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Nature and Pattern of Disguised Unemployment in Nepalese Agriculture

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INTRODUCTION

Discussion about over population is an age old topic in economic literature; inspite of non-existence of a generally acceptable concept of optimum population. But the concept of agrarian excess or surplus population; or of disguised unemployment in agriculture, have, in contrast, a precise meaning which emerged in the late 1920s. Since the 1940s this has been made one of the cornerstones of the theory of development of underdeveloped countries (Rosenstain Rodan 1978).

The latest terminology of economic growth is termed as increases in real income per head, sustained over a long period of time. Modern economic epoch is set a part from earlier times by the extended application of science to problem of economic production. Even though continually increasing income per head is the central economic feature of economic well-being, this is not the only important change associated with the move from a pre-industrial to an industrialized state. There are usually marked changes in economic structure; as such the relative share of agriculture in output and employment falls significantly. More fundamentally, there are changes in attitudes and institutions that facilitate the application of science and technology to economic life.

The process of the emergence of a money economy from a subsistence state has been formalized by Prof. Lewis in his celebrated paper *Economic Development With Unlimited Supply of Labour*, assuming a dual economy with a modern exchange sector and an indigenous subsistence sector and that there is an unlimited supply of labour in the sense that the supply of labour exceeds the demand for labour at the subsistence wage level. He argued that an underdeveloped country can develop its economy by gradually shifting its labour force into the modern industrial sector.

As the agriculture provides the potential for capital accumulation in industry by providing a marketable surplus, greater the surplus, cheaper the industry can obtain food; and more saving and the capital accumulation for industrial expansion can be undertaken. But industry also needs a market for its industrial goods, which in the early stage of development must largely come from agriculture. Now, what is required is a simple model which brings together agriculture and industry in an

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equilibrium framework. Therefore, the agriculture bears a high significance in the study of development of any nation.

One can find that historically the underdeveloped countries stretching all the way from South-Eastern Europe to South and South-Eastern Asia have been caught-up in the vicious circle of poverty with a characteristics of over population and absence of occupation, and are engaged with zero or negligible productivity. In such case the total output might, perhaps, not decrease significantly if some of the so-called employed persons are removed from land. Apparently they are disguised from their state of unemployment. This is a common character of rural over populated peasant economy. This phenomenon has been called disguised unemployment. As Nurkse says, underdeveloped countries suffer from large scale disguised unemployment in the sense that even with unchanged techniques of agriculture, a large part of population engaged in agriculture could be removed without reducing agricultural output. The same farm output could be obtained with a smaller labour force without any change in method.

Disguised unemployment, in its strict sense, therefore, means that, given the techniques and productive resources, the marginal productivity of labour in agriculture over a wide range is relatively zero. It is possible to withdraw some surplus labour from agriculture without reducing total farm output. Such situation is found where too many workers are engaged in agricultural operations because of the lack of alternative or complementary employment opportunities. Thus the chronic and large scale underemployment in agriculture is common.

CONCEPTUAL FRAMEWORK

Unemployment may be defined as a situation in which job seekers are unable to get the job at the existing wage rate. There are different kinds of unemployment such as seasonal unemployment, frictional unemployment voluntary unemployment, involuntary unemployment. Before the Great Depression of 1930s, classical economists were of the view that there is always full employment in the economy. But the Great Depression of 1930s, totally discarded the classical theory. In 1936 Keynes propounded the theory of unemployment equilibrium. He laid a frontal attacks on the classical concept with arguments that any particular producer's output and employment decision depend on the relationship between costs and prices. In this context Keynes introduced a new concept of unemployment known as involuntary unemployment, meaning of a state of being unemployed in spite of willingness to work at the given wage rate and pleaded that this phenomenon exists only in rich industrial countries. But the post-Keynesian economists do not agree

with this concept. They argue that disguised unemployment exists also in underdeveloped countries typically and chronically in agriculture. Disguised unemployment is said to be present if a part of labour force, say 5 percent, can be removed from the production without reducing aggregate output, and in fact, even increase may occur in aggregate output when the input of labour is reduced.

