

# **Nepal Population Report 2011**



Government of Nepal  
**Ministry of Health and Population**  
**Population Division**  
Ramshahpath, Kathmandu, Nepal

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## Preface

The high rate of population growth in Nepal has affected both social and economic aspect of Nepalese people in general. Excessive population growth has caused increased pressure on limited resources available in the country. This Nepal Population Report presents a status review of the population and its dimensions in Nepal. The report also includes the population policies and programmes that are implemented by different government and other agencies in Nepal.

This report is an analytic version of the demographic situation, structures; trends related with socio-economic and cultural aspects and are prepared on the information based on population census 2001 and other related surveys, reports, plan/policies and estimations of population and reproductive health.

On behalf of the Ministry of Health and Population, I would like to thank Centre for Social Sciences Studies (COSSS) for undertaking the status review task and preparing this report. Likewise, I would like to thank all those individuals and organizations who extended their support and provided us relevant information. I would also like to thank my colleagues of Population Division.

I hope this report will be of great value to researchers, policy makers, students, teachers, various institutions and the public at large.

**Padam Raj Bhatta**  
Chief  
Population Division

## Acronyms

ARI	-	Acute Respiratory Tract Infection
ASDR	-	Age Specific Death Rate
AIDS	-	Acquired Immune Deficiency Syndrome
ASFR	-	Age Specific Fertility Rate
BCC	-	Behavioral Change Communication
CDPS/TU	-	Central Department for Population Studies, Tribhuvan University
CBOs	-	Community Based Organizations
CBS	-	Central Bureau of Statistics
CDR	-	Crude Death Rate
CMR	-	Child Mortality Rate
CPR	-	Contraceptive Prevalence Rate
CTEVT	-	Council for Technical Educational and Vocational Training
DOHS	-	Department of Health Services
FPAN	-	Family Planning Association of Nepal
GDP	-	Gross Domestic Product
GOs	-	Government Organization
HIV	-	Human Immune Deficiency Virus
ICPD	-	International Conference on Population and Development
IDU	-	Injecting Drug User
IMR	-	Infant Mortality Rate
IEC	-	Information, Education and Communication
INGO	-	International Non Governmental Organization
IDU	-	Injecting Drug Users
LLPM	-	Local Level Population Management
MMR	-	Maternal Mortality Ratio
MoHP	-	Ministry of Health and Population
NDHS	-	Nepal Demographic and Health Survey
NFFS	-	Nepal Fertility and Family Planning Survey
NFHS	-	Nepal Fertility, Family Planning and Health Status Survey
NGO	-	Non Governmental Organization
NHEICC	-	National Health Education, Information and Communication Centre
NPC	-	National Planning commission
POA	-	Programme of Action
PPP	-	Population Perspective Plan
PRSP	-	Poverty Reduction Strategies Paper
PHC	-	Primary Health Centre
RH	-	Reproductive Health
STD	-	Sexually Transmitted Diseases
TBA	-	Traditional Births Attendant
TFR	-	Total Fertility Rate

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## Chapter 1 Demographic Situation

### 1.1 What is Population?

The word "Population" usually denotes all the inhabitants of a specified geographical area at a given time. This is concerned with its size, its structure and characteristics, its distribution and the changes taking places due to the interaction of fertility, mortality and migration.

*The study of human population can be encompassed into two types of demography: formal demography and Population studies. Donald Bogue, in his book entitled "Principles of Demography" defines "demography as the statistical and mathematical study of the size, composition and spatial distribution of human population, and of changes over time in these aspects through the operation of the five processes of fertility, mortality, marriage, migration and social mobility. Although it maintains a continuous description and comparative analysis of trends, in each of these process and their net result, its long run goal is to develop a body of theory to explain the events that it charts and compares(1969).However, population studies is concerned with population compositions and changes from substantive viewpoints anchored in another discipline. By definition, population studies are interdisciplinary, bordering between formal demography and a substantive discipline that is often, but not necessarily, a social science.*

### 1.2 Population Situation of the world and SAARC region

It is important to study the history of world's population growth rate to find out how the growth of population varies in different parts of the world. The world's population was estimated at about 300 million in the year A.D. 1, which increased to about 500-800 million by 1750 A.D. The average annual growth rate of population during the period 1 A.D. to 1750 A.D was around 0.56 per 1000 per year, while the growth rate for the period 1750 to 1800 was estimated around 4.4 per 1000 per year. In the beginning of the 19<sup>th</sup> century world population was estimated to be around one billion. By 1850 the population has already increased by 300 million i.e. world population in 1850 was estimated to be 1.3 billion. By 1920 the population reached 2 billion, which was estimated to be 3 billion by 1960 (Coale 1974). The next billion in world's population was added by 1975. World reached a population of 5 billion in 1987. It was estimated that the population of the world reached six billion in October 12, 1999.

**Table 1. 1: World Population (in Millions)**

Year	Population
1750	791
1800	978
1850	1262
1900	1650
1950	2521
1999	5978

Source : PRB datasheet 2010.

These population growth figures for the world as a whole suggest that the rate of growth of population was quite low during earlier years when fertility and mortality were quite high. The growth rate slowly started to increase as mortality started to decline.

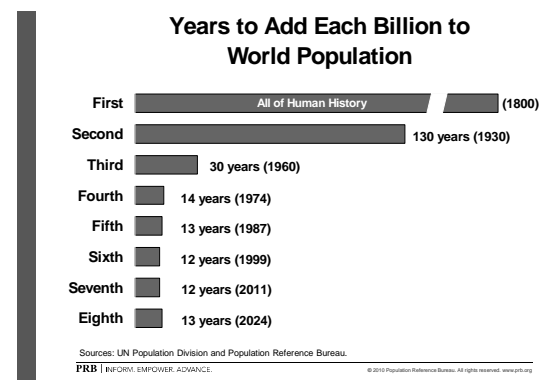


Figure 1. 1: Years to Add Each Billion to World Population

At some point around 1800, after untold millennia of human history, global population reached its first billion. The world's population now grows by 1 billion about every 12 years. The 20th century began with 1.6 billion and, at the end of that century; those two numbers had simply reversed to 6.1 billion. If birth rates continue to decline in developing countries, the increase to 8 billion could take slightly longer (PRB 2010). It is estimated that world population has reached 7 billion in 2011.

