

## CHAPTER IX ECONOMIC ACTIVITY OF THE POPULATION

### Introduction

Data on labour force participation were collected by all the four censuses since 1952/54. However, these data are not strictly comparable due to changes in definitions and concepts used by the censuses. For example, the 1952/54 census has used the “labour force” and “gainful work” concepts in defining the labour force participation status of a person. An economically active person, according to the 1952/54 census, was one who was either working or had a job from which he was temporarily absent. According to this definition, “economically active category” included in it those who were employed as well as those who were unemployed, i.e. looking for a job at the time of the census. This “labour force” concept employed by the 1952/54 census in ascertaining the economic participation status of a person was, however, abandoned at least partially in the subsequent censuses. The censuses of 1961, 1971 and 1981 defined economically active persons as those who had worked at least for eight months (either at a single stretch or in intervals) during the last year preceding the day of census enumeration, either for pay, profit or remuneration in cash or kind. These censuses considered only those who had worked for a period less than eight months in the course of the year preceding the census as economically inactive. With regard to “job seekers” at the time of census enumeration only those who had worked for at least eight months preceding the census were included in the “active labour force” category while the

remaining, i.e. those who had worked for less than eight months and were also out of work at the time of enumeration, were classified as inactive. In contrast to these procedures, the 1952/54 census included all the job seekers in the category of “economically active labour force”.

All the census with the exception of the 1952/54 census included the “unpaid family workers” who had helped in running an operation with the joint cooperation of all the members of the family, or helped during the peak agricultural season, in the economically active category. However, it should be pointed out here that the 1961 census included only those unpaid workers into “active labour force” who had worked at least for four months in a year. The other censuses, however, imposed no time criterion for an unpaid family worker to be included in “active labour force”.

The censuses also differed with regard to “reference period” for reporting economic activity. The reference period in 1952/54 was “at the time of census enumeration” only, while in the 1961, 1971 and 1981 censuses, this was confined to “eight months in the course of the year preceding the census”.

The censuses also differed from each other in respect to fixing the minimum age above which data on labour force participation were obtained. The 1952/54 census had collected information on economic participation for all persons including those under 15 years of age. In 1961, these particulars were obtained in respect of all those aged 15 years and over. However, in the subsequent

censuses, i.e. 1971 and 1981, data on “labour force” were collected for population aged 10 years and above. It may be further pointed out that the elaborate instructions to delineate the labour force status of a person were introduced since the 1971 census only.

These changes in definitions and concepts employed in various censuses to measure labour force status have to be borne in mind while comparing the intercensal data on labour force.

Statistics on the labour force collected by the censuses suffer both from conceptual and measurement problems. For example, fixing the time period of eight months work experience (either continuously or discontinuously) in a year as a criterion for qualifying as “economically active” may lead to response bias due to recall lapse. The long reference period may also lead to an exaggerated picture of labour force participation. In a poor peasant society like Nepal, very few people can afford to remain unemployed over a long period of time. And this is also supported by data on unemployment provided by the census of 1981. According to the 1981 census, only 2 per cent of male and 1 per cent of female labour force were reported to be unemployed.

There are other limitations of labour force statistics generated by the census. An important aspect of employment structure in an agrarian society is its marked seasonality. However, census being a single shot operation fails to tap this seasonal dimension of rural employment.

Moreover, census data provides no clue to the productivity/efficiency of labour force and also to the extent of the “disguised” labour force prevailing in the country.

One also notes some anomalies in the censuses with regard to the classification of women within the “labour force” or in “housewife” category. Several females were classified as economically active in

1961 when their primary occupation was, in fact the “housewives” group. This problem accounts for some of the decrease in the female labour force in the 1971 census as compared to the 1961. These limitations of labour force statistics generated by the population census are not peculiar to Nepal only but are found in population censuses conducted in other countries particularly in the developing regions.

One way to check the reliability of census data on labour force would be to compare these statistics with those obtained by other independent survey (s) on labour force, based on national probability sample. Unfortunately, no such recent data are available for Nepal to permit this external consistency check. As a result, the quality of labour force statistics generated by the population census of Nepal remain unverified.

### **Economically Active Population: General Trend**

The total as well as the economically active population as recorded at the various censuses and their intercensal growth rates are shown in Table 9.1. Comparing the growth rate of the total population with that of the economically active population, aged 15 years and over, we find the growth rate of the former was higher than that of the latter during the intercensal periods 1952/54-61 and 1961-71. However, this picture is reversed during the last intercensal period, i.e. 1971-81, when the growth rate of the labour force exceeded that of the population growth rate. This trend in the activity rates for females is the same as that of the total population. However, the growth rate of the male labour force continued to lag behind the male population growth rate in almost each intercensal period since 1952/54. Even during the intercensal period, 1971-81, when the growth rate of labour force exceeded that of population growth rate, this was not observed for males at least in the rural areas (see Table 9.7). During

the intercensal period 1971-81, the male and female population increased by 32 and 28 per cent and for the corresponding period the economically active male and female population increased by 30 and 66 per cent respectively. This shows that the higher rate of growth

of labour force over that of population growth rate observed during the last intercensal period was mostly due to large influx of females into labour force, both in the rural and urban areas (see Table 9.7).

The trend in activity rates for males, fem-

**Table 9.1- Growth of total population and economically active population by sex, Nepal, Census years 1952/54-1981**

Census year	Total population			Economically active population*			
	Number	% Change	Annual average growth rate (linear)	Number	% Change	Annual average growth rate (linear)	Dependency ratio**
<b>Both Sexes</b>							
1952/54	8,235,079	-	-	3,893,997	-	-	1,114.8
1961	9,412,996	14.3	1.67	4,306,839	10.6	1.26	1,185.5
1971	11,555,983	22.76	2.04	4,197,962	-2.53	-0.26	1,752.7
1981	15,022,839	30	2.61	5,878,188	40.02	3.34	1,555.5
<b>Male</b>							
1952/54	4,050,607	-	-	2,314,041	-	-	-
1961	4,636,033	14.45	1.68	2,563,915	10.8	1.28	-
1971	5,817,203	25.48	2.26	3,017,767	17.7	1.63	-
1981	7,695,336	32.29	2.78	3,916,583	29.78	2.59	-
<b>Female</b>							
1952/54	4,184,472	-	-	1,579,956	-	-	-
1961	4,776,963	14.16	1.65	1,742,924	10.31	1.23	-
1971	5,738,780	20.13	1.83	1,180,195	-32.29	-3.85	-
1981	7,327,503	27.68	2.43	1,961,605	66.21	4.97	-

\*Aged 15 years and above and also includes those who had not stated their ages

\*\*Dependents per thousand economically active population.

Source: Central Bureau of Statistics, 1958-Population Census 1952/54, Table 2 and Table 12;

Central Bureau of Statistics, 1968-Population Census 1961, Vol. III, Part II, Table 2 and Vol. IV, Table 1;

Central Bureau of Statistics, 1975-Population Census 1971, Vol. I, Table 6 and Vol. III, Part I, Table 19;

Central Bureau of Statistics, 1984-Population Census 1981, Table 5 and Table 21.

ales and for the total population as observed above holds true even when the population and labour force growth rates were obtained for the population aged 15 years and above (see Table 9.2). Examination of table 9.1 and 9.2 also shows that while there has been a steady increase in the number of economically active males over the years, there was a conspicuous decline in the number of economically active females between 1961 and 1971. This has resulted in a sharp decline in the overall activity rate and growth rate of labour

force between 1961 and 1971. This decline in economically active females between 1961 and 1971 is more spurious than real. This was mostly due to over estimation of the number of economically active women in 1961. In 1961 several females were classified as economically active when their primary occupation was, in fact, as "housewives". The scope of this misclassification is reduced since 1971 when elaborate guidelines were adopted to delineate the labour force status of a person and also in coding this information.

**Table 9.2- Growth of total population and economically active population aged 15 years and above, Nepal, Census years 1952/54-1981**

Census year	Total population (15 years and over)*			Economically active population (15 years & over)*		
	Number	% change	Annual average growth rate (linear)	Number	% change	Annual average growth rate (linear)
<b>Both Sexes</b>						
1952/54	5,069,434	-	-	3,893,997	-	-
1961	5,659,931	11.65	1.37	4,306,839	10.60	1.26
1971	6,881,405	21.58	1.95	4,197,962	-2.53	-0.26
1981	8,810,867	28.04	2.46	5,878,188	40.02	3.34
<b>Male</b>						
1952/54	2,434,482	-	-	2,314,041	-	-
1961	2,724,757	11.92	1.12	2,563,915	10.80	1.28
1971	3,437,781	26.17	2.31	3,017,767	17.70	1.63
1981	4,468,324	29.98	2.61	3,916,583	29.78	2.59
<b>Female</b>						
1952/54	2,634,952	-	-	1,579,956	-	-
1961	2,935,174	11.39	1.08	1,742,924	10.31	1.23
1971	3,443,624	17.32	1.59	1,180,195	-32.29	-3.85
1981	4,342,543	26.10	2.31	1,961,605	66.21	4.97

Source: Same as are those in Table 9.1

\* Includes also those who did not state their ages.

### **Crude and Refined Activity Rates**

Table 9.3 presents data on crude and refined activity rates for the census years 1952/54 to 1981. The crude activity rate (i.e. the percentage of the total population who are economically active) declined from 47 in 1952/54 to 39 in 1981. A similar decline was noticed among males and females (see Figure 9.1). To some extent, this decline could be attributed, among other factors, to the differences in concepts and definitions used by the censuses in defining labour force status. The changes in age composition may also account for some of the decline in crude activity rates. As a result of declining mortality the proportion of children below 15 has increased over the years with a corresponding decline in the proportion of the population in working age-group, i.e. 15 years and above. The proportion of children (below 15 years of age) in the total population increased from 38.4 per cent in 1952/54 to 41.3 per cent in 1981.

On the other hand, the proportion of working age population (i.e. population aged 15 years and above as percentage of total population) declined from 61.6 per cent in 1952/54 to 58.7 per cent in 1981 (see Chapters I and II). This could partially explain the decline in crude activity rate.

This decline in crude activity rate is also a consequence of falling participation rates, as reflected in the decline of refined activity rates over the years. The decline in participation rate may be attributed, among other factors, to increasing proportion of students among working age population.

One of the consequences of the decline in participation rates, is to further add to the burden of an already overburdened labour force in the country. The dependency ratio (defined as inactive population per 1,000 economically active labour force) in Nepal is one of the highest in the world, which increased from 1,115 per thousand in 1952/54

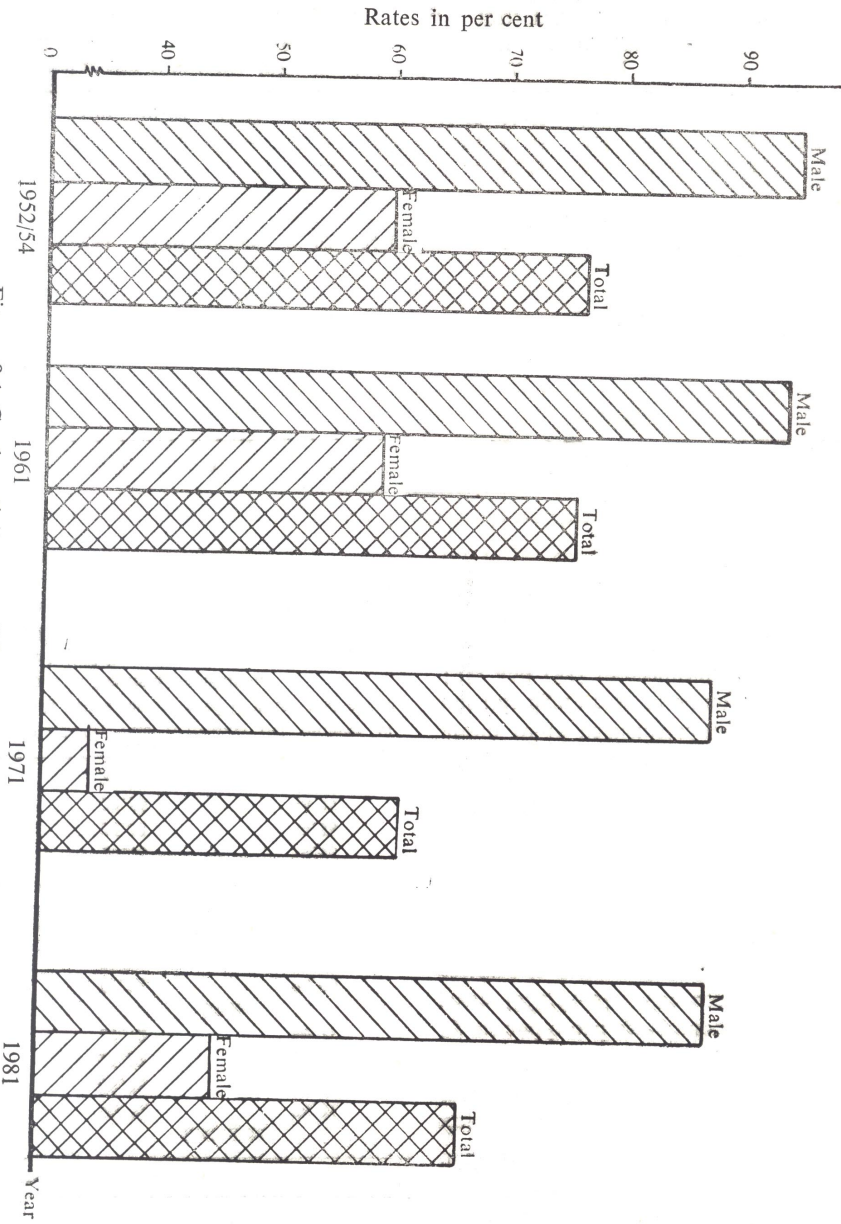


Figure 9.1 Crude activity rates (15 years and above), 1952/54-81

**Table 9.3- Crude and refined activity rates by sex, Nepal, Census years 1952/54-1981**

Census year	Crude activity rate*	Refined activity rate**
<b>Both Sexes</b>		
1952/54	47.28	76.81
1961	45.75	76.09
1971	36.32	61.00
1981	39.12	66.71
<b>Male</b>		
1952/54	57.12	95.05
1961	55.3	94.10
1971	51.87	87.78
1981	50.89	87.65
<b>Female</b>		
1952/54	37.75	59.96
1961	36.48	59.38
1971	20.56	34.27
1981	26.77	45.17

\* The crude activity rate represents the number of economically active persons aged 15 years and above as percentage of the total population.

\*\* The refined activity rate represents the number of economically active persons aged 15 years and above as percentage of the population of corresponding age, i.e. 15 years and above.