The concept of disguised unemployment, however is not unanimously accepted by economists. The main writers who believe that such condition are widespread in the underdeveloped countries are Arthur Lewis, Ragner Nurkse and Rosenstain Rodan. The modern theory of disguised unemployment is associated with marginal productivity of labour in agriculture which is low compared with other branches of the economy. Gerald M. Meir argues that the theory of widespread disguised unemployment is an exaggeration, because there lies possibility to improve methods of production in agriculture, to increase the skill of farm labourers, change in social habits, new sprit of implanting and the resisting, moving towards cities and working in factories. Changing technology in industry can employ unskilled rural workers, capital and other co-operating factors, entrepreneurs, managers, skilled foreman etc. can be provided in larger quantities, agriculture can release a lot of labour without loss of output, and industrial output be stepped up at the same time. However, Nurkse is of the opinion that the disguisely unemployed are incapable of personal identification. For the lack of personal identification we shall have to rely upon the labour market wage rates which have got many explanatory views to appropriate the subject concerned, yet the phenomenon of disguised unemployment is virtually a chronic problem of least and underdeveloped countries. Based on the availability of land, labour and capital, these countries are classified into two groups. The countries which have only the shortage of capital but not land, are grouped as underpopulated. Here land is abundant in supply and there is a shortage of labour. The countries where there is a shortage of both capital and land, are grouped as overpopulated. As there is high population, invariably, there is unemployment and underemployment of labour, and the term disguised unemployment spells out a situation in which the removal, from a working combination, of factors of some units of labour, nothing worth mentioning change is observed, level of the aggregate production does not decrease and, may even increase.

NEPALESE AGRICULTURE SCENARIO

Agriculture is the backbone of the Nepalese economy. It provides employment to more than 80 percent of the labour force and contributes over 50 percent to total gross domestic product (GDP). It is also a major source of export and raw material to most of the agro-based industries. The role of agriculture in the economic development of Nepal was recognized in the past and was accorded highest priority in the

development plans, however, it did not receive high priority in the first three developmental plans, but the achievements were not satisfactory. It was mainly due to the lack of prioritization in implementation, lack of coordination among related agencies and supply oriented services and inputs.

The share of agriculture in Nepal's GDP is given in Table 1. The contribution is declining over time. In 1974/75 agriculture accounted for about 70 percent of real GDP but its share fell steadily to about 60 percent in the late 1970s and to its lowest level, 43 percent, in 1992/93 and 1993/94. Between 1974/75 and 1993/94, the average growth rate of GDP in agriculture in real term was 6.75 percent. During the same period, the average annual growth rates of non-agricultural GDP and total GDP were 12.6 percent and 9.33 percent respectively.

Table 1
Gross Domestic Products of Agriculture in Real Terms 1974/75 to 1993/94

NRs. in million

Year	Agriculture GDP	Total GDP	Agriculture as Percentage of Total
1974/75	11550	16571	70
1975/76	11615	17300	67
1976/77	11141	17822	63
1977/78	11141	18607	60
1978/79	11480	19049	60
1979/80	10933	18606	59
1980/81	12066	20920	60
1981/82	12616	20920	60
1982/83	12478	20297	61
1983/84	13668	22262	61
1984/85	22761	4441	51
1985/86	23376	46512	50
1986/87	23213	47427	49
1987/88	24735	50762	49
1988/89	26260	53518	49
1989/90	27774	56151	49
1990/91+	28372	59768	47
1991/92+	28070	62531	45
1992/93+	27683	64373	43
1993/94+	29826	69364	43
Average Growth In Percentage		6.75	9.33

+ Preliminary Estimates

Source: Central Bureau of Statistics, 1993/94.

Agriculture has been accorded high priority in all development plans implemented since 1970. This sector's share of development expenditure increased to 25.6 percent in the fifth plan in which agriculture was declared as the most important sector of the economy (Table 2). It received the highest priority in the Sixth Five Year Plan when its share of the total development budget was of all time high, 28.4 percent. However, it share declined to 26.9 percent in the Seventh Five Year Plan and is projected to be 25.7 percent in the Eighth Five Year Plan.