**Table 1. 2: Selected Demographic Indicators of World, 2010**

Indicators	World	More Developed Regions	Less Developed Regions	Least Developed	Asia	Nepal
Midyear Population (million) 2010	6892	1237	5656	857	4157	28
Rate of Natural Increase	1.2	0.2	1.4	2.3	1.2	1.9
Projected Population (million) 2025	8108	1290	6819	1172	4845	35.7
Projected Population (millions) 2050	9485	1326	8159	1710	5424	46.1
Crude Birth Rate	20	11	22	35	19	28
Crude Death Rate	8	10	8	12	7	8
2050 Population as a multiple of 2010	1.4	1.1	1.4	2	1.3	1.6
Urban Population (percent)	50	75	44	27	43	17
Infant Mortality Rate	46	6	50	81	41	48

Life Expectancy at birth	Male	67	74	66	55	69	64
	Female	71	81	68	57	74	65
	Total	69	77	67	56	72	64
Total Fertility Rate		2.5	1.7	2.7	4.5	2.2	3
Population under Age 15 Years (%)		27	17	30	41	26	37
Population Aged 65 years above (%)		8	16	6	3	7	4
Contraceptive Prevalence Rate							
Any method		62	71	60	29	66	48
Modern Method		55	60	54	23	60	44
Population with HIV/AIDS among the population aged 15-59 years (%)							
Male							
Female		0.8	0.7	0.9	1.9	0.3	0.7
		0.9	0.3	1.1	2.7	0.2	0.3
Population Density (per sq. miles)		51	23	68	41	130	191
GNP Per capita (2008 in US\$)		10030	32370	5150	1240	6000	1120
Mobile Phone Subscribers per 100 Inhabitants		60	109	49	21	49	15

Source : PRB datasheet 2010.

By 1950, nearly one third of the world's population lived in the developed countries, but this proportion is declining over the years as the growth rate of population in less developed countries are substantially higher than that in developed one. The average growth rate of the world population has been estimated at 1.2 percent per annum. In the less developed regions this rate is around 1.5 percent while it is much lower in more developed regions. It has been projected that the world's population will reach 9.5 billion by 2050. Some demographic indicators of the world have been presented in Table 1.2

Table 1.3 shows the most populous ten countries in the world in the year 2010 and projected for 2050. India will be most populous country in 2050. In 2050, three countries from SAARC will reached at most ten populous countries.

**Table 1.3: Ten most populous countries in the world**

2010		2050	
Country	Population (million)	Country	Population (million)
China	1338	India	1748
India	1189	China	1437

USA	310	USA	423
Indonesia	235	Pakistan	335
Brazil	193	Nigeria	326
Pakistan	185	Indonesia	309
Bangladesh	164	Bangladesh	222
Nigeria	158	Brazil	215
Russia	142	Ethiopia	174
Japan	127	Congo, Dem. Rep.	166

Source : PRB datasheet 2010

The following Table shows the comparative demographic situation in the SAARC region. India is the most populous country followed by Pakistan. Total fertility rate is highest in Afghanistan and other demographic indicators also show the worse situation in the country.

**Table 1.4: Selected Demographic Indicators of the SAARC regions, 2010**

Indicators	Srilanka	India	Pakistan	Afghanistan	Bhutan	Bangladesh	Maldives	Nepal
Mid year Population (million) 2010	20.7	1188.8	184.8	29.1	0.7	164.4	0.3	28
Projected Population (million) 2025	23.2	1444.5	246.3	39.4	0.9	195	0.4	35.7
Crude Birth Rate	19	19	30	39	25	39	22	28
Crude Death Rate	7	6	7	18	8	18	3	8
Urban Population (percent)	15	29	35	22	32	25	35	17
Infant Mortality Rate	15	53	64	155	40	45	12	48
Life Expectancy at birth	Male	72	63	66	44	67	65	72
	Female	76	65	67	44	68	67	74
	Total	74	64	66	44	68	66	73
Total Fertility Rate		2.4	2.6	4.	5.7	3.1	2.4	2.5
Population under Age 15 Years (%)		26	32	38	44	31	32	30
Contraceptive Prevalence Rate								
Any method		68	56	30	19	31	56	35
Modern Method		53	49	22	16	31	48	27

Source : PRB datasheet 2010

## Population Clock, 2010

Table 1.5 describes the current population change with the form of population clock.

**Table 1.5: Population Clock 2010**

	WORLD	More Developed Countries	Less Developed Countries
Population	6,892,319,000	1,236,646,000	5,655,673,000
Births per			
Year	140,184,169	14,215,211	125,968,959
Day	384,066	38,946	345,120
Minute	267	27	240
Deaths per			
Year	56,907,606	12,125,055	44,782,552
Day	155,911	33,219	122,692
Minute	108	23	85
Natural increase (births-deaths) per			
Year	83,276,563	2,090,156	81,186,407
Day	228,155	5,726	222,429
Minute	158	4	154
Infant deaths per			
Year	6,383,531	80,133	6,303,398
Day	17,489	220	17,270
Minute	12	0.2	12

### 1.3 Demographic Transition

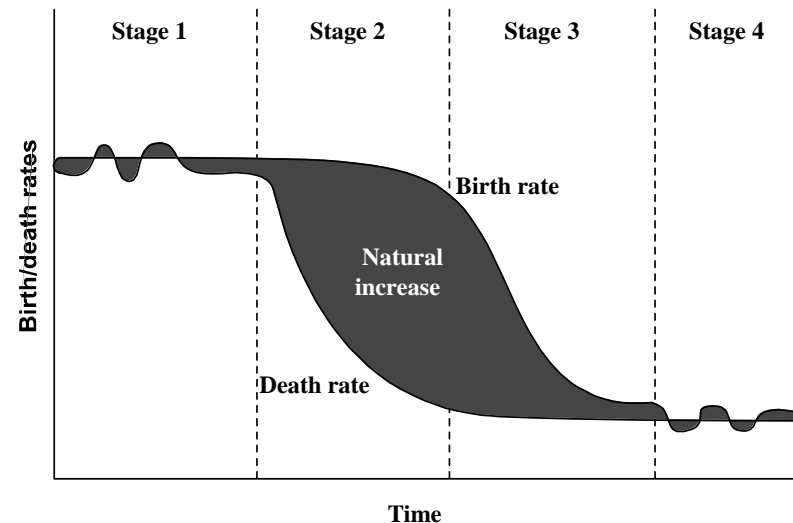
Demographic transition is a description of the observed long-term trends in fertility and mortality and a model, which attempts to explain them. Demeny (1972) has summarized it very succinctly "In traditional societies both the fertility and mortality are high and in modern society both the fertility and mortality is low. In between, there is a demographic transition".

First proponents of demographic transition theory were Thompson (1929), Davis (1945) and Notestein (1945). Three basic elements of the transition can be obtained from their writings;

- It describes the changes that have taken place in fertility and mortality over time.
- It attempts to construct theoretical causal models to explain the changes that have taken place.
- Prediction for the changes, which might occur especially in the developing countries in the light of the experience of the developed countries.

Implicit in the classical demographic transition theory is the concept of modernization and development, which brings about changes in mortality and fertility. Initially decline in mortality takes place and fertility decline is the response to this decline in mortality. Timing of fertility response depends on the levels of development and modernization in the countries concerned.

However, this explanation of fertility and mortality decline was challenged by new information obtained from the European Fertility Project, which found no evidences of association between socio-economic development and demographic change (Knodel and van de Walle (1979). Caldwell provided further critique to demographic transition theory by stressing the importance of western values regarding nuclear families. In another words, western values were more important than the level of development (Caldwell1976). Caldwell's argument has also been challenged by different studies, which have cited the presence of nuclear families before the demographic transition (Smith 1982). In a similar manner, although there has been a remarkable decline in fertility in Taiwan, extended family system is still in place thereby indicating that nuclear family (westernization) is not the prerequisite for fertility decline (Sun et. al.1978).