Source: Same as the those in Table 9.1.

to 1,556 in 1981 (see Table 9.1). Keeping other factors constant, the increasing dependency ratio implies further worsening of the standard of living of people.

### Participation Rate by Broad Age Groups Intercensal Periods

Table 9.4 presents economic activity rates by sex and broad age-groups, for the census years 1952/54-81. The economic role of children in a peasant society like Nepal is clearly demonstrated by data presented in Table 9.4.

It will be observed that a sizeable fraction of children below 15 years of age participated in economic activity and this proportion continued to rise over the census years. In 1952/54, 28 per cent of children in the age group 10-14 participated in the labour force but this figure rose to 50 and 57 percent in 1971 and 1981 respectively. In other words, the economic activity rate of children increased by 105 per cent over the period from 1952/54 to 1981. In 1981, children accounted for 14 per cent of the labour force while the

**Table 9.4- Crude activity and age specific participation rates by sex, Nepal, Census years 1952/54-1981**

Activity and age	1952/54			1961			1971			1981		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Participation rate 10 years and over	69.18	83.94	55.10	-	-	-	59.33	82.93	35.12	65.13	83.15	46.21
Participation rate 15 years and over	76.81	95.05	59.96	76.09	94.10	59.38	61.00	87.78	34.27	66.71	87.65	45.17
Participation rate 10-14	27.78	29.48	25.84	-	-	-	50.45	59.24	40.06	56.98	61.28	51.96
15-59	80.22	97.92	63.60	79.48	96.95	63.03	64.05	91.43	36.49	67.76	89.08	46.00
60 & over	39.87	61.44	22.58	43.62	65.16	25.67	31.68	51.02	13.86	57.00	74.89	37.13

Source: Central Bureau of Statistics, 1958-Population Census 1952/54, Table 12;  
 Central Bureau of Statistics, 1968-Population Census 1961, Vol. IV. Table 1;  
 Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part I, Table 19;  
 Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part V, Table 21.

corresponding figure in 1952/54 was only 6 per cent. This phenomenal increase of children's participation in the labour force over the years may be attributed, among other factors, to increasing life expectancy of children. There has been considerable decline in mortality during the last decade 1971-81 (see Chapter XI: Estimates of Fertility and Mortality) and the benefit of this decline in mortality accrued largely to children including those who were in the age group 0-4 in 1971. As a result, an increasing proportion of children who were in the age-group 0-4 in 1971 survived and they have now entered into labour force. And this may have inflated the participation rate of children in the age-group 10-14.

The increasing participation of children in labour force may also imply a deteriorating economic situation in the country. Under economic duress every member of the household, irrespective of age and sex, participates in some productive activities to ensure the bare survival of the family.

The participation rate at older ages (60 years and above) is also very high. At least 75 per cent male and 37 per cent female in the age group 60 years and above were reported to be actively engaged in economic activities in 1981. This finding may be expected in a society where there is no formal institution to support people in their old age.

And there has been a steady increase in participation rates at higher ages over the years, with the exception of the 1961-71 period. This aberration was mostly due to a decline in the female participation rate. This was again due to misclassification of some women into the economically active category in 1961 when their actual occupation was home-making. The participation rate at higher ages reached its peak in 1981 when 75 per cent male and 37 per cent female in the age-

group 60 years and above were classified as economically active. This increasing participation rate at higher ages may be attributed, in part, to a reduction in mortality in recent years. This is well reflected in the increase of the old dependency ratio<sup>1</sup> from 8.9 in 1952/54 to 10.8 in 1981 (see Table 3.19).

A deteriorating economic condition may also explain this increasingly higher participation rate at older ages. In old age, parents tend to depend on their grown up children, particularly the sons, for material support. But this support base of parents is likely to be shaken in a deteriorating economy when the children find it difficult even to support themselves. In this situation, parents are also constrained to work for their living and various studies conducted in the Indo-Bangla sub-continent have supported this contention.

The participation rate at the most productive ages, i.e. in the age-group 15-59 years, shows a declining trend over the years. This may be partly attributed to (a) changes in definitions and concepts of labour force used in various censuses, and b) also increasing number and proportion of students in the working age-group (see Table 9.5).

### **Inactive Population**

Table 9.5 compares the inactive population during 1961-71 and 1971-81 intercensal periods. This showed a considerable increase of inactive persons (i.e. aged 15 years and above who are not in labour force) during the intercensal periods. The inactive population accounted for 24 per cent of the population aged 15 years and above in 1961. The corresponding figure in 1981 was 33 per cent. In other words, inactive persons increased by 38 per cent during the period 1961-81. Explanations of this increase in inactive population may be found in the rising proportion of students

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<sup>1</sup> See footnote "b" in table – 3.19

**Table 9.5- Numerical and Percentage distribution of economically inactive population (15 years & over) by the reason for inactiveness and by sex for Nepal, Census years 1961-1981**

Reason for economically inactive	Sex	1981		1971		1961	
		Number	Percentage	Number	Percentage	Number	Percentage
Students	Both sexes	365,621 (4.14)	12.46	167,845 (2.43)	6.25	36,985 (0.65)	2.73
	Male	271,750 (6.08)	49.25	146,009 (4.24)	34.76	33,435 (1.22)	20.78
	Female	93,871 (2.16)	3.94	21,836 (0.63)	0.96	3,550 (0.12)	0.29
Dependents and others	Both Sexes	2,567,058 (29.13)	87.54	2,515,598 (36.55)	93.75	1,316,107 (23.25)	97.27
	Male	279,991 (6.26)	50.75	274,005 (7.97)	65.24	127,407 (4.67)	79.22
	Female	2,287,067 (52.66)	96.06	2,241,593 (65.09)	99.04	1,188,700 (40.49)	99.71
Total	Both sexes	2,932,679 (33.28)	100.00	2,683,443 (38.99)	100.00	1,353,092 (23.90)	100.00
	Male	551,741 (12.34)	100.00	420,014 (12.21)	100.00	160,842 (5.90)	100.00
	Female	2,380,938 (54.82)	100.00	2,263,429 (65.72)	100.00	1,192,250 (40.61)	100.00

Note: The figure in parenthesis refers to economically inactive persons aged 15 years and above as percentage of population of corresponding age, i.e. 15 years and above.

Source: Central Bureau of Statistics, 1968- population Census 1961, Vol. IV, Table 4;  
Central Bureau of Statistics, 1975- population Census 1971, Vol. III, Part III, Table 31;  
Central Bureau of Statistics, 1984- population Census 1981, Vol. I, Part V, Table 22

and homemakers in the population over the years. The proportion of students in the population aged 15 years and over increased from less than one per cent (0.65) in 1961 to four per cent in 1981. Similarly, the percentage of homemakers in the population aged 15 years and above increased from 18 per cent in 1961 to 23 per cent in 1981.\* This increase in the proportion of homemakers over the years may also reflect changes in the definitions of

labour force used by the censuses and variations in the strict application of criteria employed by the censuses to identify labour force status of person.

Among the inactive population, the “dependents” formed the absolute majority, although their proportion has slightly reduced in recent years. The dependents accounted for 97 per cent of the inactive population in 1961 and this figure was reduced to 87 percent in 1981. This reduction in the proportion of dependents is associated with the rising proportion of students over the years. The

\* The number of home makers (i.e. house-wives) increased from 1,023,197 in 1961 to 2,041,273 in 1981.



proportion of students among the inactive population increased from 2.73 in 1961 to 12.46 in 1981. And this increase was noticed both among males and females. The number of female students has risen sharply from a mere 3,550 in 1961 to 93,871 in 1981. The number of male students increased from 33,435 in 1961 to 271,750 in 1981. This rise reflects an annual growth rate of 35.63 and 127 per cent for male and female students respectively. However, the share of students among the inactive population is higher for males than for females. For example, in 1961 male and female students, accounted for 21 and 0.29 per cent of inactive male and female population respectively. The corresponding figures in 1981 were 49 per cent for males and 4 per cent for females.

As a result, the proportion of dependents among the economically inactive males declined dramatically from 79 per cent in 1961 to 51 per cent in 1981, while the share

of the dependents among the inactive female population, although reduced over the years, still accounts for 96 per cent of the population.

### Labour Force Structure

Table 9.6 presents data on the composition of labour force by agricultural and non-agricultural sectors for the census years 1961-81. Nepal is essentially an agrarian society. This is also reflected in the labour force structure of the country which is overwhelmingly dominated by an agricultural labour force. This scenario remained almost unchanged from 1961 to 1981. During this period, nearly 90 to 94 percent of the labour force was engaged in agricultural pursuits. A departure from this pattern, although minor, is noticeable during the last decade, i.e. 1971-81. During this period, participation in non-agricultural activities

**Table 9.6- Percentage distribution of labour force (15 years and above) by agricultural and non-agricultural sector and sex, Nepal, Census years 1961-81**

Labour force	1961		1971		1981		Linear intercesal growth rate per annum	
	Number	%	Number	%	Number	%	1961-71	1971-81
<b>Total (Both sexes)</b>	4,306,839	100.0	4,197,962	100.0	5,878,188	100.0	-0.26	3.34
Agricultural	4,038,895	93.8	3,933,816	93.7	5,313,610	90.4	-0.26	2.98
Non-agricultural	235,943	5.5	264,146	6.3	416,607	7.1	1.13	4.48
unspecified	32,001	0.7	-	-	147,971	2.5	-	-
<b>Total (Male)</b>	2,563,915	100.0	3,017,767	100.0	3,916,583	100.0	1.63	2.59
Agricultural	2,350,534	91.7	2,777,746	92.0	3,437,272	87.8	1.67	2.12
Non-agricultural	192,269	7.5	240,021	8.0	352,449	9.0	2.21	3.80
unspecified	21,112	0.8	-	-	126,862	3.2	-	-
<b>Total (Female)</b>	1,742,924	100.0	1,180,195	100.0	1,961,605	100.0	-3.89	4.97
Agricultural	1,688,361	96.9	1,156,070	98.0	1,876,338	95.7	-3.74	4.75
Non-agricultural	43,674	2.5	24,125	2.0	64,158	3.3	-5.76	9.07
unspecified	10,889	0.6	-	-	21,109	1.0	-	-

Source: Central Bureau of Statistics, 1965-Population Census 1961, Vol. IV, Tables 1 & 5;

Central Bureau of Statistics, 1975-Population Census 1971, Vol. I, Table 6, Vol. III, Part I, Table 20;

Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part I, Table 5 and Vol. I, Part V, Table 23.

increased slightly with a corresponding decline in participation in agricultural activities. Non-agricultural labour force accounted for only 6 per cent of the labour force during the period 1961-71. The corresponding figure was 7 per cent in 1981. One aspect of this slight increase in non-agricultural activities may be the increasing diversification of occupations with the influx of people from rural to urban areas in search of non-agricultural pursuits.

Men more often than women tend to participate in non-agricultural activities. This is to be expected in view of the limited opportunities for women to find employment in the non-agricultural sector.

#### **Labour Force Participation Status by Rural and Urban Sector**

Table 9.7 provides the labour force participation rate by rural and urban sectors. The participation rate measured in terms of crude or refined activity rate is higher in the rural

**Table 9.7- Growth of total population and economically active population (10 years and above) by rural-urban sector, Nepal, Census years 1971 and 1981**

Census year	Sex	Population		Annual average growth rate (linear)	Economically active population (10 years and above)		Annual average growth rate (linear)	Crude activity rate
		Number	% increase		Number	% increase		
<b>Rural</b>								
1971	Total	11,094,045	-	-	4,707,924	-	-	42.43 (60.07)
	Male	5,568,552	-	-	3,308,586	-	-	59.41 (83.69)
	Female	5,525,493	-	-	1,399,338	-	-	25.32 (36.02)
1981	Total	1,406,118	26.78	2.36	6,470,346	37.43	3.15	45.99 (65.85)
	Male	7,183,100	28.99	2.53	4,199,800	26.93	2.37	58.46 (83.77)
	Female	6,883,018	24.56	2.18	2,270,546	62.25	4.74	32.98 (47.19)
<b>Urban</b>								
1971	Total	461,938	-	-	144,600	-	-	31.3 (48.20)
	Male	248,651	-	-	125,702	-	-	50.55 (75.88)
	Female	213,287	-	-	18,898	-	-	8.86 (11.40)
1981	Total	956,721	107.11	6.97	380,540	163.16	8.98	39.77 (54.90)
	Male	512,236	106	6.92	280,144	122.86	7.61	54.69 (74.86)
	Female	444,485	108.39	7.02	100,396	431.25	13.66	22.58 (31.48)

Note: Figures in parenthesis refer to refined activity rate. This represents the number of economically active persons aged 10 years and above as percentage of population of the corresponding age, i.e. 10 years and above.

Source: Central Bureau of Statistics, 1975-Population Census 1971, Vol. V, Table 39; Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part I, Table 5 and Vol. I, Part IV Table 18.

than in the urban areas. And this pattern of rural-urban differentials in labour force participation holds true for males as well as females in every census year. This is expected in view of the higher proportion of students in the urban rather than in the rural areas and also lower participation by children in economic activities in the former than in the latter.

Comparing the growth rate of the labour force with the population growth rate during the last intercensal period 1971-81, we find the former markedly exceeds the latter in the urban areas.

### Age Specific Participation Rates

The age-specific participation rates for the census years 1971 and 1981 are shown in Table 9.8. It may be observed that the pattern of age specific participation rates for males and females is different. The activity rate for males increases steeply with age upto the mid twenties and remained almost constant over the years or at a high level around 97 per cent (in 1971) and 96 per cent (in 1981) until the late forties and thereafter the rate tapers off gradually until the late fifties and then more rapidly to 41 per cent

**Table 9.8- Age-specific activity rate by sex, Nepal, Census years 1971-81**

Age group	Both Sexes		Male		Female	
	1971	1981	1971	1981	1971	1981
10-14	50.5	56.9	59.2	61.3	40.1	51.9
15-19	61.6	60.7	75.7	69.2	46.2	51.3
20-24	63.5	66.1	89.8	86.3	39.2	47.6
25-29	65.3	68.7	95.1	93.4	36.6	44.9
30-34	63.7	68.2	96.6	95.3	33.9	43.3
35-39	66.9	70.8	97.4	95.8	34.0	44.1
40-44	64.7	70.4	97.2	96.0	32.9	44.7
45-49	66.7	72.3	96.8	96.4	32.5	44.9
50-54	62.9	71.2	94.0	94.3	30.5	44.7
55-59	60.0	69.9	90.3	92.2	27.7	43.3
60-64	39.7	62.5	64.1	83.3	17.9	39.9
65 and over	25.1	52.9	40.5	68.7	10.4	35.0

Source: Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part I, Table 19;  
Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part V, Table 21.

