .

$$Y = 2406.8 + 0.78 X$$

$$(0.848) \quad (0.000)$$

$$R^2 = 0.5779 \qquad \bar{R}^2 = 0.563$$

$$F = 39.71 (0.000) \qquad DW = 1.44$$

The DW-test is indecisive to conclude about the presence of autocorrelation as the value of the DW statistic falls on the indecisive zone.

$\alpha = 5\%$ , then values of  $d_l$  and  $d_u$  for  $k=1$  and  $n=31$  are respectively 1.363 and 1.496).

- **High Income Group**

The mpc of the rich income group has been found to be lowest and in case of rich also, income has appeared as the principal determinant of consumption as shown by the probability of the t-ratio and high  $R^2$ .

$$Y = 15636.2 + 0.689X$$

$$(0.517) \quad (0.000)$$

$$R^2 = 0.79 \qquad \bar{R}^2 = 0.78$$

$$F = 43.57(0.000) \qquad DW = 1.94$$

The DW-test shows that there is no presence of autocorrelation in the error term of the regression model.

$\alpha = 5\%$ , then values of  $d_l$  and  $d_u$  for  $k=1$  and  $n=13$  are respectively 1.01 and 1.34).

## **CHAPTER SEVEN**

### **CONCLUSION AND RECOMMENDATIONS**

#### **7.1 Conclusion**

This study has attempted to analyze the income and consumption pattern of Dalit community in Dhangadhi Municipality - 6, of Kailali district.

The location of survey selected was Dalit community Dhangadhi municipality 6 of Kailali district because Dalit community was very backward than others. The statistical analysis of the study area has been based on the data collection through direct personal interview using questionnaire.

To test inequality in income distribution, Gini concentration ratio, Lorenz curve, standard deviation etc. were applied in this study. Simple regression equation is also used to analysis data.

The major conclusions of the findings of the study area as follows:

1. In the field survey, the total population has been found to be 341 consisting 185 male and 156 female i.e. 54.3 percent male and 45.7 percent female,.
2. In this study average household size is found to be 5.98. The dependent population was found about 42.82 percent of the total family members. 58 percent were active population which works 7-8 hours in farm per year. Therefore, they are not fully employed. So, remaining other months, they have to go to Bharat for jobs. Large percent of dependence shows the possibility of further degradation in their existing standard of living. Much more people are absorbed by foreign job sector which is the first position of income sources while second position is taken by services. Around 28 percent active population is engaged in manual labor and business sectors and remaining active populations were based on agriculture sectors. People from this community are living at the substance level.

3. In this study, the distribution of population by sex is 54.25 percent male and 45.75 percent female. Similarly, the distribution of population by age group were found as between the age of 0 to 14 years, 15-59 years, and above 60 years are 39.29 percent, 57.29 percent and 3.52 percent respectively.
4. It was found that higher the household size, higher the income generation and lower the household size lower the share of income. This is because more people to go to Bharat whose household have more population and less family size cannot go to Bharat. So, foreign job takes first position in their income rather than other sector.
5. Much of the income was derived from foreign job, which constitutes 39.75 percent of total income of the study area. From 20.15 percent of income of 12 households comes from services. 9.24 percent of income of 16 households obtained from business. 18.62 percent of income obtained from manual labor which takes third position. Almost all families were engaged in agriculture sector but only 3.19 percent income obtained from agriculture sector which is very negligible and business, livestock, sell firewood and pension are also negligible.
6. Land has dominant share in asset structure. In some groups, it is more than 75 percent of their total assets. Every household has least small part of land and some people have no land also and they have no assets, muddy, hut houses and some livestock.
7. In the study area, education status is not satisfactory as 57.17 percent of the population is illiterate.
8. The literacy rate of female is lower than male.
9. Of the total expenditure, all the groups (small income, middle and high income) spend more for alcohol and meat. On an average, it is about 14 percent of the total expenditure. Clothing occupies third position. Most of the

people use simple type of clothes. Expenditure in beverage is very high in high income group. As income increases the expenditure in beverage also increases.