*Figure 1.2: Demographic Transition Model*

Although there is still some controversy over the demographic transition theory, it is still an important theory commonly discussed to explain the demographic changes, which are taking place around the world. Basically it can be described in four stages (Fig 1.2). The first stage of demographic change is the time when both the fertility and mortality fluctuate and are quite high. This is the period when the natural growth rate of population is quite low.

The second stage of transition is when the mortality starts to decline while fertility remains more or less constant. This is the period when the growth rate starts to increase and reaches the maximum just before the decline in fertility starts to take place. At the third stage, fertility also starts to decline as a response to declining mortality. Finally the fourth stage is when fertility and mortality are quite close and fertility is close to replacement and fluctuates according to different environmental conditions.

As we will see later, mortality in Nepal started to decline since the late fifties and the pace of mortality decline has become faster since the 1990s. If one looks at the fertility transition in Nepal one would find that fertility started to decline much later and at much slower speed than mortality. For example, fertility in Nepal was more or less constant till early eighties and started to decline thereafter. Thus it can be argued that Nepal is in the third phase of demographic transition where both the fertility and mortality are declining.

#### 1.4 Size and Growth Rate of Population of Nepal.

Geographically Nepal is situated between China and India. These two neighbours are the most populous countries in the world with both having more than one billion people. Nepal's population of 28 million (projected for 2010) is very small compared to its neighbours. Although the size of the Nepalese population compared to its neighbours is quite small, its high rate of population growth has been a matter of great concern for the country.

Census operation started in Nepal since 1911. Initial censuses till 1952 were more or less head count based on household level information. The first census of Nepal (1911) yielded a population size of 5.6 million. Since then, census count has been conducted more or less at ten-year intervals. In the census of 1952/54, technical assistance in conducting the census was obtained from United Nations and in fact this census can be regarded as the first scientific census ever conducted in Nepal. Because of different reasons, this census was carried out at two points in time. For example, eastern part of the country was enumerated in 1952, while the western half was enumerated in 1954. Because the enumeration was carried out in two points in time, the 1961 census is generally accepted as the first scientific census in terms of international standard and comparisons.

According to the latest census of 2001, Nepal's population was 23,151,423 as of June 2001. The average annual growth rate of population during the last decade i.e. 1991-2001 was 2.25 percent (CBS 2002). The census also revealed that the sex ratio i.e. males per 100 females was 99.8. In other words 49.95 percent of the total population was male, while the females comprised 50.05 percent of the population. The total population obtained in different censuses of Nepal, corresponding growth rates and times to double the population have been presented in Table 1.6. It should be noted that during the 2001 census, some of the districts could not be fully covered because of security reasons. Based on household level form and estimation

total population of Nepal were 23,151,423. Individual information (form-2) was filled in for only 22,736,934 individuals. Thus detailed data are available only for this number of persons.

**Table 1. 6: Population size, growth rate and doubling time, Nepal, 1911 – 2001**

Census year	Total Population	Population Change	Annual Growth Rate (Exponential)	Doubling Time
1911	5,638,749		-	-
1920	5,573,788	- 64,961	-0.13	-
1930	5,532,574	41,214	-0.07	-
1941	6,283,649	7,51,075	1.16	60
1952-54	8,256,625	19,72,976	2.27	31
1961	9,412,996	11,56,371	1.64	42
1971	11,555,983	21,42,987	2.05	34
1981	15,022,839	34,66,856	2.62	26
1991	18,491,097	34,68,258	2.08	33
2001	23,151,423	46,60,326	2.25	31

Source; CBS 2002

Fluctuations in the annual growth rate of population mostly relate to the quality of data obtained in the census notably the coverage and undercount and possibly over-count in different censuses. The Table shows that the rate of population growth in Nepal is still quite high (2.25percent). This high rate of growth of population has affected almost every aspect of life, both social as well as economic. It has caused increased pressure on limited land resource as more and more marginal land is being cultivated. The population growth has also led to shortages of food at places. Because of the need to farm marginal land for food production, forests are being depleted, which have resulted in frequent landslides, floods as well as soil erosion. High rate of population growth also warrants increased spending on the social services such as education, health, drinking water and other basic needs. It has increasingly been difficult to meet the growing demands of people for these services.

#### 1.5 Population Distribution

##### 1.5.1 Spatial Distribution

Nepal has three distinct ecological regions. These are *mountains*, which are defined as area that lies between the altitude of 4877 and 8848 meters comprise 35 percent of land area, while *hills* are defined as area that lies between the altitude from 610 to 4876 meters and comprises 42 percent of land area. Altogether these regions comprise about 77 percent of the total area and have about 52 percent of the total population in 2001. The *Terai* region lies below the elevation of 610 meters. It comprises of 23 percent of the total land area and contains nearly 48 percent of the population. The data in Table 1.7 also clearly show that the proportion of population living in Terai



is increasing, while the proportion of people living in the hill and mountain is declining over the years. This disproportionate distribution of population among ecological regions of Nepal is most probably due to many reasons. Some of these reasons could be

- a) Unequal distribution of resources
- b) Availability of productive land in Terai,
- c) Difficult topography of Hill and Mountain
- d) Disparity in socio-economic development and
- e) The lack of basic facilities and infrastructure in these regions.
- f) Lack of access to information.

**Table 1. 7: Population Distribution by Ecological Zones Nepal . 1952/54 - 2001.**

Census yrs.	Mountain	Hill	Mountain & Hill	Terai	Total
1952/54	-	-	5349988 (64.8)	2906637 (35.2)	8256625
1961	-	-	5991297 (63.6)	3421699 (36.4)	9412996
1971	1138610 (9.9)	6071407 (52.5)	7210017 (62.4)	4345966 (37.6)	11555983
1981	1302896 (8.7)	7163115 (45.5)	8466011 (56.4)	6556828 (43.6)	15022839
1991	1443130 (7.8)	8419889 (45.5)	9863019 (53.3)	8628078 (46.7)	18491097
2001	1687859 (7.3)	10251111 (44.3)	11938970 (51.6)	11212453 (48.4)	23151423

Note: The figures in Parenthesis indicate percentages.

Source: CBS 1995, 2002

These factors have led to increased migration to the Terai area from hills and mountains and at the same time flow of immigrants from the bordering country have played crucial role in the increased population living in the Terai region.

### 1.5.2 Population growth rate by ecological region

The rate of increase of population is higher in the Terai compared to the hills and mountains. During the decade of 1971-81, population in the Terai has increased by 4.1 per cent. However, the population growth rate has gone down during 1981-91, in all the three geographical regions. During the period 1991-2001 rate of population growth has increased in the hills and mountains but has slightly decreased in the Terai. Still the growth rate of population in the Terai is much higher than that of the hills or mountains.