Table 2
Percentage Share of Agricultural Sector Outlay During Fifth to Eighth Five Year Plans

Five Year Plan	Period	Percentage Share
Fifth	1975/76 to 1979/80	25.6
Sixth	1980/81 to 1984/85	28.4
Seventh	1985/86 to 1989/90	26.9
Eighth	1992/93 to 1996/97	25.7

Sources : Ministry of Finance, *Economic Survey*, Various Issues, MOF/HMG,Nepal.
National Planning Commission (1992), *Eighth Plan Summary.*

The Share of the different sub-sectors of the total development budget in the last three Five Year Plans periods are shown in Table 3.

Table 3
Percentage Share of Agricultural Sub-sector and Forestry in the Total Development Budget during Fifth to Eighth Five Year Plans

Sub-sector	Share of Total Development Budget			
	5th Plan 1975-80	6th Plan 1980-85	7th Plan 1985-90	8th Plan 1992-97
Agriculture	10.8	12.0	9.8	9.65
Irrigation	9.3	10.5	12.2	10.54
Forestry	3.6	4.6	4.8	4.73
Land Reform	2.0	1.3	1.0	0.70
Total Agriculture Sector	25.7	28.4	26.8	25.62

Sources: Ministry of Finance, *Economic Survey*, Various I issue, MOF/HMG,Nepal.
National Planning Commission (1992), *Eighth Plan Summary.*

It is clear from table 3 that the shares of agriculture in the total development budget have declined over time whereas those of irrigation and forestry have risen. This indicates that emphasis has been given for the development of irrigation and forestry sub-sectors relatively than other sub-sectors of agriculture over the last two decades.

Government budget allocations to on agronomic crops research in recent years are shown in Table 4.

Table 4
Budget Allocations for Agronomic Crop Research
1987/88 to 1991/92

NRs in '000

Crops	Average Annual Research Budget Allocation (from 1987/88 to 1991/92)	Research Budget as Percentage of Value of Production	
		1987/88	1988/89
Rice	1102	0.01	0.01
Wheat	832	0.03	0.04
Maize	1330	0.04	0.04
Grain Legumes	2209	0.13	0.14
Hills Crops	1028	0.15	0.20
Oil Seeds	695	0.06	0.34
Sugarcane	2402	0.66	0.36
Tobacco	3875	6.68	5.81

Sources : Ministry of Finance, *Annual Budget*, Various Issues of *HMG,Nepal.*
Nepal Agricultural Research Study, Main Report WINROCK International, 1991.

Resource allocations to different crops do not appear to be in accordance with their importance in terms of area and value of production. For example, important cereal crops, particularly rice, seem to be underfunded compared with most other crops, yet three major food crops, rice, maize and wheat have received the bulk of research budget allocations whereas , minor crops millet, buckwheat, barley livestock and horticulture have been neglected.

The Eighth Five Year Plan has policies for sustainable agricultural development and for raising the living standard of the rural poor. A district agricultural planning exercise has been initiated that consider the agro-ecological condition, comparative advantage of the district, farmer, resource endowment, market accessibility and people's participation during both plan formulation and implementation. The government has

made structural changes in the Ministry of Agriculture to deliver extension services to the farmers through one roof concept. Besides, production inputs, irrigation, credit and other technical services are said to be coordinated in a manner to deliver these more efficiently at grass root level through Agriculture Services Center, and the agricultural production programme are supposed to be directed towards intensification, diversification and commercialization. The target increase in production per year for the plan period has been set at 5.4 percent for food grains, 9.1 percent for cash crops, 5.4 percent for horticulture products and 3.8 percent for livestock products, programmes aimed at attaining national sufficiency in food production will be continued. Even though, the agriculture sector has been put on the top priority the plan does not have any concrete policy for prevailing situation of disguised unemployment in this sector.

