

## Chapter 2 . Population and Employment Generation

### 2.1 A Review Of Past Trends

The purpose of this Chapter is to identify recent changes in population and employment generation, followed by some discussion on the potential for employment generation, particularly in off farm activities. While rapid growth in population has been amongst the most significant changes in the hill economy during recent times, the agricultural sector continues to be a major source of employment and income. Without some basic understanding of these two important areas, it is difficult to appreciate the significance of issues under-lying the overall development of employment in the hills.

The population of Nepal increased from 8.3 million in 1952/54 to roughly 15.0 million in 1981. With an annual average growth of about 3 per cent, Nepal's population will once again double by the end of this century, i.e. in another 15 years there will be 15 million more people. This high growth rate is attributable to both high fertility and decreasing mortality (Karki 1985).

The regional distribution of population also shows some interesting changes (TABLE 2.1). The southern plains have experienced rapid population growth and the Terai's share in total population increased from 35 percent in 1952/54 to 44 per cent in 1981. The increasing

growth of the Terai in contrast to the declining growth of the hills and mountains is mainly attributable to the out-migration from the hills and mountains. Despite declining growth rates, the hills and mountains continue to add a million or more people every decade.

The urban-rural distribution shows that the Nepalese population is predominantly rural and that the growth of urban population in the mountains and hills during the past decade has been relatively low compared to the Terai. While in 1952/54, the Terai had only 18 per cent of the total urban population, in 1981 this share increased to about 48 per cent. The volume of inter-regional migration has also increased significantly. Life-time migrants as a percentage of native-born population has increased from 4.54 to 8.60 per cent. Roughly speaking, if in 1961 one member of every four households migrated, in 1981 this increased to one of every second household. This movement is mainly out of the hills and mountains to the southern Terai plains (Sharma 1986).

The quality of labour force data on Nepal is poor. However, based upon the notion of economically active population used by the different censuses, a number of characteristics are identifiable. Between 1971 and 1981, the economically active population grew by 3.34 per cent

**TABLE 2.1 : PERCENTAGE DISTRIBUTION AND GROWTH RATES OF POPULATION BY REGION**

	Rural			Urban		
	Mountains & Hills	Terai	Nepal	Mountains & Hills	Terai	Nepal
1952/54	64.8	35.2	100	n.a.	n.a.	n.a.
1961	63.6	36.4	100	69.7	30.3	100
1971	62.4	37.6	100	69.4	30.6	100
1981	56.4	43.6	100	51.8	48.2	100
Inter-Censal Change (Annual growth rate)						
1952/54	1.42	2.04	1.64	-	-	-
1961-71	1.85	2.39	2.05	3.38	3.27	3.34
1971-81	1.61	4.11	2.62	4.35	11.83	7.28

Source : Central Brueau of Statistics (CBS), Kathmandu, 1985, Table 1.9, p.20

per annum, which is higher than the population growth rate for the same period. Growth in economically active males (2.59 per cent per annum) was however lower than growth in male population, 15 years and over (2.61 per cent per annum) from 1971 to 1981. In the case of the female population of 15 years and over, growth in economically active females was higher (4.97 per cent per annum) than the growth of female population (2.31 per cent).

The crude activity rate during the past decade has continued to decline, for both sexes (Table 2.2). This could be the result of factors such as changing age composition and increasing student population. It is difficult to segregate the importance of each factor, but one consequence of decreasing participation rates is to increase the economic burden upon the active labour force. The dependency ratio has increased remarkably during the past three decades. While in 1952/54, one economically active person supported roughly 1.1 individuals, in 1981 this had increased to 1.6 individuals: an increase of almost 50 per cent in dependency burden.

Another interesting characteristic is that unlike male activity rates, those of females tend to vary substantially by ecological belt, being highest in the mountains and lowest in the plains. According to the 1981 census, economically active females as a proportion of total females were 42, 40, and 25 per cent respectively for the mountains, hills, and Terai regions. This seems to be largely a function of cultural variation - the lowest female activity rates being associated with more orthodox Hindu religious traditions (Acharya and Bennet 1981).

There is also increasing participation by population in the ages of 10 to 14. In 1952/54, the economically active population in this group accounted for 28 per cent of total population in the 10 to 14 age group. This

**TABLE 2.2 : ACTIVITY RATES BY SEX FOR CENSUS PERIODS (PERCENT)**

Census Year	Total	Male	Female
1952/54	47.28	57.12	37.75
1961	45.75	55.30	36.48
1971	36.32	51.87	20.56
1981	39.12	50.89	26.77

Source : Central Bureau of Statistics (1985), Kathmandu

increased to 50 and 51 per cent in 1971 and 1981.

In general, the labour force (defined as 15 years and over) as a proportion of the total population is about 39 per cent, which is somewhat high compared to other South Asian countries where it is about 35 per cent (Islam 1983). This is explained by the much higher female participation rates in the hills and mountain areas of Nepal. According to the Seventh Plan of Nepal, population is forecasted to reach almost 19 million by 1990/91 and the labour force to about 8.60 million for the same period.

Due to difficulties involved in arriving at estimates of employment and unemployment even for countries with a better data base, the attempt here is to highlight some of the previous efforts at estimation. The successive censuses during the past three decades do not indicate any significant alteration in sectoral composition of the economically active population. The agricultural sector continues to be overwhelmingly dominant in terms of labour force absorption (Table 2.3). The share of the non-agricultural sector has registered small increases, which have been limited only to the Terai; the hills and mountain areas do not show any non-agricultural diversification in terms of labour force by sectors. In

**TABLE 2.3 : DISTRIBUTION OF ECONOMICALLY ACTIVE POPULATION BY INDUSTRY (PERCENT)**

Year	Agriculture	Non-Agriculture	Unspecified
	Total : Male : Female	Total : Male : Female	Total : Male : Female
1961	93.8 : 91.7 : 96.9	5.5 : 7.5 : 2.5	0.7 : 0.8 : 0.6
1971	93.7 : 92.0 : 98.0	6.3 : 8.0 : 2.0	- - -
1981	90.4 : 87.8 : 95.7	7.1 : 9.0 : 3.3	2.5 : 3.2 : 1.0

Source : CBS, Census Reports, 1961, 1971 and 1981



1977, a survey by the National Planning Commission attempted to provide estimates of employment and unemployment for rural and urban areas (NPC 1983). While there are many questions regarding the survey, major findings include:

- An unemployment rate for rural and urban areas of 5.57 and 5.98 per cent respectively
- Underemployment as shown in Table 2.4

An average of only 118 days/worker was found to be used gainfully in rural areas (NPC 1983). For a number of reasons, this may be an underestimation; some types of off-farm employment were not recognised, and furthermore, these figures are inconsistent with the high rates of labour force participation observed for Nepal.

A limited exercise conducted by ILO-ARTEP estimated the underemployment rate as 33 per cent for rural Nepal as a whole, with considerable variation by region: mountains (54 per cent), hills (37 per cent), and Terai (21 per cent) (Islam 1982). These figures are significantly lower than those reported by the Planning Commission and emphasise the need for a more careful examination of this issue.

The ILO-ARTEP estimates are also based upon modification relating primarily to the agricultural sector. The contribution of off-farm activities has not been considered.