**Table 1. 8: Population Growth Rate by Ecological Region, Nepal, 1961/71 – 1991/2001**

Geographic region	Inter-census period			
	1961/71	1971/81	1981/91	1991/01
Mountain		1.35	1.02	1.57
Hill	1.85	1.65	1.61	1.97
Terai	2.39	4.11	2.75	2.62
Total	2.05	2.66	2.08	2.25

Source: CBS, 1995 CBS 2002.

### 1.6 Population Distribution by Development Region

If one looks at the Nepal's population by development regions, one would find that the highest proportion of population is in the Central Development Region and Far-Western Development Region has the lowest proportion of population.

During 1981-91, the population growth rate has gone down in all the development regions as compared to previous decades. The decrease in growth rate was highest in the Eastern Development Region. It should be noted that this deceleration in population growth could also be the result of the undercounting and over-counting of population in different censuses concerned.

**Table 1. 9: Population Distribution and Growth by Development Regions Nepal, 1981 – 2001**

Development Region	Distribution of Population(%)			Average Annual Growth Rate (%)		
	1981	1991	2001	1971-81	1981-91	1991-2001
Eastern	3708923 (24.49)	4446749 (24.05)	5344476 (23.09)	2.86	1.83	1.84
Central	4909357 (32.68)	6183955 (33.44)	8031629 (34.09)	2.42	2.33	2.61
Western	3128859 (20.83)	3770678 (20.39)	4571013 (19.74)	2.49	1.88	1.92
Mid-West	1955611 (13.02)	2410414 (13.04)	3012975 (13.01)	2.77	2.11	2.26
Far-West	1320089 (8.78)	1679301 (9.08)	2191330 (9.47)	3.25	2.44	2.26
Total	15022839 (100)	18491097 (100)	23151423 (100)	2.66	2.08	2.25

Source : CBS 2002, 2003

Eastern development region had a growth rate of 2.86 per cent per year in 1971-81 decade, which decreased 1.83 percent in 1981-91 decade. However, the growth rate of Central Development Region came down merely to 2.33 percent from 2.42 percent per year. During the decade 1991 to 2001 highest growth rate was recorded for Far-Western Development Region (2.66percent), while the second highest rate of growth was recorded for Central Development Region (2.61percent).

### 1.7 Growth rate and distribution of population by districts

The distribution and the growth rate of population by districts over the census years are presented in Table 1.6. Kathmandu district has the largest population as indicated by the different censuses of Nepal. The census of 2001 showed a population of 1081845 in the Kathmandu district. The smallest population was recorded in the Manang district. The census of 2001 showed that the population in the Manang district was 9587. The Table 1.10 also provides area of the districts as well as population density per square kilometer. Kathmandu district has the highest density with 2739 persons per square kilometer. The lowest population density was observed for the Dolpa district with 3.7 persons per square kilometer.

Table 1.10: Distribution and the Growth Rate of Population by Districts, Nepal 1981-2001

District	Population			Area in sq. Kms.	Population Density per sq km	Average Annual Growth Rate 1991-2001
	1981	1991	2001			
Taplejung	120780	120053	134698			
Panchthar	153746	175206	202056	1241	162.8	1.43
Ilam	178356	229214	282806	1703	166.1	2.10
Jhapa	479743	593737	688109	1606	428.5	1.48
Morang	534692	674823	843220	1855	454.6	2.23
Sunsari	344594	463481	625633	1257	497.7	3.00
Dhankuta	129781	146386	166479	891	186.8	1.29
Terhathum	92454	102870	113111	679	166.6	0.95
Sankhuwasabha	129414	141903	159203	3480	45.7	1.15
Bhojpur	192689	198784	203018	1507	134.7	0.21
Solukhumbu	88245	97200	107686	3312	32.5	1.02
Okhaldhunga	137640	139457	156702	1074	145.9	1.17
Khotang	212571	215965	231385	1591	145.4	0.69
Udayapur	159805	221256	287689	2063	139.5	2.63
Saptari	379055	465668	570282	1363	418.4	2.03
Siraha	375358	460746	572399	1188	481.8	2.17
Dhanusha	432569	543672	671364	1180	569.0	2.11
Mahottari	361054	440146	553481	1002	552.4	2.29
Sarlahi	398766	492798	635701	1259	504.9	2.55
Sindhuli	183705	223900	279821	2491	112.3	2.23
Ramechhap	161445	188064	212408	1546	137.4	1.22

Dolakha	148510	173236	204229	2191	93.2	1.65
Sindhupalchok	234919	261025	305857	2542	120.3	1.59
Kavrepalanchowk	307150	324329	385672	1396	273.6	1.73
Lalitpur	199688	257086	337785	385	877.4	2.73
Bhaktapur	144420	172952	225461	119	1894.6	2.65
Kathmandu	426281	675341	1081845	395	2738.8	4.71
Nuwakot	210549	245260	288478	1121	257.3	1.62
Rasuwa	30241	36744	44731	1544	29.0	1.97
Dhading	236647	278068	338658	1926	175.8	1.97
Makawanpur	243411	314599	392604	2426	161.8	2.22
Rautahat	332526	414005	545132	1126	484.1	2.75
Bara	318957	415718	559135	1190	469.9	2.96
Parsa	284338	372524	497219	1353	367.5	2.89
Chitawan	259571	354488	472048	2218	212.8	2.86
Gorkha	231294	252524	288134	3610	79.8	1.32
Lamjung	152720	153697	177149	1692	104.7	1.42
Tanahun	223438	268073	315237	1546	203.9	1.62
Syangja	271824	293526	317320	1164	272.6	0.78
Kaski	221272	292945	380527	2017	188.7	2.62
Manang	7021	5363	9587	2246	4.3	5.81
Mustang	12930	14292	14981	3573	4.2	0.47
Myagdi	96904	100552	114447	2297	49.8	1.29
Parwat	128400	143547	157826	494	319.5	0.95
Baglung	215228	232486	268937	1784	150.7	1.46
Gulmi	238113	266331	296654	1149	258.2	1.08
Palpa	214442	236313	268558	1373	195.6	1.28
Nawalparasi	308828	436217	562870	2163	260.2	2.55
Rupandehi	379096	522150	708419	1360	520.9	3.05
Kapilvastu	270045	371778	481976	1738	277.3	2.60
Arghakhanchi	157304	180884	208391	1193	174.7	1.42
Pyuthan	157669	175469	212484	1309	162.3	1.91
Rolpa	168166	179621	210004	1879	111.8	1.56
Rukum	132432	153554	188438	2877	65.5	1.92
Salyan	160734	181785	213500	1462	146.0	1.61
Dang	266393	354413	462380	2955	156.5	2.66
Banke	197152	285604	385840	2337	165.1	3.01
Bardiya	198544	290313	382649	2025	189.0	2.76
Surkhet	167111	225768	288527	2451	117.7	2.45
Dailekh	165612	187400	225201	1502	149.9	1.84
Jajarkot	99312	113958	134868	2230	60.5	1.68
Dolpa	22043	25013	29545	7889	3.7	1.67
Jumla	68797	75964	89427	2531	35.3	1.63
Kalikot	79736	88805	105580	1741	60.6	1.73
Mugu	35287	36364	43937	3535	12.4	1.89
Humla	28721	34383	40595	5655	7.2	1.91