(in 1971) and 69 per cent (in 1981). The age specific participation rates assume an inverted "U" shaped profile (see Figure 9.2). The overall pattern of age specific activity rates for males, as portrayed for the country as a whole, also holds for each region and for 1971 and 1981 (see Table 9.23 and Table 9.24).

The pattern of male labour force participation is similar to the one observed for both sexes except that the male rates for each age-group are substantially higher than the corresponding rates for both sexes. In the case of

females, however, the pattern is completely different. In 1971 the rate declined gradually after reaching the peak at the second lowest age-group (15-19). In 1981, the female activity rates declined gradually from a peak at the youngest age-group (10-14 years) to a low at ages 30-34, and then gradually increased with age upto 45-49 years (Figure 9.3). The overall pattern of age specific activity rates for females as observed for the country was also found in almost every development region of the country (see Table 9.23 and Table 9.24).

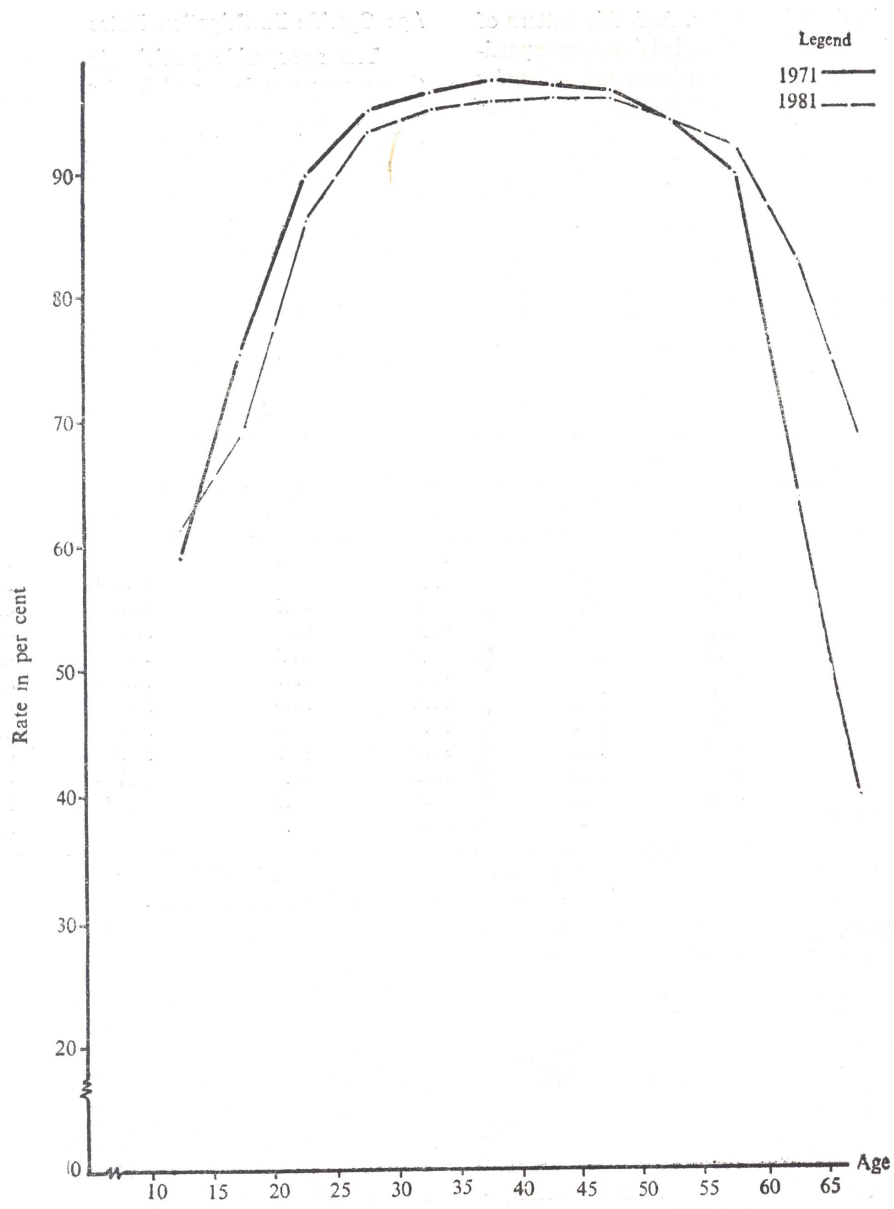


Figure 9.2 Age-specific activity rates for males, 1971-81

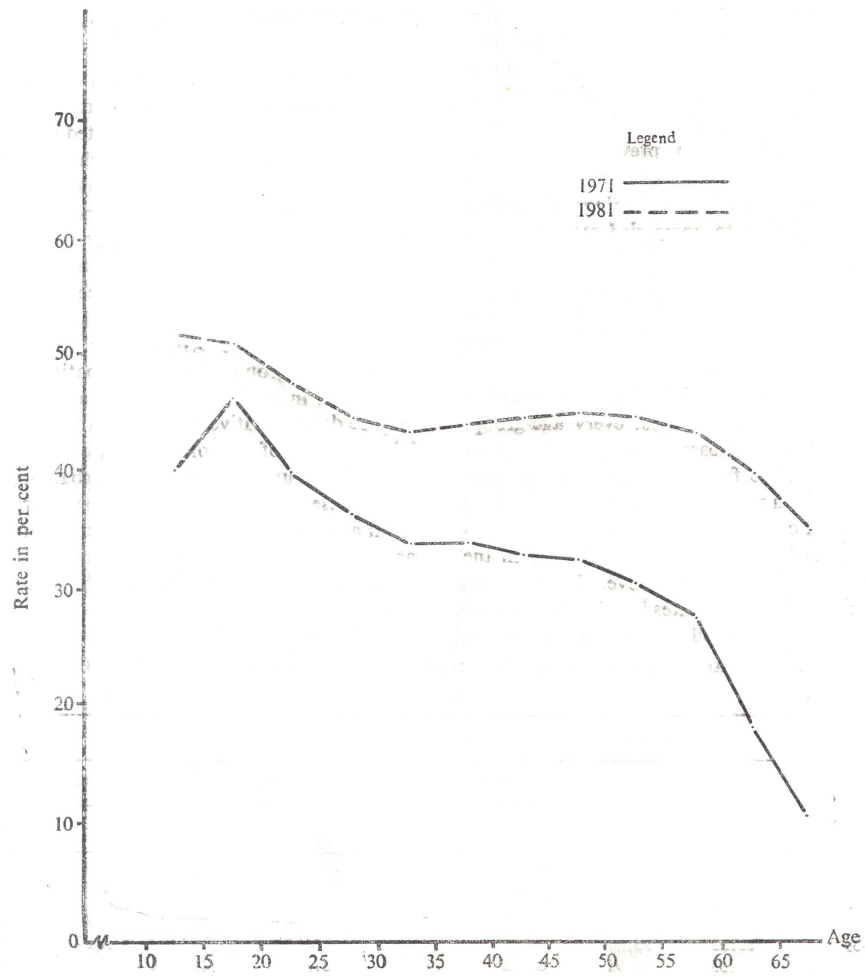


Figure 9.3 Age-specific activity rates for female, 1971-81

The male participation rate at every age far exceeds that of the corresponding rate for female. And this is found not only for the country as a whole but for every region of the country (see Table 9.23 and Table 9.24). The finding of lower female participation rate can be attributed to the prevailing social and cultural barriers to the employment of women. And these barriers are more stringently applied to married than to unmarried women, particularly for jobs outside the home. And this could also explain the finding of greater involvement in economic activities in the case of younger women aged 10-14 and 15-19, who are mostly unmarried.<sup>3</sup>

Between 1971 and 1981, the participation rate increased for almost every age-group. However, this increase was mostly due to an increase in the female rather than the male participation rate. The male participation rate remained constant at almost every age excepting the lowest age-group and those in the age-group 55 years and above. In these age-groups male activity rates increased during the last intercensal period. On the other hand, the

female activity rate increased at every age-group during the last intercensal period.

### Rural/Urban Differences

The age-specific participation rates for rural and urban areas in 1961 and 1981 are presented in Table 9.9. It is to be noted that the participation rates at all ages are higher in rural than in urban areas for both males and females. However, between 1961 and 1981, the differences in participation rates between rural and urban areas in the case of males almost disappeared for all age-groups excepting two younger age-groups, 10-14 and 15-19 (see Table 9.9 and Table 9.10). For these two younger age-groups, the participation rate was higher in rural than in urban areas. This may be due to relatively higher availability of jobs and lack of school facilities for younger children in rural rather than in urban areas. In the case of females, the participation rates at all ages were higher in rural than in urban areas. This could be due to the inclusion of unpaid female workers in the labour force category.

The relatively higher female activity rate

Table 9.9- Age-sex specific activity rates in urban and rural areas, Nepal, Census years 1961 & 1981

Age-group	Male				Female			
	Urban		Rural		Urban		Rural	
	1961	1981	1961	1981	1961	1981	1961	1981
15-24	67.98	61.92	95.39	78.72	26.17	30.70	75.11	50.73
25-34	89.27	90.42	98.93	94.53	28.92	30.79	64.21	45.01
35-44	90.28	94.41	98.94	96.01	33.13	31.77	58.96	45.16
45-59	88.28	93.88	97.76	94.70	33.45	33.13	51.68	45.09
60+	63.53	98.91	65.22	74.93	15.83	30.43	26.02	37.51
Age not stated	15.43	-	32.21	-	6.80	-	31.28	-
Total	79.47	80.81	94.75	88.16	27.78	31.24	60.51	46.09

Source: Central Bureau of Statistics, 1968-Population Census 1961, Vol. IV, Table 2;

Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part V, Table 21 and Vol. III, Table 18.

<sup>3</sup> The average female age at marriage was estimated to be 17 years in 1981.

**Table 9.10- Age specific participation rate in rural and urban areas, Nepal, Census year 1981**

Age-group	Both sexes		Male		Female	
	Rural	Urban	Rural	Urban	Rural	Urban
10-14	58.23	38.81	62.50	43.82	53.27	32.81
15-19	62.27	40.85	70.79	50.40	52.95	29.53
20-24	67.04	53.61	87.42	73.75	48.73	31.80
25-29	69.24	61.10	93.79	88.35	45.81	31.15
30-34	68.55	63.48	95.43	92.93	44.08	30.36
35-39	71.19	65.75	95.92	94.08	44.94	31.40
40-44	70.65	66.16	96.11	94.83	45.41	32.24
45-49	72.60	67.73	96.45	95.31	45.62	32.81
50-54	71.44	67.46	94.29	93.98	45.29	33.60
55-59	70.08	66.57	92.27	91.13	43.82	32.99
60-64	62.69	59.63	83.30	82.72	40.37	31.82
65 and over	52.96	51.04	68.71	68.32	35.31	29.78
Total	65.85	54.90	83.77	74.86	47.19	31.48

Source: Central Bureau of Statistics 1984-Population Census 1981, Vol. I, Part v, Table 21 and Vol. III, Table 18.

in rural compared with urban areas in partly due to the reporting of women in farm households as unpaid family workers in agricultural work. Nearly ninety-nine per cent of the unpaid family workers originated from rural areas in 1981. For the same year, only 1 per cent of the urban employed population were unpaid family workers as against 4 per cent in rural areas. Moreover, opportunities for self-employment are greater in rural than in urban areas and this is clearly borne out by the fact that in 1981, nearly 90 per cent of all employed females in rural areas were “workers on won account”, the corresponding proportion in urban areas being 85 per cent. All these factors could together produce lower female participation rate in urban rather than in rural areas.

### **Industrial Classification**

The type of economic activity that an employed person performs can be looked at from the point of view of (a) the industry or the activity of the establishment in which an economically active person works during the time reference period; (b) occupation or the kind of work done during the time

reference period, and (c) status as employee, own account worker or unpaid family worker.

With regard to industry, the employed population in this study are classified into three broad industrial sectors, viz, primary, secondary and tertiary. Each sector represents the following major division:

- Primary: Comprising the major divisions, agriculture, forestry, hunting and fishing;
- Secondary: Comprising the major divisions, mining and quarrying, manufacturing and construction;
- Tertiary: Comprising all other major divisions, electricity, gas, water and sanitary services, commerce, transport, storage, communications and other services.

The distribution of the employed population by the three broad industrial sectors and by rural and urban areas is shown in Table 9.11.

**Table 9.11- Percentage distribution of employed population (10+years) by major industry sector and sex, Nepal, Census years 1952/54-81**

Sex	Year	Primary <sup>1</sup>	Secondary <sup>2</sup>	Tertiary <sup>3</sup>	Unspecified	Total	
						Number	%
<b>Nepal</b>							
Both sexes	1952/54	93.48	2.13	4.19	0.20	4153455	100.0
	1971	94.37	1.17	4.45	-	4852524	100.0
	1981	91.15	0.53	6.47	1.87	6850886	100.0
Male	1952/54	91.71	2.45	5.64	0.20	2460492	100.0
	1971	92.81	1.46	5.73	-	3434288	100.0
	1981	88.71	0.68	8.48	2.13	479944	100.0
Female	1952/54	96.04	1.67	2.09	0.19	1692963	100.0
	1971	98.17	0.46	1.36	-	1418236	100.0
	1981	95.75	0.22	2.68	1.35	2370942	100.0
<b>Rural</b>							
Both sexes	1971	96.26	0.84	2.89	-	4707924	100.0
	1981	92.74	0.33	5.14	1.78	6470346	100.0
Male	1971	95.21	1.03	3.75	-	3308586	100.0
	1981	90.82	0.42	6.72	2.02	4199800	100.0
Female	1971	98.75	0.38	0.86	-	1399338	100.0
	1981	96.30	0.16	2.2	1.34	2270546	100.0
<b>Urban</b>							
Both sexes	1971	32.83	12.03	55.13	-	144600	100.0
	1981	63.96	3.81	29.09	3.12	380540	100.0
Male	1971	29.53	12.78	57.68	-	125702	100.0
	1981	57.00	4.54	34.74	3.70	280144	100.0
Female	1971	54.81	7.02	38.16	-	18898	100.0
	1981	83.39	1.75	13.33	1.51	100396	100.0

1. Primary sector includes agriculture, forestry, hunting and fishing.

2. Secondary sector includes mining, quarrying, manufacturing and construction.

3. Tertiary sector includes electricity, gas, water, transport, communication and other services.

Source: Central Bureau of Statistics, 1958-Population Census 1952/54, Table 12;

Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part I, Table 21 & Vol. V, Table 45;

Central Bureau of Statistics, 1984-Population Census 1981, vol. I, Part V, Table 24 and Vol. III, Table 21.