Nature of Unemployment in Nepalese Agriculture

Nepal is predominantly an agricultural country. The agriculture sector absorbs more than 80 percent of the total labour force of the country. About 18 percent of the total land area had been brought under agricultural operation of which about 53 percent lies in the terai region (CBS 1994).

In many Asian countries the population density in agricultural sector has gradually decreased, so in Nepal also. Share of agricultural sector in GDP is decreasing and share of non-agriculture sector is increasing. There is an important relationship between land and population. Population had been increasing at faster rate without any tangible expansion in other non-agriculture sectors than the agriculture. Hence, the increased population has to be employed in agriculture forcefully. The situation of excess labourers in agriculture force them to be employed themselves in this sector beyond the capacity of cultivable land. Therefore, picture of a surplus labour force, or in other words, the situation of disguised unemployment in Nepalese agriculture can be clearly observed.

The labour market is overwhelmingly dominated by agriculture and by self-employed subsistence activities. According to the 1981 census, about 86 percent work force was engaged in agricultural pursuits and 83 percent according to 1991 census. While most households participate in the labour market, the proportion of time hired is low being 19 percent for men, and 6 percent for women (NPC 1991).

The fact that labour force growth has exceeded GDP growth, the reported declines in the wage rates, and village morphological studies, all suggest that labour is surplus (World Bank/UNDP 1991).

Land used for cultivation in Nepal is limited. As there is deficiency of land suitable for cultivation, the increased population are enforced to depend on existing agricultural level, without any contribution in national income, creating a situation of disguised unemployment in the absence of modern and advanced methods of cultivation. Farming is still carried out in primitive way depending upon monsoon rain, cultivation is not possible whole year round which further intensified the problem of disguised unemployment.

The developing countries are characterized by the vicious circle of poverty which have caused low level of development. The magnitude of underemployment and disguised unemployment in these countries is very large. Rapid population growth has become a serious problem leading to disguised unemployment in least developed countries like Nepal, and due to the absence of productive employment opportunities, existing population has become a burden to the nation.

In Nepal, more than 80 percent of the economically active population are engaged in agriculture, however, the women population engaged in agriculture is more than 90 percent. The proportion of population depending on agriculture since 1971, has been declined from 94 percent to around 83 percent in 1991, in spite of that the agriculture still stands a major sector in absorbing the economically active population with subsistence farming common and fragmented and small size of land holding, creating obstacle for mechanization even in the fertile plains of terai. Hence agriculture remained in its traditional subsistence form without transforming into modern commercial, income generating employment oriented one.

The magnitude of unemployment in the country is highly seasonal. During the period of planting, harvesting and threshing of various agricultural crops, the demand for agricultural labour is very high resulting to low level of unemployment. It has also been observed that during planting and harvesting season of paddy there is a labour shortage and substantially large number of labourers from Bihar and Uttar Pradesh of India enter Nepal in search of work especially in terai region. During peak season, the people work for twelve hours or more as against of standard working hours of seven. In other season majority of rural population keep idle without any productive work. As industries are not well developed in many areas, the off-farm employment is very rare. Therefore, nature of existing potential labour force, remaining idle without any contribution income, is disguising in apparent employment.

At present, the main economic problem of the country is to accelerate the pace of economic development. In this respect, the

agriculture sector plays an important role, because without an increase in agriculture production development can not be enhanced. The great task before the policy makers is to reduce this existing greater dependency on agriculture. This problem, to a great extent, can be solved by improving land productivity. The land productivity is linked, along with other factors, to the labour force which must be engaged to the level of optimum productivity, but there exists excess labour in agriculture sector while in the other sector it is lacking, the main reason of this is unskilled labours of agriculture sector which can not be fully employed in other sector.

The background of economy lies with the genesis of land and labour. Established order of over and under supply of labour force excess to land productivity in agriculture had created overemployment and underemployment problem. In the study of NPC (1978), the extent of underemployment and surplus labour force in Nepal have been calculated. This study is based on the empirical analysis of both urban and rural areas of different regions. General findings of the study with respect to underemployment and surplus labour force are:

— Out of 323 annual working days of rural worker, 118 days are utilized in all types of agricultural and non agricultural operations, the unutilized work days were 205, giving an underemployment rate of 63.47 percent per rural workers.