Utilisation of the labour force varies by farm category in different ecological belts, so that overall notions of unemployment and underemployment may not be useful for an economy characterised by wide regional

variations. Among different farm categories, marginal farmers (about 26 per cent of the farm households) are engaged for the fewest days in crop production, even less than the landless groups. The landless groups account for maximum days in off-farm employment, followed by the marginal farmers. In general, group of farmers without access to irrigation show a higher number of days utilised than groups with irrigation facilities. Variations of this type become more pronounced as we examine different regions.

The remaining sections will discuss the nature of employment generation in the off-farm sectors in order to assess potentials for employment generation in those activities.

## 2.2 Off-farm Employment

Off-farm employment generation assumes great importance as a policy response to the situation facing Nepal. The most obvious reason is that, at least for those in the hills and mountains, expansion of employment on the farm is strictly limited. Indeed there is evidence that off-farm economic activities have been underestimated in official statistics, though the picture revealed by some regional and area studies is different. The Rapti baseline study (APROSC 1980) for five hill districts in Western Nepal has suggested that agriculture contributed only 23 per cent of the total income of farm households, while off-farm activities provided as much as 57 per cent of the total income. Among the major sources of off-farm cash income, services accounted for 19.4 per cent, followed by trade and business (14.3 per cent). There was substantial variation in the contribution of different off-farm activities in the five districts. While agriculture was the most important source in Dang, in Rolpa and Salyan, it was trade and business.

Household surveys in other districts of the hills have shown that the share of non-agricultural income is almost 50 per cent (DRCG 1982, Bhattarai 1984). Although agriculture tends to be the primary source of employment and income, secondary income sources are mainly off-farm activities. Another positive reason for promoting off-farm employment is that such an approach will particularly favour the lower income groups, for they are relatively more dependent on such activities. In Rapti Zone, while the contribution of agriculture was 32 per

**TABLE 2.4 : UNDEREMPLOYMENT IN DIFFERENT ECOLOGICAL REGIONS**

Region	Percentage of Days Unemployed	
	Males	Female
Mountain	57.23	65.58
Hill	62.04	67.80
Terai	53.97	72.01
Nepal	57.88	68.83

Source : NPC, 1983

cent and 21 per cent for the large and medium groups of farmers, it was less than 10 per cent for small, marginal, and sub-marginal groups (APROSC 1980). Bhattarai has noted that the relative share of off-farm income and employment declines in importance with increases in land holding, in both the hills and the Terai (1984). This has also been reported for other countries in the region (Islam 1982). It should be noted that while the relative significance of off-farm work is greater for poorer groups, the returns are not commensurate with their efforts (Amatya 1982; Bhattarai 1984). It is very important to find out why this is so and whether or not it is possible to raise their productivity. The experiences of the Small Farmer Development Project (SFDP) and the Cottage and Small Industries Programmes (CSI) in Nepal suggest this is not only possible but economically and financially viable (Shrestha 1985). In support of the thesis that this approach would contribute to reducing inequalities, there are some indications that off-farm income is more equitably distributed than farm income, and efforts to increase off-farm income are likely to contribute to reduction in the prevailing level of inequality in rural Nepal (Bhattarai 1984). This issue merits further detailed enquiry, to establish whether distribution of incremental incomes from all types of off-farm activities are more equitable in the case of all regions.

It is by no means clear, however, that promoting off-farm employment would be beneficial to women. Although studies have revealed that women in the hills at present contribute more than half of the total household income (particularly in cottage industry and food processing), development programmes have tended to ignore this and emphasize the role of men (Acharya and Bennett 1981; Joshi 1985). Further arguments in favour of off-farm employment emerge from some of the broader changes likely to be induced through its expansion. Through focus on poorer groups, off-farm employment generation loosens many of the land-related socio-institutional bonds that are *prima facie* exploitative. Increased employment opportunities in off-farm sectors will increase demand for foodgrain, probably the most effective stimulant to agricultural growth (Mellor 1975). Increase in demand for foodgrain will further stimulate farm demand for various off-farm activities, taking advantage of agglomeration economies, and providing a major spurt to the growth of urban centres. Rapid growth in off-farm activities, therefore, has enormous potential

for productive absorption of the labour force displaced by economic changes in the hills. This potential, however, will not materialise of its own accord; an effective set of policies and programmes must be designed and implemented.

### 2.3 Conventional Off Farm Activities

Broadly speaking, off-farm activities may be classified into two groups: the modern off-farm sector which is small and includes non-agricultural activities (mainly manufacturing and processing), that are fairly well integrated with the organised sector and conventional off-farm activities which are much greater and cover practically all off-land activities in rural hill areas. The latter are largely unregistered and usually operate on a seasonal or part-time basis by family members. The distribution of both types of off-farm employment activities varies considerably, both regionally and between urban and rural areas. In more accessible locations, and especially in towns, there is a growing trend of modern off-farm activities, as well as some modification in conventional ones. But in large parts of rural Nepal the bulk of activities remains conventional. The extent to which households allocate time for off-farm work has been found to be sensitive to numerous factors including wage rates, farm incomes, distance from home to alternative employment, and number of working adults in the family and their skill levels (Bhattarai 1984). In the hills there are strong ethnic associations with some of the conventional off-farm activities. Socio-cultural factors are also very important for example, various groups are excluded from certain types of work.

The range of economic activities in which rural households engage is shown in Table 2.5, which relates to Rasuwa and Nuwakot, two neighbouring districts between Kathmandu Valley and Tibet. It is clear that agriculture and livestock account for the greater part of annual income, with other economic activities (cottage industry, trade, portering, other wage labour) contributing less than 25 per cent on average. But this latter figure varies considerably with income level, being substantially greater for lower income groups. It is also noteworthy that income from livestock is the most variable; poor households earn almost nothing from this source, while it contributes one-third of the income for richer households. There is considerable variation in the



**TABLE 2.5 : AVERAGE ANNUAL INCOME BY SOURCE FOR DIFFERENT INCOME GROUPS IN TWO HILL DISTRICTS (PERCENT)**

	RASUWA			NUWAKOT		
	Low	Middle	High	Low	Middle	High
Agricultural	65.9	57.6	50.3	65.5	65.5	59.6
Livestock	5.9	8.9	33.8	1.0	13.0	34.0
Cottage Industry	0.9	0.4	3.4	0.2	0.3	0.1
Trade	2.7	0.4	3.7	2.6	0.0	0.9
Porterage	9.2	10.6	4.3	8.3	4.3	0.4
Other Wages	12.9	8.6	1.3	18.1	10.8	1.7
Other	2.6	3.2	3.2	4.6	5.0	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source : DRCG, 1982

composition of rural household income according to location, especially between the mountains, hills and Terai. This is well demonstrated by the figures in Tables 2.6 and 2.7. Table 2.6 shows a breakdown of eight study villages in aggregate, while the Table 2.7 indicates the situation in each village separately. In view of the problems of classification and measurement, direct comparisons between these data and those for Rasuwa and Nuwakot, for example, should be made with caution.

A few particular points of interest emerge. Farm production (including kitchen gardening) is most significant in the Terai (about 65 per cent), less so in the hills (45 to 50 percent) and least important in the mountains (39 per cent). Wage labour is of most importance in the hills (9 to 26 per cent) but displays considerable variation even here. Trading accounts for 23 per cent of household income in the mountains, but is of relatively little importance elsewhere (0 to 6 per cent).