It may be observed that for the country as a whole, and for rural areas, more than 90 per cent of all employed persons were engaged in the primary sector, while the tertiary sector engaged the second highest, 3 per cent to 6 per

cent, while the remaining were engaged in the secondary sector. The secondary sector continues to play a very minor role in absorbing the growing labour force of Nepal. These findings are in the expected direction



giving the fact that Nepal is essentially a rural country where more than 94 per cent of its population lives in rural areas and agriculture is the main source of livelihood.

The pattern of industrial distribution of the employed population as observed for the total and for rural areas also holds good for males and females separately. However, the proportion of females employed in the primary sector was relatively higher than that of males, but in the other two sectors a higher proportion of males were employed. The finding of a higher proportion of females engaged in agriculture may primarily be attributed to the presence of a substantial number of female unpaid family workers in traditional agriculture.

While the pattern of industrial distribution of the employed population in rural areas more or less conforms to the national pattern, the situation in urban areas is not only different but also changing from one census year to the other, particularly with respect to male workers. The largest proportion (58%) of male employed urban population was engaged in the tertiary sector in 1971, while the primary sector employed the largest proportion (57%) in 1981. The primary and tertiary sectors engaged the second largest number of male urban workers in 1971 and 1981 respectively. The pattern of industrial distribution of female urban workers was the same both in 1971 and 1981. The majority of female urban workers was engaged in the primary sector, while the tertiary sector accounted for the second largest number.

It will be further observed from Table 9.11 that the proportion of employed persons in the primary and secondary sectors declined by 3.22 and 0.64 percentage points. Consequently, the proportion of those engaged in the "tertiary" and "unspecified" categories increased by 2.02 and 1.87 percentage

points respectively. In other words, the proportionate decline in the primary sector is counter-balanced by the proportionate increase in the "tertiary" and "unspecified" categories. The changes noted above are more marked for the male rather than for the females.

The pattern of changes in the industrial classification observed for the country as a whole also holds for the rural areas<sup>5</sup>. However, one notices remarkable changes in the proportion of urban employed persons. The proportion of male and female urban workers engaged in the primary sector increased by 27 and 28 percentage points respectively, while the proportion engaged in the tertiary sector declined by 23 percentage points and 25 percentage points respectively. The participation in the secondary sector also declined by 8 percentage points for males and 5 percentage points for females during the last intercensal period. This dramatic increase in the proportion of urban workers being engaged in the primary sector which comprises the major industrial group of agriculture, fishing and hunting, may be attributed largely to the inclusion of some areas in the category of "urban" which were essentially rural in character and had a heavy concentration of agricultural occupations. Part of this increase could also be explained by stagnation of employment in the non-agricultural sector in urban areas.

### **Industrial Distribution**

The percentage distribution of the employed population by major industries for 1971 and 1981 is shown in Table 9.12. It may be observed that more than 90 per cent were employed in agriculture and allied industries both in 1971 and 1981, although

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<sup>5</sup> The proportionate decline in the primary sector among rural males, may be attributed to the influx of rural males to urban areas for work and by increased number of years spent in schools even in rural areas.

there has been a decline in this proportion during this period. The proportion of those engaged in any industry other than agriculture and allied industries accounts for less than 3 per cent of the employed population, excepting personal and community services. The personal and community services accounted for 3 and 5 per cent of the labour force in 1971 and 1981. The pattern of the distribution of the employed population observed for the country also holds good for each region of the country (see Appendix A). The highest concentration of the labour force in agriculture and allied industries testifies that agriculture is still the main source of employment and very few job opportunities are open outside agriculture in the modern extractive industries. In other words, the economy of Nepal has remained essentially agrarian in character.

**Table 9.12- Percentage distribution of the employed population by major industries**

Major Industry	1971	1981
Agriculture, Forestry & Fishing	94.35	91.15
Manufacturing	1.07	0.50
Electricity, Gas & Water	0.04	0.04
Construction	0.10	0.02
Commerce	1.32	1.60
Transport and Communications	0.21	0.11
Financial and Business Services	0.06	0.14
Personal and Community Services	2.84	4.58
Industry not stated	-	1.86
Total	Number 4,852,524	6,850,886
	% 100.00	100.00

Source: Same as are those in Table 9.13

Taking the total non-agricultural labour force as 100 per cent, we observe that the largest proportion of workers is concentrated in “personal and community service” industries (see Table 9.13).

**Table 9.13- Percentage distribution of the economically active population aged 10 years and over by sex, urban/rural areas and major industries, Nepal, Census years 1971-81**

Major industrial group	1971					1981				
	Total	Male	Female	Urban	Rural	Total	Male	Female	Urban	Rural
<b>Total Labour Force</b>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Farmers & Fishermen	94.38	92.81	98.17	32.84	96.26	91.15	88.70	95.75	63.97	92.74
Unspecified	-	-	-	-	-	1.86	2.13	1.35	3.13	1.78
<b>Non-agri (industry)</b>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Manufacturing	19.02	18.38	25.06	15.38	20.72	7.09	7.02	7.53	10.96	5.72
Elec., Gas & Water	0.58	0.64	0.10	0.71	0.52	0.63	0.70	0.21	0.88	0.54
Construction	1.84	1.97	0.54	1.96	1.77	0.42	0.46	0.17	0.61	0.35
Commerce	23.29	22.56	30.22	22.78	23.57	22.83	22.65	23.90	29.62	20.44
Transportation	3.53	3.17	1.21	4.71	2.88	1.55	1.72	0.50	3.15	0.98
Finance and Business	1.27	1.35	0.52	2.11	0.80	2.05	2.15	1.46	4.32	1.26
Personal & Community Services	50.47	51.33	42.36	51.80	49.74	65.42	65.29	66.22	50.46	70.71

Source: Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part I, Table 21;

Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part V, Table 24 and Vol. III, Table 21.

“Personal and community services” are the leading sources of employment for both male and female non-agricultural labour force in rural and urban areas. It is a means

of livelihood for over one half and two thirds of the non-agricultural labour force in 1971 and 1981 respectively. Community services usually include basic administrative, health,

education and welfare services. These services are more likely to grow at the early stages of economic development and also with rapid increase of population. These factors taken together could explain the finding of higher and increasing concentration of non-agricultural labour force in the community and personal services industries.

Commerce involves the second highest percentage of non-agricultural labour force. It accounted for nearly 23 percent of employed non-agricultural labour force both in 1971 and 1981. Retail trade is usually the most important activity within the commerce industry. Non-availability of jobs elsewhere may result in small, on man, or family owned and operated retail selling enterprises because these may offer a relatively easy outlet for people with very small capital, working with family help. As the economy advances these enterprises are likely to disappear gradually. Therefore, the finding of higher concentration of non-agricultural labour force in commerce may also indicate that the economic development of the country particularly in the modern sector is yet to take off. This is further attested by the finding of lower and declining share of manufacturing industry in accounting for the non-agricultural labour force.

The manufacturing industry is the third largest source of employment for the male and female non-agricultural labour force in rural and urban areas. However, the proportion of non-agricultural labour force employed in the manufacturing industry reduced drastically from 19 per cent in 1971 to only 7 per cent in 1981. This decline is more apparent among females than males and also higher in rural than urban areas. The proportion of male and female non-agricultural workers employed in manufacturing industries declined by 11 and 18 percentage points. The corresponding decline in urban and rural areas were 4 and

15 percentage points. This dramatic decline in proportion and absolute number of non-agricultural workers in manufacturing industry, particularly in rural areas among females may be attributed, among other reasons, to the decline in cottage industries, the leading source of employment of rural women in the manufacturing industry. Given the rising cost of production and declining market due to increasing preference for machine finished products, particularly those imported from abroad, it is not unlikely that a considerable decline on cottage industry might have occurred during the last decade. This decline in manufacturing industry could also be attributed to either under-enumeration in 1981 or over enumeration in 1971.

The intercensal decline in the proportion and number employed is also noticeable with regard to the construction and transport industries. However, these industries are very minor in terms of providing employment to the non-agricultural labour force.

Within the non-agricultural labour force, the proportion of males employed exceeded the corresponding proportion of females in almost every industry excepting manufacturing and commerce. In these two industries the proportion of females employed was considerably higher than that of males in 1971. However, female preponderance in these two industries reduced considerably during the last intercensal period.

The industrial distribution of economically active population by rural and urban areas shows a higher degree of industrial concentration in urban than in rural areas. However, one notices some important changes in the distribution of industry between rural and urban areas during the last intercensal period. Between 1971 and 1981, there has been tremendous expansion in personal and community services in rural and commerce in urban areas. The proportion non-agricultural

labour force engaged in personal and community services in rural and commerce in urban areas increased by 21 and 7 percentage points respectively. This rapid rise in community services in rural areas could be due to extension of health, education and other community services in this area. During recent years, there has been a considerable increase in health, education and other community services in rural areas and this could explain the finding of rapid expansion in community services in this area. The lack of wage employment in the face of rising labour force in urban areas due to persistent high fertility and rural to urban migration, could lead people to petty

trades in the commerce industry. And this could explain the finding of a small but increasing proportion of non-agricultural labour force engaged in commerce in urban areas.

### Occupational Classification

The percentage distribution of the employed population by two major occupational groups, sex and residence, for 1971 and 1981 is shown in Table 9.14. It will be noted that for the country as a whole and for rural areas, an absolute majority (89% and above) of male and female workers are engaged in

**Table 9.14- Percentage distribution of employed population (10 years and above) by major occupation and sex, for whole kingdom, rural and urban, Nepal, Census years 1971-81**

Sex	Year	Agricultural	Non-Agricultural	Unspecified	Total	
					Number	%
<b>Total</b>						
Both sexes	1971	94.37	5.63	-	4852524	100.00
	1981	91.37	6.35	2.28	6850886	100.00
Male	1971	92.80	7.20	-	3434288	100.00
	1981	88.89	8.15	2.96	4479944	100.00
Female	1971	98.17	1.83	-	1418236	100.00
	1981	96.06	2.95	0.99	2370942	100.00
<b>Rural</b>						
Both sexes	1971	96.26	3.73	-	4707924	100.00
	1981	92.99	5.17	1.83	6470346	100.00
Male	1971	95.20	4.79	-	3308586	100.00
	1981	91.03	6.59	2.36	4199800	100.00
Female	1971	98.75	1.24	-	1399338	100.00
	1981	96.62	2.52	0.84	2270546	100.00
<b>Urban</b>						
Both Sexes	1971	32.76	67.23	-	144600	100.00
	1981	63.70	26.42	9.87	380540	100.00
Male	1971	29.46	70.53	-	125702	100.00
	1981	56.68	31.45	11.85	280144	100.00
Female	1971	54.73	45.26	-	18898	100.00
	1981	83.28	12.36	4.36	100396	100.00

Source: Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part I, Table 20 & Vol. V, Table 44;

Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part V, Table 23 and Vol. III, Table 20

agricultural occupations, although there has been a slight decline in this proportion during the last intercensal period. The proportion of females engaged in agricultural occupations is higher than that of males, but in the non-agricultural sector a higher proportion of males were employed. And this pattern of occupational distribution by sex exists in both rural and urban areas. The finding of a higher proportion of females in agricultural occupations may be attributed to the heavy concentration of female unpaid family workers in the traditional agricultural sector.

It will be further noted that between 1971 and 1981, the proportion of the employed population in the agricultural occupations declined by 3 percentage points. Consequently, there has been a slight increase by 0.72 per cent in the proportion of those employed in the non-agricultural occupations and a considerable increase by 2.28 percent in the "unspecified" category. The increase in the unspecified category, therefore, precludes the analysis of the reasons and outcome of these changes. These changes, particularly with respect to agricultural occupations were more apparent among employed males than employed females. The proportion of male and female workers engaged in agricultural occupations declined by 4 percentage points and 2 percentage points respectively.

The pattern of occupational distribution of the employed population in rural areas closely corresponds to that of the national pattern. However, the picture in urban areas is not only different from that of the rest of the country, but it also changes from one census to the other. For, the country as a whole and for rural areas, we observed a slight decline in the proportion of employed persons engaged in agricultural occupations, while this proportion showed a marked increase in urban areas. Similarly, the proportion of employed people engaged in non-agricultural occupations

showed a slight increase for the country as a whole and for rural areas, but this proportion declined considerably in urban areas. In 1971, the majority of urban male workers were engaged in non-agricultural occupations, while in 1981 the largest proportions were found in agricultural occupations. The largest proportion of female workers in urban areas have been and still are engaged in the agricultural occupations, although this proportion has increased considerably during the last intercensal period. The proportion of male and female urban workers engaged in agricultural occupations increased by 27 and 29 percentage points during the last intercensal period, while the proportion engaged in non-agricultural occupations declined by 39 points for males and by 33 points for females. Several reasons may be adduced to explain this dramatic increase in the proportion engaged in agricultural occupations in urban areas. One important explanation is the inclusion of some areas in the "urban category" in 1981 which were essentially of rural in character. This physical annexation of some rural areas into "urban category" resulted in an increase of the agricultural population in urban areas. The slow growth of wage employment opportunity in urban areas may have also pushed some people to participate in agricultural occupations and this could also partially account for the increase in the proportion employed in agricultural occupations in urban areas. The decline in the non-agricultural occupations may also partly be attributed to the slow growth of wage employment opportunity in non-agricultural sector and consequent failure to absorb the growing labour force due to prevailing high fertility and influx of people from rural to urban areas.

### **Occupational Distribution**

One would also expect to find a close

correspondence between industrial and occupational structure in a predominantly agrarian economy like Nepal where both agricultural and non-agricultural sectors are characterized by simple methods of production. And this closeness is partly borne out by data in Table 9.15 which provides the occupational distribution of labour force.

**Table 9.15-Percentage distribution of the employed population by major occupational groups**

Major occupational groups	Sex	1971	1981
Professional & Technical	Both sexes	0.52	0.93
	Male	0.68	1.19
	Female	0.14	0.45
Administrative & Related	Both sexes	0.02	0.09
	Male	0.03	0.13
	Female	0.003	0.02
Clerical	Both sexes	0.97	0.71
	Male	1.31	1.03
	Female	0.13	0.12
Sales	Both sexes	1.24	1.25
	Male	1.54	1.62
	Female	0.51	0.53
Services	Both sexes	0.70	0.24
	Male	0.84	0.31
	Female	0.38	0.10
Agriculture	Both sexes	94.37	91.37
	Male	92.80	88.89
	Female	98.17	96.06
Production & Related	Both sexes	2.18	3.12
	Male	2.80	3.86
	Female	0.67	1.73
Not stated	Both sexes	-	1.73
	Male	-	2.28
	Female	-	0.99

Source: Same as are those in Table 9.16

It will be observed that more than 90 per cent of all economically active persons are engaged in farming and related occupations and this proportion closely corresponds to the proportion of workers engaged in agricultural and allied industries. It is to be noted also that the proportion of those engaged in any occupation other than agricultural accounts

for less than 3 per cent of the employed population except production and related occupations. The proportion of those engaged in production and related occupations barely accounted for 2 and 3 per cent of the employed in 1971 and 1981 respectively. The pattern of occupational distribution observed for the country is also observed in each region of the country (see Appendix B). This finding not only confirms that the economy of Nepal has been and still is predominantly agrarian but also that very limited opportunities were created outside the agricultural sector. Given very low share in the total labour force of white collar (professional, administrative, clerical and sales), blue collar (production and related workers) and service workers, one reaches the conclusion that Nepal has a long way to go in social and economic development.

