

CHAPTER VIII

URBANIZATION

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1. Introduction

Urbanization or the growth in the proportion of persons living in urban areas has been one of the most significant demographic features of the present time. Many countries of the world are undergoing rapid urbanization process. This is one of the reasons for the growing interest in the study of urbanization. The other reason is that urbanization and economic growth of a country are strongly related. As urbanization proceeds, various aspects of development in the country are affected. Transition away from agriculture, for example, proceeds with the process of urbanization. Apart from economic growth, urbanization brings improvements in various basic services necessary for people. It has been observed that, urban areas are better endowed with basic services, compared to the rural areas. Urbanization brings with it several problems and challenges too. Shortages of basic infrastructures, particularly in many developing countries, have led to negative features such as "urban poverty, deprivation and environmental degradation".

Nepal is among the least urbanized of the developing countries. The country is just at the beginning of urban transition. Although the present urban population is not large, the rate of growth during the recent years has been quite significant. With the present rate of growth the urban population will be doubled in less than 15 years to come. It is a concern for the country to provide the "basic urban services and amenities" for the increasing urban population. The country has been already facing many problems in improving the level of living of its urban population. The problem will certainly be more aggravated in the coming years. The importance of the study of demographic and other aspects of urbanization in Nepal has been increasing these days because it provides the basic information necessary "to formulate development plans and to implement development programs" for the urban as well as rural population of the country.

In this study various demographic aspects of the urbanization (for example, level of urbanization and the tempo of change) and some of the major implications of the growing urbanization in Nepal are covered. The future trend of urbanization in the country is also outlined.

2 Definition of Urban Area

One of the most common ways of classifying the population for purposes of general analysis, is dividing them into urban and rural groups. Correspondingly, the geographical areas of a country are also divided into urban and rural. An urban place, in general, is defined as the part of the country not included in rural areas. "Urban population" consists of individuals residing in urban areas. Rural areas in turn consist of farm and non farm

population¹.

The rural farm population is that living on farms (outside urban areas) without regard to occupation and the rural non farm population Includes persons residing in rural areas who do not live on farms.

In Nepal, data on urban places are available since the 1952/54 Population Census². The

urban areas of the country have been denoted by various names in different censuses- sahar (in 1952/54), sahar or nagarpalika (1961), nagarpanchayat (1971 and 1981) and nagarpalika (1991). The urban areas covered in the Censuses since 1961 are the urban places (i.e.. nagarpalika or nagarpanchayat) designated under the statutory provisions. The definitions as adopted in these censuses are basically the definition of "municipality" or "nagarpalika" or "nagarpanchayat". These definitions show a considerable variation over the years. It has been observed that some of the recognized attributes for an urban area were not followed in formulating these definitions. However, the recent Municipality Act has provided some of the universally recognized factors for the definition of a Municipality. Historically, the following Acts are pertinent (or die definition of municipal or urban areas of Nepal:

- (i) Nepal Rajya Nagarpalika Ain, 2009,
(Nepal State Municipality Act, 1952);
- (ii) Nagar Panchayat Ain, 2019,
(Town Panchayat Act, 1962);
- (iii) Nagarpalika Ain, 2047,
(Municipality Act, 1990);
- (iv) Nagarpalika Ain, 2048,
(Municipality Act, 1992).

Criteria specified in these Acts (for a locality to be a municipal area or an urban area) are summarized in diagram 1. **Nepal Rajya Nagarpalika Ain, 2009 (1952)**, which had

Data from the 1942 Population Census of Nepal on three urban areas (or sahar) of the Kathmandu valley (i.e., Kathmandu, Bhaktapur and Lalitpur) are included in the report of the 1952/54 Population Census. Concerning the urban population of the 1952/54 Census, total population for ten towns or saharis is presented in the report. Detailed tabulations, however, are presented for the three towns of the Kathmandu valley only.

repealed the "Town Panchayat Act, 2007"³, did not specify particular conditions for a

locality to be an urban area or municipality. This Act entrusted the government for establishing a municipality in any locality, "on demand of the local people or on its own judgement". The government was authorized to do so, "after considering revenue and population of the locality". The following are the urban places included in the subsequent population census (i.e., the 1952/54 Population Census): Biratnagar, Janakpur, Malangawa, Lalitpur, Bhaktapur, Thimi, Kathmandu, Kirtipur, Birgunj and Nepalgunj (Table 1).

In several reports it has been observed that the 1961 Population Census, for the first time, attempted to define a "sahar" meaning city (or an urban place) as "an area with a population cluster of 5,000 and over and having an urban environment such as high school, college, judicial and administrative offices, bazaar, communication facilities, mills, factories etc." However, in one of the reports of the 1961 Population Census it has been clearly mentioned that this definition was not strictly followed in the census and the census

After the enactment of Nepal Rajya Nagarpalika Ain, 2009, the then existing "nagarpanchayats" were replaced by "nagarpalikas". (HMG/Nepal, 1953, Nepal Gazette, Vol. II, No. 41).

enumeration was limited to the designated municipal areas only⁴.

The **Town Panchayat Act, 2019 (1962)** defined a municipal area as "an area with not less

than 10,000 inhabitants"⁵. This definition too was not consistently followed for the

purpose of designating a municipality. For example, in the 1971 Census Shivganj (Jhapa) with a population of more than 10,000 was rural while Tansen (Palpa) with a population of

In 1976, the fifth amendment of this Act lowered the threshold to 9,000 individuals.

less than 9,000 was declared as a municipality⁶. According to the 1971 Population Census,

there were 24 localities in the country with a population of 10,000 or more. Out of these localities 12 were designated urban areas. Four other urban areas contained less than 10,000 inhabitants in each locality.

Diagram 1: Definition of Municipal Area (or an urban place), Nepal,
1952/54 - 1991

Act	Basis for the designation of municipality
Nepal Rajya Nagarpalika Ain, 2009 (1952)	Annual of revenue and population of the locality
Nagar Panchayat Act, 2019 (1962)	Locality with 10,000 or more inhabitants
The fifth amendment, 2033 (1976)	Locality with 9,000 or more inhabitants
Nagarpalika Ain, 2047 (1990)	Locality with 9,000 or more inhabitants
Nagarpalika Ain, 2048 (1992)	Locality <ul style="list-style-type: none"> a) with 20,000 or more inhabitants; b) having electricity, road, drinking water communication and other minimum facilities; c) having minimum annual revenue source of one million rupees; and d) having semi-urban environment.

Source: HMG/Nepal, 1953, Nepal Gazette, Vol. II, Issue No. 41

HMG/Nepal, 1974, Nepal Ain Sangraha, p. 40

HMG/Nepal, 1982, Nepal Ain Sangraha, p. 49

HMG/Nepal, 1990, Nagarpalika Ain, 2047

HMG/Nepal, 1992, Nagarpalika Ain, 2048.

The **Municipality Act, 2047 (1990)**, enacted after the reestablishment of the multiparty system in the country, defined a municipal area as the "area with not less than 9,000 inhabitants". Under this Act, the existing town panchayats were renamed as "nagarpalika".

CBS, 1977, p. 62. (According to the 1971 Population Census Report, Tansen contained 6,434 individuals while Sivganj had 17,891).

The following year, **Municipality Act, 2048 (1992)** was promulgated. For the first time, this Act of 1992 has provided a basis that combines political as well as statistical components for the definition of an urban place. It has also included some of the recognized urban criteria such as - urban environment and a minimum level of earning source of the municipality. According to this Act, a municipality should have "a population not less than 20 thousand along with electricity, road, drinking water, communication and

other similar minimum urban facilities."⁷ The "other similar minimum urban facilities" are

not specified in the Act. Further, urban areas have been classified into three categories on the basis of "inhabitants, source of revenue collected and other urban environments".

These three categories are:

- (a) Mahanagarpalika (metropolitan area),
- (b) Upa-mahanagarpalika (sub-metropolitan area), and
- (c) Nagarpalika (municipal area or municipality).

Mahanagarpalika is defined as a municipality with a population of 300,000 or more, having an annual revenue of at least Rs. 70 million and having electricity, road, drinking water, communication and other similar adequate urban facilities. **Upa-mahanagarpalika**, on the other hand, is defined as a municipality with a minimum population of 100,000 and having an annual revenue of at least RS. 20 million and having electricity, road, drinking water, communication and other similar necessary urban facilities. It should be an already designated municipality. **Nagarpalika (municipal area)** is a locality with a minimum population of 20,000 and having annual revenue of at least one million Rs. and having electricity, road, drinking water, communication and other similar minimum urban facilities. It

should be a semi urban area.⁸

Table 1 presents the names of urban places and municipalities included in different Population Censuses of Nepal. An "x" in the table signifies that the place was included in the said census. Among the urban places and municipalities listed in the table, three (Gaur, Byas and Tulsipur) were designated after the 1991 Census, three (Matihani, Thimi and Kirtipur) have been dropped or declassified before the 1971 Census. Two (Malangawa and Banepa) were included in the 1961 Census and declassified in the latter two census but were again included in the 1991 Census.

Any comparison of urbanization levels over time is subject to limitations because of the variabilities in definition as well as boundary changes in the urban places. Besides, one of the most observed features of rapidly growing urban places is that the urban activities flow outward over the boundaries. This further compounds the problem. In this study, the outgrowth of urban areas has not been taken into account. Comparisons, by and large, are limited to the nomenclature of the urban

The Municipality Act, 1992, has retained the municipality status of the existing nagarpalikas in the country. But it can be inferred that the municipal areas to be declared in the future will be based on the definition provided by this Act.

places. Other factors such as expansion or delimitation of boundaries also might have affected the reclassification of urban places. The population variation due to changes in the boundaries is not available. Hence no adjustment could be made for the changes in the municipal boundaries.

Table 1: Urban Places and Municipal Areas, Nepal, 1952 to 1992

	Year (notified in the Nepal Gazette)	Census year				
		1952/54	1961	1971	1981	1991
Ilam	1960			x	x	x
Bhadrapur	1957			x	x	x
Damak	1982					x
Biratnagar	1953	x	x	x	x	x
Dharan	1959		x	x	x	x
Inaruwa	1986					x
Dhankuta	1978				x	x
Rajbiraj	1959		x	x	x	x
Lahan	1976				x	x
Janakpur	1960	x	x	x	x	x
Jaleswor	1982					x
Matihani	-		x			
Malangawa	1986	x	x			x
Banepa	1982		x			x
Dhulikhel	1986					x
Lalitpur	1953	x	x	x	x	x
Bhaktapur	1953	x	x	x	x	x
Thimi	-	x	x			
Kathmandu	1953	x	x	x	x	x
Kirtipur	-	x	x			
Bidur	1986					x
Hetaunda	1969			x	x	x
Gaur	1992					
Kalaiya	1982					x
Birgunj	1953	x	x	x	x	x
Bharatpur	1978				x	x
Byas	1992					
Pokhara	1959		x	x	x	x
Tansen	1957		x	x	x	x
Butawal	1959			x	x	x
Siddharthanagar	1967			x	x	x
Taulihawa	1960					x
Tribhuvannagar	1978				x	x
Tulsipur	1992					
Nepalgunj	1953	x	x	x	x	x
Birendranagar	1980				x	x
Dipayal	1982					x
Dhangadhi	1976				x	x
Mahendranagar	1977				x	x

Source: Bhatta, L. D., 1981, pp. 6-7 and pp. 127-128

HMG/Nepal, Nepal Gazettes: Asoj 27, 2037 (1980)

Baishakh 12, 2038 (1982), and Chaitra 30, 2048 (1992).

Note:- Year not available

3. Urbanization

Urbanization, in general, is defined as the growth in the proportion of total population which resides in urban places. In other words, it is the process of development of urban areas and concentration of population. The process of urbanization involves the increase in number of urban places as well as population of individual urban place. The proportion of population residing in urban places and the urban to rural ratio are the simplest and the most direct measures of the level of urbanization. The "city size of the median inhabitant" and the "mean population size" also are considered as measures of the urbanization level.