#### Trading and Porterage

Trading as a source of off-farm income and employment has always been important both in urban and rural areas of Nepal. In the northern hills and mountains it is even more significant than agriculture, with salt and wool from the north being bartered for cereal grains from the south (Haimendorf 1975). The significance of this trade declined after the 1950 political changes in Tibet, but limited trade is still conducted. In the middle hills, the significance of trade is less. While in the urban areas trading is a full-time occupation of many households, in rural areas, these activities are limited mainly by the extent of surplus production and of rural purchasing power. Apart from providing income and employment to the traders themselves, trade is also an important source of off-farm work for porters, especially in those areas unconnected by roads. The significance of portering varies greatly according to location. Thus, in a Newar village in the Kathmandu Valley, and a Tharu Village in the Far Western Inner Terai, portering accounted for only 5 per cent of outside employment activities

**TABLE 2.6 : COMPOSITION OF OFF FARM INCOME IN EIGHT VILLAGES (PERCENTAGE)**

	A*	B*
Agriculture	59.4	62.9
Kitchen gardening	3.2	1.3
Animal husbandry	10.0	9.5
Hunting & gathering (incl. fuel)	5.9	6.0
Food processing	19.2	16.7
(liquor-making husking/drying roasting/grinding and others)		
Manufacturing	2.3	2.3
(textile rope/basketry and others)		
Total - Farm Income	100.0	100.0
Non-farm Income		
Trading & investment	8.5	6.2
Wages & salaries	14.3	13.5
Total	122.8	119.7

\*A: Household Income Study (279 sample households)

\*B: Time Allocation Study (192 sample households)

Source: Acharya and Bennett, 1982 Tables 2.8, 3.3

(measured in person-days). But in a Tamang village in the Central Middle Hills, the figure was 56 per cent (Acharya and Bennett 1981). This last village is on a major trade route between the Kathmandu Valley and Tibet.

Every ton of goods transported by porters provides portering employment for 25 working days. Despite the difficulties of portering, wages are attractive compared to other forms of rural work. Where roads are constructed, this source of income dries up and porters have to find alternative employment, or move to new areas. Roads, however, have other positive effects, one of which is growth in trade and retail outlets.

#### Cottage Industry

The decline of cottage industry in the hills has become an issue of increasing concern. It continues to be a major source of off-farm work for many rural households, with the bulk of the products consumed locally. Again, there is considerable variation according to location. Textiles, leather rope and basket work, are among the more important products. Although perhaps not a true cottage industry, liquor-making for sale, is of considerable importance in some places. In one mountain village, 12.5 per cent of household income comes from this source. And in another, in the Eastern Middle Hills, the contribution was 18.2 per cent (in this case the revenue arose almost entirely in a brief period in August/September, the occasion of a major festival). This is a good example of market seasonality of many such economic activities. The decline of cottage industry has been due to a number of factors, including availability of

cheaper and more durable manufactured substitutes, increasing difficulties in the availability of raw materials, particularly those from forests, changing tastes and preferences, and marketing problems. Rural areas close to urban centres have been able to overcome some market problems, but this is difficult to generalise. Traditional cottage industries that have effectively modernised in some areas are carpet making and distinctive types of cloth weaving (Shrestha 1985).

#### Wage-Labour

This ranges from landless peasants working for neighbouring farmers, to long-term migration. Table 2.8 shows the composition of total outside employment in eight sample villages (including portering and paid cottage industry work). Agricultural labour and service in the organised sector together account for nearly 60 per cent of the total. These figures, however, do not include migrant labour involving absences of more than six months. Out-migration (both seasonal and permanent) has become an important source of employment support for the hill economy and is being seen as an important indicator of the deteriorating agricultural economy of the hills. It is an extensive phenomenon, with complex dimensions (Sharma 1985; Joshi 1985; Kansakar 1982). The inhabitants of the northern mountains migrate seasonally for trading purposes and some have migrated for specialised work in mountaineering and trekking; others have been forced to move in search of any type of work. Some groups look specifically for military service while others move to urban areas, the Terai, and even to India for unskilled work. In some cases, only the males

**TABLE 2.7 : COMPOSITION OF HOUSEHOLD INCOME BY VILLAGE IN DIFFERENT ECOLOGICAL REGIONS (PERCENT)**

Location of Village	Farm Prod.	Kitc. Gnd.	Anim. Husb.	Hunt.& Gath.	Food Proc.	Manu- factur.	Trad.& Invst.	Wages
1.Kathmandu	48.7	3.1	10.4	7.0	8.5	1.9	4.0	16.3
2.Hills	44.1	1.4	12.7	3.1	7.8	2.0	2.6	26.3
3.Hills	44.9	1.3	11.6	58.9	8.2	1.2	1.5	22.4
4.Hills	48.3	1.4	7.9	8.21	2.5	3.1	6.3	12.3
5.Hills	44.3	3.7	6.6	5.0	28.8	1.7	0.9	9.0
6.Mountains	38.6	0.0	6.5	5.4	18.4	3.0	22.5	5.6
7.Terai	58.7	8.1	7.2	3.8	12.0	1.2	2.7	6.3
8.Terai	63.6	0.7	5.7	0.6	21.0	0.0	-	8.4

Source: Acharya and Bennett, 1989, Table 2.8



**TABLE 2.8 : PERCENTAGE OF TOTAL WORKDAYS**

Agricultural labour	34.1
Service - organised sector	24.5
Service - unorganised sector	6.5
Construction	8.9
Cottage Industry	8.1
Domestic	6.8
Portering	6.5
Other	3.3
TOTAL	100.0

Source : Acharya and Bennett, 1982, Table 2.12

move; in others, it is the entire family. All have provided valuable economic support to the hill economy. Over the years, some of the sectors absorbing migrants have remained static, while new opportunities have also arisen. Whether the latter have been able to absorb the increasing flow of rural migrants from the hills is not known, but the support provided by the remittances of migrants is becoming increasingly important for the hills. The hills have also been referred to as "money-order" economies, referring to the role of remittances.

#### Local Specialised Services

Many groups of people have been providing specialized non-agricultural services in rural areas of the hills based on the prevailing caste system and hereditary occupations. Some occupational mobility has occurred over the years, but many groups of people are still dependent upon conventional occupations. These include tailors, blacksmiths, potters, shoemakers, river ferry

operators, as well as a number of other distinct groups that do not fall within occupational caste groups, such as the Raute of Far Western Nepal. The demand for services and commodities produced by these groups has been declining all over the country. In many cases, better substitutes have become available. Traditionally, the asset holding positions of these occupational groups was limited and they were not paid a specific wage but were supported (in cash and kind) by the community. While the disruption effects are obviously not uniform, their extent is determined by asset holding positions and access to alternative employment opportunities. Some had the resources to move to other activities or to migrate, but a large number are left to struggle as agricultural labourers and porters (Seddon 1981).

#### 2.4 Manufacturing and Other Employment Generating Activities

Regular censuses of manufacturing establishments (MEs) have been undertaken in Nepal, which indicate that these establishments have grown at an annual rate of about 17 per cent, but from a very small base (TABLE 2.9). Employment has grown even faster; in 1965/66 average employment per ME was 11.5 and by 1981/82, this increased to 16.5.