Looking into the occupational structure of non-agricultural labour force (taking it as 100 persons), we find that a production and related works is the largest occupational group, engaging 45 per cent of labour force in 1981 (see Table 9.16). Sales work constitutes the second largest major group of non-agricultural occupations, even though the proportion engaged in this occupation showed a decline, particularly among females, during the last intercensal period, 1971-81. These two (production related work and sales) occupations accounted for nearly 61 per cent and 69 per cent of the non-agricultural labour force of 1971 and 1981 respectively. The professional, technical and related workers emerged as the third largest group on non-agricultural occupation, replacing clerical workers, accounting for 15 per cent of the non-agricultural occupations in 1981.

Between 1971 and 1981, there has been considerable increase in the proportion of non-agricultural population engaged in production and related occupations, followed

by those in professional occupation. The increase is more marked for male than for female workers. The proportion of male and female workers in production and related occupations increased by 8.4 percentage points (38.90-47.30%) and by 22.33 percentage points (36.46-58.79%) respectively. The proportion of male and female workers engaged in professional and technical related occupations increased by 5.21 percentage points (9.43-14.64%) and by 7.54 percentage points (7.73-15.27%) respectively. The professional and technical related persons are mostly concentrated in education, health and welfare institutions/organizations. And there has been considerable expansion in health, education and welfare activities of the government in recent years. Expansions in these activities also coincided with the availability of large number of

professionals in the country. These factors could together explain the findings of an increasing proportion engaged in professional and production related occupations.

It is to be also noted that between 1971 and 1981, the proportion of non-agricultural population engaged in service experienced the highest decline, followed by those in clerical and sales occupations. The proportion of those engaged in service, administrative/ clerical and sales occupations declined by 8.76, 4.78 and 2.41 percentage points respectively during the last intercensal period. The decline was more apparent for females than males. There exists no sex pattern in the distribution of non-agricultural occupations. In all but two occupations, the proportion of employed males is higher than that of females.

**Table 9.16-Percentage distribution of the economically active persons (10 years and over), by sex and major occupation group, Nepal, Census years 1971-81**

Occupation	1971			1981		
	Total	Male	Female	Total	Male	Female
<b>Total Labour Force</b>	100.00	100.00	100.00	100.00	100.00	100.00
Farmers and related	94.37	92.80	98.17	91.37	88.89	96.06
Non-farmers	5.63	7.20	1.83	6.35	8.15	2.95
Unspecified	-	-	-	2.28	2.96	0.99
<b>Non-farmers</b>	100.00	100.00	100.00	100.00	100.00	100.00
Professional, tech. & related	9.27	9.43	7.73	14.74	14.64	15.27
Administration, clerical and related	17.51	18.59	7.23	12.73	14.27	4.67
Sales workers	22.02	21.40	27.92	19.61	19.95	17.86
Service workers	12.53	11.68	20.66	3.77	3.84	3.40
Production and related	38.67	38.90	36.47	49.14	47.30	58.79

Source: Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part I, Table 20;  
Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part V, Table 23.

### **Educational Attainment and Occupation**

The relationship between level of education on the one hand and the skill and reward (social and economic) associated with an occupation, on the other hand, is expected to

be positive. Employment in the agricultural occupations is mostly at the level of unskilled labour with low wages and without much assurance of continued availability of employment. But white collar occupations demand

higher skill, also are the best paid not only at the higher level but at the lower levels of clerical workers and service workers. More-over, one accords higher social prestige to white collar than to agricultural occupations. In view of these considerations, one would expect those with little or no education to be concentrated in agricultural occupations, while those with college education and above to prefer professional, administrative and other

white collar occupations. And this has been also supported by data (see Table 9.17).

Table 9.17 provides the distribution of employed population by occupation and educational attainment. It may be noted that 96 per cent of those who have had no formal schooling and 75 per cent of those who had education upto high school level or below were engaged in agricultural occupations in 1971. For the corresponding year, the participation in white collar occupations showed an

**Table 9.17- Percentage distribution of employed population by occupation and educational attainment, Nepal, Census years 1971-81**

Educational attainment	Sex	1971			1981			Unspecified
		White Collar occupations <sup>a</sup>	Agricultural occupations <sup>b</sup>	Others occupations <sup>c</sup>	White Collar occupations <sup>a</sup>	Agricultural occupations <sup>b</sup>	Others occupations <sup>c</sup>	
Total	Both sexes	2.75	94.37	2.88	9.45	81.82	3.37	5.36
	Male	3.56	92.80	3.64	10.32	80.10	3.72	5.86
	Female	0.78	98.17	1.05	4.56	91.55	1.40	2.49
No schooling	Both sexes	1.50	95.97	2.53	5.53	87.46	3.59	3.42
	Male	1.90	94.90	3.20	6.11	86.18	3.96	3.75
	Female	0.58	98.39	1.03	2.20	94.90	1.41	1.49
Below S.L.C., S.L.C. and equivalent	Both sexes	16.84	74.86	8.30	8.84	82.52	3.34	5.30
	Male	16.92	74.48	8.60	9.73	80.73	3.70	5.84
	Female	15.15	82.27	2.57	4.02	92.21	1.40	2.37
Grade 11-12	Both sexes	65.48	26.21	8.30	40.36	38.39	2.57	18.67
	Male	64.81	26.69	8.50	41.05	37.24	2.72	18.98
	Female	83.13	13.79	3.08	34.06	48.98	1.18	15.78
Graduate	Both sexes	73.28	21.22	5.50	47.08	30.32	1.90	20.70
	Male	72.53	21.76	5.71	47.28	29.51	2.00	21.21
	Female	90.86	8.60	0.54	45.11	38.10	0.95	15.84
Post graduate	Both sexes	85.04	11.65	3.30	52.29	26.94	1.20	19.57
	Male	84.27	12.22	3.51	52.37	26.34	1.22	20.07
	Female	96.01	3.62	0.36	51.53	32.24	1.14	15.09

a. includes professional, technical and related workers; administrative and related workers; clerical and related workers; and sales workers.

b. includes farmers and related workers.

c. includes production and related workers and service workers.

Source: Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part I, Table 22;  
Central Bureau of Statistics, 1984- Population Census 1981, Vol. I, Part VI, Table 26



increase with level of education from 65 per cent among those with intermediate (11-12 grades) level education to 73 and 85 per cent among those with graduate and post graduate levels of education respectively. The relationship between occupation and educational attainment observed in 1971 also holds for 1981, however one notices interesting intercensal changes, particularly with respect to diversification of occupations among different education groups. Although the highest proportion (over 80%) of those with no schooling and those having education upto high school level are still engaged in agricultural occupations in 1981, the participation in agricultural occupations among the higher educated persons has increased considerably during the last intercensal period. The proportion of workers engaged in agricultural occupations among those with intermediate, graduate and post graduate level of education increased by 12, 9 and 15 percentage points respectively.

Consequently, participation in white collar occupations among higher educated workers declined considerably during the last intercensal period, although these white collar occupations still remain to be the most popular occupations among higher educated persons in 1981. The proportion of those engaged in white collar occupations among those with intermediate, graduate and post graduate level of education declined by 25, 26 and 33 percentage points during the last intercensal period. The findings of increasing participation in agricultural occupations among higher educated persons on the one hand and declining participation in white collar occupations among the higher educated workers on the other, may be attributed to the following factors: higher educated persons may find it increasingly profitable and/or preferable to engage in agricultural occupations, particularly in the modern agricultural sector,

than to join in the lower range of professional and administrative occupations or clerical services, since expansion in white collar occupations at higher levels was likely to be very limited. This is because there was little or no expansion in the non-agricultural sector during the last intercensal period, although college and university graduates increased manifold during the last intercensal period.

It will be also noted from Table 9.17 that a considerable proportion of workers, particularly those with a higher level of education, were included in the "unspecified" category in 1981. This finding is somewhat contrary to expectations. Persons with little or no education are less likely to specify their co-occupations than are those with higher education. This finding, although seemingly unexpected is not inexplicable. The following reasons may be cited: higher educated person, even though they may have independent earnings, they may have no fixed or permanent jobs, or they may currently be occupying positions which are not commensurate with their level of education and/or expectations. The higher educated members of the labour force usually look for wage employment in the white collar occupations, particularly at higher levels. Given the slow growth of wage employment opportunities in the modern sector of the economy, the white collar occupations at higher level are of limited supply although there has been a great increase of university/college graduates over the years. As a result, educated members of the labour force, even though presently engaged in some gainful activities, may still be looking for situations which are more permanent in nature and closer to their expectations, and these could be the reasons they do not specify their current occupations as well as employment status.

### **Employment Status**

Employed persons have been classified accor-

ding to their employment status into four broad categories, namely, a) employee; b) employer; c) own account workers, and d) unpaid family workers. The proportionate distribution of the employed population by status is given in Table 9.18. It shows that the overwhelming majority of workers are

self-employed, i.e. own account workers and less than 1 per cent are employers. This is what one would expect to find in a country like Nepal where nearly 95 per cent of the total population live in rural areas and are engaged in traditional agriculture of family farming.

**Table 9.18- Percentage distribution of employed population (10+ years) by employment status and sex, Nepal, Census years 1952/54-81**

Sex	Year	Employees	Employers	Own account workers	Unpaid family workers	Unspecified	Total	
							Number	%
<b>Nepal</b>								
Both sexes	1952/54*	18.23	0.91	80.54	-	0.32	4,153,455	100.00
	1971	9.34	0.45	85.92	4.29	-	4,852,524	100.00
	1981	9.07	0.69	85.54	2.52	2.18	6,850,886	100.00
Male	1952/54	20.64	1.08	77.98	-	0.30	2,460,492	100.00
	1971	11.69	0.55	84.66	3.10	-	3,434,288	100.00
	1981	11.84	0.86	83.21	1.73	2.36	4,479,944	100.00
Female	1952/54	14.73	0.66	84.27	-	0.33	1,692,963	100.00
	1971	3.65	0.21	88.98	7.16	-	1,418,236	100.00
	1981	3.85	0.36	89.95	4.02	1.82	2,370,942	100.00
<b>Rural</b>								
Both sexes	1971	8.02	0.44	87.21	4.33	-	4,707,924	100.00
	1981	8.07	0.68	86.54	2.60	2.10	4,670,346	100.00
Male	1971	10.05	0.54	86.27	3.13	-	3,308,586	100.00
	1981	10.55	0.86	84.56	1.77	2.25	4,199,800	100.00
Female	1971	3.21	0.20	89.41	7.17	-	1,399,338	100.00
	1981	3.49	0.36	90.19	4.14	1.81	2,270,546	100.00
<b>Urban</b>								
Both sexes	1971	52.38	0.84	43.94	2.84	-	144,600	100.00
	1981	26.02	0.71	68.57	1.15	3.55	380,540	100.00
Male	1971	54.78	0.86	42.10	2.26	-	125,702	100.00
	1981	31.16	0.81	62.83	1.09	4.11	280,144	100.00
Female	1971	36.35	0.74	56.17	6.74	-	18,898	100.00
	1981	11.65	0.41	84.59	1.38	1.97	100,396	100.00

\* Here population below 15 years are taken in the age group 10-14

Source: Central Bureau of Statistics, 1958-Population Census 1952/54, Table 13;

Central Bureau of Statistics, 1968-Population Census 1961, Vol. IV, Table 9;

Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part II, Table 25 & Vol. V, Table 45;

Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part V, Table 25 and Vol. III, Table 22

Examination of Table 9.18 shows that for the country as a whole and for the rural areas, the proportions of male and female “own account workers” or self-employed remained more or less constant, while the proportions of employees and employers increased, although marginally, during the last intercensal period 1971-81. This increase in proportion of male and female employees and employers, although very limited, may indicate the creation of some job opportunities, particularly in rural areas, due to expansion of modern agriculture.

Although there were no significant changes in the status of the employed by sex at national level and in rural areas, this change, however, was very significant in urban areas. The proportions of male and female “own account workers” in urban areas increased, while the proportion of “employees” showed considerable decrease. In urban areas, the proportions of male and female “own account workers” recorded a marked increase by 21 percentage points and 29 percentage points respectively, while the proportions of male and female “employees” decreased by 24 percentage points and 25 percentage points respectively during the last intercensal period.

The finding of an increasing proportion of “own account workers” on the one hand and a decreasing proportion of employees on the other in urban areas, may be attributed to the following factors: i) slow growth of wage employment opportunities in the non-agricultural sector, and ii) prevailing high unemployment in urban areas. The slow growth of wage employment opportunities in the face of growing labour force, due to persistent high fertility and the influx of people from rural to urban areas, may have forced some of the unemployed to seek means of livelihood as self-employed or to help in family enterprises. The increasing proportion of own account workers may also result from the

government policy of encouraging self employment by giving individuals financial assistance (loan) and other incentives to start farms, small industries, etc. Furthermore, the areas which were newly classified as *Town Panchayats* in 1981 may have also included some areas where agriculture was the dominant occupation of the majority of people. And this could also lead to an increase in the proportion of “own account workers: in urban areas.

It may be further observed from Table 9.18 that the status of a good proportion of the employed was “unspecified” in 1981 and this “unspecified” category is mostly concentrated among males in urban areas. This finding may also imply increasing difficulties in obtaining specific or permanent job for a good proportion of urban workers due to the failure to create wage employment opportunities in the non-agricultural sector to absorb the growing labour force.

It is to be further noted from Table 9.18 that the proportions of male and female “unpaid family workers”, particularly the latter, decreased both in rural and urban areas between 1971 and 1981.