— Out of 280 annual working days per urban working person 155 days are utilized. The unutilized days come to 125 giving an underemployment rate of 44.64 percent for urban working person.

— Out of 69, 14, 200 people constituting labour force in rural areas in 1977, 43,90,610 people are found surplus during off-season or when agricultural operations are over.

— Similarly, out of 2,43,500 people constituting labour force in urban areas in 1977, 1,11 4000 people are found surplus.

To measure the extent of surplus labour the study has taken into account the two important factors which are:

(a) Annual average utilization of family labour per household, and

(b) The average annual working days for different sexes.

The study has adopted the following procedures in order to find the exact magnitude of unemployment.

— Annual average availability of family and permanent labour per household for male and female were adjusted to arrive at the average annual working days per household.

— Annual average working days per household for male and female were estimated after deducing average annual non-working days

from the average annual available days obtain from the above mentioned available average annual non-working days as reported by the village headman of the surveyed VDC were averaged for the district and used as the norm for the purpose.

— Annual average utilization of family labour per household for male, female in all activities like crop production, marketing the products, grazing of livestocks, maintenance and repair, household activities of farm employment and contribution to mutual exchange labour obtained were deducted from average annual working days for male and female as mentioned above.

Estimates of open unemployment is about 6 percent, however, time-use estimates of unemployment are generally in the range of 45-65 percent. There is naturally substantial seasonal unemployment in rainfed agriculture, except in some areas and at sometimes of the year, and there is very little off-farm work (World Bank/UNDP 1990). There are no appropriate data on the demand for labour in Nepal, although crude estimates suggest that in aggregate the available supply substantially exceeds the demand for labour in agriculture (Table 5).

Table 5
Rural Labour Supply and Demand Per Annum

Region	Rural Labour Supply/a	Estimated Agricultural Labour Demand/b
Hill	359	261
Terai	398	204

Note: a = Supply based on active 1990 labour force, number of hours spent on domestic tasks, average 62 percent; assuming 200 work-days per year.
b = demand based on labour intensity per hectare area to each major crop.

Source: WB/ UNDP *Nepal Relieving Poverty in a Resource-Scarce Economy* 1990.

SUBSTANTIATION FROM A CASE STUDY

The author, conducted a study on nature and pattern of disguised unemployment in a village of the Bhojpur district in Nepal which also substantiate the outgoing analysis.

The study area, Shyamila VDC lies in the eastern part of the district, in Koshi Zone, Eastern Development Region of Nepal. It is hilly area in mid-east of Bhojpur district; approximately 25 kilometers east from the district head quarter.

The VDC area is extended from the Khesangkhola in the east and to the Mullbato in the north. The study area is bounded on the east by Changre and Tiwari-Bhangyang VDCs and on the west by Amatak and Bhaishipakha VDCs. It's spatial coverage is approximately 70 square kilometers. It's north-south part is wider than eastern and western. It is situated 27°8' north 87°8'4". Topographically it can be divided in to three parts.

- The Mahabharat Lekh in the central,
- The North hill area; and
- South hill area.

The Mahabharat range lies in the central part of the village. It runs west-east direction. Most of the parts of the study area have eastern slope. The elevation ranges from 1025 mt. to 2800 mt. above the sea level. The study area covers an area of about 25 sq. km. Due to high altitude of the Mahabharat range following from north to south, this physical unit covers approximately 35 percent of the total village area. Due to gentile slope these areas have been extensively used for cultivation and settlements, and cover more than 65 percent of the total village area.

In the cropping pattern, the cereal grains dominate in this village. Paddy, maize, millet and barley are major cereal crops which cover about more than 85 percent of the gross cultivated area. The major cash crops grown are potato and mustard which cover less than 15 percent of the total cultivated area in this VDC.

