

Poverty in Rural Nepal : A Case Study of Purana Jhanga Jholi VDC of Sindhuli District

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INTRODUCTION

Poverty is mostly concentrated in the rural areas of underdeveloped countries like Nepal. Poverty in rural areas is basically caused by low productivity of agriculture, the limited base and the inadequate growth rate of non- agricultural sector in the economy, low workforce productivity, high growth rate of population, poor agricultural policy and topographical disadvantages . Low level of percapita income in rural sector with low rate of saving causing low rate of capital formation and investment, alongwith the reliance of farmers on traditional inputs and prevailing technology can also be assumed as the cause of poverty.

So far the problem of poverty is concerned, it has multidimensional characteristics. Unemployment, underemployment and high income inequalities are apparent features of poverty. Not only the economic conditions but also the socio-cultural conditions have much to do with poverty, and in the rural area the lower caste groups are mostly poverty ridden people. As caste is still an important social set up in rural area, it has affected the ownership, control and use of land and other economic resources. Thus, it is not on exaggeration to say that most of the people in rural areas live in deprived condition with the lack of basic essentials of life.

Nepal is an agricultural country where majority of its population lives in rural areas. Agricultural sector is bifurcated between the rich and the poor, land owners, peasants tenants and labourers. Poverty strikes unevenly to the lower groups and the process of economic growth further has accentuated the difference in living standard between them. Thus, it is agricultural labourers, the landless and the near landless who form the core of the rural poverty in Nepal.

Nepal, having high man-land ratio and the majority of the rural people being based on land and its productivity, large number of people in rural areas are poverty ridden. Given the present trend of high population and low rate of economic growth and the absence of a concerted effort in poverty alleviation, the number of poor in Nepal is likely to increase substantially in coming future. Out of the total world

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population of 5.3 billion, South Asian region had a population of 1.1 billion and out of this 440 million population fall below the poverty line i.e. nearly 40 percent. Among the 440 million poor, nearly 360 million live in rural areas and 80 million in urban areas(WB 1994). Thus, it is clear that rural poverty is the greatest challenge for every South Asian country, hence, for Nepal also.

SCENARIO OF POVERTY IN THE STUDY AREA

From the field observation the author has found most of the poor people do not own the land. Among the two types of land categories. i.e. Khet and Bari, most of the absolutely poor people do not have Khet and very few have a few acre of Bari.

The village consists of two types of absolutely poor viz. those who have land and those who do not have land. Those who have land keep their land as the mortgage and borrow money from the village merchant in high rate of interest which is more than 100 percent higher than the bank rate. Most of the borrower are unable to repay the money they have borrowed, making a vicious circle of poverty by themselves. There are another type of borrowers also who borrow the money once but never become able to pay the debt so, the money lenders hire him as the Hali (bullock worker) throughout his life. They struggle severely for existence. Out of seventy households in the village, 29 households are absolutely poor and out of this 29 absolutely poor households, 20 are from low caste group viz. Damai, Sarki, Kami etc. The table 1 makes it clear.

Table 1
Castewise Distribution of Absolute Poor

Caste	Number of Absolute Poor Hhs	Percentage of Absolute Poor Hhs
Upper	9	31.04
Lower	20	68.96
Total	29	100

Source : Field Survey by the Author, 1993.

Table 1 shows that the percentage of lower caste people in absolute poverty is more than double of the percentage of upper caste people. The children of the absolutely poor households look always sick and have poverty stricken faces. They are ill-fed and torn-clothed. Their health seems very bad. Some of them go to the school for studying but the difference in caste and dominance of upper caste people are also apparent in the school complex also. Though, the government has provided free education and distributed books freely up to primary level education, the children of the absolute poors are not facilitated by it. It is mainly due to two reasons, which are:

(i) most of the children from absolute poor households have to work in their rich neighbours houses as a servant, when they are 6 year or

more of age. The Children Act has not been still observed on them, and (ii) the environment in which they are born is not so appropriate to learn something. It is because they stay in the house where is the lack of even a simple kerosene light i.e. *Tuki* is not available.