The proportionate distribution of employed persons by status and industrial sectors for 1971 and 1981 is shown in Table 9.19. the employment status of a person varies by sector of the economy in which he works. The largest proportion of workers in the primary sector was self-employed, i.e. “own account workers”. And this finding holds good for both the census years and for male and female workers. In the primary sector, “own account workers” constituted 89 per cent and 91 percent of the employed population in 1971 and 1981 respectively. As might be expected, this finding confirms that the absolute majority of males and females were self-employed farmers in traditional agriculture. In the “tertiary” sector, the highest proportions of

**Table 9.19- Percentage distribution of employed population by employment status, sex and major industrial sector, Nepal, Census years 1971-81**

Major industrial sector	Sex	1971				1981				
		Employees	Employers	Own account workers	Unpaid family workers	Employees	Employers	Own account workers	Unpaid family workers	Unspecified
Primary*										
	Both sexes	6.03	0.28	89.25	4.44	4.03	0.58	91.09	2.61	1.69
	Male	7.45	0.33	88.99	3.23	5.24	0.75	90.44	1.79	1.77
	Female	2.77	0.16	89.85	7.21	1.90	0.28	92.23	4.05	1.54
Secondary**										
	Both sexes	59.42	3.68	34.07	2.82	71.14	1.45	19.01	1.87	6.53
	Male	61.70	3.77	32.19	2.34	74.09	1.49	16.72	1.40	6.30
	Female	42.20	3.03	48.29	6.48	54.02	1.23	32.31	4.61	7.82
Tertiary***										
	Both sexes	66.28	3.20	28.93	1.58	69.02	1.07	21.79	1.53	6.58
	Male	67.58	3.25	27.86	1.31	70.12	1.03	21.16	1.24	6.44
	Female	53.13	2.63	39.90	4.34	62.41	1.30	25.59	3.28	7.42
Unspecified										
	Both sexes	-	-	-	-	29.94	4.25	54.26	1.72	9.83
	Male	-	-	-	-	34.23	4.21	50.57	1.16	9.82
	Female	-	-	-	-	17.18	4.37	65.22	3.37	9.86

\* Primary sector includes agriculture, forestry, hunting and fishing.

\*\* Secondary sector includes mining, quarrying, manufacturing and construction.

\*\*\* Tertiary sector includes electricity, gas, water, transport, communication and other services.

Source: Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part II, Table 27;

Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part VII, Table 34

males and females were “employees” in both 1971 and 1981. The “employees” accounted for 68 per cent and 53 per cent of the male and female workers in the tertiary sector in 1971. The corresponding figures were 70 per cent and 62 per cent in 1981. Although the largest proportion of workers in the secondary sector were employees, this was not true for female workers in 1971. In 1971 while the largest proportion of male workers were “employees”, the largest proportion of female workers were “own account workers” in the secondary sector. However, in 1981 the highest proportion of both male and female workers in the secondary sector were “employees”. In the secondary

and tertiary sectors, the majority of the employed population were employees. “Employees” accounted for 59 per cent and 66 per cent of the working population in the secondary and tertiary sectors respectively in 1971. The corresponding figures were 71 per cent and 69 per cent in 1981. It shows that those who work outside the primary sector, i.e. traditional agriculture, are the waged workers while farmers are self-employed. The Table 9.19 also shows a relatively high proportion of female “own account workers” in the secondary sector, compared with the corresponding proportion in the tertiary sector, reflecting the relative importance of cottage industries among female workers.

One also notices some interesting intercensal changes with respect to the employment status of the working population, particularly those working in the secondary and tertiary sectors. In the secondary and tertiary sectors, the proportion of male and female self employed workers, i.e. own account workers had decreased considerably. The proportion of male and female “employees” in the secondary sector has increased from 62 per cent and 42 per cent in 1971 to 74 per cent and 54 per cent in 1981, i.e. by 12 percentage points during the last intercensal period, while in this sector the proportion of male and female “self-employed” workers declined by 15 percentage points (32% to 17%) and by 16 percentage points (48% to 32%) respectively during the last intercensal period, 1971-81. For the corresponding period, the proportion of male and female employees in the “tertiary sector” has increased by 2 (68% to 70%) and 9 percentage points (53% to 62%) respectively, while in this sector the proportion of male and female “self-employed” workers declined by 7 percentage points (28% to 21%) and 14 percentage points (40% to 26%) respectively. The increase of paid workers with a corresponding decline in the self-employed, i.e. “own account workers” in the secondary and tertiary sectors may imply among other things, expansion of paid employment in the secondary and tertiary sectors on the one hand and stagnation of cottage industries, the most important source of self-employment, on the other, over the years. As a result, the “own account” workers were forced to look for paid jobs in the secondary and tertiary sectors or alternatively, the “own account” workers found it more profitable to work for pay jobs than the traditional self-employing enterprises. However, these are empirical questions which remain to be investigated.

It is to be further noted that the proportion of male and female employees in the primary sector declined by 2 percentage points (7% to 5%) and 1 percentage points (3% to 2%) during the last intercensal period. This decline, although small may indicate that the number of jobs was more or less stabilized in the traditional agricultural sector in which scope for further wage employment is limited unless agriculture is modernized.

### **Unemployed Population**

Nepal has no reliable estimates of unemployment and under-employment. This is not only due to lack of good data but also due to definitional and conceptual problems associated with the measurement of these estimates.

In this section we provide the most recent estimates of unemployment and under-employment in Nepal based on census and survey data. However, these estimates have to be treated with caution for the following reasons: the official censuses and surveys usually define a person as unemployed if he/she is out of work (involuntarily) during the reference period and is looking for a job. This definition is unacceptable given the peculiar social and institutional aspects of the labour force prevailing in Nepal. To be more precise, in the context of the joint family system, a person may be out of a job but may not report himself/herself as such because of the transfer payment accruing from the family. Moreover, a person may not be looking for a job, even though he/she be unemployed, if the prospects of finding a job are bleak. For example, educated women may tend to prefer professional occupations, particularly teaching and research and there may not be any openings in these occupations. Lack of suitable jobs and social taboos may, therefore, prevent educated women from looking for jobs. Moreover, a person may be willing to accept a job at a

certain wage level and under certain terms and conditions of employment, but if these terms and conditions are not met, he/she will be automatically pushed out of the labour market. These factors should be borne in mind when interpreting the estimates of unemployment and under-employment.

Lack of good data and uniformity in definitions also prevent the carrying out of any meaningful analysis of trends in under and unemployment.

The estimates of unemployment obtained from the 1981 census are shown in Table 9.20. These estimates indicate that for the country as a whole, nearly 2 per cent of the labour force is unemployed, the unemployment level is higher among males than females and urban areas had a higher level of unemployment than rural areas. The level of unemployment derived from the census data seems to be low<sup>6</sup>, when compared with other estimates of unemployment in Nepal.

The most recent estimates of unemployment and under-employment are those based on a national survey conducted by the National Planning Commission in 1977. The survey reported 5.62 per cent of the total labour force were openly unemployed<sup>7</sup> at the national

<sup>6</sup> This low estimate may be attributed, among other things, to the definition of unemployed used by the census and the timing when the census was conducted. The census of 1981 considered a person unemployed if he/she had not worked at least for eight months (either at a single stretch or at intervals), during the year preceding the census and is currently looking for a job. It is unlikely to find a person who was out of work for eight months in a subsistence economy like Nepal. Also, the census was conducted in the month of June which coincides with the peak agricultural season.

<sup>7</sup> In this survey all those persons who were in the labour force aged 10 years and above but did not participate in any main or subsidiary occupation during the reference year of 1976-77, were defined as unemployed.

**Table 9.20- Distribution of the population by rural-urban residence and rate of unemployment, Nepal, 1981**

Area	Sex	Economically active population	Un employed population*	Unemploy ment rate**
Nepal	Males	4,479,944	85,701	1.91
	Females	2,370,942	25,159	1.06
	Both sexes	6,850,886	110,860	1.62
Urban	Males	280,144	8,391	2.99
	Females	100,396	2,317	2.30
	Both sexes	380,540	10,708	2.81
Rural	Males	4,199,800	77,310	1.84
	Females	2,270,546	22,842	1.00
	Both sexes	6,470,346	100,152	1.54

\* Unemployed here are those who had not worked for eight months (either at a single stretch or in intervals) during the (last) year preceding the day of census enumeration and also "seeking job"

\*\*Number of unemployed persons per 100 economically active persons

**Table 9.21- Percentage unemployed to labour force**

Area	Male	Female	Both sexes
Rural	5.47	5.68	5.57
Urban	4.52	6.02	5.98
Nepal	5.32	5.99	5.62

Source:

"A Survey of Employment, Income Distribution and Consumption Pattern in Nepal", Summary Report, Vol. IV (National Planning Commission, HMG, 1978), p.57

level. The data are presented in Table 9.21.

It may be observed that the female unemployment rate is higher than that of male rate in both rural and urban areas. However, this sex difference in unemployment rates is more glaring in urban areas. The unemployment situation is slightly better in rural (5.6) than in urban areas (6.0). The pattern of unemployment by rural/urban residence reported by the survey closely correspond to those reported by the census data (see Table 9.20).

During under-employment as the ratio of actual number of man-days (i.e. total number of days utilized in farm and non-farm activities) to the potential number of man days, per person per year, the National Planning Commission Survey, reported 63.0 per cent and 44 per cent of the rural and urban areas were under-employed. The potential number of man-days per active person was arbitrarily assumed to be 323 days per annum. It shows that on an average 118 days in rural and 181 days in urban areas were utilized gainfully per worker per year out of 323 days. These estimates of under-employment are considered somewhat exaggerated in view of the following reasons: i) fixing 323 days as full employment norm is unrealistic since it fails to take into consideration the seasonality of agriculture and time loss due to pregnancy, child-birth, illness, festivals, etc. Moreover, the finding of 118 days gainfully employed or 205 days remaining idle on average per worker in rural areas was

untenable given the prevailing high labour force participation rate in rural Nepal<sup>8</sup>. The under estimation of productive days in rural areas was mostly due to non-recognition of off-farm activities in this area.

A recent study by ILO-ARTEP<sup>9</sup> in 1982 estimated the under-employment rate as being 33 per cent for rural Nepal and 54, 37 and 21 per cent for the Mountain, Hill and Terai respectively. In this study the potential number of man-days was assumed to be 254 days per active person per year.

### Age-specific Unemployment Rates

The age-specific unemployment rates calculated from the 1981 population census are given in Table 9.22.

<sup>8</sup> Sixty six per cent of the rural population (eighty four per cent and 47% of rural male and female) aged 10 years and above were engaged in labour force in 1981.

<sup>9</sup> ILO-ARTEP, Employment and Basic Needs in Nepal: A Preliminary Analysis of Problems and Policies, Bangkok, March 1982.

**Table 9.22-Age specific unemployment rates by sex, rural and urban areas, Nepal, 1981**

Age Group	Nepal			Urban			Rural		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
10-14	2.05	2.24	1.79	2.61	2.81	2.30	2.03	2.29	1.77
15-19	3.01	3.77	1.89	5.93	6.68	4.40	2.86	3.60	1.78
20-24	2.48	3.25	1.19	5.11	5.53	4.07	2.31	3.09	1.06
25-29	1.74	2.19	0.85	3.21	3.43	2.57	1.65	2.09	0.77
30-34	1.33	1.63	0.73	2.26	2.41	1.73	1.27	1.57	0.68
35-39	1.07	1.27	0.62	1.68	1.78	1.33	1.03	1.23	0.59
40-44	0.91	1.08	0.52	1.36	1.52	0.79	0.88	1.05	0.57
45-49	0.83	0.98	0.47	1.24	1.34	0.83	0.81	0.96	0.45
50-54	0.69	0.80	0.43	1.09	1.17	0.83	0.67	0.78	0.41
55-59	0.66	0.77	0.37	1.21	1.42	0.43	0.63	0.73	0.37
60-64	0.46	0.54	0.27	0.84	1.05	0.14	0.44	0.51	0.28
65+	0.40	0.47	0.24	0.90	1.08	0.38	0.37	0.43	0.23
<b>Total</b>	1.62	1.91	1.06	2.81	2.99	2.30	1.54	1.84	1.00

Source: Central Bureau of Statistics, 1984-Population Census 1981, Vol. III, Tables 18 and 19

It will be noted that, for the country as a whole, the incidence of unemployment was highest among those aged 15-19 years followed by those aged 20-24 years. While the pattern for males is similar to the pattern for both sexes, i.e. country as a whole, in regard to females, the highest incidence of unemployment was in respect of those aged 15-19 years followed by those aged 10-14 years. The age-specific incidence of unemployment in urban areas conforms to the pattern obtaining for the country as a whole. But in rural areas the incidence of unemployment is highest at ages 15-19 years for both males and females and second highest at ages 20-24 for males and 10-14 for females. It shows that the incidence of unemployment is highest at ages 15-19 in both urban and rural areas.

#### **Regional Differences in Economic Activity: Development Regions**

The economic activity rates by development regions are shown in Table 9.23. It may be noted that among the development regions the labour force participation rate (refined) was highest in the Western Development region followed by Far-western, Mid-western, Eastern and Central Development regions in 1971. However, the relative rank-order of the regions in respect of economic activity rates is changed between 1971 and 1981 (see Table 9.23 and Table 9.24). With regard to economic activity rates, the Mid-western Development region improved its position from rank *third* in 1971 to first in 1981 while the position of Western Development region slid from rank *first* in 1971 to rank *third* in 1981. The economic activity rate of Far-western Development region has been and continues to be the second highest among the development regions; it is to be noted also that the participation rates of Eastern and Central Development regions were consistently lower than those in other three regions and for the country as a whole in both 1971 and 1981. The activity rates of

females were also very low in the Eastern and Central Development regions which has depressed the overall labour force participation rates in these two regions.

The differences in participation rates between regions are less marked for males than for females. The male activity rates varied between regions within a narrow range of 5 to 7 percentage points in 1971 and 1981, while the variation in respect of female participation rates between the regions ranged widely from 21 percentage points in 1971 to 17 percentage points in 1981.

The activity rates for males was highest (85%) in the Mid-western Development region and almost equal in the Central and Far-western Development regions with 84.0 per cent and 83.6 per cent respectively in 1971. However, the relative position of various regions in terms of male economic activity rates changed between 1971 and 1981. In 1981, the highest activity rates for males were almost equally shared between the Far-western and Mid-western Development regions with 87.64 and 87.50 respectively. The third highest male participation rate was observed for the Central Development region in 1981. It shows that the Mid-western and Far-western Development regions continued to be the main centers, followed by Central Development region, for male economic activities in both 1971 and 1981.