Double cropping is very much common in this village. In non-irrigated low land rice alone is cropped, while in irrigated land rice is followed by either wheat or barley. Maize, wheat, potato and barely are the cropping pattern in up land. In summer season local farmers cultivate almost all cultivable land. The main summer crops are paddy, maize, in upland. Some other crops like mustard, barley bean, potato and some vegetables are grown in both lands. In winter season farmers grow wheat in irrigated land.

The population growth rate of country is 2.08 percent (CBS,1994), and so in the case of Shyamsila VDC, which is critical to other parameters. Since, the cultivable land could not cope with the population problem, the new comers engage themselves in traditional sector i.e. agriculture. Such annual growth rate of population has resulted apparent disguised unemployment. No better standard of living can be expected in relation to available infrastructure when the population is growing at such faster rate.

Shyamsila VDC is one of the village of rural area of Nepal. There is no any employment opportunity of the people except agriculture. So the labour force of this sample village cannot shift themselves to non-agricultural activities. Hence, the majority of the people are engaged in agriculture sector itself, so labour force in agriculture is unemployed in disguised form.

MEASUREMENT OF DISGUISED UNEMPLOYMENT FOR STUDIED AREA

With reference to sample data collected by the researcher 56.4 percent people are economically active. The land distribution and other breakdowns are as follows :

Table 6
Per Head Land Available under the Various Farm Size of Land

SN	Land Holding Farm Size in Ropani	Available Land in Ropani	Number of Economically Active Population 15-59 Yrs	Required Labour Days per annum	Per Head Land Available in Ropani
1	0-2	4	10	520	0.4
2	2-4	13	4	592	3.25
3	4-10	136	43	3370	3.16
4	10-20	470	112	5993	4.2
5	20+	1594	208	9973	7.66
	Total	2217	377	20448	

Source : Field Survey By the Author, 1994.

The table 6 shows that the bottom level farm had only 4 ropani but 10 economically active member are dependent on that farm. Per head land available is 0.4 ropani in this category. This signifies the existence of disguised unemployment, because a person is potential to work on more land, i.e. can work on more land than given land because 3. 25 ropani per head is marginal farm size. Hence we can easily say that there is disguised unemployment in agricultural.

Measurement of disguised unemployment had been done by both ordinary man land ratio approach and labour force approach.

Ordinary Man Land Ratio Approach

This is an indirect method to find out the impact of disguised

unemployment. The data used are all primary and following formula has been used :

$$D(U) = \frac{P \times (E-d) \times T}{100}$$

Where,

D (U) = Disguised unemployment.

E= Highest standard man land ratio.

d= Lowest man land ratio.

P= Percentage of the area falling within different size group.

T= Total cultivable land of the households.

In this formula *d* is the value of the lowest man- land ratio that comes in the highest land holding groups assuming that there is no disguised unemployment in the case of big land holders. *E* is the corresponding value of standard man land ratio in each size holding other than big land holders and (*E-d*) gives us surplus labour. The table 7 throws light on the ordinary man land ratio of the different size of the land holding in the surveyed VDC.

Table 7
Ordinary Man-land Ratio

S.N.	Land Holding Farm Size in Ropani	Total Number of Family Member	Land in Ropani	Ordinary Man-land Ratio
1	0-2	12	4	0.33
2	2-4	6	13	2.17
3	4-10	80	136	17.00
4	10-20	195	470	2.41
5	20+	376	1595	4.24
	Total	669	2217	-

Source : Compiled by the Author on the Basis of Field Survey, 1994.

From table 7 it is clearly reflected that the average man-land ratio is 3.31 ropani while man land ratio for different category we have 0.33 ropani per head under 0-2 ropanies category, 2.17 ropani under 2-4 ropanies category; 17 ropani under 4-10 ropanies category, 2.41 ropani under 10-20 ropanies category and 4.24 ropani under 20 and above ropani land holding size. Thus it can be easily substantiated that disguised unemployment is prevalent in this villages. In this study 15- 59 years age group population has been taken as the economically active population group on which basis standard norms of economically active

population of the sampled VDC has been established.