Urban population in SAARC countries, - Nepal is the founder member of the "South Asian Association for Regional Cooperation" (SAARC). The following presents the level of urbanization in the member countries of the SAARC (excluding Bhutan for which data are

not available).⁹ Among the member countries of the SAARC, Nepal has the lowest proportion

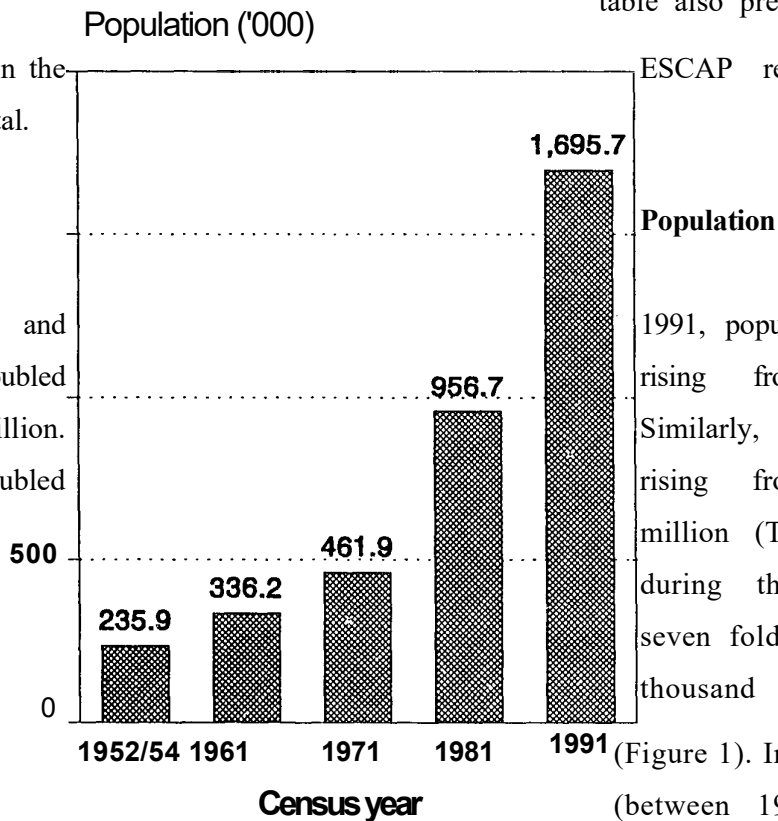
of urban population. However, the growth rate of urban population in Nepal is seen to be one of the highest in the region. In other words the urbanization in Nepal is moving very fast among the member countries. The percentage of urban population in the SAARC region as a whole rose from 19 in 1970 to above 26 in 1990. During the same period the urban population of Nepal increased from less than 4 per cent of the total population to some 9 per cent (Table 2). For the

ease of comparison the table also presents the

urbanization level in the well as the world total.

3.1 Growth of

Between 1952/54 and Nepal more than doubled population doubled million to 16.8 million to 16.8 million persons ten years 1991) alone, the by 77 per cent. The corresponding increases in the rural and the total population were 19 and 23 per cent respectively.



ESCAP region as

Population

1991, population of rising from 8.3 million. Similarly, the rural rising from 8.0 million (Table 3). during the same seven fold soaring thousand to 1.7

(Figure 1). In the last (between 1981 and urban population increased

Source: Table 3.

Countries differ in specifying criteria for defining urbanization (See B. N. Ghose, 1987, p. 152). The member countries of the SAARC also have varying definitions of "urban areas". This makes it more difficult to compare the level of urbanization among these countries. It will be relevant to mention here that for the purpose of this comparison, the definition has not been standardized.

FIGURE 1
URBAN POPULATION OF NEPAL
1952/54 TO 1991

2,000

1,500

1,000

Table 2: Percent Population Residing in Urban Areas in the SAARC Countries, 1970 to 1990

	1970		1980		1990	
	Total Population (' 000)	Percent urban	Total Population (' 000)	Percent urban	Total Population (' 000)	Percent urban
Bangladesh	66,671	7.6	88,219	11.3	115,593	16.4
Bhutan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
India	554,911	19.8	688,856	23.1	853,094	27.0
Nepal	11,488	3.9	14,857	6.1	18,491*	9.2
Maldives	114	14.0	158	21.5	213	25.8
Pakistan	65,706	24.9	85,299	28.1	122,626	32.0
Sri Lanka	12,514	21.9	14,819	21.6	17,217	21.4
SAARC region#	711,404	18.9	892,208	22.1	1,127,234	26.1
ESCAP region	2,029,106	12.3	2,484,720	14.2	2,979,676	18.7
World total	3,697,849	36.6	4,448,037	39.5	5,292,195	45.2

Source: ESCAP/UN, 1993, Ch. II, p. 10
CBS, 1993, Vol. I, Part 1, Table 1, p. 1
CBS, 1994, Vol. II, Table 1, p. 1.

n.a. Not available.
' Population from the 1991 Census.
Population of Bhutan not included.

Increase in urban population between censuses have been different over the years. Increase was the highest (107%) between 1971 and 1981, which decreased (as mentioned earlier) to 77 per cent between the period of 1981 and 1991 (Table 4). At this juncture, it should be noted that different censuses of Nepal have covered different number of urban places. In other words, the urban population in different censuses pertains to different number of urban localities. Because of this limitation, the comparison of growth rates becomes difficult. As an alternative, the average annual growth rate of urban population may be calculated by comparing the total population of urban places in the initial census year with the total population of the same urban places in the subsequent census years. Growth rates calculated by this method may not still be completely comparable. The problems due to changes in boundaries may yet persist. Kathmandu city in the 1952/54 Census, for example, was much smaller than what it was in the 1991 Census. However, this differential procedure is expected to give more reliable indication of the urban growth. In the study it is observed that both of the methods (differential and the other) show that the average annual growth rates have actually declined during the decade 1981-91 compared to the corresponding growth rates during the decade 1971-81 (Table 5). It is also seen that the highest growth rate during 1981-91 was for the towns with population below 20,000. This is because the newly added urban places after the 1981 Census were those with population less than 20,000.

Table 3: Total Population by Urban - Rural Residence, Nepal, 1952/54 to 1991

(Population in Thousand)

	1952/54	1961	1971	1981	1991
Urban Population	235.9	336.2	461.9	956.7	1695.7
Rural Population	8,020.7	9,076.8	11,094.1	14,066.1	16,795.4
Total Population	8,256.6	9,413.0	11,556.0	15,022.8	18,491.1

Source: Department of Statistics, 1958, Table 1, p. 1 and Table 5, p. 14

CBS, 1967, Vol. II, (mimeographed in Nepali), Table 3, p. 3

CBS, 1975, Vol. I, Table 1, p. 01-01 and Vol. V, Table 39, p. 1-30

CBS, 1984, Vol. I, Part 1, Table 1, p. 1. and Vol. III, Table I, p. 1

CBS, 1993, Vol. I, Part 1, Table 1, p. I.

CBS, 1994, Vol. II, Table 1. p. 1.

Table 4: Urban Population in Nepal, 1952/54 to 1991

Census Year	Number of urban places	Total urban population (' 000)	Percentage of urban population to total	Increase in the urban population between the censuses (Per cent)
1952/54	10	235.9	2.9	-
1961	16	336.2	3.6	42.5
1971	16	461.9	4.0	37.4
1981	23	956.7	6.4	107.1
1991	33	1,695.7	9.2	77.2

Source: Department of Statistics, 1958

CBS, 1967 Vol., II

CBS, 1975, Vol. I and Vol. V

CBS, 1984, Vol. I and Vol. III

CBS, 1993, Vol. I

CBS, 1994, Vol. II

Table 5: Average Annual Growth Rate of Urban Population with Number of Urban Places included in Censuses, Nepal, 1952/54 to 1991

	Average annual growth rate #				Number of urban Places
	1952/54-1961	1961-1971	1971-1981	1981-1991	
Urban places common to: 1952/54 Census & later censuses	3.07	2.36	5.13	4.68	7
1961 Census & later censuses	-	2.83	5.55	4.80	11
1971 Census & later censuses	-	-	5.59	4.74	16
1981 & 1991 censuses	-	-	-	4.70	23
Urban places with population 10,000 or more	4.26	4.51	8.03	6.05	*
Urban places with population 10,000 or more	3.65	4.21	9.20	5.49	*
Total urban places	4.53	3.23	7.55	5.89	*

Source of basic data: Same as Table 4.

Geometric growth rate.

* Varying number of urban places from one census to another.

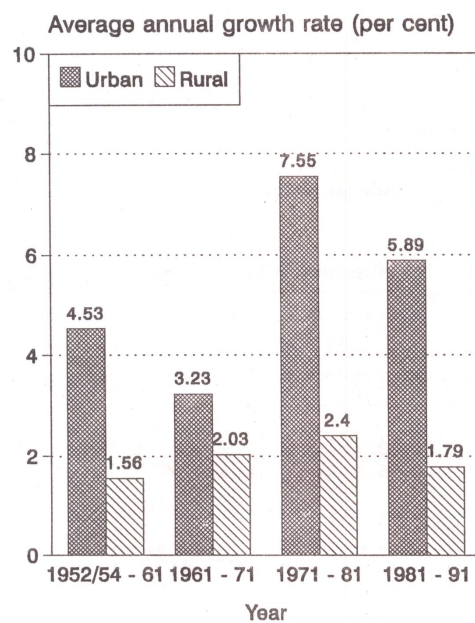
Table 6 : Growth Rate of Population in Rural and Urban Places, Nepal, 1952/54 to 1991

	Average annual growth rate			
	1952/54-1961	1961-1971	1971-1981	1981-1991
Urban	4.53	3.23	7.55	5.89
Rural	1.56	2.03	2.40	1.79
Nepal	1.65	2.07	2.66	2.10

Source: Table 3.

Table 6 presents urban, rural as well as total population growth rates over the years. Nepal is at an accelerating phase of the urban transition. The average annual growth rate in urban areas is much larger than the growth rate of rural population. As compared to the average annual growth rates of the total population of the country, the urban growth rates are more than double. Urban growth rate over the years is seen to highly exceed the rural population growth rate. The growth differential during the last two decades is notably high. In figure 2, average annual growth rates for urban as well as rural areas of the country are shown.

FIGURE 2
URBAN AND RURAL POPULATION GROWTH RATES IN NEPAL
1952/54 TO 1991



Source: Table 6.

It is reported that the recorded trend of urbanization severely underestimates the growth of urban population and overestimates the growth of rural population. The main reason behind this is the "failure to re-draw the boundaries of urban places as to incorporate the over-spilling population and activities which are essentially urban" (ESCAP/UN, 1993, p. 7). This indicates among other things that in some of the municipalities the actual growth rate may have been more than what has been computed here.

3.2 Selected Measures of Urbanization

In general, level of urbanization refers to the proportion of people living in urban places. A number of measures of the urbanization level have been suggested in different studies. In his working paper entitled "Selected Measures of Urbanization" (Arriaga, 1975, pp. 19-87), Arriaga has described the following "demographic dimensions of urbanization":

- degree of urbanization,
- changes in the degree of urbanization,
- distribution of population,
- concentration and dispersion of population and
- components of urban growth.

Some of the indicators dealing with the above aspects will be considered in the following. The percentage of urban population to the total population of the country is increasing steadily. As seen in Table 4, the level was 2.9 in the 1952/54 census which reached 9.2 in the 1991 Census. Still this level of urbanization in Nepal is very low in comparison to the level in other countries.

The ratio of urban to rural population per thousand has increased from around 30 in the 1952/54 Census to 101 in the 1991 census. The ratio has been increasing steadily over the years. The size of locality of residence of median inhabitant increased in 1991 compared with 1981. The mean city size index has been increasing steadily since 1952/54. The mean city size more than doubled between 1981 and 1991. The size was 5.9 thousands in 1981 which reached 13.9 thousands in 1991 (Table 7).