The female participation rate was highest for Western Development region in 1971 and for Mid-western Development region in 1981. The second highest female activity rate was observed for Far-western Development in both 1971 and 1981. It shows that Mid-western and Far-western Development region are emerging as the major centers for male and female activities. It is to be noted also that male participation rates in the Eastern and Western Development regions and female participation rates in the Eastern and Central Development



**Table 9.23- Age-sex specific activity rates by development regions, Nepal, Census year 1971**

Region	Sex	Age Groups											Total	
		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64		65+
Nepal	BS	50.50	61.60	63.50	65.30	63.70	66.90	64.70	66.70	62.90	60.00	39.70	25.10	59.33* (41.99)
	M	59.20	75.70	89.80	95.10	96.60	97.40	97.20	96.80	94.00	90.30	64.10	40.50	82.90 (59.03)
	F	40.10	46.20	39.20	36.60	33.90	34.00	32.90	32.50	30.50	27.70	17.90	10.40	35.10 (24.71)
Eastern Development Region	BS	45.10	55.90	59.00	62.20	60.90	62.30	62.70	66.30	61.10	59.30	41.30	26.20	56.95* (39.21)
	M	56.70	73.70	89.30	5.50	97.70	98.00	97.80	97.60	94.60	91.30	70.00	45.10	82.70 (58.18)
	F	31.70	36.00	30.20	28.40	27.50	28.20	28.30	29.10	26.80	24.60	16.80	9.60	28.50 (19.81)
Central Development Region	BS	49.40	59.10	59.40	62.40	60.20	64.00	61.50	63.60	60.70	57.30	39.90	25.60	56.94* (40.39)
	M	61.50	76.40	89.10	95.20	96.90	97.60	97.30	97.00	94.00	90.30	66.80	43.00	84.00 (59.99)
	F	34.70	39.30	31.30	29.30	26.70	27.10	25.90	25.20	24.80	22.50	15.90	9.40	28.60 (20.13)
Western Development Region	BS	54.80	69.00	72.40	72.50	71.10	72.50	71.00	72.00	67.90	65.00	44.40	26.70	64.83* (46.69)
	M	54.00	72.20	88.30	93.20	94.90	96.00	97.40	95.40	93.40	90.20	66.80	40.40	80.00 (57.29)
	F	55.40	65.40	58.50	54.80	50.30	49.20	47.00	44.50	42.30	38.60	24.70	13.70	50.10 (36.31)
Mid-western Development Region	BS	54.50	63.00	64.20	64.00	62.70	65.30	62.80	63.90	59.90	56.50	31.40	19.50	59.31* (41.39)
	M	65.90	81.10	93.30	96.60	97.60	97.80	97.20	96.90	92.90	88.20	51.80	31.40	85.20 (60.08)
	F	40.90	43.70	37.40	33.20	30.70	29.40	28.20	26.60	24.70	21.60	13.00	7.10	32.70 (22.55)
Far-western Development Region	BS	53.20	65.70	69.90	71.00	69.40	71.70	70.00	71.00	67.20	63.40	33.50	19.60	63.64* (45.47)
	M	61.60	79.00	92.10	95.80	70.00	97.80	97.80	97.90	94.90	90.10	49.40	27.90	83.60 (60.36)
	F	42.90	51.50	49.40	47.50	44.70	44.50	43.30	41.50	38.40	34.40	17.40	9.40	43.10 (30.47)

Note: Figure within parenthesis refers to the crude activity rate.

\*refers to the refined activity rate.

Source: Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part I, Table 19.

**Table 9.24- Age-sex specific activity rates for development regions, Nepal, Census year 1981**

Region	Sex	Age Group												
		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Nepal	BS	56.98	60.70	66.05	68.68	68.21	70.84	70.37	72.31	71.21	69.88	62.52	52.85	65.13* (45.60)
	M	61.28	69.24	86.31	93.39	95.25	95.80	96.02	96.38	94.27	92.21	83.27	68.69	83.15 (58.21)
	F	51.96	51.30	47.58	44.86	43.25	44.13	44.67	44.90	44.66	43.25	39.91	35.00	46.21 (32.35)
Eastern Development Region	BS	52.26	57.84	64.61	68.21	67.70	71.25	70.44	72.33	70.28	69.60	61.00	48.99	63.22 (44.49)
	M	55.26	65.00	84.94	93.58	95.75	96.42	96.80	96.96	94.78	93.04	83.67	66.16	81.14 (57.43)
	F	48.87	50.04	45.71	42.47	40.84	42.26	43.25	42.85	42.39	40.77	36.48	30.40	44.13 (30.86)
Central Development Region	BS	54.98	56.73	61.70	64.94	64.41	67.39	66.58	68.53	67.82	65.79	59.36	50.15	61.73 (43.46)
	M	61.70	68.46	85.32	92.98	95.09	95.64	95.95	96.19	93.87	91.69	82.45	67.65	83.02 (58.63)
	F	45.16	43.46	39.88	36.98	35.32	36.07	36.46	43.58	36.65	35.18	33.54	29.71	38.79 (27.22)
Western Development Region	BS	56.52	62.26	68.93	70.51	70.18	71.59	71.84	73.64	72.76	71.66	65.39	55.21	66.42 (46.86)
	M	58.09	66.83	84.90	91.92	93.89	94.29	94.53	95.21	93.66	91.44	84.01	70.06	81.27 (56.95)
	F	54.71	57.34	54.76	51.43	49.39	49.58	49.96	50.33	49.39	48.32	43.75	39.30	51.40 (36.51)
Mid-western Development Region	BS	66.30	69.47	73.08	73.94	73.93	75.55	75.46	77.44	76.20	75.35	67.46	59.50	71.90 (49.25)
	M	70.79	78.28	91.32	95.23	93.64	96.82	96.84	97.19	94.70	92.67	83.74	72.79	87.50 (59.91)
	F	61.16	59.97	56.80	54.35	53.54	53.18	54.25	54.73	54.75	53.63	49.64	43.94	55.78 (38.21)
Far-western Development Region	BS	67.05	67.18	70.53	72.19	70.97	73.67	73.36	75.99	74.88	73.67	67.10	60.08	70.45 (48.26)
	M	86.03	77.72	90.62	88.59	95.76	96.45	96.63	97.26	95.33	93.19	82.98	71.12	87.64 (59.29)
	F	60.48	55.62	52.42	51.07	49.46	50.90	51.37	52.75	52.34	52.18	49.68	46.65	52.88 (36.69)

Note: Figures within parenthesis are the crude activity rates.

\*refers to refined activity rates.

Source: Central Bureau of Statistics, 1984-Population Census 1981, Vol. I, Part V, Table 21.

region have been consistently lower than those in other regions of the country in both 1971 and 1981. The activity rates for males and females for the Eastern Development region was one of the lowest among the development regions observed in both 1971 and 1981.

It may be further gleaned from Tables 9.23 and 9.24 that all the regions experienced an increase in the labour force participation rate, particularly the female activity rates, during the last intercensal period, 1971-81. This increase was consistent with the overall increase in the labour force participation rate observed for the total population in general

and female population in particular.

### Regional Differences in Economic Activity: Ecological Zones

The economic activity by ecological zones are shown in Tables 9.25 and 9.26. It may be observed that among the ecological zones, the labour force participation rate, measured either by crude or refined activity rates, continues to be the highest for the Mountain and Hill, followed by the Terai. Within the "Mountain" and "Hill" category, the labour force participation rate is higher for the Mountain than for the Hill. And this pattern holds good for almost every age group.

**Table 9.25 Crude economic activity rates for geographic zones (with respect to population 10 years and over), Nepal, Census years 1952/54-81**

Zone	Year	Total population			Economically active population (10 years & over)			Crude economic activity rates		
		Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Mountain and Hill	1952/54	5,331,070	2,597,877	2,733,193	2,796,976	1,540,804	1,256,172	52.46	59.31	45.95
	1971	1,138,610	571,539	567,071	577,947	365,858	221,089	50.75	62.43	38.98
Mountain	1981	1,302,896	666,432	636,464	709,471	412,070	297,401	54.45	61.83	46.72
	1971	6,071,407	3,005,517	3,065,890	2,720,660	1,756,239	964,421	44.81	58.43	30.86
Hill	1981	6,556,828	3,409,465	3,147,363	3,497,178	2,095,137	1,402,041	53.33	61.45	44.54
	1952/54	2,904,009	1,452,730	1,451,279	1,356,479	919,688	436,791	46.71	63.30	30.09
Terai	1971	4,345,966	2,240,147	2,105,819	1,553,917	1,321,191	232,726	35.75	58.97	14.97
	1981	7,163,115	3,619,439	3,543,676	2,644,237	1,972,737	671,500	36.91	54.50	18.94

Source: Central Bureau of Statistics, 1958-Population Census 1952/54, Table 2 and Table 12;  
Central Bureau of Statistics, 1975-Population Census 1971, Vol. Part I, Table 19;  
Central Bureau of Statistics, 1984-Population Census 1981, Vol. II, Table 20;

The zonal differences in activity rates is mostly due to differences in female rather than in male activity rates. There is very little variation in respect of male refined activity rates among the zones which remain concentrated within a narrow range of 82 to 87 per cents. The Mountain has the highest male activity

rate, followed by the Terai and Hill. And the pattern of regional distribution of male activity rates remain unchanged during the last intercensal period.

Although the variations in male activity rates among the regions were less pronounced, this was very glaring in respect of female

**Table 9.26 Refined economic activity rates for geographic regions (with respect to population 10 years and over), Nepal, Census years 1952/54-81**

Region	Census Year	Population 10 years & over			Economically active population (10 years & over)			Refined activity rates		
		Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Mountain and Hill	1952/54	3,882,416	1,870,106	2,012,310	2,796,976	1,540,804	1,256,172	72.04	82.39	62.42
	1971	825,701	417,290	408,411	577,947	356,858	221,089	69.99	85.51	54.13
Mountain Hill	1981	937,635	479,633	458,002	709,471	412,070	297,401	75.66	85.91	64.93
	1971	4,325,585	2,141,990	2,183,595	2,720,660	1,756,239	964,421	62.89	81.99	44.16
Terai	1981	5,083,906	2,554,049	2,529,857	3,497,178	2,095,137	1,402,041	68.78	82.03	55.41
	1952/54	2,120,943	1,061,101	1,059,842	1,356,479	919,688	436,791	63.95	86.67	41.21
Terai	1971	3,027,334	1,581,524	1,445,810	1,553,917	1,321,191	232,726	51.32	83.33	16.09
	1981	4,496,347	2,353,932	2,142,415	2,644,237	1,972,737	671,500	58.80	83.80	31.34

Source: Same as are those in Table 9.25.

activity rates; the female activity rate has been and continues to be very low in the Terai. The Mountain continues to occupy the highest position in regard to female activity rates while the Hill occupies the intermediary position. The female activity rates of the Mountain and Hill exceeded the corresponding rate in the Terai by 107 per cent and 77 per cent respectively in 1981. The regional disparities in respect of female activity rates were more pronounced in 1971 than in 1981.

It may be further noted that the female activity rate in each zone is lower than that of the male activity rate. However, the female activity rate increased considerably in each region, while the male activity rate remained more or less constant during the last intercensal period.

The regional data on agricultural and non-agricultural labour force are presented in Table 9.27. It may be observed that the Terai had the largest proportion of males and females employed in non-agricultural activities follow-

ed by the Hill and Mountain in 1971 and 1981. the pattern of regional distribution of labour force by occupation groups as observed for both sexes also holds good for each sex separately. Between 1971 and 1981, the proportion of the employed population engaged in non-agricultural activities increased, although marginally, for the Terai by 3 percentage points while it remained almost constant for the Mountain and decreased for the Hill, particularly among the economically active males, by one percentage point only. The proportionate decline in non-agricultural occupations, particularly among the male labour force of the Hill, was counter balanced by a proportionate increase in the "unspecified" category by nearly 3 percentage points. Considerable increase in the "unspecified" category was also observed in other regions of the country, particularly among males. The increase in the proportion of those included in the "unspecified" category precludes analysis of the reasons for reasons for these intercensal changes.

**Table 9.27- Percentage distribution of employed population aged 15 years and over by major occupational groups and sex for ecological zones, Nepal, Census years 1961-81**

Major occupational groups	Terai			Hill	Mountain & Hill		Mountain		
	1961	1971	1981	1971	1981	1961	1971	1981	
	Total								
Agriculture	92.43	91.59	85.57	94.16	92.96	94.47	97.51	95.78	
Non-agriculture	6.68	8.41	11.18	5.84	4.91	4.86	2.49	2.52	
Unspecified	0.89	-	3.24	-	2.13	0.67	-	1.70	
Total	Number	1,461,205	1,380,362	2,275,620	2,323,433	2,989,840	2,845,634	494,167	612,728
	Percent	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Male								
Agriculture	90.74	90.97	83.57	91.95	90.45	92.27	96.72	94.25	
Non-agriculture	8.31	9.03	12.57	8.05	6.71	6.98	3.28	3.44	
Unspecified	0.95	-	3.85	-	2.84	0.74	-	2.31	
Total	Number	995,705	1,199,547	1,730,822	1,510,483	1,825,131	1,568,210	307,737	360,630
	Percent	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Female								
Agriculture	96.04	95.70	91.92	98.26	96.90	97.17	98.82	97.96	
Non-agriculture	3.19	4.30	6.76	1.74	2.09	2.25	1.18	1.19	
Unspecified	0.77	-	1.31	-	1.01	0.58	-	0.85	
Total	Number	465,500	180,815	544,798	812,950	1,164,709	1,277,424	186,430	252,098
	Percent	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Central Bureau of Statistics, 1968-Population Census 1961, Vol. IV, Table 5;  
 Central Bureau of Statistics, 1975-Population Census 1971, Vol. III Part I, Table 20;  
 Central Bureau of Statistics, 1984-Population Census 1981, Vol. II, Table 22.

As is to be expected, the proportion of the labour force engaged in the secondary and tertiary sectors also found to be highest in the Terai, followed by both the Hill and Mountain in 1971 and 1981 (see Table 9.28). And this pattern of regional distribution of labour force by industry holds for both male and female separately. Between 1971 and 1981 the proportion of persons engaged in the tertiary sector increased considerably, particularly for the Terai, while the proportion in the primary and secondary sectors declined in every region and for each sex.

The findings of low proportion of emplo-

yed population engaged in non-agricultural occupation and secondary/tertiary sectors in the Mountain is not unexpected given the fact that these occupations and industries are usually associated/located with urban center and the Mountain has no such center.