Bajura	81801	92010	108781	2188	49.7	1.67
Bajhang	124010	139092	167026	3422	48.8	1.83
Achham	185962	198188	231285	1680	137.7	1.54
Doti	153135	167168	207066	2025	102.3	2.14
Kailali	257905	417891	616697	3235	190.6	3.89
Kanchanpur	168971	257906	377899	1610	234.7	3.82
Dadeldhura	86853	104647	126162	1538	82.0	1.87
Baitadi	179136	200716	234418	1519	154.3	1.55
Darchula	90218	101683	121996	2322	52.5	1.82

Note: These are adjusted figures and take into account the boundary changes of the districts.

Source: CBS 1995, CBS 2002.

### 1.8 Population Density

Ecologically, Nepal is divided into 3 regions; *mountain, hill* and *Terai*. As these three regions differ from each other in climate and topography, population distribution is also different in these regions. Data obtained from different censuses indicate that population density has increased in all three regions over the years, with Terai witnessing a much higher density than Mountains and Hills.

**Table 1. 11: Population density (person per sq. km.) by ecological zones & development regions, Nepal, 1981-2001.**

Zones/Regions		Eastern	Central	Western	Mid Western	Far Western	Total
<b>Mountain</b>	Area sq.km.	10438	6277	5819	21351	7932	51817
	1981	32.41	65.82	3.43	11.35	36.42	25.14
	1991	34.40	75.03	3.37	12.20	41.95	27.85
	2001	38.47	88.39	4.22	14.48	50.15	32.57
	<b>Hill</b>	Area sq.km.	10749	11805	18319	13710	6762
1981	116.94	178.60	117.41	76.03	89.37	116.76	
1991	132.95	226.98	132.15	88.95	99.18	137.25	
2001	152.87	300.10	152.47	107.44	118.15	167.11	
<b>Terai</b>	Area sq.km.	7269	9328	5260	7317	4845	34024
	1981	290.70	255.97	182.11	91.67	88.23	192.71
	1991	365.72	325.18	252.87	127.14	139.62	253.58
	2001	453.93	421.75	333.32	168.22	205.28	329.59
	<b>Total</b>	Area sq.km.	28456	27410	29398	42378	19539
1981		130.32	179.10	106.43	46.14	67.56	102.01
1991		156.25	225.61	128.26	56.87	85.95	125.63
2001		187.82	293.02	155.49	71.10	112.15	157.30

Source: CBS 2002.

Table 1.11 presents population density for Nepal by ecological and development regions. In 1981 population density for Nepal was 102 persons per square kilometer, which is increased to 157 in a period of 20 years. In 1981 only 193 persons per square kilometer resided in Terai region, which increased to 330 in 2001. Mountain region had 25 persons per square kilometer in 1981, which increased to only 33 after 20 years in 2001. In the Hill region it reached 167 from 117 in the same 20 year period. Among development regions, the lowest population density is observed for Mid-Western Development Region (71), while it is the highest in the Central Development Region (293) in 2001.

### 1.9 Sex Ratio

The sex composition of a population is indicated by sex ratio. It is calculated as a ratio of total number of males to that of females multiplied by 100. Thus it shows the number of males per 100 females. In normal populations sex ratio of 103-105 is obtained at birth. This indicates that for every 100 female babies born nearly 105 male babies are born. As the age increases i.e. by the age of five, the sex ratio is considered to be more or less equal as infant and child mortality is higher for male babies. As the age increases, sex ratio gets in favor of females as mortality for males are higher than females.

The sex ratio at birth is around 105 male births for every 100 female births and existing higher risk of death among females than males in the country, low sex ratio can only be explained by the possibility of a large volume of temporary male emigration.

Table 1.12 shows that females have slightly outnumbered males, mainly because adult males used to go abroad in search of livelihood.

**Table 1. 12: Sex Ratio by Ecological Regions, Nepal, 1952/54 – 2001**

Ecological Regions	Sex Ratio					
	1952/54	1961	1971	1981	1991	2001
Mountain			100.79	104.71	98.43	98.39
Hills	95.95	94.26	98.02	102.14	95.34	95.84
Terai	100.10	102.14	106.39	108.33	103.85	103.77
Nepal	96.80	97.05	101.37	105.02	99.47	99.80

Source : CBS, 1995,2002.

However, in the censuses of 1971 and 1981 more males were counted than females. The censuses of 1991 and 2001 yielded more females than males and as a consequence overall sex ratio was less than 100. This sharp decline in sex ratio during 1981-1991 periods is unexplained, because there is no authentic evidence to explain such changes in the sex ratio. Only exodus of male population for work outside the country, can be speculated, again a large

exodus could be hardly possible. Table 1.13 shows sex ratio of population by ecological and development regions from 1981 to 2001.

**Table 1. 13: Sex ratio of population by ecological & development regions, Nepal, 1981-2001.**

Ecological Zones	Year	Development Regions					Total
		Eastern	Central	Western	Mid Western	Far-western	
Mountain	1981	102	107	108	107	102	105
	1991	96	100	109	103	94	98
	2001	97	99	116	103	96	98
Hill	1981	101	106	100	100	92	102
	1991	97	102	88	96	92	95
	2001	97	103	87	97	94	96
Terai	1981	108	107	109	107	116	108
	1991	103	106	103	102	101	104
	2001	102	107	102	101	103	104
Nepal	1981	105	107	103	103	105	105
	1991	100	104	93	99	96	99
	2001	100	105	93	99	98	100

### 1.10 Age Structure

Whether a population is young or old, or getting older or younger depends on the proportion of people at different age groups. In general, a population with more than 35 percent under age 15 is considered young and population with more than 10 percent aged 65 and above is considered old. Age structure is affected by the fertility, mortality and migration. However, under normal situation, the affect of mortality and migration is smaller and proportion of population at each age group is mainly affected by fertility. Distribution of population by five year age group is shown for males and females based on census data in Table 1.14.

The Table 1.14 shows that the population of Nepal is composed primarily of young people and since 1960s it has remained young. More than 39 percent of its present population is under 15 years of age. Similarly, more than half of the population is in the age group 15-59. This age structure indicates approximately one person is in the working ages (15-59 years) for every person less than 15 years old and aged 60 years or more. This age structure of Nepalese population is mainly due to high fertility and declining mortality in all ages, particularly in younger ages.