These factors make them to be born in poverty, live in poverty and die in poverty. It is the agricultural labourers, the landless and the near-landless who form the core of the poverty in the study area. Though, poverty strikes unevenly to these groups, the weakest sectors of the rural society have suffered most severely from the declining standard of living and poverty ridden conditions.

Though the rural poor are a heterogeneous group, they have common disadvantages viz. limited resources, limited assets, environmental vulnerability and lack of access to public services and amenities, specially educational and medical. Most of the people do not desire a comfortable house. They are fate believing people and do not blame the government and other institution for their poverty. They believe that their poverty was god given. Most of the absolutely poors express their intention of going to urban area, preferably, Kathmandu in order to earn more.

POVERTY SITUATION IN THE STUDY AREA

So far the problem of poverty is concerned, two types of poverty lines are estimated viz. absolute poverty line and relative poverty line. The absolute poverty line indicates the level of income which is termed as required for minimum subsistence or for survival. Those persons whose income is below poverty line are called absolute poor or below poverty line poor. In similar fashion, Keynesian notion or break-even technique is used to draw the total poverty line. It is defined as the Wolf-point level of income where it just equals the consumption expenditure. Those persons whose income level is below this point are called poor. However, it would not tell about relative poverty. Thus, it is believed that if the income of a person is below the total poverty line but above the absolute poverty line, the person is relatively poor. In this connection, it is generalized that total poor is sum total of absolute poor and relative poor.

Absolute Poverty Line and Absolute Poor

For the computation of absolute poverty line, minimum subsistence norm is followed. The income level required to purchase a basic need bundle of goods and services is, thus, defined as absolute poverty line. This level of income is only sufficient for survival. The computation of poverty line of this VDC is based one the specified food calorie requirement. In the present study, the minimum calorie requirement per day has also considered. However, it is noticeable that there is no fixed calorie requirement percapita per day in this VDC.

The National Planning Commission has fixed the basic need income on the basis of daily calorie requirement for the regional as well as national level. The minimum daily calorie requirement for mountainous region has been fixed at 2340 calorie and for terai, it is 2140. Thus, it has fixed at 2250 calorie for national level. National Planning Commission has estimated different absolute poverty lines for different regions. It has assumed that in *Poverty Bundle of goods and services*, expenditure on food items covers only 65 percent of total consumption expenditure whereas 35 percent of expenditure is made on non-food items. Based on this assumption, NPC has calculated basic need income percapita per day equal to NRs. 5.94 for hill and NRs. 4.75 for terai. The study area lies in the hilly region, thus, the minimum calorie requirement is 2340 calories percapita per day. However, in the present study, the national average is followed.

In the study of FAO, daily calorie requirement for Nepal is 2256. It further informs that to fulfill these required calorie intake, the consumption of 603 gram of cereals and 60 gram of pulses are essential. The person can take the cereal or pulse item individually or in combination. Out of 2256 calories requirement percapita perday, 2042 calories are obtained from the consumption of 605 gram of cereals and the remaining 214 calories, from the consumption of 60 gram of pulses.

To arrive at the percapita per day value of 605 gram of cereals by averaging the local market prices of these items, cereals are multiplied by their respective prices. Similarly, we arrive at the per capita per day value of 60 gram of pulses. The summation of these two values gives us the total value of 2256 calories per capita per day. In this connection, only those cereals and pulses are taken which are common in the study area. Considering this, the value of 2256 calorie percapita per day is found to be NRs. 6.38.

According to NPC, the expenditure on food item only covers the 65 percent of total expenditure percapita per day. Remaining 35 percent of total expenditure will account on the other basic needs i.e. on non-food items. Thus the value of minimum average actual daily consumption expenditure on other non - food items is found to be NRs 3.43 for the study area. Summing up the expenditure on food and non-food item, we arrive at the absolute poverty line. Thus, the absolute poverty line income percapita per day for Purana Jhanga Jholi VDC is NRs. 9.81, which is just for bare subsistence.