Output and value added per person engaged also show some changes. Output/person engaged was about Rs. 36,907 in 1972/73 but increased only marginally to about Rs. 39,897 in 1981/82. The value added by this sector was about Rs. 6,549 per capita in 1972/73 but increased to about Rs 13,272 in 1981/82.

**TABLE 2.9 : CHARACTERISTICS OF MANUFACTURING ESTABLISHMENTS IN NEPAL**

	(RS. MILLION IN 1972/73 PRICES)				
	1965 /66	1972 /73	1976 /77	1981 /82	Percent Change per annum from 1972 to 1982
Number of Establishments (No.)	1257	2345.00	3528.00	4903.00	32.20
Persons Engaged (No.)	14397	47638.00	50120.00	81050.00	7.80
Wages & Salaries	-	69.00	94.40	144.50	22.60
Total Assets	-	257.40	677.70	711.80	19.60
Gross Output	-	1758.20	2800.20	3233.70	9.30
Gross Input	-	446.20	2421.80	2157.90	5.40
Value Added	-	312.00	378.40	1075.70	27.20

Table 2.10 compares the growth of MES in the hills and Terai. The increasing share of the hills is evident from the relatively higher rates of average annual change. The share of the hills in the national total has increased substantially according to most indicators, most notably the share in gross fixed capital which has registered an increase from 27 to 43 per cent. While these changes are important in the context of the hill economy, it is worthwhile noting the predominant importance of Kathmandu Valley, which in 1981/82, accounted for 20 per cent of the gross fixed assets, and 30 per cent of the output and value added.

ME distribution between towns and rural areas is also significant. The four main towns of the Terai and the Kathmandu Valley together show a major concentration of MES, accounting for 36 per cent of total MES, 54 per cent of employment and about 46 per cent of total output. The extent of concentration in Kathmandu vis- a-vis the hills is greater than the extent of concentration in the four major Terai towns vis-a-vis the Terai. This is evident from the fact that about 42 per cent of MES in the hills are in Kathmandu valley, while in the Terai only 32 per cent are located in these four towns.

#### Changes in Type of Manufacturing

Table 2.11 shows changes in MES by type and region. Some of the major points emerging from this Table are:

- Between 1971/72 and 1981/82, a number of new types of MES were set up both in the Terai and the hills, including fruit canning and bottling, knitting mills, and plastic and polythene products.

- The major significant difference in composition between the hills and the Terai is that the latter seems to be lacking in activities concerned with production of jewellery, curios, carpets and rugs: distinctly tourist- associated industries.
- A high proportion of MES in both the hills and Terai are still agriculture, forestry and livestock based. Even among the new establishments since 1972/73, 50 per cent are in this group.
- In the hills, 66 per cent of the increase in MES was in cereal grain processing and oil extracting.

While these changes in the types of MES undoubtedly suggest broad directions in ME growth patterns in Nepal, it is also important to relate this to changes in investment and employment. In 1981, manufacturing establishments employed less than 1 per cent of the rural labour force and about 4.3 per cent of the urban labour force: in aggregate terms, about 1 per cent of the total economically active population in the country. From Table 2.10 it is evident that while growth has been rapid, in absolute terms ME employment is still small.

The distribution of industry by size (measured in terms of numbers) is shown in Table 2.12 for the hills and the Terai. The Terai has a greater concentration of MES in the lowest and highest size ranges.

The distribution of employment by type of worker for 1981/82 is shown in Table 2.13. The percentage of unpaid family workers is less than 10 per cent for both regions. There are more female workers in MES in the hills (14.5 per cent) than in the Terai (10.4 per cent). The proportion of non-Nepali workers in the Terai is almost three times that of the hills (8 per cent in the hills, but about 24 per cent in the Terai).

In a recent study, the major problem identified for MES in the hills was shortage of raw materials, power, spare parts, and trained manpower. The situation in the Terai was similar, with lack of working capital as an additional constraint. It is interesting to note that lack of markets is not among the problems identified. This however does not imply that this factor may be ignored. The fact that both the Terai and the hills cite shortage of raw materials as the most serious problem is interesting,

**TABLE 2.10 : SHARE OF MANUFACTURING IN THE HILLS**

(Percent)

	Share of Hills in Total*	
	1972/73	1981/82
No. of Establishments	33	39
Persons Engaged	23	36
Gross Fixed Capital	27	43
Gross Output	23	31
Value Added	27	31

\*Hills includes mountains

Source : CBS, Census of Manufacturing 1972/73 and 1981/82



**TABLE 2.11 :CHANGES IN MANUFACTURING ESTABLISHMENTS BY TYPE AND REGION (NUMBERS)**

Types of Industries	Hill & Mountains		Terai	
	1972/73	1981/82	1972/73	1981/82
1. Oil & Grain milling	497	1135	1363	2397
2. Fruit Canning & Bottling	-	5	-	5
3. Other Food, Drink & Tobacco	21	59	28	81
4. Yarn & Textiles	30	120	2	25
5. Knitting Mills	-	22	-	8
6. Carpets & Rugs	11	67	-	-
7. Leather & Footwear	3	3	2	11
8. Wooden Furniture	54	167	21	62
9. Paper	-	-	13	-3
10. Other Consumers Goods*	38	50	21	40
11. Saw Mills & Jute Processing	-	8	28	63
12. Construction Materials	30	100	99	171
13. Plastic, Polythene, Rubber Products	-	12	-	12
14. Printing	53	68	27	57
15. Repair Works and Iron Products	16	49	7	37
16. Animal Feed	-	12	-	3
17. Not specified	-	19	16	16
<b>TOTAL</b>	<b>753</b>	<b>1909</b>	<b>1614</b>	<b>2991</b>

\*Metal furniture, soap, matches, caps, metal vessels, jewellery, curios, drugs & medicines

Source: CBS, Census of Manufacturing Establishments, 1972/73 and 1981

given that over 50 per cent of the MEs are in the agriculture, forestry and livestock sectors. This might indicate increasing supply constraints in these sectors, and more specifically, continuing poor performance of the foodgrain, forest and livestock sectors. Little mention is made of lack of foreign working capital which indicates limited constraints in terms of imported inputs at present.

Recently the performance of mainly export-oriented small-scale industries has improved. Shrestha argues that performance has been encouraging in terms of employment, loan recovery, capacity utilisation and export earnings (Shrestha 1985). Support for some of these activities has come in the form of special banking projects that minimise the collateral required where economic viability and technical feasibility are assured.

While focus should clearly be on promoting more viable export-oriented small-scale industries to generate off-farm employment, some problems are worth noting. Focus on export makes it important to emphasize problems of transport and to ensure that these products have access to reasonably assured markets. The success of carpet and garment manufacturing cannot be duplicated throughout the country, and other exportable

products must be identified. The vulnerability of export to exchange rate fluctuations is well known.