Expenditure in education, nutrition, food and health seems to be negligible. Therefore, their productivity is decreasing day after day.

10. In the study area, the Gini concentration ratio is 0.2925 on households' income basis. As national comparison is concerned, it is 0.46 which is higher than in our study area. This proves that there is no much difference in conditions of living of Dalit community in Dhangadhi municipality.
11. The annual average household consumption is found to be Rs.91233.56, annual average per capita consumption is found to be Rs.15250.18 out of which 36.33 percent and 63.67 percent were shared by food and non food items respectively.
12. The marginal propensity to consume for the study area was found to be 0.72. It is 0.85063, 0.78162 and 0.68907 for low, middle and high income group respectively.
13. In the study area all the income groups fulfill the basic concept of Keynesian Psychological law of consumption functions. The household size affects less on consumption in the context of this study area.
14. About 60 percent of the households earned below Rs.100000 per annum, of the rest 28 percent of the households earned above 1,00,000 and below 2,00,000 and the remaining households above Rs.2,00,000 per annum and the highest earner is found to be 3,01,900 per annum.
15. In general, it is found that larger the household size larger is the household income.

## 7.2 Recommendations

From the study, it is found that there is the problem of low productivity in the several sectors and unequal distribution of income between different households. There is disguised unemployment in the agriculture sector.

To improve the economy of the study area, the following recommendation can be made hoping that these will be useful for planners and policy makers.

1. The productivity of agriculture sector should be increased by providing improved seed, necessary pesticides, fertilizer, and to manager irrigation facility to the farmer in this community. Agro-vet techniques should be provided to the farmers. In appropriate place the agriculture market should be established.
2. The literacy rate is found to be low. Therefore, proper education programme should be implemented in this community and free schooling for all Dalit people.
3. There is disguised unemployment, underemployment and seasonal unemployment in the study area. The opportunities of employment should be increased. For this, the government expenditure should be channeled in those sectors which may create the employment opportunity for the Dalit people.
4. Low income groups have high MPC and they spent more on food than non-food items while high income groups attracted to unnecessary non-food items such as alcohols, fashionable clothes etc. The people in study area have been found less conscious about the significance of education and health so that social awareness program should be carried out in the Dalit community.
5. The tax structure on the beverage items need to be progressive one so that high income group will attempt to curtail their consumption, thereby increase the saving for investment in the productive areas.

6. Nowadays foreign employment has become a popular alternate for most of the unemployed Nepalese youths. In the context of Dalit community, nobody has success in foreign employment for third countries. They are limited only in India for searching job opportunity, which may not be sufficient to improve their existing economic condition. Hence, the government should provide some foreign job opportunity for poor backward community such as like Dalit by providing free visa. For this purpose, government may instruct for backward group.
7. In the study area, literacy and all kinds of education of female is found low as compared to male. Thus, the government should give priority to women education in the study area.
8. To generate employment and income of unemployed person in this community, some cottage industries can be established based on the local raw material.
9. Dallit people spent more amount on unproductive sector like jewelleries and luxuries items. So government should establish financial institutions. For this, financial institutions should provide them attractive interest rate.
10. Expenditure on smoking, drinking and unnecessary expenditure on tradition, festivals should be discouraged.

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## APPENDIX A

### Household Survey Questionnaire

### HOUSEHOLD SURVEY QUESTIONNAIRE

### DHANGADHI MUNICIPALITY

Ward no: ..... Date of interview: .....

#### (1) General Information

Name of household head: ..... Religion:.....  
Age: ..... Sex: ..... Education: .....  
District: ..... Municipality: ..... Ward no: .....