Relative Poor and Relative Poverty Level

To estimate relative poor, Wolf-point is computed. The Wolf-point level of income is that level of income which is just equal to expenditure.

The Wolf - point is $a/1-b$ in Keynesian Linear Consumption Function. If a household falls below this point, the household's consumption expenditure exceeds income. Such households have nothing to save, rather they have to draw on past savings, sell assets or incur debt to maintain expenditure. Using percapita daily income and consumption expenditure, a linear consumption function is estimated and using Least Square Method, regression is computed to find out the value of a and b in the Wolf-point. Thus, the present study found the Wolf-point to be NRs. 15.18 percapita per day. In this way, the households with income level below this point and above the absolute poverty line are called relatively poor households. So, the Wolf-point is also taken as the total poverty line, because the households with the income below this point are poor.

The Incidence and Extent of Poverty

There is a controversy regarding the level of total poor in Nepal in various studies. Some researchers conclude that nearly 60 percent of rural people are poor whereas, the other researches says that nearly 50 percent of the rural people are poor. However, all believe on the same notion that there is the existence of high degree of poverty in the rural areas of Nepal than in its urban area. The present study makes an effort to find the percentage of total poor and what fraction of the total poor constitutes absolute poor and relative poor.

Considering the NRs. 9.81 percapita per day income as the absolute poverty line for the study area, out of 70 sampled households which were interviewed, 29 households fall below the absolute poverty level. In this way, it has been found that 41.42 percent households are absolutely poor. In other words, out of 402 population, 173 people have the income below than NRs 9.81 percapita per day. Thus, 43.03 percent population is absolutely poor in the study area.

Concerning NRs 15.18 as the Wolf-point level of income and NRs. 9.81 as absolute poverty level of income, the study reveals that out of 70 sampled households, 13 households have that level of income which is greater than absolute property line income and less than Wolf-point level of income. On the basis of this, it is estimated that 18.57 percent of the total sampled households is relatively poor. In other words, out of 402 population, 68 people are relatively poor. Thus, out of total sampled population, 16.91 percent of them is relatively poor.

The summation of absolutely poor and relatively poor gives the percentage of total poor. So out of 70 households, 42 households i.e. 60 percent to the total households are poor. And out of 402 population, 241 people are poor i.e. 59.95 percent of total population is found to be poor.

The table 2 presents the total poor in the study area.

Table 2
Distribution of Households by Living Standard

Categories of Living Standard	Sampled Households	Percent	Total Number of Population	Percent
Total Households	70	100	402	100
Absolute Poor Households	29	41.42	173	43.03
Relative Poor Households	13	18.57	68	16.91
Total Poor Households	42	60	241	59.95
Non Poor Households	28	40	161	40.04

Source : Field Survey by the Author, 1993.

The findings of the percent study are different from other studies, and a comparative study can be seen from table 3.

Table 3
Absolute Poor Households and Population

Study Area	Total Number of Households	House Holds below Poverty Line		Total Population	Population below Poverty Line	
		Population	Percentage		Population	Percentage
Nepal (Rural)	2136168	860769	40.3	12445368	4505835	36.2
Panchthar (Sample)	89	56	62.92	519	333	64.14
Purana Jhanga Jholi	70	29	41.42	402	173	43.03

Sources : NPC, *A Study of Employment, Income Distribution and Consumption Pattern in Nepal*, 1987.

Dahal, K.K and Shrestha, M.K., *Rural Poverty in Nepal*, : A Case Study of Panchthar District, 1987.

Field Survey by the Author, 1993.