#### Construction

Infrastructural and development activities and construction work associated with building roads, power supply projects, bridges, irrigation, schools, hospitals, and drinking water projects are clearly a major form of off-farm employment activity in Nepal. They continue to take up the major share of planned development funds in

**TABLE 2.12 : DISTRIBUTION OF INDUSTRIES BY NUMBER OF EMPLOYEES (1981)**

No. of Employees	Hills	Terai	Nepal
Below 10	1426	2506	3932
10 - 99	421	400	821
100 - 999	83	60	143
1000 and above	-	7	7
<b>TOTAL</b>	<b>1930</b>	<b>2973</b>	<b>4903</b>

Source : CBS, Census of Manufacturing Establishments, 1981

**TABLE 2.13 : DISTRIBUTION OF EMPLOYMENT BY TYPE OF WORKER 1981 (PERCENT)**

	Hills & Mountains	Terai
Paid Employee Nepali :		
male	68.0	59.0
female	11.6	7.8
Non - Nepali :		
male	6.8	23.5
female	1.1	2.4
Unpaid Family Worker		
male	9.9	7.2
female	2.0	0.2
<b>TOTAL:</b>	<b>100.0</b>	<b>100.0</b>

Source : CBS, Census of Manufacturing Establishments, 1981

Nepal, and after agriculture, represent the most important source of wage employment for rural and urban populations. In urban areas, house construction is particularly important. Construction plays a major role in both the public and private sectors and represents an increasing source of employment for those pushed out of agriculture. The direct and indirect linkages of this activity with agriculture, manufacturing, and transport are very important. Unfortunately, little is known about this sector.

Some studies have examined aspects of public works activity and analysed factors that influence the type and volume of employment generated. Pradhan has examined payments to different groups resulting from these infrastructure projects and the nature of distribution of project benefits, particularly employment, in project areas (Pradhan 1985). Pradhan has shown that a 215 km road project can generate over 1 million working days. Road, forestry, and irrigation sectors with their construction activities generated over 200,000 man years during the first four years of the Sixth Plan.

#### Tourism

Tourism has been seen as one of Nepal's most promising industries, and the one least handicapped by a limited domestic market. It is one of those rare cases where obstacles (rugged terrain) can be converted into potential assets (tourism earnings). The option of using tourism as a generator of employment, however, is not

open to all regions. Experience indicates that the Kathmandu Valley and a limited number of other areas (including Khumbu, Pokhara, Jomsom, Chitwan) stand to gain the most from this sector, particularly the Valley, which controls the entire industry. Eighty seven per cent of tourists arrive directly in Kathmandu and most of their stay and expenditure are concentrated in the Valley.

Between 1962 and 1981, the number of tourists visiting Nepal increased 26 times, from 6179 to 161,669. Average per capita tourist expenditure also increased substantially from Rs.126 in 1962/63 to Rs. 5657 in 1981. The average duration of stay has increased from less than three days in the sixties to more than ten in 1982 (Burger 1978; DRCG 1981).

The contribution of this sector to the development of the Valley and Nepal has become increasingly important. In 1981/82, tourism contributed about 22 per cent of the total foreign exchange earnings in Nepal. It has given major impetus to the growth of the hotel industry, both in the Valley and outside. The number of hotel beds increased from 280 in 1986 to over 3000 in 1981, giving rise to significant excess capacity in an industry which is marked by strong seasonal fluctuations. The overall occupancy rate stood at a low level of only 36 per cent for Kathmandu in 1981. The bulk of investments of the Nepal Industrial Development Corporation have gone into the hotel sector.

Studies of tourist expenditure have shown that 50 per cent is spent on food and lodging, while handicrafts and curios receive about 24 per cent, internal travel 20 per cent, recreation and others five per cent. An important question is how much of tourism earnings are actually retained in Nepal? A World Bank study has estimated a figure of 60 per cent of gross earnings (World Bank 1983). Research has revealed that while the impact of tourist expenditure on income and imports is strong, it is lower on employment, although the effect varies considerably according to the type of tourist (DRCG 1981).

At present, this dynamic sector faces two major problems: decreasing growth in tourism in recent years and high import content of tourism-supporting expenditure. Government red tape has been compounded by the lethargy of the private sector in facing these problems, and with the growth in alternative sites lik



Lhasa and Bhutan, Nepal will have to more actively sustain the growth of tourism.

Total benefits from tourism are difficult to quantify. It has stimulated the growth of infrastructure like roads, airport and communication facilities and has generated substantial private sector investment in different services catering to tourism.

#### Government and Other Services

Other sectors which have shown fairly rapid growth in some parts of the country are government and semi-government sectors, transport, trade, and other services. With inclusion of all project-related construction employment the expansion in government activities has made this one of the largest employers after agriculture. The problem is that this expansion has been limited to major urban centres. Expansion in the services and trade sector is evident from the increase in the number of schools and hospitals and emergence of new markets and small towns. Many local markets have mushroomed over the years along new road networks as well as in urban centres. For the bulk of the rural population, however, absorption into these sectors is limited.

#### 2.5 Equity and Other Aspects

As noted earlier, in relation to the Rasuwa/Nuwakot study, off-farm employment activities disproportionately engage a large per cent of lower income workers. There is, therefore, a case for arguing that the benefits of off-farm employment generation will come especially to the poor, so that in equity terms, the effect should be progressive. However, the issue is not quite as simple. For example, the category of wage labour includes landless peasants working on other peoples' farms. And some

cottage industry activities are so unrewarding in terms of revenue per day worked, that one would not wish to encourage them. The equity implications of off-farm employment generation, therefore, require more detailed analysis, but the prospects would appear to be favourable.

In this context, the figures in Table 2.14 are revealing. Although the contribution of household production is fairly invariant with income (80 to 85 per cent), the composition of the balance varies substantially. As one might expect, high-income groups derive more than half of the balance (11.7 per cent) from trading and investment, while for low income groups wage labour accounts for almost all. As for extra-household employment, the pattern also varies with income level (Table 2.14). The top economic stratum derive their income largely (48 per cent) from employment in the organised service sector. The bottom stratum rely mainly on agricultural labour (58 per cent).

#### The Role of Women

As Table 2.15 shows, women in rural areas currently contribute more than half of total farm income, with a substantial proportion of income from trading and wage-labour. On the basis of days worked in employment outside the farm, their contribution averages about 25 per cent for the eight villages, but the type of activity varies considerably. Agricultural labour is generally a major activity, but portering, cottage industry, and domestic service are also important.

A major condition of the study from which these figures are taken (Acharya and Bennett 1981) is that development programmes are currently targeted almost exclusively towards men, resulting both in waste of productive potential and a tendency to lower the status of

**TABLE 2.14 : COMPOSITION OF HOUSEHOLD INCOME BY ECONOMIC STRATA**

Economic Strata	Household Products	Trading & Inventory.	Wage/Salary	Total (%)	Av. HH Income (Rs)
Top	79.7	11.7	8.6	100.0	16,871
Middle	84.8	2.4	12.8	100.0	9,757
Bottom	80.6	1.6	17.8	100.0	5,129

Source : Acharya and Bennett, 1982, Table 2.7



1



(Courtesy : Kk. Panday)

1. Weaving as off farm work for women

Cheap imports and unattractive returns are likely to discourage weaving in the future.

2. Women carrying firewood for sales

Sales in nearby urban areas provide a source of cash income for the household.