The proportionate distribution of the employed population by status and sex for ecological zones is provided in Table 9.29. It may be observed that the "own account worker" constituted the majority of the employed male and female population in every region of the country, although there has been decline in this proportion during the last inter-

**Table 9.28- Percentage distribution of employed population aged 15 years and over by major industrial sector according to ecological zones, Nepal, Census years 1952/54-81**

Major occupational groups	Terai				Hill		Mountain & Hill		Mountain		
	1952/54	1961	1971	1981	1971	1981	1952/54	1961	1971	1981	
	Total										
Primary*	92.56	92.49	91.61	85.69	94.16	92.57	93.76	94.50	97.51	95.39	
Secondary **	1.55	1.78	1.58	0.85	1.21	0.46	2.48	2.13	0.82	0.24	
Tertiary ***	5.78	4.81	6.81	11.35	4.63	4.99	3.51	2.68	1.67	2.48	
Unspecified	0.11	0.92	-	2.11	-	1.98	0.25	0.69	-	1.89	
Total	Number	1,293,212	1,461,205	1,380,362	2,275,620	2,323,433	2,989,840	2,600,785	2,845,634	494,167	612,728
	Percent	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Male										
Primary*	91.29	90.84	90.99	83.65	91.96	90.11	91.72	92.32	96.72	93.93	
Secondary **	1.69	2.20	1.72	1.05	1.61	0.59	2.99	2.73	0.96	0.28	
Tertiary ***	6.90	5.98	7.29	12.99	6.43	6.97	5.03	4.17	2.32	3.60	
Unspecified	0.12	0.98	-	2.31	-	2.32	0.26	0.78	-	2.19	
Total	Number	877,772	995,705	1,199,547	1,730,822	1,510,483	1,825,131	1,436,269.0	1,568,210	307,737	360,630
	Percent	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Female										
Primary*	95.23	96.04	95.70	92.17	98.26	96.42	96.28	97.17	98.81	97.49	
Secondary **	1.25	0.86	0.67	0.24	0.46	0.26	1.84	1.39	0.60	0.18	
Tertiary ***	3.41	2.32	3.63	6.13	1.28	1.88	1.64	0.86	0.59	0.87	
Unspecified	0.11	0.77	-	1.45	-	1.44	0.24	0.58	-	1.46	
Total	Number	415,440	465,500	180,815	544,798	812,950	1,164,709	1,164,516	1,277,424	186,430	252,098
	Percent	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Note: \*, \*\* and \*\*\* are the same as are those \*, \*\* and \*\*\* in Table 9.19.

Source: Central Bureau of Statistics, 1958-Population Census 1952/54, Table 12;

Central Bureau of Statistics, 1968-Population Census 1961, Vol. IV Part I, Table 21;

Central Bureau of Statistics, 1975-Population Census 1971, Vol. IV Part I, Table 21;

Central Bureau of Statistics, 1984-Population Census 1981, Vol. II, Table 23.

censal period, the major exception being the female self-employed workers in the Terai. The proportion of female self-employed workers in the Terai registered an increase during the last intercensal period.

Among the ecological zones, the Mountain has had the highest proportion of "own account workers", followed by the Hill and Terai. The finding of a higher proportion of

own-account workers in the Mountain could partly be attributed to fewer off-farm employment opportunities and greater stagnation in agriculture in this region compared with other regions of the country. The off-farm employment opportunities for the country as a whole are limited and these are more limited in the Mountain due to its non-industrialization and non-urbanization. Similarly, the

**Table 9.29- Percentage distribution of employed population (15+years) by employment status and sex for ecological zones, Nepal, Census years 1961-81**

Zone	Year	Employer (%)		Employee (%)		Own account worker (%)		Unpaid family worker (%)		unspecified (%)		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Mountain & Hill	1961	0.23	0.11	9.12	4.54	87.61	86.09	2.52	8.73	0.52	0.53	1,568,210	1,277,424
												(100.00)	(100.00)
Mountain	1971	0.23	0.14	3.19	1.13	95.11	96.16	1.47	2.57	-	-	307,737	186,430
												(100.00)	(100.00)
Hill	1981	0.43	0.27	4.75	1.25	90.65	91.84	2.61	5.46	1.56	1.18	360,630	252,098
												(100.00)	(100.00)
Terai	1971	0.38	0.13	6.85	1.82	89.65	91.27	3.12	6.78	-	-	1,510,483	812,950
												(100.00)	(100.00)
Hill	1981	0.49	0.26	7.83	2.33	88.13	91.62	1.41	3.99	2.14	1.80	1,825,131	1,164,709
												(100.00)	(100.00)
Terai	1961	2.01	1.18	37.51	26.34	56.80	53.34	3.25	18.52	0.43	0.62	995,705	465,500
												(100.00)	(100.00)
Terai	1971	0.93	0.77	21.54	16.02	76.11	76.61	1.42	6.60	-	-	1,199,547	180,815
												(100.00)	(100.00)
Terai	1981	1.55	0.77	19.99	9.57	74.03	84.77	1.32	2.37	3.11	2.52	1,730,822	544,798
												(100.00)	(100.00)

Source: Central Bureau of Statistics, 1968-Population Census 1961, Vol. IV, Table 9;  
Central Bureau of Statistics, 1975-Population Census 1971, Vol. III, Part III, Table 25;  
Central Bureau of Statistics, 1984-Population Census 1981, Vol. II, Table 24.

room for further absorption of a growing labour force in the agriculture is very limited, particularly in the Mountain, not only due to its traditional structure, but also due to its limited arable land and poor quality soil.

Given this relatively greater difficulty in finding off-farm employment opportunities in the Mountain it is, therefore, not unexpected to find a higher proportion of the working population of this region engaged in self-employment as a means of livelihood, compared with their counterparts in other regions of the country.

The "paid workers", i.e. employees constitute the second most important category for males and females in the Terai and for males in other two regions. The proportion of "paid workers" is highest in the Terai, and

lowest in the Mountain and the Hill occupied the intermediary position. In 1981, 20 per cent of the working men in the Terai were paid workers as against 8 per cent and 5 percent in the Hill and Mountain. In the case of females, 10 per cent of the working population in the Terai were paid workers in 1981. The corresponding proportions in the Hill and Mountain were 2.33 and 1.25 per cent respectively. Likewise, the proportion of employers, although a very insignificant category, is highest in the Terai followed by the Hill and Mountain. The findings of higher proportion of paid workers and employers in the Terai and Hill compared to the mountain, may indicate that the openings of off-farm employment opportunities are higher in the former regions than in the latter region. Most

of the industries and factories are located in the Terai and Hill, therefore, it is likely to find higher proportion of paid workers and employees in the former regions than in the mountain zone. Between 1971 and 1981, the proportion of employees and employers registered modest but positive increase in almost every region of the country, excepting for male and female employees in the Terai.

The “unpaid family workers” constitute the second most important

category of work among females in the Mountain and Hill, while this was the third important category for males in all regions and for females in the Terai.

### THE LONGEVITY OF WORKING LIFE IN NEPAL

In the concluding section, we provide a description of the average length of economically active life for male in Nepal using tables of working life. The analysis was confined to

Table 9.30-Abridged table of economically active life for males, Nepal, 1981<sup>a</sup>

Age group	Specific activity rate			Stationary population		Life expectancy (in years)			Components of annual charge				
	In age group	At beginning age x	Total	In labour force	Total	In labour	Inactive	Average remaining years in labour force per active survivor	Death rate per 1000 of labour force	net entries into economic activity per 1000 inactive labour force	Net retirements into inactive labour force		
	$n^W_x$	$W_x$	$n^L_x$ <sup>c</sup>	$n^{LW}_x$	$n^{L/W}_x$	$e^o_x$	$e^o_{wx}$	$e^o_x - e^o_{wx}$	$R_x$	$n^{qd}_x$	$n^A_x$	$n^{Or}_x$	
	1	2	3	4	5	6	7	8	9	10	11	12	13
0-4	00.00	0.00	432,653	-	-	50.88	35.88	15.00	-	-	-	-	
5-9	00.00	0.00	413,926	-	-	55.76	42.97	12.79	-	-	-	-	
10-14	61.28	0.00	407,898	249,960	393,132	51.67	43.71	7.96	49.27	2.49	338.95	-	
15-19	69.24	65.26	401,628	278,087	387,089	47.28	41.17	6.11	44.86	3.71	81.01	-	
20-24	86.31	77.78	392,666	338,910	378,451	43.13	38.45	4.68	40.66	5.35	177.50	-	
25-29	93.39	89.85	381,923	356,678	368,097	39.22	35.11	4.11	36.68	5.91	138.12	-	
30-34	95.25	94.32	370,265	352,677	356,861	35.30	31.41	3.89	32.69	6.59	50.31	-	
35-39	95.80	95.52	357,019	342,024	344,095	31.40	27.62	3.78	28.71	7.95	18.47	-	
40-44	96.02	95.91	341,310	327,726	328,955	27.58	23.86	3.72	24.77	10.07	14.58	-	
45-49	96.38	96.20	322,313	310,645	310,645	23.87	20.16	3.71	20.92	12.84	-	1.82	
50-54	94.27	95.32	298,706	281,590	281,590	20.30	16.53	3.77	17.34	17.68	-	4.42	
55-59	92.21	93.24	269,151	248,184	248,184	16.95	13.13	3.82	14.08	23.99	-	11.78	
60-64	83.27	87.74	232,250	193,395	193,395	13.82	9.92	3.90	11.30	35.29	-	23.30	
65-69	72.75 <sup>d</sup>	78.01	187,649	136,515	136,515	11.01	7.28	3.73	9.32	51.43	-	27.06	
70-74	63.66 <sup>d</sup>	68.20	137,357	87,441	87,441	8.52	5.24	3.28	7.68	77.57	-	21.11	
75+	59.50 <sup>d</sup>	61.58	141,289	84,067	84,067	6.36	3.78	2.58	6.14	70.29	-	92.50	

- For a detailed discussion of the methodology see, United Nations, 1968. Methods of Analysing Census Data on Economic Activities of the Population, Population Studies No: 43.
- Activity rates were computed from the 1981 census of Economic Characteristics.
- Source: Level 14.58, “West” model, Coale and Demeny, 1966. Regional Model Life Tables and Model Stable Populations, Princeton University Press, New Jersey, USA.
- Obtained in graphical extrapolation.



males only in view of their greater participation in economic activities (see Table 9.8). The tables of working life, also known as tables of economically active life or labour force life tables, represent the life cycle of economic activity of a hypothetical cohort of people subject to given schedules of age-specific mortality rates and age-specific activity rates.

Table 9.30 provides abridged table of economically active life of male population of Nepal based on activity rates obtained from the 1981 census and the abridged life table generated on the basis of estimated life expectancy at birth of 50.88 for males in 1981\*.

It may be observed from Table 9.30 that a Nepalese male at birth is expected, on the average, to spend 36 years in the labour force and 15 years as dependent, out of his total life expectancy of 51 years. At the age of entry into the labour force, i.e. at age 10 the corresponding figures were 43.71, 7.96 and 51.67 years.

Table 9.30 further shows that economically active male survivors to age 10 will have on the average 49.27 remaining years in the labour force, whereas the expectation of active life for all males at age 10 is 43.71 years. This is expected because the average remaining years of active life is obtained per economically active survivor of the cohort while the “expectation of active life” is calculated for each person in the life table at birth and at different ages.

#### **The Loss of Active Life**

An estimate is also made of the number of years lost due to death prior to the completion of the potentially active years. This is done by taking the difference between gross years of active life and net years of active life, i.e. expectation of active life. The gross years of active life derived from age specific

participation rates alone shows what the average number of active year per person would be if there were no death before the age of retirement, while the net years take into account the shortening of working life due to mortality. The gross years of active life\* over the whole range of ages from ten years upward comes to 61 and 30 years for Nepalese males and females respectively in 1981.

The effects of mortality on the expectation of active life at birth and at the beginning age entries into the labour force are shown below:

	Active Years in all ages 10 and over
1. Gross years of active life	61
2. Expectation of active life at birth	36
3. Loss of active years by mortality (1-2)	25
4. Expectation of active life at age 10	44
5. Loss of active years by mortality after age 10 (1-4)	17

It shows that the average potential span of 61 productive year in Nepal will be shortened as a result of mortality by 25 years. The loss of active years by mortality after age 10 is 17 years.

#### **Dynamics of Labour Force**

Table 9.30 also provides the rates of labour force replenishment for males by accession and of depletion by death and retirement, at each age interval. As expected, the rate of entry into the labour force is at its maximum in the age group 10-14 reflecting economic value of children in a peasant agricultural society like Nepal. By the age of 40-45, most of the process of entering into the labour force seems to be completed, with

\* See, Chapter XI: *Estimates of Fertility and Mortality, for greater details*

\* Gross years of active life is calculated by multiplying the age-specific activity rates for various age-groups by the numbers of years in the groups and summing the products.

only 14.58 persons per thousand population in this age group joining the labour force in the next five years. It is also interesting to note that the entry is concentrated in a shorter age span, almost completed by age-group 30-35.

Total separation rates for males increase gradually from a low of around 2.5 per 1000 of the male stationary labour force in age group 10-14 to 163 and above for age 75 and above. Retirement rates follow the same pattern as the rates of separation due to death rising with age. The retirement rates are much below the mortality rates for each age excepting the highest age group. This signifies that males reported as workers in Nepal are more likely to die than to retire at any age. Given the importance of agriculture, the low retirement rates in old age group may stem from the common belief on the part of the workers that he is still a tiller of the soil when in fact he may have only nominal labour force activity (Farooq,1975)<sup>10</sup>

Finally, applying the age-specific rates from the table of economically active life to the figures for corresponding age groups in the active labour force and inactive population of Nepal in 1981, and summing up the results for all ages, the following crude rates of labour force replenishment by entries and of its depletion by death and retirement were derived.

	Annual crude rate per 1000 of the male labour force in 1981
Entries	35.79
Loss by death	11.06
Retirements	3.36
Labour force replacement rate	21.37

<sup>10</sup> Farooq, G.M Dimensions and structure of labour force in Relation to Economic Development. A Comparative study of Pakistan and Bangladesh, Islambad, Pakistan Institute of Development studies.

It shows that the losses from labour force due to mortality are by far higher than losses due to withdrawal from the active to the inactive population and the expectancy of working life at age 10(35.79) is comparatively low. There is no doubt that substantial reduction in mortality level would basically increase the expectation of working life, and improve the efficiency of the labour force.

Taking the difference between the entry rate and the total separation rate (i.e. death and retirement rate), we have calculated "Labour Force Replacement Rate". It measures labour force growth per 1000 of the initial labour force size, i.e. the rate at which it would grow under conditions of constant age-specific activity rates. In case of Nepal it amounts to an increase of 21.3 per cent per 1000 of the male labour force.

In order to appreciate the magnitude of pressure on the labour market, we have further calculated "Labour force replacement ratio"\* a summary index which measures the number of entries per 100 withdrawals from the economically active population. The replacement ratio for male worker turns out to be 248- indicating that for one job vacated either due to retirement or death, there are two aspirants. This finding points out the need for creating/generating greater number of jobs to absorb the growing labour force.

\* Defined as the annual number of entries into the labour market per 100 of the sum of retirements and losses by death.