**Table 1. 14: Percentage Distribution of Population by Five-year age groups, Nepal, 1981-2001**

Age Groups	1981		1991		2001		Total
	Male	Female	Male	Female	Male	Female	
0-4	15.5	15.3	14.9	14.4	12.29	11.95	12.12
5-9	14.5	14.6	15.5	14.8	14.38	13.87	14.12
10-14	11.9	10.8	13.1	12.1	13.50	12.73	13.11
15-19	9.0	8.6	9.5	9.9	10.44	10.57	10.51
20-24	8.3	9.5	7.9	9.3	8.33	9.40	8.87
25-29	7.4	8.1	7.0	7.8	7.23	7.95	7.59
30-34	6.1	6.9	6.0	6.5	6.39	6.71	6.55
35-39	6.0	5.9	5.6	5.5	5.73	5.79	5.76
40-44	4.9	5.1	4.5	4.7	4.75	4.82	4.79
45-49	4.3	3.9	4.1	3.9	4.13	3.99	4.06
50-54	3.8	3.4	3.3	3.1	3.46	3.28	3.37
55-59	2.4	2.2	2.7	2.3	2.80	2.49	2.65
60-64	2.5	2.4	2.3	2.3	2.31	2.27	2.29
65+	3.4	3.1	3.6	3.4	4.26	4.16	4.20

Source : CBS, 1995,2002.

The present age structure suggests that a large share of resources have to be spent on basic facilities such as education, nutrition and health of young people just to maintain a status quo. It also suggests that because of young nature of Nepalese population, population momentum for Nepal is still very high, indicating that Nepal's population will continue to grow for quite some time even if the fertility were to reach replacement level today.

From the Table it can be seen that percentage of 5-9 age group population is highest in the census periods except 1981. Under normal situation age group 0-4 should have the largest population. Usually children under 5 year of age are undercounted especially children under one years of age therefore age group 5-9 shows the largest population in different censuses of Nepal. After the age group 5-9, the proportion decreases with age, following more or less the expected pattern. The age structure of the population in the census year 2001 is shown in the figure 1.3.

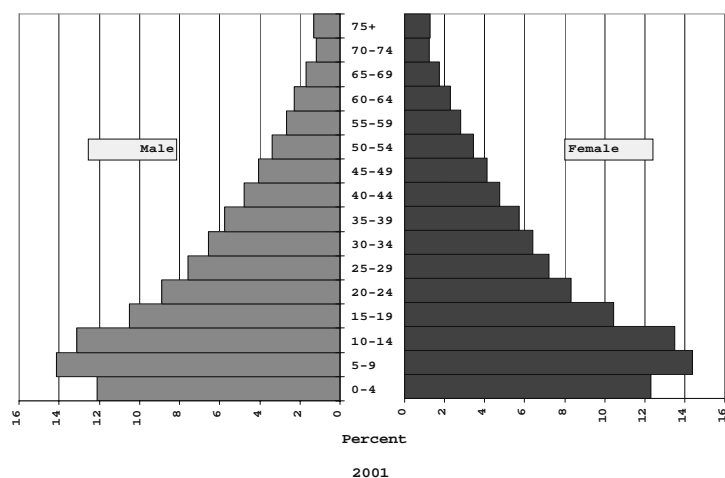


Figure 1.3: Population Pyramid of Nepal, 2001

Source: CBS, 2002

### 1.11 Adolescents and Youth

Adolescence is a transitional stage of physical and mental human development that occurs between childhood and adulthood. This transition involves biological (i.e. pubertal), social, and psychological changes, though the biological or physiological ones are the easiest to measure objectively. Historically, puberty has been heavily associated with teenagers and the onset of adolescent development. Adolescence is the second decade of life and it is a period of rapid development, major physical change take place and differences between boys and girls are emphasized. Adolescents are often thought of as a healthy group. Nevertheless, many of them do die prematurely due to accidents, suicide, violence, pregnancy related complications and other illnesses that are either preventable or treatable. In addition, many serious diseases in adulthood have their roots in adolescence. For example, tobacco use, sexually transmitted infections including HIV, lack of nutrition and exercise habits, lead to illness or premature death later in life (WHO).

Youth is the time where a person's life is in between childhood and adulthood. The majority (almost 85%) of the world's youth live in developing countries, with approximately 60 percent in Asia alone. A remaining 23 percent live in the developing regions of Africa, and Latin America and the Caribbean. By 2025, the number of youth living in developing countries will grow to 89.5%. Therefore, it is necessary to take youth issues into considerations in the development agenda and policies of each country.

If one were to look for the proportionate share of population in these groups, one would find that adolescents in Nepal cover 23.62 percent of the total population i.e. nearly a quarter of the population. It should be noted that for a period of nearly three decades this group of the population will be in the reproductive age and will be bearing children. If we were to look at the proportion of population in the youth category we would find that 19.38 percent i.e. nearly a fifth of the total population is in this group. It should be noted that this group is already in the reproductive age group and already contributing to population growth. If we are to control the rate of population growth through addressing fertility then these groups need to be targeted for the population related programmes. In general, young people (10-24 years) constitute of almost 33 % of the total population of Nepal.

### 1.12 Distribution of Women aged 15-49, by five year age groups.

As discussed earlier, the rate of population growth is highly affected by fertility. If there are more women in the reproductive age group then a larger number of births will take place given a fixed fertility rate. As the age group of women increases, the proportion of women in each group decreases. However, in the 1981 census the number of women in the age group 20-24 was greater than the number of women in the age group 15-19. This could be due to age misreporting in the censuses of Nepal.

Among women, about 49 percent are in the reproductive age. In a likewise manner, of the total population about 24.6 percent of the population is in the reproductive age. In Nepal, female marriage takes place early and almost every woman marries. Thus higher proportion of married women coupled with higher fertility levels contributes to high rate of population growth.

The proportion of women in the reproductive age group has increased slightly over the last 10 years. This could be mainly due to declining fertility whereby the proportion of younger population less than 10 year of age has declined. For example, among males it was 30.4 percent in 1991, which decreased to 26.7 by the year 2001. Corresponding figures for females are 29.2 percent and 25.8 percent respectively.

## Chapter 2

# Fertility and its Proximate Determinants

## 2.1 Fertility

The major three demographic processes that determine the structure, distribution and growth of any population are: fertility, mortality and migration. Among these factors, fertility is one of the main factors in determining the age structure of a population. As compared to other demographic processes, the study of fertility is more complex because it is affected by host of factors including biological as well as other behavioral.

*Fertility refers to the number of live births per women in the population. It represents the actual performance and should not be confused with the ability of capacity to reproduce, which is termed as fecundity. The inability of reproduce is called sterility. Only a section of the population namely women in the reproductive age group (15-49) which is biologically identified as between menarche and menopause.*

*The demographic literature offers many measures of fertility. There are broadly two ways of approaching the study of fertility: period and cohort. Period analysis looks at fertility cross-sectional that is at births occurring in a specific period of time, normally one year. Cohort Analysis on the other hand looks over time, at their reproductive history. In spite of the general theoretical preference for cohort measures, the literature suggests that period influences tend to be more powerful than cohort influences in explaining fertility behavior.*

Demographers have developed different measures of fertility for its analysis. In this report, we will mainly focus on four indicators namely Crude Birth Rate (CBR), Age Specific Fertility Rate (ASFR), Children Ever Born (CEB) and Total Fertility Rate (TFR).