2



(Courtesy : Kk. Panday)



**TABLE 2.15 : MALE/FEMALE CONTRIBUTIONS TOWARDS HOUSEHOLD INCOME**

(Percent)

	Female	Male
Agriculture	48.1	51.9
Kitchen gardening	77.5	22.5
Animal husbandry	58.0	22.0
Hunting & gathering (incl. fuel)	47.3	52.7
Food processing	11.3	88.7
Manufacturing	44.1	55.9
Sub-total: farm income	42.2	57.8
Investment		
income and trading	60.3	39.7
Wages and salaries	79.5	20.5
<b>TOTAL</b>	<b>47.5</b>	<b>52.5</b>

Source : Acharya and Bennett, 1981, Table 3.3

women. These findings should be taken into consideration in planning off-farm employment generation strategies, so that women are neither excluded from such activities nor confined to specific types of activity defined by imposed gender roles, often inconsistent with traditional practice (Joshi 1985).

#### Location Aspects

In locational terms, two main distinctions are significant. One is between rural and urban areas, where to a large extent, the conventional/modern categories correspond to the rural/urban distinction. Thus, most of the conventional non-farm activities, even including much of the migrant labour, are to be found in rural areas, while most of the modern manufacturing employment described above is located in urban areas. (The exceptions are mainly those most closely related to agriculture, such as oil and rice milling.) For certain purposes, it may be more helpful to use the rural/urban classification in place of conventional/modern. A second distinction, already discussed, is the regional distinction-- mountains, hills, Terai which relates not only to land use and seasonality, but also to socio-cultural variation. Even within these broad regions, however, there are notable variations. Based upon a study of Nuwakot District, (see Chapter 5) the conclusion is that current spatial development forces are likely to concentrate the location of off-farm activities along accessible river valley belts and lowlands.

Given overall development trends, there appears to be some truth in the above findings. As pointed out earlier, in the hills there is a strong element of "lowland determinism" in the concentrations of development forces, which is recognised by the people and the market. Efforts to counter this at present may lead to uneconomic use of scarce resources.

Some of the Indian hill towns provide exceptions to this picture, for these are very specialised service towns catering to a distinct clientele. In the future, with increasing economic growth, it may be feasible to develop such towns. But as Manandhar (1985) points out, many of the hill towns in Nepal which initially started as centres for off-farm activities and services, have progressively become more agricultural. Functional differentiation between rural areas and towns has gradually reduced over time and the towns have been unable to provide the impetus for rural change. It is important to find out what factors can revive the off-farm roles of urban areas in the hills.

#### 2.6 Policy Considerations

Many policies and programmes have had both direct and indirect implications for the growth as well as and slow demise of off-farm activities in the hills. Policies implemented with certain objectives in mind have, over time, often given rise to unanticipated and negative effects. Some of these could easily have been foreseen, like the displacement of porters by the construction of roads. Others were not adequately recognised, such as the effects of forest control on firewood sales, charcoal production, ginger drying, and Nepali paper making.

It would be interesting to identify all the various policies and programmes of recent years which have affected, to varying degrees, the extent and nature of off-farm employment. In the following pages some selected points are made regarding investment and pricing policies, agriculture and industry, and finally, integrated rural development projects.

Clearly, increasing levels of investment are critical for maintaining steady expansion in the development of off-farm opportunities. In Nepal, investments proposed by the Seventh Plan amount to no more than Rs. 2000 per capita over a five-year period. Investments in Integrated

Rural Development Projects, which might be seen as the major channel for pumping resources into rural areas, have over the past decade amounted to no more than US \$ 23 per capita. In order to promote off-farm activities which generally have higher capital-labour ratios than farm sectors, levels of investment will have to rise substantially. For purposes of comparison it may be noted that in the Small Farmer Development Project, the average per capita loan has been about Rs. 1500, while in the Cottage and Small Industries Project it has been about Rs. 12,000 per person employed. It should, however, be noted that there are questions about the absorptive capacity of the hills, although this issue appears to be more a lack of managerial skills than of suitable investment opportunities.

This in turn may help to explain the relatively disappointing returns from investments carried out so far. Across the board, projects are not being completed on time, costs are increasing rapidly, and actual benefits have been small compared to expected ones (NPC 1985; Pradhan 1985).

Exercises relating to the choice of area, sector, and location of investment have been poor. Sectoral investment policies have been primarily determined by the number of carry-over projects and possibilities of foreign aid (Banskota 1983). Little systematic evaluation of investment and returns has been carried out. Ad hoc shifts in focus are not uncommon. The trade-offs resulting from investment allocation between high-potential and low-potential areas have not been systematically evaluated. Often, after the completion of one set of projects, little supporting investment has been made.

The implications of these prevailing conditions for improving the overall planning capability for hill area development are substantial. Recent efforts to implement a more decentralised system of planning are important, but it is clear that the translation of the decentralisation system from a political programme to one that is capable of enhancing overall planning and decision-making capability is still a long way off.

A second critical area of policy for off-farm employment generation is the complex issue of pricing and taxation. Government influences the incentive structure for different activities and sectors through

alterations in prices. Wage rates, foreign exchange, interest rates, taxes, and subsidies all influence the relative rates of return from different activities. Often the use of these instruments is based on objectives which may not always be supportive of off-farm employment. In Nepal a liberal import policy has been pursued, both with the purpose of raising revenue and to earn Indian rupees, but the effects of liberal imports might adversely affect indigenous manufacturing units, as they are unable to compete with imports. A case-by-case study is required because the performance of some of the protected industries has been consistently disappointing. At the same time, the use of pricing mechanisms and other policies to promote manufactured exports, particularly carpets, handicrafts and textiles has been encouraging. There is no doubt that pricing policy deserves more attention, in order to identify specific pricing policy measures to promote off-farm activities.

Choices in terms of development strategies have undergone changes over time. In so far as agriculture is concerned, during the fifties and sixties, the major thrust was to expand cultivation in the sparsely settled areas of the Terai, and a limited effort was made at land reform. More recently, however, the main focus has been on the propagation of improved agricultural technology, both in the hills and the Terai. The overall performance, has not been encouraging. While some expansion in agricultural employment has undoubtedly occurred because of expansion in cultivated area, productivity increases and related employment benefits have been limited to pockets like the Kathmandu Valley.

Although it is generally believed that the cultivated area has expanded considerably in the southern Terai plains and to some extent in the hills, by bringing marginal lands under cultivation, the yield of all major cereals has either remained stagnant or declined (ADB 1982). Rainfall variation continues to play a critical role since irrigation development has been slow with only 10 per cent of cultivated land having a reasonable guarantee of water. Soil fertility has been declining on account of poor replenishment of nutrients and fertiliser consumption is low; indeed, fertilisers are largely unavailable in many inaccessible parts of the hills and mountains. As far as agricultural credit is concerned, it is still heavily biased towards the larger land-holding groups. According to the Agricultural Credit Survey,



marginal farmers held 8 per cent of the land and had access to 2.78 per cent of the credit, while large farmers held 42 per cent of the land and had access to 74 per cent of the agricultural credit (NRB 1980).

The manufacturing sector has been relatively insignificant in the Nepalese economy, and almost negligible in the rural areas. In 1981/82, the entire employment generated by the manufacturing sector was 81,000 of which 54 per cent was located in the five major towns (Banskota 1986).