Table 7: Level of Urbanization in Nepal, 1952/54 to 1991

	1952/54	1961	1971	1981	1991
Percent of Population in Urban places	2.9	3.6	4.0	6.4	9.2
Ratio of Urban-rural population *1000	29.4	37.0	41.6	68.0	101.0
Size of locality of residence of median inhabitant ('000)	46.9	40.1	47.5	46.9	82.5
Mean city population size ('000)	1.7	2.2	2.8	5.9	13.9

Source of basic data: Same as Table 4

Tempo of urbanization in Nepal has slowed down during 1981-91 as compared to the previous decade. Table 8 presents some of the measures of the tempo of urbanization. The average annual rate of growth of urban population has declined from 7.6 per cent during 1971-81 to 5.9 per cent during 1981-91 (Table 5). During the decade 1971-81, the level of urbanization increased by 0.24 percentage points. During 1981-91 the increase has been by 0.28 percentage points. The rate of change, however, had declined from 4.81 to 3.70 during the same period. Change in mean city population size, however, has been increasing over the years. Between 1971 and 1981, it was 110.7 per cent whereas between 1981 and 1991 it increased to 135.6 per cent.

As in the case of urban growth rate, the growth differential increased substantially during tile 197181 in comparison to the previous decade. The urban-rural growth differential decreased during 1981-91 (in comparison to 1971-81). Still the growth differential is seen to be significantly high in order to accelerate the process of urbanization. Apart from the addition of new urban places and changes in the boundaries, the urban-rural growth differential is attributable to natural increase in rural and urban areas as well as migration. In the case of Nepal, the component of natural increase does not seem to contribute significantly to urban-rural growth differential. Thus a discussion of urbanization is basically a discussion of net rural to urban migration.

Table 8: Tempo of urbanization in Nepal, 1952/54 to 1991

	1952/54-1961	1961-1971	1971-1981	1981-1991
Average annual change in percent urban population	0.09	0.04	0.24	0.28
Average annual rate of change in percent urban population	2.74	1.06	4.81	3.70
Difference of urban and rural rates of growth of population	2.97	1.20	5.15	4.10
Percent change in size of locality of residence of median inhabitant (per thousand)	-14.50	18.45	-1.26	75.91
Percent change in the mean city population size	29.41	27.27	110.71	135.59

Source Tables: - Tables 6 and 7.

4. Growth of Urban Places

Growth of urban places along with population is shown in Figure 3. As mentioned earlier, the 1952/54 Population Census had included 10 urban places. The 1961 Census included 16 urban places of which 10 were the urban places included in the 1952/54 Census and the remaining 6 were the newly designated municipalities. The 1971 Census

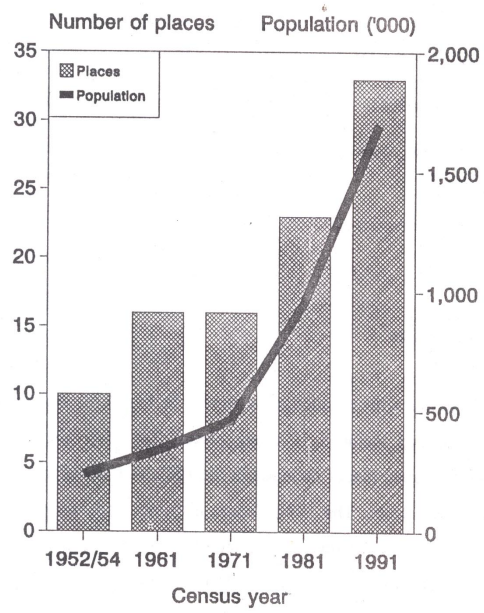
also included 16 municipalities¹⁰. Of these 16 municipalities, 11 were included in the

previous census (of 1961) while the other 5 were newly designated ones. Five urban places included in the 1961 Census were dropped or declassified in the 1971 Census. Number of municipalities included in the 1981 Census increased by 7 and reached 23 which again increased by 10 and reached 33 in the 1991 Census.

The population distribution within urban places is an important demographic aspect of the process of urbanization. In urban planning, the most important factor is the size of locality. In the following, the urban places of Nepal have been divided into different categories on the basis of population size.

These municipalities were designated under the Town Panchayat Act, 2019 (1962) and were called Nagar Panchayat.

FIGURE 3
NUMBER AND POPULATION OF URBAN PLACES IN NEPAL
1952/54 TO 1991



Source: Table 4.

4.1 Places of 20,000 and Over

Localities with population 20,000 and over have special importance in Nepal. The Municipality Act, 1992 has set the lower limit for population at this figure. In 1991, the population in places of 20,000 or more numbered 1.5 million constituting about 87 per cent of the total urban population in the country. In 1952/54, this per cent was as high as 76. The proportion of population in places of 20,000 and over has been increasing over the years (Table 9).

4.2 Places of 100,000 and Over

Urban places with a population size of 100,000 or more deserve a separate consideration in the study of urbanization. At this size the population concentration is subjected to the impact of "urbanization as a way of life" (Hauser and Gardner, 1982, p. 22). Between 1952/54 and 1991, the population in cities of 100,000 or more increased more than 6 fold to reach a total of 667 thousand. The proportion of all urban residents who inhabit these cities is of interest. In 1952/54 about 45 per cent of the urban population was residing in the urban places of this category. The proportion has decreased to 39 per cent in 1991. In the total population of the county, however, the per cent of population living in this size class of cities has increased from 1 in 1952/54 to nearly 4 in 1991.

4.3 Three Largest Cities

There was only one city with more than 10,000 inhabitants - the capital city Kathmandu (105,247) in 1952/54. This continued till 1981. According to the 1991 census, this number reached 3 - Kathmandu (421,258), Biratnagar (129,388) and Lalitpur (115,865). Pokhara (95,286) is approaching to this category. In 1991, 3.6 per cent of the total population was residing in the three major cities - Kathmandu, Biratnagar and Lalitpur. On the other hand, almost 40 per cent of the total urban population were concentrated in these cities.

Table 9: Population in Localities Having 20,000 and 100,000 Inhabitants, Nepal, 1952/54 to 1991

	1952/54	1961	1971	1981	1991
Localities with 20,000 or more inhabitants:					
Urban population (' 000)	178.7	238.0	359.3	866.1	1477.8
Total population (' 000)	178.7	238.0	359.3	1075.0	1653.3
Localities with 100,000 or more inhabitants:					
Urban population (' 000)	105.2	121.0	150.4	235.2	666.5
Total population (' 000)	105.2	121.0	150.0	235.2	666.5

Source: Same as Table 4.

5. Geographical Pattern of Urbanization

The geographical distribution of the urban population had been continuously changing over the years. As may be seen from Table 10, most of the urban population was concentrated in the Central region in 1952/54 and there was a gradual and continuous geographic spread over the subsequent years. In 1952/54 the Central region had about 92 per cent of the total urban population and about 3-4 per cent each in the Eastern and the Mid-western regions whereas Western and Far-western regions did not have any urban population. By 1991 all the regions had significant proportions of urban population and the Central region still maintained the lead though exhibiting a much reduced concentration (54%) as compared to earlier decades. Among the ecological zones, the Hills and the Terai are the only ones that ever contained urban population. The share of Hills was over 82 per cent in 1952/54 which gradually reduced to 51 per cent in 1991.

As may be seen from Table 11, urbanization levels had increased between 1981 and 1991 in all the zones, the greatest being in the Hills zone among the ecological zones and in the Central region among the development regions. These two are the most urbanized regions, the reason probably being the Kathmandu valley, which remains the most urbanized area in the country.

Table 10: Percentage Distribution of Urban Population by Development Region and Ecological Zone, Nepal, 1952/54 to 1991

	1952/54 ^a		1961 ^a		1971 ^a		1981		1991	
Development region										
Eastern	3.4	(1)	16.2	(3)	19.1	(5)	24.5	(7)	20.3	(9)
Central	92.0	(8)	75.9	(10)	63.4	(6)	49.1	(7)	54.4	(13)
Western	3.2	(2)	12.4	(4)	11.9	(4)	12.4	(5)
Mid-western	4.6	(1)	4.7	(1)	5.1	(1)	7.1	(3)	5.9	(3)
Far-western					..		7.4	(2)	7.0	(3)
Ecological zone										
Mountain	
Hill	82.4	(5)	69.7	(8)	65.0	(7)	51.8	(9)	51.2	(13)
Teraï	17.6	(5)	30.3	(8)	35.0	(9)	48.2	(14)	48.8	(20)
Nepal										
Percent	100.0	(10)	100.0	(16)	100.0	(16)	100.0	(23)	100.0	(33)
Population	235.9		336.2		461.9		956.7		1695.7	

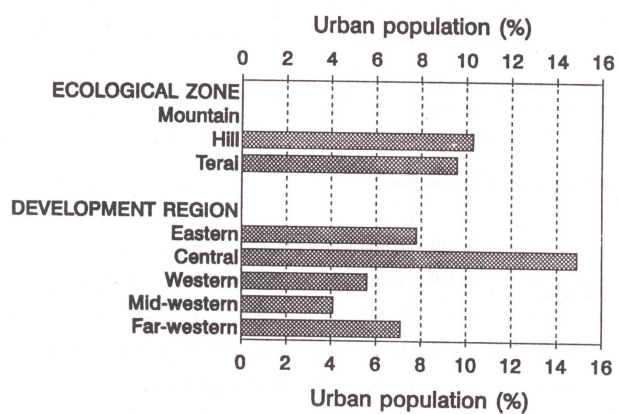
Source: CBS, 1987, Table 8.12 and 8.13
CBS, 1984, Vol. III, Table 1, p.1
CBS, 1994, Vol. II, Table 1, p. 1.

Figures in brackets are the number of urban places.

As far as the urban population growth between 1981 and 1991 is concerned, there is very little difference between the Hills and the Terai. Among the development regions, The Central region having attained the highest level of urbanization, exhibited also the highest growth of urban population. The Eastern region which has the second highest level of urbanizations exhibited about the lowest growth rate of urban population. A low level of urbanization and a high rate of urban population growth seem to be characteristic of Western region. Fig. 4 shows the regional variations in the level of urbanization in Nepal in 1991.

In 1991, 46 districts out of 75 districts (61%) were entirely rural. In the Hills, 27 out of 39 districts were rural (Byas of Tanahu was designated after the 1991 census). Majority of these districts lie in the western part of the country. Most of the Terai districts (17 out of 20) contained urban population (Gaur of Rautahat was declared municipality after the 1991 Population Census and hence is excluded here). Leaving the 46 districts which were entirely rural, the level of urbanization in the remaining 29 districts of Nepal is shown for 1981 and 1991 along with the inter-censal urban growth in Table 12.

FIGURE 4
URBANIZATION BY ECOLOGICAL AND DEVELOPMENT REGIONS
NEPAL, 1991



Source: Table 11.

Table 11: Urbanization by Development Region and Ecological Zone, Nepal, 1981 to 1991

	1981		1991		Average annual growth rate of population (1981-1991)	
	Total Population (' 000)	Percent Urban	Total Population (' 000)	Percent Urban		
					Total	Urban
Development region						
Eastern	3,708.9	6.3	4,446.7	7.8	1.8	3.9
Central	4,909.3	9.6	6,184.0	14.9	2.3	7.0
Western	3,128.9	3.6	3,770.7	5.6	1.9	6.3
Mid western	1,955.6	3.5	2,410.4	4.1	2.1	3.8
Far western	1,320.1	3.4	1,679.3	7.1	2.4	5.3
Ecological zone						
Mountain	1,302.9	..	1,443.1	..	1.0	..
Hill	7,163.1	6.9	8,419.9	10.3	1.6	5.8
Teraï	6,556.8	7.0	8,628.1	9.6	2.8	6.0
Valley	766.3	47.4	1105.4	54.1	3.7	5.1
Nepal	15,022.8	6.4	18,491.1	9.2	2.1	5.9

Source: CBS, 1984, Vol. III, Table 1, p. I

CBS, 1994, Vol. 11, Table 1, p. 1.