### 2.1.1 Crude Birth Rate

The Crude Birth Rate is defined as the number of live births per thousand persons in a given area for a particular year. Although, simple to calculate and easy to understand, it is a crude measure, because it uses persons from all age groups and both the sexes involve in the denominator. Age/sex structure of the population has an important bearing on the Crude Birth Rate, it is ignored altogether. For example, even if two countries have the same age-specific fertility rates, their crude birth rates may be substantially different if their age/sex compositions are different. Despite being a crude measure, it is one of the most commonly used summary measures for level and trend analysis of fertility.

Fertility measures including CBR are calculated either through indirect methods or through direct methods. In the absence of vital registration and survey data, indirect method of fertility estimation is usually used. These methods are based on stable population, which utilizes the age-structure of

population and other available demographic parameters for the estimation of fertility and mortality indicators. Once the survey data are available, direct method of fertility estimates are commonly used. Demographic surveys carried out before 1991 have indicated some problems of data quality, especially omission and displacement of vital events. Because of this till 1986 different censuses and surveys provided fertility estimates based on indirect method [i.e. stable population estimates or different versions of P/F ratio methods. P/F ratio may be defined as the ratio of present vs. past (cumulative fertility)].

Table 2.1 provides estimates of CBR over time for Nepal. It indicates that CBR in Nepal was high till the mid eighties. After the mid-eighties, CBR has been gradually declining.

The Nepal Demographic and Health Survey, 2006 has indicated that the CBR is around 28 per thousand in Nepal. Although, this means a decrease of 4 points during the last 5 years, this CBR is still considered to be quite high.

**Table 2.1 :Crude Birth Rate by various sources, Nepal, 1952/54 - 2005**

Sources	Years	Crude birth rates (per 1000 population)
United Nations, ESCAP	1952-54	45.0
Vaidhyathan and Gaige	1954	48.7
Krotki and Thakur	1961	47.0
CBS(Census data)	1971	42.0
Nepal Fertility Survey, MOH	1976	45.5
CBS(Census data)	1981	44.0
Nepal FP/MCH Project, MOH	1981	42.9
CBS Demographic Sample Survey	1986	40.7
CBS(Census data)	1991	41.6
Nepal Family Health Survey, 1996	1994-96	37.0
Nepal Demographic Health Survey, 2001	1998-2000	33.5
Nepal Demographic Health Survey, 2006	2003-2005	28

Source : CBS 1995, MOH, 1997,2002a and 2006

### 2.1.2 Age Specific Fertility Rates (ASFRs)

Age Specific Fertility Rates (ASFRs) are defined as the ratio of children born to a specific age group of women to the number of women in the risk of bearing children. These are more refined a measure of fertility as the age/sex structure of a population is taken into account. Thus, international comparisons of ASFRs can easily be made while CBR described earlier should not be compared internationally unless standardized for the age/sex structure of the population. For the calculation of ASFRs, usually a five-year age groups are considered.

There is an inverted U-shaped relationship between fertility and the age of women. In other words, during early part of reproductive life fertility is low. It

increases to a maximum value during the twenties and then declines women get older. Table 2.2 presents ASFRs for Nepalese women aged 15 to 49 from 1971 to 2003-2005.

The age pattern of fertility indicates that Nepalese women have the highest fertility in the early part of childbearing period. For example, in 2003-2005, of the one thousand women in the age range 20-24, 234 women give births in a given year while the corresponding figure for women in the age range 35-39 is only 48. If the age specific fertility rates for the period 1998-2000 and 2003-2005 are compared, we find that fertility has declined for all the ages during the last five-year period.

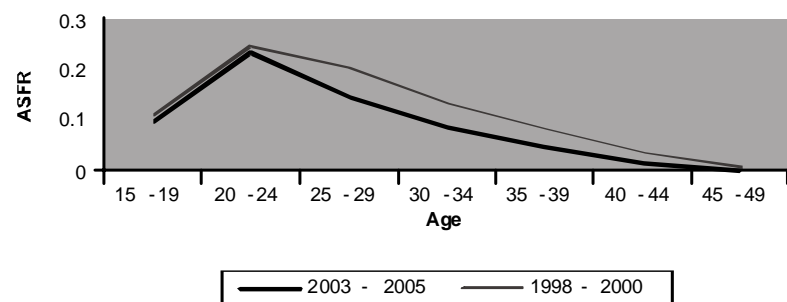
**Table 2.2 : Age Specific Fertility Rates, Nepal, 1971-2000**

Age group	1971	1976	1981	1984-86*	1989-91*	1994-96*	1998-2000*	2003-2005
15-19	0.074	0.145	0.066	0.099	0.101	0.127	0.110	0.098
20-24	0.267	0.290	0.230	0.261	0.263	0.266	0.248	0.234
25-29	0.310	0.295	0.266	0.230	0.230	0.229	0.205	0.144
30-34	0.261	0.269	0.245	0.200	0.169	0.160	0.136	0.084
35-39	0.196	0.169	0.206	0.114	0.117	0.094	0.081	0.048
40-44	0.109	0.075	0.142	0.068	0.055	0.037	0.034	0.016
45-49	0.043	0.023	0.099	0.049	0.026	0.015	0.007	0.002

\*ASFRs are based on births that occurred three years prior to the survey

Source : CBS 1995; MOH 1997; MOH 2002.

The figure 2.1 presented below provides the comparison of ASFR for the period 1998-2000 and 2003-2005.



**Figure 2.1 :Age Specific Fertility Rates Nepal, 1998-2000 and 2003-2005**

The two ASFR lines clearly indicate that there has been a decrease in the age specific fertility in all the age groups in Nepal during the last five-years.

### 2.1.3 Total Fertility Rate (TFR)

Another measure commonly used to describe the level of fertility is Total Fertility Rate (TFR). Verbally TFR is defined as the number of children of a woman would bear during her childbearing period under prevailing age specific fertility rates (i.e. ASFRs). The TFR is calculated as the sum of ASFRs. As we have used ASFR for 5 year age groups, the sum of ASFRs need to be multiplied by 5 to obtain the TFR. Although, defined as a cohort measure, in fact, it is a synthetic cohort measure based on period data. It is the most commonly used summary measure of fertility as it is free from age distribution of a population. This measure is also widely understood and used by policy makers and planners. Table 2.3 provides the different estimates of TFR from 1971 to 2005.