Programmes for the development of cottage industry have been launched in a number of areas. Although these projects were started with the objective of supplementing the agricultural incomes of the poorer groups, they have lacked a target group focus and provided assistance indiscriminately. A number of evaluation studies have revealed that programmes have been ineffective with respect to both employment and income generation.

Some projects have provided training to people without the necessary working capital support, so that the trainees have been left unemployed. In many cases trainees have been selected from least needy households, or good training has not been adequately followed up. Markets have not been clearly identified or developed (DRCG 1982). While this is the general picture of cottage industry development projects in rural areas, there are exceptions in the case of a few projects like the Cottage and Small Scale Industry (CSI) Project. The coverage of CSI is to be expanded during the Seventh Plan period and it would be worth monitoring this vastly greater scale of operation to see whether the effectiveness claimed by it as a pilot project can be replicated. Infrastructure development activities like roads, electricity, bridges, irrigation, and drinking water projects have continued to take the lion's share of planned development funds in Nepal. They are clearly the second most important employment generation activity in Nepal after agriculture, and represent the most important source of wage employment for the rural population. Nevertheless, there is very little information on direct and indirect employment effects of infrastructure development. Some studies have raised doubts as to the overall employment effects even of infrastructure projects.

Money-flows alone cannot tell the whole story about distribution of benefits, but can highlight project characteristics regarding employment and income benefits. One study examining the case of construction workers in Western Nepal points out, "in summary, the overall situation (for the workers) is one of bare subsistence wages for long hours of work brought about through a combination of agencies, contractors, merchants and landowners, enforced by the state apparatus" (Seddon 1979, p. 138).

Lest one gets the impression that development of infrastructure has not contributed to employment generation at all, it must be pointed out that employment in two road construction projects alone generated about 62,00 man days/km of road (Pradhan:1986). During the period of the Sixth Plan, over 1500 km of road network was added which, on the basis of these figures, would imply employment of 50-100,000 persons per year. Similarly, employment has been generated in the fields of power supply, irrigation, and afforestation. Despite these large inputs, it is worth noting that these investments still make a relatively small contribution in relation to the overall problem of unemployment, and underemployment. Nor are these projects maximising their employment potential influenced as they are by other factors relating to choice of technology and materials, contractual systems and organisation of work.

Since the Fifth Plan, Integrated Rural Development Projects (IRDPS) have become a major vehicle for undertaking multisectoral development projects in the rural areas of Nepal. At present, eight IRDPS are in operation covering 23 districts of Nepal and about 3.5 million people. Total funds expended over the period 1976 to 1985 have exceeded US\$ 83 million. Although in aggregate this appears to be a large amount, the per capita expenditure was about US \$ 23.0 during the 1976-1985 period. These multisectoral programmes have covered a wide ranging set of activities. A recent study points out that the performance of the IRDPS has been less than satisfactory. All the evaluation reports suggest persisting problems of implementation and coordination (Pradhan 1985).

All rural development programmes pledge increasing gainful employment in rural areas through a variety of programmes expected to contribute to



employment generation both directly and indirectly. Direct employment generation is attempted through different infrastructure-related construction activities, through increased gainful self-employment in private sector activities, and through labour demands for implementing rural development programmes. Indirect employment increases are envisaged through increased agricultural and other outputs.

A study of the Rasuwa-Nuwakot Rural Development Project estimates that total employment generated by the project was 18,510 worker months, of which only 14 per cent was paid, the rest was voluntary labour (DRCG 1981). Data on employment generation from other projects does not exist. There are, however, some indications that the situation is unsatisfactory. Infrastructure projects have tended to be capital-intensive, and there has been increasing concern over the huge influx of Indian construction labour. Delays in project completion have tended to enhance capital intensity and have also adversely affected indirect employment benefits expected from the resulting output.

## 2.7 Prospects for Off-farm Employment Generation

In most developing countries, the process of economic growth is accompanied by and is indeed, primarily attributable to, a shift from low-productivity activity (notably agriculture) to high-productivity activity (notably industry), along with increases in productivity in both sectors. In Nepal, the process of industrialisation is at an early stage. The potential for industrial development is very limited, especially in the hills and mountains. There is scope for increased productivity in the agricultural sector, in terms of both labour and land, but there is little scope for increasing the area cultivated. Thus, prospects for productively employing the rapidly increasing population in their traditional agricultural activities is not encouraging. Simply stated, this is the stark background against which the importance of generating off-farm employment emerges so clearly. This is further reinforced by severe environmental problems faced by the hills and mountains, and any effective action to develop the economy is hampered by difficulties of access to these areas.

It is evident that the problems of economic development in the hills and mountains of Nepal are in

many ways different from those of most developing countries (although commonalities are shared by the mountain areas of the other countries of the Hindu Kush-Himalaya). Limited potential for industrial development, at least in the medium term, is a major constraint. Opportunities, therefore, must be sought elsewhere: In trading, for example, many groups in the mountains have adapted, with considerable enterprise to the changing opportunities open to them; in tourism where the export sector (unlike primary products) has a rapidly growing world demand and where Nepal's challenging physical environment can be turned to advantage. Other sectors include construction, agro-processing and handicrafts. In conclusion, it may be helpful to give a brief summary of the main emerging points.

### Who Benefits ?

There is evidence that the landless and those in the lower economic strata derive a higher proportion of their income from off-farm activities. There is thus a *prima facie* reason to believe that the generation of off-farm employment will be beneficial in terms of its impact on the poor. This may not inevitably be the case, however, and policies should be designed to ensure that this aim is achieved. Similarly, programmes should avoid the current practice of focussing primarily on men, not least because the evidence from rural Nepal shows that women currently contribute more than half of total household income.

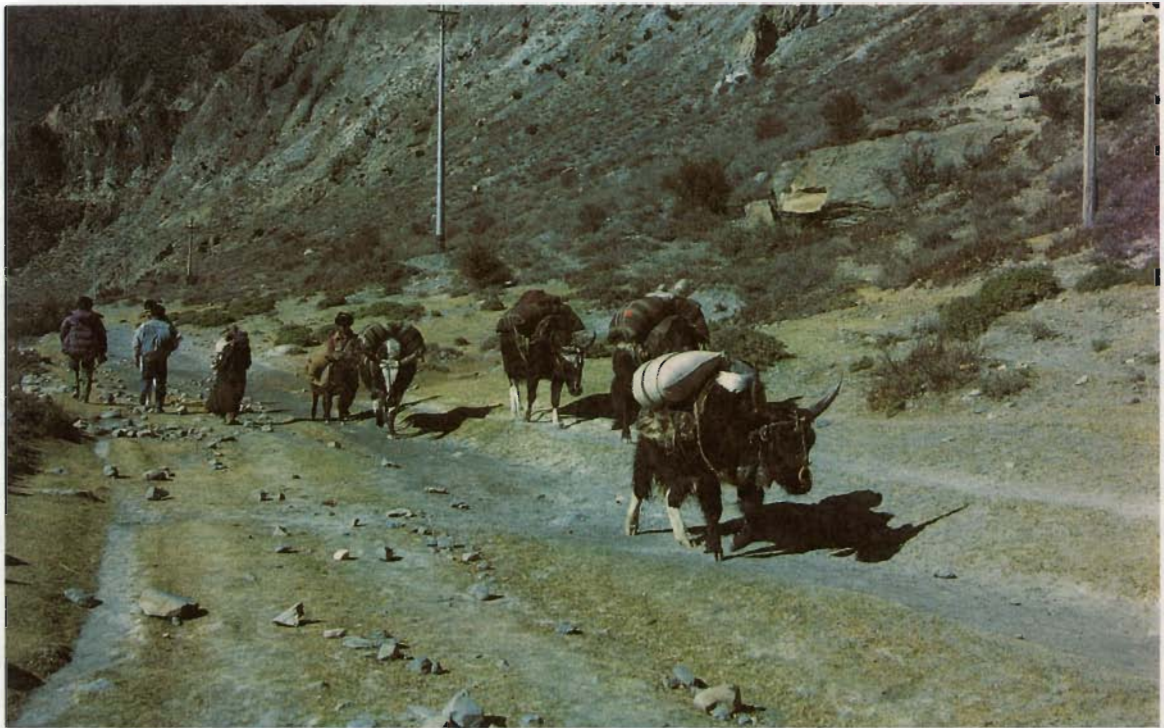
### The Complexity of the Off-Farm Category