Note: Valley - Kathmandu, Lalitpur and Bhaktapur.

There is a wide variation in the level of urbanization among the districts, ranging from 2.0 per cent in Jhapa to 55.7 per cent in Kathmandu in 1981; and from 2.9 per cent in Sarlahi to 62.4 per cent in Kathmandu in 1991. Kathmandu; Lalitpur and Bhaktapur are the most urbanized districts in the country. These three districts together contributed more than 35 per cent of the total urban population in 1991. The following are the districts with the proportion of urban population out of the total population being higher than the national average in 1991: Kathmandu, Lalitpur, Bhaktapur, Kaski, Kanchanpur, Morang, Sunsari, Makawanpur, Parsa, Banke, Rupandehi, Chitwan, Dhankuta, Kailali, Surkhet, Dhanusha, and Jhapa.

Growth rates during 1981-91 of total population and urban population in these districts are also shown in Table 12. There is much less variation among districts, in the growth rate of total population (0.5 to 4.9 per cent per annum) than in the growth rate of urban population which ranged from 0.4 per cent in Palpa to 19.2 per cent in Jhapa. It is also clear that the districts which exhibited high rates of growth of urban population are not necessarily the districts having high rates of growth of total population. One of the reasons for this phenomenon could be rural-urban migration within the district. Yet another reason could be the reclassification as urban places in 1991 of the erstwhile rural areas.

During 1981-91, districts exhibiting urban growth rates above the national average were: Jhapa (19.2), Kaski (7.4), Sunsari (7.3), Chitawan (7.1) and Kathmandu (6.0).

Table 12: Urbanization by District, Nepal, 1981 to 1991

	1981		1991		Average annual growth rate (1981-1991)	
	Total Population (' 000)	Percent Urban	Total Population (' 000)	Percent Urban	Total	Urban
Ilam	178.4	5.5	229.2	5.8	2.5	3.0
Jhapa	479.7	2.0	593.7	9.5	2.2	19.2
Morang	534.7	17.5	674.8	19.2	2.4	3.3
Sunsari	344.6	12.2	463.5	18.3	3.0	7.3
Dhankuta	129.8	10.7	146.4	11.7	1.2	2.1
Saptari	379.1	4.3	465.7	5.2	2.1	4.0
Siraha	375.4	3.7	460.7	4.1	2.1	3.3
Dhanusha	432.6	8.1	543.7	10.1	2.3	4.6
Mahottari	361.1	-	440.1	4.1	2.0	..
Sarlahi	398.8	-	492.8	2.9	2.1	..
Kavre	307.2	-	324.3	6.9	0.5	..
Lalitpur	184.3	43.3	257.1	45.1	3.4	3.8
Bhaktapur	159.8	30.3	173.0	35.5	0.8	2.4
Kathmandu	422.2	55.7	675.3	62.4	4.8	6.0
Nuwakot	203.0	-	245.3	7.6	1.9	..
Makawanpur	243.4	14.3	314.6	17.1	2.6	4.5
Bara	318.9	-	415.7	4.5	2.7	..
Parsa	284.3	15.4	372.5	18.5	2.7	4.7
Chitawan	259.6	10.6	354.5	15.4	3.2	7.1
Tanahu	223.4	-	268.1	-	1.8	..
Kaski	221.3	21.1	292.9	32.5	2.8	7.4
Palpa	214.4	6.1	236.3	5.8	1.0	0.4
Rupandehi	379.1	14.2	522.2	16.0	3.3	4.5
Kapilbastu	270.0	-	371.8	4.6	3.3	..
Dang*	266.4	7.7	354.4	8.2	2.9	3.5
Banke	205.3	16.6	285.6	16.7	3.4	3.5
Surkhet	166.2	8.3	225.8	10.2	3.1	5.2
Doti	153.1	-	167.2	7.4	0.9	..
Kailali	257.9	10.6	417.9	10.7	4.9	5.1
Kanchanpur	169.0	25.9	257.9	24.1	4.3	3.5
Nepal	15,022.8	6.4	18,491.1	9.2	2.1	5.9

Source: CBS, 1984, Vol. I, Part I, Table 1, p. 1 and Vol. III, Table I, p. 1

CBS, 1993, Vol. I, Part I, Table 1, p. 1

CBS, 1994, Vol. II, Table I, p. 1.

Note: Tulsipur is not included.

- Municipality designated after the Census.

.. Not applicable.

6. Primacy Index and Other Indicators

Some of the measures of urban population concentration (primacy index¹¹ cumulative urban

Primacy index for four cities is calculated as -

$$PI_4 = \frac{C_1}{\sum_{k=2}^4 C_k}$$


where, C is the population of the largest city, and C_k (k=2, 3 and 4) is the population of the second, third and fourth ranked cities, respectively. This index "measures the concentration of population in the first city in relation to the remaining three cities." The value of the index increases with the increase in the concentration in the largest city. (Arriaga, 1975, p. 64).

The primacy index for eleven cities is defined as –

$$PI_{11} = \frac{2C_1}{\sum_{k=2}^{11} C_k}$$

The interpretation of this index is similar to the index based on four cities.

per cent¹², Ginni concentration index and city concentration index) are considered in the



following. In 1952/54, the primacy index (based on 4 cities) was 1.25 which declined to 1.03 in 1961. Since 1961, the primacy continued to increase, indicating the increase of concentration in the principal cities and towns. The primacy index based on 11 cities is some what different from that of the index based on 4 cities (Table 13).

The indices based on "cumulative urban per cent" also clearly indicate that the concentration of urban population in the largest city¹³ is increasing over the years (Table 13). Another widely used index for the measurement of city concentration is "Ginni concentration

This index is calculated by considering the following city categories:

- F₁ = all urban places,
- F₂ = urban places with 20,000 or more population,
- F₃ = urban places with 50,000 or more population, and
- F₄ = urban places with 100,000 or more population.

The formula for the index is –

$CV = (1/m) \sum_{i=1}^m F_i$, where

F_i = the per cent of population in the open category i, and

m = the number of city-size categories

“The limits of this index are zero when there is no urban population, and one hundred when all the population lives in the largest category.”

ratio"¹⁴ The ratio based on the ten largest urban places of the country are shown in Table

13. Here the ratio has been calculated only for the 10 largest urban places of the country. This may be the reason that the ratio seems to be decreasing over the years. According to "city

The formula used for the calculation is -

$$CR_{IO} = 0.9 \frac{\sum_{k=2}^{10} E^{10} (k^{-1})^* C_k}{\sum_{k=2}^{10} E^{10} C_k}, \quad \text{where}$$

C_k = the population of the city k after ranking the cities from the largest to the smallest.

(The higher the value of this index the greater the level of concentration in the largest cities.)

concentration index" ¹⁵ the concentration in the largest cities increased considerably

between 1981 and 1991 compared to the previous censuses.

For this study the index has been calculated as -

$$CC = \frac{\sum C_i^2}{P^2} * 100, \text{ where}$$

C_i is the population of city i , u is the number of cities included as urban and P is the total population.

(The maximum value of the index is a hundred. The higher the value of the index, the greater is the concentration in the largest cities.)

Table 13: Primacy Index and Other Indicators of Urbanization in Nepal, 1952/54 to 1991

	1952/54	1961	1971	1981	1991
Primacy index:					
4 cities	1.25	1.03	1.04	1.06	1.24
11 cities	-	1.28	1.12	0.94	1.06
Cumulative urban percent	1.89	2.17	2.56	4.11	6.79
City concentration index	0.021	0.023	0.024	0.039	0.075
Gini concentration ratio (based on 10 largest towns)	0.58	0.49	0.42	0.34	0.35

Sources of basic data: Same as Table 4

Table 14 presents ten most populous urban places of the country. Kathmandu continued to be the most populous since the 1952/54 Census. A comparison between the 1981 and the 1991 Census reveals that Kathmandu, Biratnagar and Lalitpur retained their positions as were in the 1981 Census. In the fourth place, Pokhara replaced Bhaktapur. Bhaktapur slipped to the eighth position in 1991 from the fourth in 1981. Janakpur retained its ninth position of 1981. In 1991, Bharatpur replaced the tenth position occupied by Hetanuda in 1981. Changes in population of fifty thousand plus towns of the country since 1971 is depicted in Figure 5.

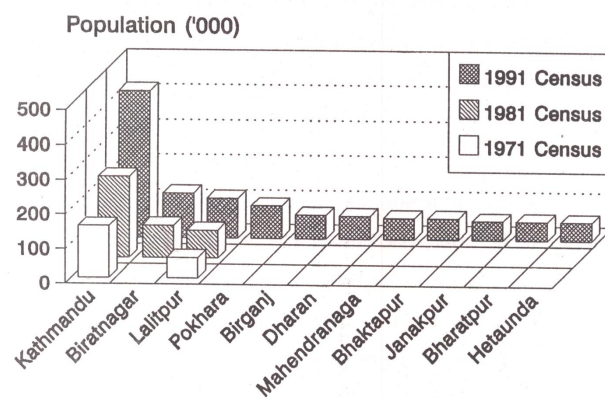
Table 14: Ten Most Populous Urban Places of Nepal, 1952/54 to 1991

1952/54	1961	1971	1981	1991
Kathmandu (105.2)	Kathmandu (121.0)	Kathmandu (150.4)	Kathmandu (235.2)	Kathmandu (421.3)
Lalitpur (41.3)	Lalitpur (47.7)	Lalitpur (59.0)	Biratnagar (93.5)	Biratnagar (129.4)
Bhaktapur (32.1)	Biratnagar (35.4)	Biratnagar (45.1)	Lalitpur (79.9)	Lalitpur (115.9)
Nepalgunj (10.8)	Bhaktapur (33.9)	Bhaktapur (40.1)	Bhaktapur (48.5)	Pokhara (95.3)
Birgunj (10.0)	Nepalgunj (15.8)	Nepalgunj (23.5)	Pokhara (46.6)	Birgunj (69.0)
Thimi (8.7)	Dharan (14.0)	Pokhara (20.6)	Mahendranagar (43.8)	Dharan (66.5)
Biratnagar (8.1)	Birgunj (10.8)	Dharan (20.5)	Birgunj (43.6)	Mahendranagar (62.1)
Kritipur (7.0)	Thimi (9.7)	Siddharthanagar (17.3)	Dharan (42.1)	Bhaktapur (61.4)
Janakpur (7.0)	Janakpur (8.9)	Hetauda (16.2)	Janakpur (34.8)	Janakpur (54.7)
Malangawa (5.6)	Malangawa (6.7)	Janakpur (14.3)	Hetauda (34.8)	Bharatpur (54.7)

Source: Same as Table 4.

Note: Figures in brackets are population in thousand.

FIGURE 5
CHANGES IN POPULATION OF FIFTY THOUSAND PLUS TOWNS
NEPAL, 1971 - 1991



Source: Table 14.