The figure of the absolute poor in the present study is higher than the national average estimated by NPC. But it seems lower than in other studies. There are various reasons for its deviation from others. The estimation of absolute poor is influenced by the factors which affect the value of minimum basic essentials of life. Some of these factors are local market price of food and non-food items, nearness from the city, season when the sampled households are surveyed, etc. Since the food items are cheaper in the study area than that of other urban area of Nepal, the value of minimum subsistence food basket is low. Thus, it affects the absolute poverty line. In the same way, as the area is far from the city, the cost of living is low. It is due to two reasons. First is that, the people spend very little money on wearing cloths and on medical care. Second is the low degree of demonstration effect.

To determine the relationship between the poverty and employment, it is assumed that those members who are in the age group of 13 to 59 years constitute the working age group and the remaining are considered as the non-working age group. The table 4 shows the distribution of population by working age group.

Table 4
Distribution of Population by Working Age Group

Group of Population	Number			Percent		
	Male	Female	Both	Male	Female	Both
Working Age Group	141	76	217	69.11	38.38	53.93
Non-working Age Group	63	122	185	30.89	61.61	46.01
Total	204	198	402	100	100	100

Source : Field Survey by the Author, 1993.

From the table 4 it is clear that out of total sampled population 53.93 percent is found to be in working age group. In other words, 69.11 percent of male out of 204 males is in working age group, whereas only 38.38 percent of female out of 198 females is in this group. In the study area, the percentage of female in non-working age group is comparatively high. However, it is not so effective in our analysis because most of the outside jobs and income creating activities are not done by them.

On the basis of employment hours, the working age group population is subdivided into three categories viz. fully employed, underemployed, and unemployed. To perform the analysis, the study has assumed that the people engaged with the work at least for 21 hours a week or nine months or more in a year are considered as fully employed. Those having less than that but more than 3 months in a year are considered to be underemployed. Those having less than 3 months work in a year are considered as unemployed.

Considering this criteria, it is observed that the top 20 percent of households has nearly 37 percent of fully employed family member whereas the bottom 20 percent of households has only 4.41 percent of fully employed population. Out of 217 working age people only 68 persons are employed, 82 are underemployed and 67 are unemployed. Thus, it is clear that there is a significant relationship between the employment and the level of income. It is concluded on the basis of Chi-square test value. In other words, the calculated value of Chi-square is greater than tabulated value signifying that the alternative hypothesis is accepted. In our case, the calculated value of Chi-square is 50.97 whereas the tabulated value is only 28.9.

MEASUREMENT OF POVERTY AND ITS EXTENT

For measuring the incidence of poverty, Sen's Poverty Index is calculated. The computation of this index answers the question, "how poor are the poor?" The index is based on the ordinal welfare concept. The value of Sen's index is calculated into two ways, viz. considering Gini-coefficient and without considering Gini-coefficient. In this case Gini-coefficient represents the extent of inequality which is taken as one to the major determinant of poverty.

Measurement of Income Inequality in the Study Area

In order to study the income distribution and inequality on its distribution, the sample households of the village are divided into ten income groups. Each group occupies 10 percent of total sampled households i.e. in each decile there are 7 households. It has been ranked from the low income group. Thus, the first decile covers 10 percent of high income households' group.

In the study the percapita daily income is used for analysis. It is found that top 10 percent of household members has secured nearly 20 percent of total income whereas the bottom 10 percent of household members receives only 3 percent of the total income. So the share of these groups have very high inequality in the distribution of income. Thus, to find out the value of the area of concentration or extent of inequality, Gini concentration ratio is computed. Considering percapita per day income, the value of Gini-coefficient ratio is calculated to be 0.3112 among total sample.

Income Distribution among Absolute Pooors

There is not only difference in the distribution of income between the poor, but among the absolute poor also there is significant difference of income. The simple statistical tool *range* represents the extent of inequality which is calculated to be 1.028 for absolute ppoors. It is no less than that of the range value among the total sampled which is 1.836. Table 5 represents the income inequality among absolute poor.