Table 8
Ordinary Man-land Ratio under Standard Norms

S.N.	Land Holding Farm Size in Ropani	Number of Economically Active Population (15-59 Yrs)	Total Culti-vable Land in Ropani	Percent of Sample HHs	Ordinary Man-land Ratio
1	0-2	10	4	0.18	2.5
2	2-4	4	13	6.12	0.31
3	4-10	43	136	6.12	0.32
4	10-20	112	470	21.15	0.24
5	20+	208	1594	71.73	0.13
6	Total	377	2217	100	

Source : Compiled by the Author on the Basis of Field Survey, 1994.

The table 8 shows the relationship between land and labour and clearly reflects that ordinary man-land ratio is significantly higher on the small size farm. While calculating disguised unemployment in terms of man-land ratio the conventional technique was applied and the ordinary man land ratio is adjusted as per standard quality of land i.e. irrigation facility in most of the cases. Table 9 presents available land and required labour for sampled VDC.

Table 9
Available Land and Required Labour

S.N.	Land Holding Farm Size in Ropani	Available Total Land in Ropani	Active Population (15-59 Yrs)	Required Labour Days
1	0-2	4	10	52
2	2-4	13	4	592
3	4-10	136	43	3370
4	10-20	470	112	5993
5	20+	1594	208	9973

Note: Required labour days has been calculated and ascertained on the basis of responses responded by the interviewers.
Source : Compiled by the Author Based on the Field Survey, 1994.

Compilation of the labour days supplied and required, with the help of the table 9, has been presented in table 10.

Table 10
Disguised Unemployment in Days Per Annum

S.N.	Land Holding Size in Ropani	Supplied Labour Force per day	Required Labour in Days per Day	Disguised Unemployment (SLD-RLD)
1	0-2	3000	520	2480
2	2-4	1200	592	608
3	4-10	12900	3370	9530
4	10-20	33600	5993	27607
5	20+	62400	9973	52427
6	Total	113100(100)	20448(18.80)	92652 (81.92)

Note : In a year, the working days have been considered 300 days and the rests as holidays and contingencies, and nine hours a day working time.

Source : Compiled by the Author Based on the Field Survey, 1994 and on the Table 9.

Table 10 clearly reflects that there is 81.92 percent man days disguisely unemployed in agriculture and do not join off- farm activities which shows that all the days they are working on the same agricultural land without adding any output. Calculation of disguisely unemployed for Shyamsila VDC is presented in table 11.

Table 11
Disguised Unemployment under Ordinary Man Land Ratio

S.N.	Land Holding Farm size In Ropani	Ordinary Man-land Ratio	Surplus Man Power (Ed)	Percent-age	$D(U) = \frac{P \times (E-D) \times T}{100}$
1	0-2	2.5	2.5-0.13= 2.37	0.18	9.46
2	2-4	0.31	0.31-0.13=0.18	0.59	2.35
3	4-10	0.32	0.32-0.13=0.11	21.19	51.68
5	20+	0.13	0.13-0.13 = 0	71.91	0
percentage				100	89.31

Source : Compiled by the Author on The Basis of Table 7 and 9.

Total cultivable area = 2217 Ropani

Total disguised unemployment $D(u) = \frac{P \times (E - d) \times T}{100}$

= 89.31 percent

Total man-land ratio available for rural working force (W) = 3.77

Disguised unemployed as percentage of (W) = 89.31 x 100/377
= 23.69 percent which is disguisely unemployed.

Labour Force Approach

Labour force approach has also been used to ascertain the disguised unemployment in the rural household. The number of labour force actually required for the agricultural activities and the excess labour force that may be withdrawn or removed from the agricultural sector has been ascertained from the households by asking the relevant questions directly. The number of person that may be withdrawn from agricultural activities has been presented in table 12.