7. Components of Urbanization

As mentioned in the report entitled "State of Urbanization in Asia and the Pacific" published by the ESCAP/UN, Bangkok, the process of urbanization consists of at least four components. They can be summarized as: (i) the formulation of the definition of urban areas, (ii) the changes of urban population, (iii) the increase of population in non-agricultural occupations, and (iv) the existence of distinctive built up urban environment (ESCAP/UN, 1993, p. 1). These factors are briefly discussed in the following.

i) The definition of urban places in Nepal has undergone changes since the 1952/54 Census. Due to these changes in the definition of urban areas from one census to the other, it has become difficult to study, identify and compare the real trend of urbanization in the country. Recently efforts have been made to standardize the definition of urban place or municipality.

ii) Urban population growth results from several factors. The report on the "State of Urbanization in Asia and the Pacific, 1993" has mentioned four reasons: (a) natural increase, (b) non-urban to urban migration, (c) international migration, and (d) boundary expansion (ESCAP/UN, 1993, p. 15). For Nepal, the percentage attributable to natural increase in the total growth is estimated at 31.9 per cent for the period 1980-85, 32.5 per cent for 1990-95 and 32.6 per cent for 2000-2005. The major contribution is attributed to migration and urban reclassification (Table 15). The percentage of urban growth attributed to migration and reclassification has been estimated at 68.1 per cent for the period 1980-85 and 67.5 for 1990-95. This component will continue to contribute about 67.4 per cent during 2000-2005 (ESCAP/UN, 1993, pp. 2-14). It is said that the boundary and administrative reclassification have major impact in the overall increases of the urban population. But in the case of Nepal, information on these aspects are not available. International migration is not a major factor in the urbanization in Nepal (ESCAP/UN, 1993, p. 16).

Table 15: Components of Urban Growth, Nepal, 1960 to 1991

	1960's	1970's	1981-1991
Annual inter censal population growth rate of urban places	3.2	7.3	5.9
Estimated annual urban rate of natural increase	2.1	2.9	1.9
Estimated annual growth from internal migration and reclassification	1.1	4.3	4.0
Estimated percentage of growth attributable to internal migration and reclassification	33.6	59.7	67.8

Source: Quoted in the report of the ESCAP/UN, 1993, Table 2.13, page 2-15 (for 1960s and 1970s figures).
 Figures for the period 1981-91 are imputed on the basis of the estimates provided in the report and the results of the 1991 Population Census of Nepal.

iii) The total economically active population in urban places in 1991 was nearly 0.5 million constituting about 7 percent of the total labour force. The production of urban labour force engaged in agriculture is quite different from those in rural areas (Fig. 6.). As expected, the labour participation in agriculture was higher in rural areas than in urban areas. (A like pattern of rural-urban differences in agriculture labour for males and females were noted in every censuses since 1961). There has been change in the composition of labour force with the growth of urbanization in the country. The change, however, was very slow and notable only after the 1981 Census (Table 16).

iv) Regarding the existence of urban environment, not all of urban areas are “urban” in the strict sense of the urban way of life. According to an estimate by Sharma, only 67 percent of the population in hill urban areas and 58 percent in the inner terai urban environment. The proportion of the built up areas, for example, is significantly low. According to the estimate presented in Sharma’s paper, Kathmandu, Dharan and Lalitpur are the only municipal areas with the built up areas of over 50 percent. For municipalities in general, only about 13 percent of the total areas is actually built-up areas (Sharma, 1993a).

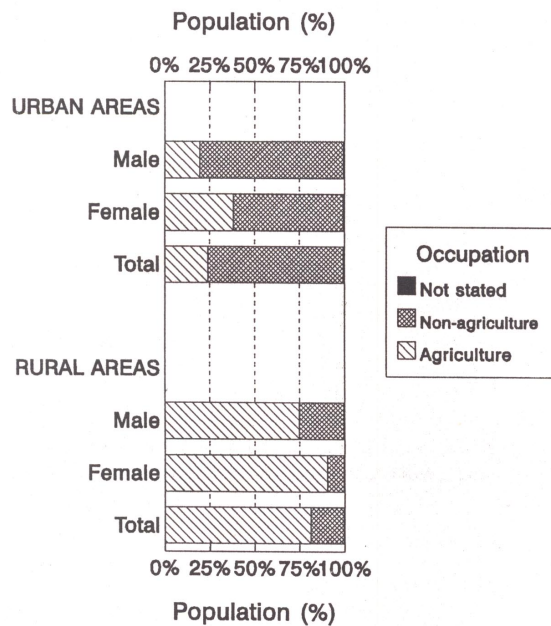
Table 16: Percentage Distribution of Working Population in Agriculture, Nepal, 1961 to 1991

	1961 ^a	1971 ^b	1981 ^b	1991 ^b
Economically active population				
in agriculture (%) ^c :				
Urban area	38.6	32.8	64.0	24.8
Rural area	96.1	96.3	92.7	86.2
Nepal	94.5	94.4	91.1	82.0
Total economically active population:				
Urban area (%)	2.8	3.0	5.6	7.0
Rural area (%)	97.2	97.0	94.4	93.0
Nepal				
Percent	100.0	100.0	100.0	100.0
Number (' 000)	4306.8	4852.5	6850.9	7339.6

Source: CBS, 1967, Part IV, Table 8, p. 386
CBS, 1975, Vol. III, Part II, Table 24, p. 24-01 and Vol. V, Table 44, p. 44-1-7
CBS, 1984, Vol. I, Part V, Table 24, p. 223 and Vol. III, Table 24, p. 364
CBS, 1993, Vol. I, Part XIII, Table 52, p. 325
CBS, 1994, Vol. 11, Table 15, p. 446.

Note: ^a Population at ages 15 years and over,
^b Population at ages 10 years and over,
^c "not stated" category excluded.

FIGURE 6
EMPLOYMENT IN AGRICULTURE SECTOR OF NEPAL
BY URBAN AND RURAL POPULATION, 1991



Source: Same as Table 16.

8 Changes in Urban Population and Urban Places

As mentioned above, urbanization in Nepal has been proceeding at a slow rate. The distribution of towns by population size at different censuses are shown in Table 17. In the 1991 Census 10 more urban places have been added to the number listed in the 1981 Census. Out of an increase of 739 thousand urban populations between 1981 and 1991, about one fourth was due to this addition of new places or reclassification. The population of these new urban places was below 50 thousand each. In actual numbers, the population of these places varied from 12 thousand to 41 thousand.

Table 17: Number of Urban Places by Size and Census Year, Nepal, 1952/54 to 1991

Size of urban place	1952/54	1961	1971	1981	1991
Population:					
Less than 10,000	5	9	4	2	1
10,000-19,999	2	3	5	5	13
20,000-29,999	-	-	3	4	3
30,000-39,999	1	2	-	4	1
40,000-49,999	1	1	2	5	4
50,000-99,999	-	-	1	2	8
100,000 and over	1	1	1	1	3
Total	10	16	16	23	33

Source: Same as Table 4.

In the last ten years, the increase in the number of small size (urban places with 10,000 - 19,999 inhabitants) towns was noticeable. It reached from 5 in 1981 to 13 in 1991. 'File medium sized towns (urban places with 50,000 - 99,999 inhabitants) emerged since the 1971 Census and the growth since then has been significant. There was only one town in this size category in the 1971 Census and the number reached 8 in the 1991 Census (Table 17).

Table 18: Number of Urban and Rural Localities at Different Population Censuses of Nepal, 1952/54 to 1991

	1952/54	1961	1971	1981	1991
Urban localities	10	16	16	23	33
Rural localities	28,760	28,446	3,915	2,912	4,015
Total localities	28,770	28,462	3,931	2,935	4,048

Source: Same as Table 4.

Table 19: Population by Size of Urban Places and Census Year, Nepal, 1952/54 to 1991

Size of urban place	Population (' 000)				
	1952/54	1961	1971	1981	1991
Population:					
Less than 10,000	36.4	57.7	29.1	19.5	9.8
10,000-19,999	20.9	40.6	73.6	71.0	208.1
20,000-29,999	-	-	64.6	98.1	76.2
30,000-39,999	32.1	69.2	-	134.8	39.5
40,000-49,999	41.3	47.7	85.2	224.7	178.2
50,000-99,999	-	-	59.0	173.4	517.4
100,000 and over	105.2	121.0	150.4	235.2	666.5
Total Urban population ('000)	235.9	336.2	461.9	956.7	1,695.7

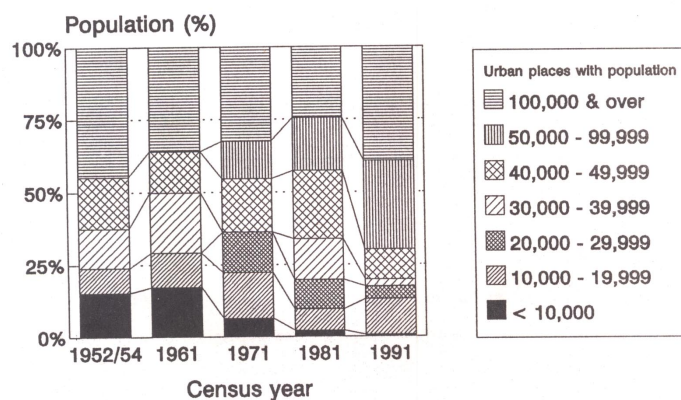
Source: Same as Table 18.

The number of localities¹⁶ in different censuses varied considerably (Table 18). This

variation should be taken into consideration while comparing the population of urban places (or localities) between different censuses. In 1991, there were 14 urban places in the country which had a population of less than 20 thousand. On the other hand, there were 19 localities with a population of 20 thousand or more. The contribution to the urban population by different size classes is summarized in Table 19. Comparison is shown in Figure 7.

For the census purpose a locality is the same as "ward", the lowest level of administration. "Locality" mentioned here are the enumeration as well as reporting areas of the population censuses in Nepal.

FIGURE 7
PROPORTION OF URBAN POPULATION BY SIZE CLASS
NEPAL, 1952/54 - 1991



Source: Same as Table 20.

Table 20: Changes in Urban Population by Size of Urban Place, Nepal, 1981 to 1991

Size of urban place	1981		1991		Percentage Change (1981-91)	
	Number	Population	Number	Population	Number	Population
Population:						
Less than 10,000	2	19.5	1	9.8	-50	-50
10,000-19,999	5	71.0	13	208.1	160	193
20,000-29,999	4	98.1	3	76.2	-25	-22
30,000-39,999	4	134.8	1	39.5	-75	-71
40,000-49,999	5	224.7	4	178.2	-20	-21
50,000-99,999	2	173.4	8	517.4	300	198
100,000 and over	1	235.2	3	666.5	200	183
Total	23	956.7	33	1,695.7	43	77

Source: Same as Table 4.

During 1981-91, the size of the population living in each of the following size classes has declined: less than 10,000; 20,000-29,000; 30,000-39,000 and 40,000-49,000 (Table 20). Of the three size classes, each recorded a growth. The highest growth was registered in the urban places of size class (50,000-99,000) followed by the size class (10,000-19,999). The population in large cities (with a population of more than 100,000) also recorded notable increase (183 per cent). It may be noted, the growth or decline in the size of population from 1981 to 1991 was always accompanied by the corresponding growth or decline in the number of places.

9 Urban Rural Differences

Differences exist between the population living in urban and rural areas. The study of these differences is important in order to better understand the nature of urbanization in a country. Urban-rural differences with respect to various characteristics pertaining to the population of Nepal are examined in the following.

9.1 Age Composition

As in other developing Countries, in Nepal the proportion of population aged 60 and over is very low; it was below 6 per cent in 1991. The proportion of children under 15, was about 42 per cent

of the total population in the 1991 Census. There are urban-rural differences with regard to the proportions of child population and old age population. Urban areas, as compared to rural areas, are characterized by lower proportion of child population and higher proportion of old age population. According to the 1991 census, the proportion of population below 10 years in urban areas was lower (25%) than the proportion in rural areas (30%). The proportion of working age population was higher in urban areas as compared to the rural areas. This has been the general trend since 1961 (Table 22). Another feature is that the proportion of population at ages 15-59 years in rural areas is slowly declining over the years (Figure 8). The proportions of children and old age persons, on the other hand, are increasing since the 1961 census. This observation is true of the total population, which is a result of the gradual and continuous decline in mortality in general and at infant and childhood ages in particular.