#### (2) Family Structure by Age and Sex:

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

#### (3) Education Status:

Education	Male	Female	Total
Illiterate			
Literate			
Under SLC			
SLC			
Above SLC			

#### (4) Occupational Status of Economically active population (15-60).

Occupation	Male	Female	Total
Agriculture			
a) Self			
b)Hired/ rented			

Business/ Trade			
Service			
a) Government			
b) Non Govt.			
Foreign job			
Unemployment			
Others			

**(5) Type of House**

(a) Jhupadi ( ) (b) Kachee ( ) (c) Pakkee ( )

**(6) Ownership of House**

(a) Own House ( ) (b) Rented from Other( )

**(7) Type of Toilet**

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

**(8) Electricity Facility**

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

If yes, Source

(a) From Govt.( ) (b) From biogas( ) (c) Others( )

**(9) What are the Source of drinking water?**

(a) Tap ( ) (b) Hand pump ( ) (c) Deep well ( )

(d) River ( ) (e) Others ( )

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

(a) yes ( ) (b) No ( )

If yes give the following information.

S.N.		Name of Disease	Died	Type of Treatment			Treatment Exp.
				Doctor	Ayurvedic	Dhami/Jhakri	
1	Male						
2	Female						
3	boy						
4	girl						

**(11)Annual Source of Income.**

(a)Income from agriculture.

S.N.	Crops	Quantity (kg)	Value (in Rs.)
1	Paddy		
2	Wheat		
3	potato		
4	Maize		
5	Vegetables		
6	Fruits		
7	Others		
8	Total		

(b) Income From Non -Agriculture Sector.

- (i) Income from service: .....
- (ii) Income from pension: .....
- (iii) Income from foreign job: .....
- (iv) Income from labouring: .....
- (V) Income from Trade/Business: .....
- (VI) Income from other sources: .....

**(12) Income from livestock and animal products.**

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

**(13) Sector of Expenditure (last year).**

(a)Expenditure on food items.

S.N.	Items	Expenditures(in Rs.)
1	Paddy/rice	
2	Wheat	
3	Dal	
4	Salt	
5	Vegetables	
6	Milk	
7	Meat	
8	Eggs	
9	Tea/Sugar	
10	Oil	
11	Fruits	
12	Cigarette/Wine	
13	Total	

(b) Expenditure on Non Food Items.

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

(c) Expenditure on agriculture production.

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

(d) Expenditure on livestock production.

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

**(14) Amount of Landholding (in Kattha).**

S.N.	Types of land holding	Irrigated	Non irrigated	Total
1	Own			
2	Rented in			
3	Rented out			
4	Total			



## Appendix- B

### Income and Expenditure of Dalit Community

S.N.	HH	Y	X2
		Income (In Rs)	Expenditure (in Rs.)
1	H1	42875	44934
2	H3	42300.	42235
3	H8	61300	60000
4	H28	27440	35460
5	H29	45310	48235
6	H30	28700	27830
7	H34	61100	48179
8	H37	74200	72675
9	H40	34000	30700
10	H45	55400	48528
11	H48	22000	21158
12	H53	72225	65050
13	H55	31030	27777
14	H2	75800	56150
15	H4	75200	59500
16	H6	90700	74150
17	H7	84389	68834
18	H10	102000	66669
19	H12	98150	72808
20	H16	82900	68780
21	H17	88800	60492
22	H18	88740	72020
23	H21	137000	105517
24	H22	107800	94820
25	H23	77720	62548
26	H24	80170	69354
27	H25	85300	89434
28	H27	92000	89769

29	H31	75950	65165
30	H32	126500	91975
31	H33	99500	66190
32	H35	80200	67627
33	H36	86100	72409
34	H38	98800	94970
35	H39	136000	143260
36	H41	125400	109015
37	H43	123440	107540
38	H44	99400	80120
39	H47	116010	59830
40	H49	109880	75818
41	H50	98400	65780
42	H52	79202	84545
43	H54	89100	53150
44	H57	144580	114323
45	H5	185000	176310
46	H9	182300	123050
47	H11	201000	156358
48	H13	252000	199097
49	H14	199000	156386
50	H15	189100	139336
51	H19	171500	124030
52	H20	160800	108365
53	H26	264000	206768
54	H42	201200	156296
55	H46	301900	210954
56	H51	294600	200180
57	H56	244500	207860
total		6499911	5200313
MEAN VALUE		114033.5263	91233.5614