Table 12
Disguised Unemployment under Labour Force Approach

S.N.	Land Holding Farm Size in Ropani	Economically Active Number of Labour Force Engaged (15-59)	Number of Labour Force Required	Number of Person Which can be Withdrawn	Disguised Unemploy-ment D (U)
1	0-2	10	4	6	60 Percent
2	2-4	4	2	2	50 Percent
3	4-10	43	25	18	41.86 Percent
4	10-20	112	70	42	37.5 Percent
5	20+	208	151	57	27.40 percent
	Total	377	252	125	
Average 33.15 Percent					

Source : Compiled by the Author on the Basis of Field Survey, 1994.

Table 12 shows that in an average 33.15 percent of labour force is disguisely unemployed in studied Shyamisila VDCs.

In first category of land holding 60 percent labour force is disguisely unemployed, in second category 50 percent; in third category 41.86 percent; in fourth category 37.5 percent and in fifth category 27.40 percent. It clearly reflects that disguised unemployment is perpetuating in the size of small farmers which fall in the first category.

It can be observed from the table 13 that during the peak season of the agriculture i.e. showing time, disguised unemployment is not quite apparent while during slack seasons, it is quite apparent. It is because overall low agricultural activities during slack periods.

Table 13
Labour Supply and Requirement and Disguised Unemployment in a Year

in month and hour

Months	Comsumption of Working Hour		Available Labour Hour	Required Labour Hour	Disguised Unemploy-ment in hour
	per day	per month			
April, August, Sept. Dec. (for each month)	8	200	75400	10410	64990
Total	**32**	**800**	**301600**	**41640**	**259960**
May, June, July, Oct., Nov. (for each month)	12	300	113100	15615	97485
Total	**60**	**1500**	**565500**	**78075**	**487425**
Jan., Feb., March. (for each month)	6	150	56550	7807	48743
Total	**18**	**450**	**169650**	**23421**	**164229**
Grand Total	**110**	**2750**	**1036750**	**143136**	**893614**
Percentage			**100 percent**	**13.8 percent**	**86.2 percent**

Note : Average working hour per day is assumed nine hours.
Source : Compiled by the Author on the Basis of Field Survey, 1994.

The table 14 shows that in comparison to men women's working time in a day is more. It has been due to off-farm activities of the women specially in household works.

Table 14
Working Time of Male and Female

in a month and day in hour

Months	Available Hours in a Day	Working Time in Hour in a Day	
		Male	Female
April, August, Sept. Dec.	24	6	10
May, June, July, Oct., Nov.	24	10	14
Jan., Feb., March.	24	4	8
Total		86	134
Average		7.16	11.16

Source : Compiled by the Author on the Basis of Field Survey, 1994.

CONCLUSION

The out going analysis reflect that the disguised unemployment is apparent in this VDC which can be extended to the Nepalese rural as well as agricultural economy and its nature and pattern are gender oriented and seasonal. However, on the basis of findings, impact of disguised unemployment has been found extensive on socio-economic life of the rural people which can be extended to the rural Nepal. As disguised unemployment is of seasonal nature due to the migratory nature of working population, the labour supply is wage inelastic making permanent withdrawal of labour force from agriculture difficult. The socio-economic impact of disguised unemployment has been more intensive on female. As, female labour is more rigid to the social norms their immobility had caused more staggering, resulting weak command of very little disposable income. Thus the disguised unemployment is perpetuating with following results:

- meager disposal income has resulted low quality of food and clothing depriving other necessities and health facilities, especially for women;
- it has caused male migration resulting cultivable land to be left fallow even in peak season and immobility of female labourers;
- its impact is intense on female labourers as they are rigid to their social values and immobile, so when male labourers migrate, productivity of the land still deteriorate due to female labourers' marginal productivity being almost or nearer to zero;
- it has caused wage inelastic supply of labour force, so even when other job alternatives are created there is less possibility of withdrawing disguisely unemployed persons from agriculture;
- with no work in slack season in agriculture, people become accustomed to commit unproductive activities, polluting the community environment; and
- apparently, during off-farm season, men are more unemployed than women, but in real yielding women's productivity does not contribute any additional output, so the incidence of disguised unemployment is much more acute on women.

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