Table 21: Percentage Distribution of Urban and Rural Population According to Important Age Groups, Nepal, 1991

Age group	Urban			Rural		
	Total	Male	Female	Total	Male	Female
0-4 years	12.0	11.8	12.3	14.9	15.2	14.6
5-9 years	13.0	12.9	13.0	15.4	15.8	15.0
10-14 years	12.3	12.5	12.1	12.6	13.2	12.1
15-19 years	11.2	11.2	11.1	9.5	9.3	9.8
20-29 years	20.0	19.6	20.5	15.6	14.5	16.8
30-39 years	13.2	13.4	12.9	11.7	11.4	11.9
40-49 years	8.3	8.7	7.9	8.6	8.5	8.6
50-59 years	5.0	5.2	4.9	5.8	6.1	5.5
60 years & over	5.0	4.7	5.3	5.9	6.0	5.7
All ages:						
Number (' 000)	1,695.7	882.0	813.7	16,795.4	8,339.0	8,456.4
Percent	100.0	100.0	100.0	100.0	100.0	100.0

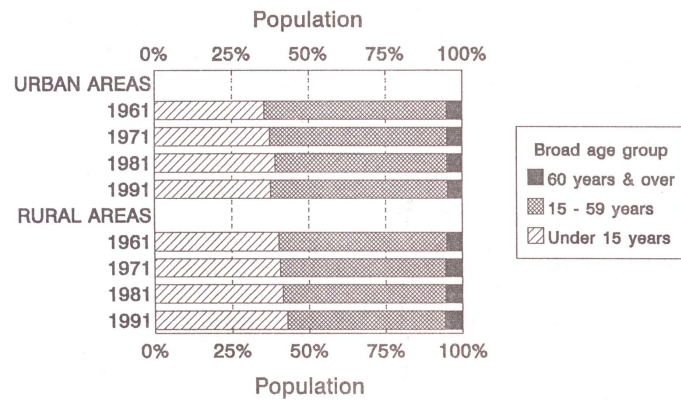
Sources: CBS, 1993, Vol. 1, Part I, Table 5, p. 172
CBS, 1994, Vol. II, Table 5, p. 72.

Table 22: Percentage Distribution of Urban, Rural and Total Population by Broad Age Groups, Nepal, 1961 to 1991

	1961	1971	1981	1991
Urban population (%):				
Under 15 years	35.5	37.3	39.1	37.3
15-59 years	59.3	57.6	55.8	57.7
60 years & over	5.2	5.1	5.1	5.0
Rural population (%):				
Under 15 years	40.2	40.6	41.5	42.9
15-59 years	54.6	53.8	52.8	51.2
60 years & over	5.2	5.6	5.7	5.9
Total population (%):				
Under 15 years	39.9	40.5	41.4	42.4
15-59 years	54.6	53.9	52.9	51.8
60 years & over	5.2	5.6	5.7	5.8
Age not stated	0.3	-	-	-
Urban population (' 000)	336.2	461.9	556.7	1,695.7
Rural population (' 000)	9,076.8	11,094.1	14,066.1	16,795.4
Total population (' 000)	9,413.0	11,556.0	15,022.8	18,491.1

Source: CBS, 1987, Table 3.16, p. 63 and 3.14, p. 61
CBS, 1993, Vol. I, Part I, Table 5, p. 172
CBS, 1994, Vol. 11, Table 5, p. 72.

FIGURE 8
AGE STRUCTURE IN URBAN AND RURAL AREAS
NEPAL, 1961 TO 1991



Source: Same as Table 23.

9.2 Sex Ratio

The sex ratio, defined as number of males per 100 females shows a male dominance in urban compared to rural areas in the 1991 census. The male dominance is much greater in the age groups 15-59 in the urban areas indicated by sex-ratios much larger than 100; in the same age groups the sex-ratios are less than 100 in rural areas (Table 23). A possible reason for this phenomenon is migration of males from rural to urban areas in search of job and education.

Table 23: Males per 100 Females for Total Population and for Urban and Rural Areas by Broad Age Groups, Nepal, 1991

	Urban	Rural	Nepal
0-4 years	103.8	102.5	102.6
5-9 years	107.4	103.7	104.0
10-14 years	112.6	107.8	108.3
15-19 years	109.4	94.5	96.0
20-29 years	103.6	85.0	87.0
30-39 years	113.0	94.2	96.0
40-49 years	118.4	97.2	99.0
50-59 years	114.5	109.6	110.0
60 years & over	96.6	103.2	102.7
Age not stated	58.5	60.9	60.7
All ages	108.4	98.5	99.5

Source: CBS, 1993, Vol., 1, Part 1, Table 5, p. 172
CBS, 1994, Vol. II, Table 5, p. 72

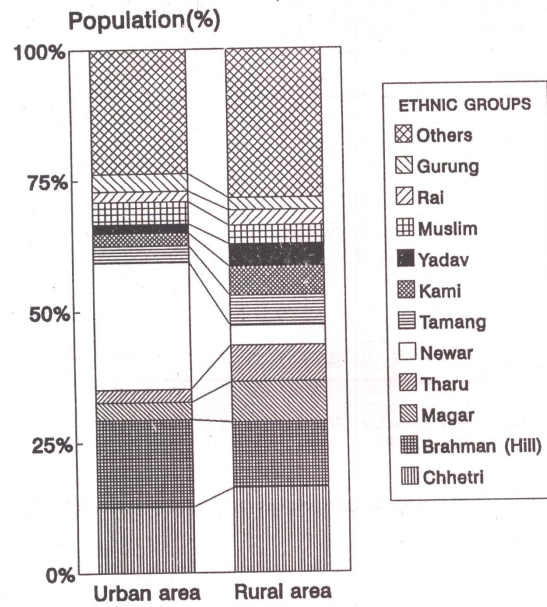
Table 24 indicates a more or less continuous increase in the male dominance in urban areas except for a slight drop in 1991.

Table 24: Males per 100 Females for Urban, Rural and Total Population, Nepal, 1952/54 to 1991

	1952/54	1961	1971	1981	1991
Urban Population	104.1	112.4	116.6	115.2	108.4
Rural Population	96.6	96.5	100.8	104.4	98.5
Total Population	96.8	97.1	101.4	105.0	99.5

Source: CBS, 1987, Table 3.1, p. 42
CBS, 1993, Vol. 1, Part 1, Table 3, p. 61
CBS, 1994, Vol. II, Table 3, p. 3

FIGURE 9
URBAN AND RURAL POPULATION BY ETHNICITY, NEPAL
1991



Source: Same as Table 25.

9.3 Caste/Ethnicity

The 1991 Population Census of Nepal, reported 60 caste/ethnic groups of the population¹⁷. In

the total population, Chhetri, Brahman (hill), Magar, Tharu, Newar, Tamang, Kami, Yadav, Muslim, Rai and Gurung each consisted of more than two per cent of the total. These groups together accounted for more than two-thirds (72.5%) of the country's inhabitants. For the total inhabitants in 1991, Chhetri topped the list with about 16 per cent of the total.

The story is different for the urban places. Among the urban population, Newar topped the list of the urban inhabitants. Almost one fourth of the urbanites in 1991 were Newar. Brahman, Chhetri, Muslim, Gurung, Magar, Tamang, Tharu, Kami and Rai each contained more than two per cent of the total urbanites. These caste/groups together accounted for about 74 per cent of the total urban population (Table 25). Figure 9 compares the proportion of urban and rural population by ethnicity for 1991.

A comparison of per cent population with urban residence among caste and ethnic groups shows, Marwadi (71.9%), had the highest proportion residing in the urban places followed by Newar (39.4%), and Bengali (39%). Other caste/ethnic groups having more than average proportion of urban population were: Thakuri, Kayastha, Dhimal, Baniya, Churaute, Halwahi, Brahman (Terai), Rajput, Sudhi, Kanu, Gurung, Brahman (Hill), Muslim, Sikh, and Gaine (Table 26).

These groups accounted for about 96 per cent of the total population. The remaining 4 per cent comprised of "others", "no caste", and "not reported" categories in the population.

Table 25: Urban and Rural Population by Caste/Ethnic Group, Nepal, 1991

Urban Population			Rural Population		
Caste/ethnic group	Population (' 000)	Percent	Caste/ethnic group	Population (' 000)	Percent
Newar	410.2	24.2	Chhetri	2,752.7	16.4
Brahman, hill	282.9	16.7	Brahman, hill	2,105.6	12.5
Chhetri	215.4	12.7	Magar	1,284.0	7.6
Muslim	73.6	4.3	Tharu	1,153.4	6.9
Gurung	55.5	3.3	Tamang	963.8	5.7
Magar	55.3	3.3	Kami	923.2	5.5
Tamang	54.4	3.2	Yadav	736.4	4.4
Tharu	40.9	2.4	Newar	630.9	3.8
Kami	40.4	2.4	Muslim	579.5	3.5
Rai	34.1	2.0	Rai	491.5	2.9
Yadav	28.8	1.7	Gurung	393.7	2.3
Brahman, terai	22.5	1.3	Damai	346.8	2.1
Baniya	21.8	1.3	Limbu	283.0	1.7
Sudhi	21.3	1.2	Thakuri	278.3	1.7
Damai	21.2	1.2	Sarki	266.6	1.6
Thakuri	21.1	1.2	Teli	232.9	1.4
Marwadi	21.0	1.2	Chamar	197.3	1.2
Teli	17.8	1.1	Kushwah	196.5	1.2
Others	257.7	12.1	Sanyasi	169.3	1.0
			Others	2,810.0	16.7
Total	1695.7	100.0	Total	16,795.4	100.0

Source: CBS, 1993, Vol. 1, Part VII, Table 25, pp. 1-8.
CBS, 1993, Urban Tables, Computer Printouts, Table 66.

Table 26: Urbanites by Caste/Ethnic Group, Nepal, 1991

Caste/ ethnic group	Urban Population (' 000)	Total Population (' 000)	Urban population * 100 Total Population
Marwadi	21.0	29.2	71.9
Newar	410.1	1,041.1	39.4
Bengali	30.8	7.9	39.0
Thakali	3.6	13.7	26.3
Kayastha	13.1	53.5	24.5
Dhimal	3.8	16.8	22.4
Baniya	21.8	101.9	21.4
Churaute	0.4	1.8	21.0
Halwaii	8.8	44.4	19.8
Brahman, terai	22.5	162.9	13.8
Rajput	7.7	55.7	13.7
Sudhi	21.3	162.0	13.1
Kanu	8.9	70.6	12.5
Gurung	55.5	449.2	12.4
Brahman, hill	282.9	2388.5	11.8
Muslim	73.6	653.1	11.3
Sikh	1.0	9.3	10.9
Gaine	0.5	4.5	10.7
Others	736.3	13225.1	5.8
Total	1,695.7	18,491.1	9.2

Source: Same as for Table 25.

9.4 Education

Literacy rate, in general, is higher in the urban areas compared with the rural areas. In each age group, the literacy rate was much more in the urban areas than in the rural areas (Table 27). This is true of males as well as females. The differences are much greater at older ages for both sexes in general and for females in particular.

Table 27: Literacy Rate for Urban and Rural Population, Nepal, 1991

Age group	Urban			Rural		
	Total	Male	Female	Total	Male	Female
06-09 years	47.0	55.7	38.0	44.7	53.7	35.3
10-14 years	63.2	76.0	49.3	61.2	74.8	46.6
15-19 years	54.7	71.5	38.6	51.8	69.6	35.0
20-29 years	70.6	82.9	57.8	35.8	56.5	18.1
30-39 years	61.2	76.0	44.5	26.2	44.0	9.4
40-49 years	52.3	69.6	31.7	20.1	35.6	5.0
50-59 years	42.2	60.0	21.9	15.6	27.1	3.0
60 years & over	32.2	50.8	14.2	12.4	22.1	2.4
All ages	66.9	78.0	54.8	36.8	51.9	22.0

Source: CBS, 1993, Vol. 1, Part VII, Table 26, p. 325
CBS, 1994, Vol. 11, Table 6, p. 89.

Note: Literacy Rate = (Literate* 100)/(Literate + Illiterate).