Table 5
Income Distribution among Absolute Pooors

Percapita Per Day Income Group (in Rs.)	Number of Households	Number of Population	Percent of Absolute Poor Population	Percapita Mean Income Per Day (in Rs.)	Percentage Share of the Total Absolute Pooors	Percentage Share from the Total Income of Sample Households
3-5	8	51	29.47	3.87	16.33	3.156
5-7	8	43	24.86	6.06	25.57	4.942
7-9	8	46	26.59	7.74	32.66	6.312
9-9.81	5	33	19.08	9.63	25.40	4.908
Total	29	173	100	6.536	100	19.323

Source : Field Survey by the Author, 1993.

The absolute poor population and households are divided into four income groups. The first group covers those whose percapita per day income ranges from NRs 3 to 5. The second group covers those population or households whose percapita daily income ranges from more than NRs. 5 to 7. The third group covers the population or households whose per capita income ranges from more than NRs 7 to 9. Similarly, the last income group contains those households or population whose percapita daily income is more than NRs 9 but less than the minimum subsistence level of income i.e. NRs 9.81. Thus, it is clear from the table 5 that there is significant difference in the distribution of income among absolute poor. Out of 29 absolute poor households, 8,8,8 and 5 households or 29.47, 24.86, 26.59 and 9.63 percent of absolute poor belong to these income groups respectively. In this connection, the Gini-coefficient technique is used to measure the extent of inequality among absolute poor. Based on actual figures, the Gini-coefficient is recorded as 0.1837. So the income inequality can also be taken as the main determinant of poverty.

Sen's Poverty Index

Concerning the question, "how poor are the poor", Sen's Poverty Index has been calculated. The ordinal welfare concept is its basis. It is defined as follows :

- (a) concerning the income inequality i.e. the Gini-coefficient of the absolute poor, we compute the sen's Index as follows :

$$P^* = \frac{X}{C^*p} [C^{\wedge}p - C^{\wedge}p (1-Gp)]$$

Where,

P^* = Poverty index

X = Percentage of population below poverty line

C^*p = Poverty line

$C^{\wedge}p$ = Mean income of the poor

Gp = Gini-coefficient of the absolute poor

In this equation, $C^{\wedge}p$ can also be taken as the mean consumption expenditure of the poor, if we assume the Gp as the Gini-coefficient of the consumption expenditure of the absolute poor, and as the Gini-coefficient of the absolute poor is 0.1837, it is serious to some extent. As the value of Gini-coefficient approaches to zero, it implies less inequality of income distribution. But if it approaches to 1, it means the greater inequality in the distribution of income. So the intensity of poverty problem is also severe, as the value of poverty index considering income inequality is recorded to be 0.1962

- (b) For computation without concerning the income inequality following formula is used:

$$P^* = \frac{X}{C^*p} [C^*p - C^{\wedge}p(1-Cp)]$$

Applying this, the value of poverty index is calculated as 0.1436. These two types of Sen's poverty indices are presented in the table b

Table 6
Index of Poverty

Poverty Index	Considering Income Inequality	Without Considering Income Inequality
p*	0.1962	0.1436

Source: Field Survey by the Author, 1993.

CONCLUSION

Most of the Nepalese poor live in rural areas, thus, it can be said that poverty is one of the major characteristic of the rural part of Nepal. Most of the Nepalese poor are usually peasants whose main means of support are agricultural production and livestock raising. The problem of poverty arises due to various reasons. Some of them are: small size of land holding, production only for self consumption, lack of market facilities and market-oriented behavior and other basic infrastructure, and lack of off-farm jobs.

It is also found that the existing distribution of income is highly unequal and it helps to strengthen the circle of poverty. Thus, it is not only that the inequalities and concentration of income are acute but it is chronic fact that the level of income itself is very low being the average monthly income of the poor only NRs. 190, which is very negligible for maintaining livelihood. There is spatial dimension of poverty also i.e. locational remoteness of the poverty. It is mainly because there is no access to basic services, communication, roads and markets also.

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