Being a residual category, off-farm employment includes a very wide range of different activities. These fit uncomfortably into modern classifications of economic activity. But in addition, the quantitative measures of these activities mark a number of different and important variations, for example:

- **by season** : the extent and nature of different types of off-farm employment vary considerably with the season
- **by zone** : there is considerable variation between the mountains and the hills
- **by area** : within a zone, there are variation



3



(Courtesy : Tej Pratap)

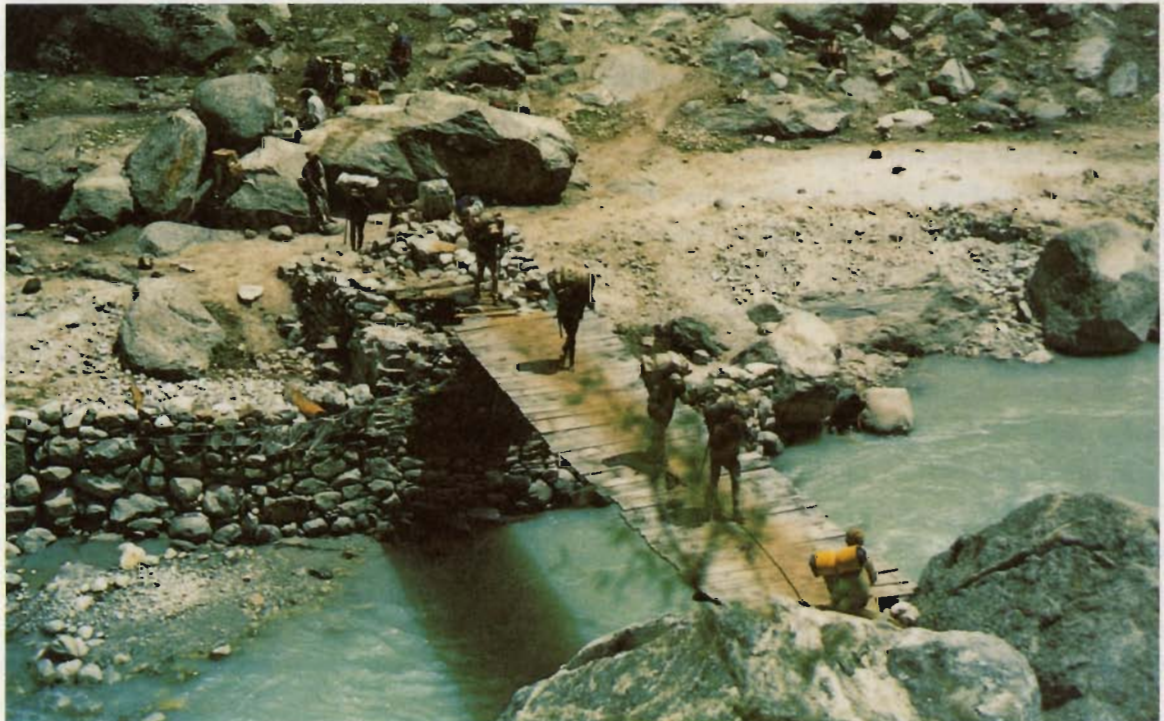
3. Use of pack animals in higher altitudes.

Animals such as yaks and mules have facilitated the transportation of bulk goods in higher altitudes and provide an important source of cash income for their owners.

4. Portering

Throughout the middle hills of Nepal, this is an important off farm activity for poor hill farmers.

4



(Courtesy : Veit Burger)

according to other locational factors, e.g. lowland vs. upland, distance from road, distance from major town

- **by economic stratum** : variations occurs significantly between high, middle, and low income groups
- **by social group** : in some instances, specific social groups are traditionally linked to specific activities.

No aggregate data can fully capture the diversity and complexity of off-farm employment in Nepal, and any policies designed must take full account of this situation.

#### Significance In Terms Of Money and Time

Even now off-farm employment is a major source of income for rural households in Nepal. Although agriculture is undoubtedly the primary source of income for the vast majority, the contribution of agriculture to rural household income is generally only about 50 per cent. If measured in terms of time inputs, off-farm employment is generally found to be even more significant. This raises the question of the productivity of off-farm activities.

#### Is Off-Farm Employment Productive ?

The shifts from subsistence to marketed output, from agriculture to industry, and from self-employment to wage labour, are typically regarded as evidence of economic growth and development. But some of the current off-farm activities in the hills of Nepal are properly characterised as distress employment. The returns to effort of producing rope or string for example may be extremely low. Some such activities are inevitably of low productivity, and products face severe competition from modern substitutes available in the towns. It is important, in framing off-farm employment, policy to distinguish activities which are potentially productive from those which are not.

#### Urban Development and Off-Farm Activities

Urban areas in the hills are few and far apart. In spite of their limited number, they are beginning to play an increasing role in the development of many productive off-farm activities such as agro-processing, manufacturing, trade and services. With increasing urban development in the hills, market centres, small towns, and cities will become increasingly important in the future for off-farm activities. Appropriate policies are required for better economic integration between rural and urban areas in these hills. There are important questions of improved access, rural-urban investment complementarity, and general upgrading of the quality of rural labour force and rural resource management in order to respond to urban development opportunities. Similarly there is a need for appropriate policies to induce selective urban development in order to generate agglomeration economies and derive maximum benefits from relatively costly infrastructure investment. This will further require some planning of population distribution between rural and urban areas for the future. An increasing and diversified urban demand will play a major role in diversifying hill agricultural production. This market-oriented multiple cropping system promises to be the major generator of non-farm activities for the hills. The transition is not likely to be easy under the prevailing conditions where basic infrastructure is lacking. Careful work on investments, extension, processing and marketing of specific cash crops and other activities will provide valuable guidelines for developing comprehensive policies to promote rural-urban linkages and the development of non-farm activities in the hills.

The next Chapters will examine in greater deal the problems and constraints in hill agriculture and the potentials for its development. Because of strong off-farm linkages of a dynamic agriculture, it seems obvious that the major impetus for rapid growth in employment and income opportunities must originate from agricultural development itself.