The differences in the literacy rates of rural and urban areas are striking in all the censuses since 1961 (Table 28). The urban literacy rate is about five times as high as the rural literacy rate in 1961, about four times in 1971, about two-and-a-half times in 1981 and less than twice in 1991. Thus the urban-rural differences in literacy have been decreasing over the years. This may be due to the general increase in the literacy status of the people in the country.

Table 28: Literacy Rates (for Population 6 Years of Age and Over), Nepal, 1961 to 1991

	1961 ^a	1971	1981	1991
Urban population	39.3	48.3	50.5	66.9
Rural population	7.7	12.5	21.4	36.8
Total population	8.9	13.9	23.3	39.6

Source: CBS, 1968, Vol. 111, Part IV, Table 4, p. I
CBS, 1975, Vol. II, Part V, Table 16 and Vol. V, Table 42
CBS, 1984, Vol. II, Part IV, Table 14, p.I and Vol. 111, Table 11, p. 152 CBS, 1993, Vol. 1, Part VII, Table , p. ;
CBS, 1994, Vol. II, Table 6, p. 89.

Note: ^a For population 10 years of age and over.

9.5 Economic Activity

The economic activity rate in the rural areas is higher than in the urban areas for males as well as females. For females, the activity rate in the rural areas is almost twice as high as the activity rate in tile urban areas at each age group (Table 29). Some of the reasons for this may be the high level of rural poverty, the predominance of the agricultural sector and the subsistence economy prevailing in rural areas.

Table 29: Economic Activity Rate by Urban and Rural Population, Nepal, 1991

Age group	Urban			Rural		
	Total	Male	Female	Total	Male	Female
10-14 years	7.6	8.0	7.0	24.8	19.5	30.6
15-19 years	23.3	29.6	16.4	52.5	52.1	52.9
20-29 years	47.9	70.9	24.1	71.9	88.5	57.8
30-39 years	62.1	91.1	29.3	76.2	96.6	57.0
40-49 years	62.0	90.5	28.3	75.6	96.1	55.6
50-59 years	53.9	81.7	22.1	70.3	91.3	47.4
60 years & over	27.5	46.7	9.0	35.2	51.0	18.9
All ages	40.8	59.4	20.3	58.8	69.8	48.1

Source: CBS, 1993, Vol. 1, Part XIII, Table 50, p. 163
CBS, 1994, Vol. II, Table 13, p. 395.

Note: Activity rate = (Economically Active* 100) / (Economically Active + Economically not Active)

In 1991, agriculture was the main occupation of the population residing in rural areas (Figure 10). More than 90 per cent of economically active females and nearly 75 per cent males reported their main occupation as agriculture (i.e., farm and fish workers). The second highest proportion of the population was in "service workers" category (6.2%) followed by "production labour workers" (4.2%). In contrast to this, some one fourth of the economically active urban population were "farm and fish workers". The proportions of the total economically active population in urban areas reporting their occupation as "sales workers", "service workers" and "production and labour workers" were much more than the corresponding proportions for the rural areas (Table 30).

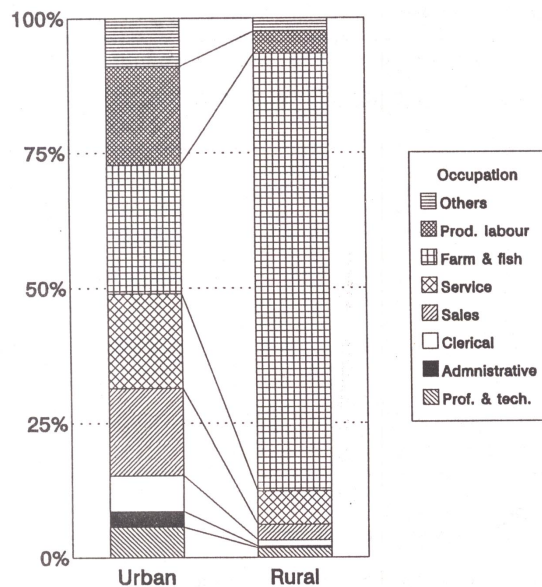
Table 30: Percentage Distribution of Economically Active Population by Occupation, Nepal, 1991

Age group	Urban			Rural		
	Total	Male	Female	Total	Male	Female
Prof./technical workers	5.7	5.1	7.5	1.8	2.5	0.7
Administrative workers	2.9	3.4	1.2	0.3	0.5	0.1
Clerical workers	6.7	7.5	4.4	1.1	1.6	0.3
Sales workers	16.2	17.6	11.6	3.0	3.9	1.7
Service workers	17.5	17.7	16.7	6.2	7.8	3.8
Farm & Fish workers	23.8	19.4	38.0	81.1	74.8	90.5
Prod. Labour workers	18.4	19.5	14.7	4.2	5.8	2.0
Others	8.3	9.2	5.4	2.1	3.0	0.8
Occup. Not stated	0.6	0.6	0.6	0.3	0.3	0.3
Total						
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Number (' 000)	514.6	391.8	122.8	7,339.6	4,375.6	2,964.0

Source: CBS, 1993, Vol. 1, Part X111, Table 51, p. 244
CBS, 1994, Vol. 11, Table 14, p. 412.

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FIGURE 10
ECONOMICALLY ACTIVE POPULATION
BY RURAL AND URBAN RESIDENCE, 1991



Source: Same as Table 30.

9.6 Structure of Employment

It is seen that Nepal has experienced little structural change in employment over the years. The structure of employment in urban areas is different from that of the people residing in rural areas (Table 31). In rural areas, the proportion of employment is the highest in the primary sector while in the urban areas the proportion is the highest in the tertiary sector. This is a common phenomenon in other countries of the world too.

Table 31: Structure of Employment of Population 10 Years of Age and Over (Per cent), Nepal, 1971 to 1991

	Percentage distribution by industry				Total	
	Primary	Secondary	Tertiary	Unspecified	Number (' 000)	Percent
Urban:						
1971	32.8	12.0	55.1	-	144.6	100.0
1981	64.0	3.8	29.1	3.1	380.5	100.0
1991	24.1	11.4	61.5	3.0	514.6	100.0
Rural:						
1971	96.3	0.8	2.9		4707.9	100.0
1981	92.7	0.3	5.1	1.9	6470.3	100.0
1991	85.5	1.9	11.8	0.8	6825.0	100.0
Nepal:						
1971	94.4	1.2	4.4	-	4852.5	100.0
1981	91.2	0.5	6.5	1.9	6850.9	100.0
1991	81.2	2.6	15.7	1.0	7339.6	100.0

Source: CBS, 1987, Table 9.11, p. 216
CBS, 1993, Vol. 1, Part III, Table 52, p. 325.

Note: 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.

Agriculture is the main economic activity and as such more than 80 per cent of the population (at ages 10 years and over) residing in the country are engaged in the primary sector of activity. But for the urban population the proportion is significantly lower than that of rural areas. In 1991, for example, less than one fourth of the urban population was engaged in primary sector. Employment in the tertiary sector was as high as 62 per cent of the urban labour force (Table 31). Although the proportion of occupied population in services (Tertiary Sector) has increased in recent years, Nepal continues to have sizable population in agriculture.

9.7 Labour Force Changes

It is said that one of the most important facts of urbanization process is the change in the structure of the urban labour force. Between 1981 and 1991, growth rate of urban labour force was nearly five times the growth rate of the total labour force (Table 32). Consequently, a greater proportion of the increase in the size of the labour force is expected to occur in urban areas. Translated into number of people, the urban labour force grew by 134,070 between 1981 and 1991. During the same period of 10 years, rural labour force increased by 354,630. Thus, more than one fourth (27%) of the total labour force increase was accounted by the urban area. Major portion of this increase, again, was due to the increase of male labour force. In other words, the movement of people from rural areas to urban areas is still predominantly of males. Between 1981 and 1991, male labour force recorded a negative growth in rural areas. Figure 11 presents the changes in urban labour force between 1981 and 1991.

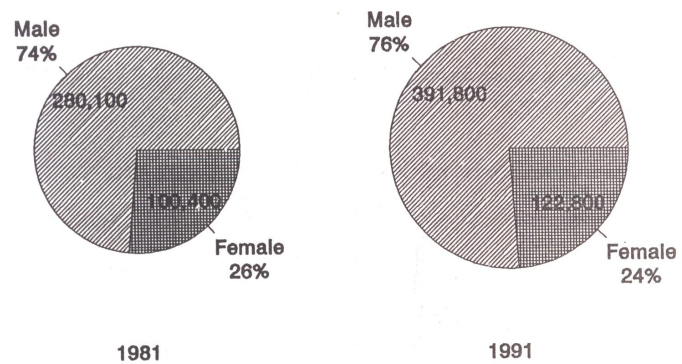
Table 32: Change in Urban, Rural and Total Labour Force of Nepal Between 1981 and 1991

	1981	1991	Change (Percent)
Urban labour force:			
Persons (' 000)	380.5	514.6	35.2
Male (' 000)	280.1	391.8	39.9
Female (' 000)	100.4	122.8	22.3
Rural labour force:			
Persons (' 000)	6,470.3	6,825.0	5.5
Male (' 000)	4,199.8	3,983.8	(5.1)
Female (' 000)	2,270.5	2,841.2	25.1
Total labour force:			
Persons (' 000)	6,850.9	7,339.6	7.1
Male (' 000)	4,480.0	4,375.6	(2.3)
Female (' 000)	2,370.9	2,964.0	25.0

Source: CBS, 1984, Vol I, Part V, Table 21, p. I and Vol III, Table 18, p. 252
CBS, 1993, Vol I, Part XIII, Table 50, p. 163
CBS, 1994, Vol II, Table 13, p. 395.

Note: Labour force = Economically Active Population (10 years of age and over).
For 1991, the number excludes the population (about 0.7% of the total population 10 years of age and over) for which the activity status was not stated.
Due to changes in definition of labour force between censuses the data on labour force are only broadly comparable (Bastola, 1993).

FIGURE 11
CHANGES IN URBAN LABOUR FORCE
NEPAL, 1981 AND 1991



Source: Same as Table 32.

9.8 Marital Status

As in the previous censuses of Nepal (CBS, 1987, p. 196), the proportion of married persons was higher in the rural areas than in the urban areas. In 1991, the proportion of singles was about 37 per cent in urban areas whereas it was 30 per cent in the rural areas. The proportion of persons reported in the category "widow / widower" in rural areas slightly exceeds the corresponding proportion in the urban areas (Table 33).

Table 33: Marital Status of Population 10 Years of Age and Over, Nepal, 1991

	Single	Currently	Widow/widower	Divorced	Separated	Not stated
Urban						
Number (' 000)	466.4	741.9	47.7	1.9	4.1	9.6
(%)	(36.7)	(58.3)	(3.8)	(0.1)	(0.3)	(0.8)
Rural						
Number (' 000)	3,507.7	7,454.6	612.5	27.9	40.6	60.2
(%)	(30.0)	(63.7)	(5.2)	(0.2)	(0.4)	(0.5)
Nepal						
Number (' 000)	3,974.1	8,196.5	660.2	29.8	44.7	69.8
(%)	(30.6)	(63.2)	(5.1)	(0.2)	(0.4)	(0.5)

Source: CBS, 1993, Vol. I, Part XI, Table 34, p. I
CBS, 1994, Vol. II, Table 9, p. 259.

The proportion of the currently married persons in the urban areas has decreased in 1991 compared with the proportion in 1981 (Table 34). The proportion of currently married females has decreased significantly compared with the male counterparts. The proportion of single females, on the other hand, has increased in 1991 compared with the proportion in 1981. One of the several reasons for this may be due to an increase in the average age at marriage of females.

Table 34: Marital Status of Urban Population 10 Years of Age and Over, Nepal, 1981 to 1991

	Single	Currently	Widow/widower	Divorced/Separated	Not stated
1981:					
Male (' 000)	156.6	210.4	6.2	1	-
(%)	(41.8)	(56.2)	(1.7)	(0.3)	-
Female (' 000)	92.9	210	14.8	1.1	-
(%)	(29.1)	(65.9)	(4.6)	(0.4)	-
Total (' 000)	249.5	420.4	21	2.1	-
(%)	(36.0)	(60.7)	(3.0)	(3.0)	-
1991:					
Male (' 000)	278.3	369.3	10.4	2.0	4.1
(%)	(41.9)	(55.6)	(1.6)	(0.3)	(0.6)
Female (' 000)	188.1	372.6	37.3	4.0	5.5
(%)	(31.0)	(1.3)	(6.1)	(0.7)	(0.9)
Total (' 000)	466.4	741.9	47.7	6.0	9.6
(%)	(36.7)	(58.3)	(3.8)	(0.4)	(0.8)

Source: CBS 1984, Vol III, Table 13, p. 212
CBS, 1994, Vol. 11, Table 9, p. 259.

9.9 Population by Income

Separate data for rural and urban sector by income groups are not available for Nepal. The overall levels of poverty in the Country are noticeably high though. In case of urban population below the poverty line, absence of "productive employment, adequate shelter and basic services" are the most obvious and visible characteristics. It has been generally established fact that there is a positive correlation between the degree of urbanization and the per capita income. A higher per capita income tends to be correlated with a higher percentage of urban population in the total population. Nepal is at a very low level of urbanization. This may be one of the reasons for the fact that the contribution of industry in its total GDP is very low and the volume of trade as a per cent of GDP is not so high either (Table 35).

Table 35: Selected Socio-economic Indicators, Nepal, 1971 to 1990

	1971	1981	1990
Urban population as a percent of total population	4.0	6.4	9.2
GDP per capita (US \$)	80.0	153.4	170.0
Percentage share of industry in GDP	9.0	11.3	12.3
Volume of trade as a percent of total GDP	4.1	3.4	4.4

Source: CBS, 1974, Table 96, p. 112 and Table 97, p. 113
CBS, 1986, Table 138, p. 237 and Table 143, p. 253.

9.10 Income Distribution

Report on the 1983/84 Household Survey in Nepal conducted by the Nepal Rashtira Bank provides data on income distribution for urban and rural households. From the report it seems that urban households in Nepal seem to be better off than the rural households. As may be seen from Table 36, in urban areas there are about 23 per cent of the households belonging to the poorer 40 per cent income group and nearly equal proportion viz. 22 per cent of the households belong to the richest 10 per cent income groups. The situation in the rural areas is different. While as many as 25 per cent households belong to the poorest 40 per cent income group, only 20 per cent of the households belong to the richest 10 per cent income group, in rural areas.

Table 36: Income Distribution in Rural and Urban Areas of Nepal, 1983/84

Per Capita Rankings	Per Cent Share of Total Income	
	Urban	Rural
Bottom 40%	23	25
Top 10%	22	20

Source: NRB, 1988, Table XII, p. 103

9.11 Economic Development and Urbanization

It has been a well established truism that economic development and urbanization are closely related. Gross domestic product (GDP) estimates for the urban areas are not available. Changes in the structure of GDP of the country as whole can be seen in Table 37. This gives an indication that with the growth of GDP as well as change in structure of its composition, the process of urbanization is related.

Table 37: Structure of GDP (Per Cent), Nepal, 1961 to 1991

	Total GDP at current price (million Rs.)	Percentage distribution			
		Agriculture	Manufacturing	Mining and Construction	Others
1960/61	3,682	63.9		36.1	
1970/71	9,077	66.5	2.4	2.4	28.7
1980/81	27,307	56.8	3.8	7.4	32.0
1990/91	103,948	50.1	6.1	8.0	35.8

Source: NRB, 1966, Tables 133 and 14, pp. 25-26

CBS, 1974, Statistical Pocket Book, Tables 96 and 97, pp. 112-113

CBS, 1991, Statistical Year Book of Nepal, Table 12.3, p. 467

CBS, 1993, Statistical Year Book of Nepal, Tables 12.2 and 12.3, pp. 421-24.

Note: Others include electricity, gas, water, transport, communication and other services.

About half of the gross domestic product at Current market prices originates from agriculture. The share of agriculture sector in the total GDP of the country (measured at current prices) was as high as 66 per cent in 1970-71 which has declined to about 50 per cent in 1990-91. On the other hand, there has been growth of industry and the services sectors (Table 37). This among other things explains the experience of other countries that industrial and services sector in the country increase with the increase in the level of urbanization.

10. Impact of Urbanization

Information on the impact of urbanization are not available from the Population Census results. Nevertheless, this is one of the important aspects in the study of urbanization. Increase in the level of urbanization is generally accompanied by "large scale poverty, depression and environmental degradation". In Nepal too, there are more people in towns than jobs, education, medical and accommodation facilities. The pace of urbanization is faster than the rate of industrialization and the rate at which other facilities are expanding. Urban areas in Nepal have many problems, such as unemployment, slums, road congestions, pollution, and drinking water. The following is a short account (based on the information availed from the sources other than the Population Censuses of Nepal) of some of these problems.

10.1 Access to Water Supply

Report on the "State of Urbanization in Asia and the Pacific" published by ESCAP/UN has mentioned that the "poor households, apart from the low level of access and questionable quality of water are also reported to be disadvantaged in respect of what they pay for water". In Nepal, the percentage of urban population served by drinking water supply was 66 in 1987. Over the years since 1987, the condition has not improved but the drinking water shortages have become more acute. Drinking water supply has been a major problem for large urban settlements, especially in Kathmandu city. It is said that some "65 litres of water per person (per day) is served in urban areas" (NCRPC, 1992, p. 28), but the shortage of drinking water in Kathmandu indicates problems of distribution.

Access to Water Supply of Urban Population in Nepal, 1970 to 1987

	1970	1980	1987
Percentage of urban population served by water supply system	59	83	66

ESCAP/UN, 1993, Ch. II, p. 32.)

The quality of drinking water in urban areas of Nepal is found to be very poor. Most of the water pollution studies have examined the quality of drinking water supply in the Kathmandu valley, particularly its urban areas. These studies have found that the levels of coliform contamination of drinking water in the valley urban areas is significantly high. Ground water in the Kathmandu area is also highly polluted with coliform bacteria counts exceeding the level recommended by the World Health Organization (WHO). In general, the contamination becomes higher in the rainy season (June - September) than in other seasons. It is said that the quality of drinking water is deteriorating over the years.

10.2 Sanitation

According to the report entitled "State of Urbanization in Asia and the Pacific" sanitation coverage in Nepal is as low as 16 per cent (ESCAP/UN, 1993, p. 43). Solid waste management services (particularly in the cities of the Kathmandu valley) are deficient and deteriorating. It is estimated that each individual disposes some 0.4 kg. of solid waste per day in the urban areas of the Kathmandu valley. This waste contains 57 per cent organic materials and 27 per cent inert materials (of which percentages of paper and cloth are 55 and 27 respectively) (NCRPC, 1992, pp. 59-60). These solid wastes containing biodegradable as well as non-biodegradable materials have become the major source of environmental pollution of urban areas.

10.3 City Transport

Cities (specially in the valley) are beset with severe transport problems. Demand for transport has outstripped road capacity and provision of viable transport services. In the valley urban area, road congestion has gone from bad to worse. Although the number of automobiles as compared to other Countries of the region is very low, a high level of pollution is another undesirable feature of overloaded roads and streets. An increase in the number of automobiles increases the levels of noise as well as air pollution. It has been found that the noise level in Kathmandu city areas has already exceeded 80 decibels. Similarly, utilization of petroleum products have led to considerable amount of carbon dioxide, nitrogen dioxide and sulphur dioxide polluting the air in urban areas.

11. Future of Urbanization

In Nepal, trend towards urbanization started around the middle of the 20th century. In the 30-year period between 1961 and 1991, the urban population increased five times whereas the total population nearly doubled. The proportion of urban population has increased from 3.6 per cent in 1961 to 9.2 per cent in 1991. Urban population has increased in absolute terms from 336,222 in 1961 to 1,695,719 in 1991. In relative terms, the ratio of urban to rural population has gone down from 1:27 in 1961 to 1:10 in 1991. This means that at present out of every 11 Nepalis, one person lives in town area; 30 years before, for every 28 Nepalis, only one was an urbanite.

There was only one city (Kathmandu) with a population of over 100 thousand in 1961 and the number has increased to three in 1991. One more municipality (Pokhara) has a population very close to 100 thousand. The proportion of the urban population in towns with a population of over 100 thousand has increased from 36.0 per cent of the total urban population in 1961 to 39.3 per cent in 1991. Similarly, the proportion of the urban population in municipalities with a population of over 50 thousands has increased from 36.0 per cent in 1961 to 69.8 per cent in 1991. Further, in 1991, there were 11 municipalities in Nepal, each with a population of over 50 thousand. This shows a trend inwards concentration of population in the bigger towns.

With the growth rate observed between 1981 and 1991, Nepal will have its urban population doubled by the year 2005. This will certainly create a number of social and economic problems which demand quick solutions. The government should be prepared to solve the problems of housing, water supply, sanitary services, education facilities, medical services and other public services needed for the fast increasing urban population. Between 1961 and 1991, urban growth actually exceeded total population growth - the result of course, of migration from rural to urban areas. This flow is expected to increase in the coming years and is expected to lead the country to an accelerating phase of urban transition.

The planners and policy makers are becoming more concerned with these problems of urbanization in Nepal. Accordingly, the Eighth Plan of Nepal (HMG/Nepal, 1991, p. 45) has envisaged to formulate necessary policy framework and comprehensive planning guidelines "to address the problem of orderly and efficient development of urban settlements and to offer solutions to growing environmental problems." The future of urbanization in Nepal will largely be influenced by the effective implementation of programmes based on these policy frameworks and guidelines.

12. Conclusion

The distinctiveness of urbanization in Nepal can be summarized as:

- very low proportion of total population residing in urban areas, and
- very slow pace of increase in the level of urbanization.

According to the 1991 Population Census, a mere 9.2 per cent of the people were living in the urban areas of Nepal. This level has reached from a very low level of 2.9 in 1952/54; very slow pace of overall growth during a period of nearly 40 years. The average annual growth rates of urban population during the last two decades, however, have been increasing rapidly. These rates indicate that the country is at an "accelerating phase" of urbanization process.

The urbanization process can not be separated from "other processes of economic, demographic and social changes that are occurring at the national level" (ESCAP/UN, 1993, p. 24). The process is also based upon and affected by the changes in the rural areas of the country. In Nepal, the average annual growth rate of population in rural areas is also considerable. This growth (of rural population) accentuates a growth of rural poverty for which escape to urban areas is the only alternative. This is equivalent of saying that in an attempt to escape from the rural poverty, the Population flow is directed to urban areas.

In recent years, the migration from rural to urban area has been conspicuous in Nepal. A large city in Nepal such as Kathmandu has its attraction to several types of industries particularly carpet and garments. The rural to urban migration has been accentuated by such industries located specially in the Kathmandu valley. The country must be prepared to deal with problems generated by rural to urban migration due to these reasons. But as rightly pointed out by Hauser and Gardner in their paper entitled "Urban future: Trends and prospects", the more crucial problems lie in the need to reduce the rates of total population growth (Hauser and Gardner, 1982, p. 14).

In a country like Nepal, a large number of medium sized cities would be more desirable than a small number of very large cities. The expansion and improvement of the facilities relating to education, medical services, sanitation, transport and housing in urban areas are of prime importance for a healthy process of urbanization. As urban system is closely "linked with and reliant upon" rural areas, the living conditions in rural areas should also be improved simultaneously. Hence, to reduce the attraction of particular urban areas, facilities of drinking water, medical services, electricity, transport and education should be made available in rural areas as well as other smaller towns and urban centers.

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