**Table 2.3 : Total Fertility Rate Nepal, 1971-2000**

Data Source	Year	Total Fertility Rate
CBS Census, 1971	1971	6.3
Nepal Fertility Survey 1976, MOH	1975-1976	6.33
Nepal Contraceptive Prevalence Survey 1981, MOH	1980-1981	6.27
Nepal Fertility and Family Planning Survey 1986, MOH	1984-86	5.1
Nepal Fertility Family Planning and Health Survey 1991, MOH	1989-91	4.8
Nepal Family Health Survey 1996, MOH	1993-95	4.6
Nepal Demographic and Health Survey 2001, MOH	1998-2000	4.1
Nepal Demographic and Health Survey, 2006	2003-2005	3.1

\*These rates are based on births occurring 3 years preceding the survey and are direct estimates.

Source : CBS 1995; MOH 1997; MOH 2002a, MOHP, 2006.

Table 2.3 shows that the estimate of TFR for Nepal was more or less constant till mid eighties and thereafter it started to decline. The level of TFR till mid eighties was around 6.3. A substantial reduction in fertility can be seen during the period 1999 to 2004 when a decline of one child was observed. The Nepal Demographic and Health Survey 2006 provided an estimate of TFR for Nepal to be 3.1. Although a detailed analysis of causes of decline in fertility has not been done, possible causes for this decline after mid-eighties could be include a) increased use of family planning methods b) increased age at marriage c) improved level of education d) increased urbanization and e) spousal separation due to conflict and employment etc.

**Replacement Level of fertility** is the average number of children sufficient to replace their parents. The replacement level of fertility is measured by GRR (Gross Reproductive Rate) and NRR (net Reproductive Rate). If the NRR=1, then we called it as the replacement level of fertility. Actually it is the level of fertility at which women in the same cohort have exactly enough daughters on average to replace themselves in the population.

**Population momentum** refers to the tendency of the population to continue to grow after replacement level of fertility has been achieved. A population that has achieved replacement of below replacement level of fertility may still continue to grow for some decades because past high fertility leads to a high concentration of people in the youngest ages. Total births continue to exceed the total deaths as these youth becomes parents. Eventually, however, this large group becomes elderly then deaths increase to equal or out number of births. Thus it may take two or three generations before each new birth is upset by a death in the population.

Hill	4.5	4.0	3.0	5.6	5.4	4.6
Terai	4.6	4.1	3.1	5.7	5.3	5.0
<b>Development Region</b>						
Eastern	4.1	3.8	3.1	5.4	4.9	4.7
Central	4.6	4.3	3.0	5.6	5.4	4.7
Western	4.7	3.5	3.1	5.5	5.3	4.6
Midwestern	5.5	4.7	3.5	6.6	6.4	5.6
Far Western	5.2	4.7	3.5	6.2	6.0	5.6
<b>Educational Status</b>						
None	5.1	4.8	3.9	5.8	5.6	5.1
Primary	3.8	3.2	2.8	5.3	4.5	4.0
Secondary	2.5*	2.3	2.3	3.7*	3.7	3.3
SLC and above	-	2.1	1.8	-	2.6	2.6
Total	4.6	4.1	3.1	5.7	5.4	4.9

\* includes secondary or higher level of Education

Source : MOH, 1997,2002,2006

Comparison of TFR differentials for the period 1994-1996 and 1998-2000 and 2003-2005 suggest that the differentials by socio-economic variables have increased substantially over the years. This is an indication of declining fertility trend in Nepal as well as faster decline in fertility for the advantaged group of population as indicated by lower fertility for educated women as well as women living in urban areas.

Table 2.4 also provides the mean number of children born to women aged 40-49. Similar differentials in the mean number of children born to women aged 40-49 can also be seen. However, the differentials are smaller and increase in the differentials over the last five years is also smaller.

Moreover, it should be noted that the mean number of children ever born to these women (40-49) is considerably higher than the TFR discussed earlier. Recall once again that the TFR is a synthetic cohort measure based on period data, while the mean number of children ever-born to women (40-49) is a cohort measure. TFR is based on the recent data on ASFRs, while the mean number of children ever-born to women is based on the ASFRs prevalent during the last 25-30 years. As the fertility was higher in earlier period, it is natural that the cohort TFR measure is also higher.

### 2.3 Proximate Determinants of Fertility

Earlier we discussed fertility and its differentials. The differentials in fertility were demonstrated for different demographic and socio-economic variables. In fact, socio-economic variables do not have a direct causal link with fertility, however, their effect is mediated through behavioral factors as well as biological factors. These are the factors which Davis and Blake (1956) called intermediate variables (also known as proximate determinants of fertility)

Davis and Blake in their classical articles described the mechanism through which different biological as well as behavioral factors had effects on fertility. Bongaarts (1978,1982) attempting to model the intermediate variable frame-

## 2.2 Fertility Differentials

The change in fertility in fertility level by some specific phenomenon or characteristics is called fertility differential. During the early phase of fertility transition, the differentials in fertility emerge and large differentials can be observed for some key socio-economic variables. Table 2.4 provides fertility differentials by place of residence, ecological region, development region and education. In Table 2.4, mean number of children ever-born (CEB) by women aged 40-49 have also been displayed. Mean number of children ever-born for women 40-49(or 45-49) can be regarded as a cohort measure of TFR. It should be noted that some women may have given births to their children quite early, thus, they might misreport live births, which might have resulted in death soon after birth. Following differentials in TFR can be clearly seen, when one looks at the NDHS 2006 data on TFR:

1. The TFR in the Terai region is similar to that observed in the Hill region while the TFR in the mountain region is around one child higher.
2. By development regions the TFR in the central region is the lowest (3.0) and the highest TFR is observed for the mid western region and Far western region (3.5).
3. Women with SLC and above have a TFR of 1.8, which is less than half of the rate for women with no education.
4. Similarly, urban women have lower fertility (on an average by two births) than their rural counterparts.

**Table 2.4 : Level of TFR and Mean Children Ever Born [Mean CEB] 40-49) by Background Characteristics Nepal, 1994-1996 and 1998-2000**

Background Variables	TFR			Mean CEB 40-49		
	1994-1996	1998-2000	2003-2005	1994-1996	1998-2000	2003-2005
<b>Region of Residence</b>						
Urban	2.9	2.1	2.1	4.6	4.5	3.7
Rural	4.8	4.4	3.3	5.8	5.5	5.1
<b>Ecological Region</b>						
Mountain	5.6	4.8	4.1	6.2	6.1	5.4



work of Davis and Blake identified only four factors out of several factors identified by them as the major determinants of fertility in a population. His regression model showed that nearly 96 percent of variation in fertility in a population was explained by the following four factors

- a) Proportion of females married
- b) Post-partum infecundity due to lactation amenorrhea
- c) Contraceptive prevalence rate and
- d) Prevalence of induced abortion.

In the following section we will mainly deal with these four proximate determinants and their role in reducing fertility in Nepal.

## 2.4 Nuptiality

In societies, where child bearing takes place mostly within marriage, timing of marriage marks the beginning of women's exposure to child bearing. In other words, age at marriage in most of the societies, begins a woman's exposure to the risk of child bearing. Age at marriage is a major determinant of the duration and tempo of fertility in a population. Consequently, age at marriage and proportion of women never married are important proximate determinants of fertility (Bongaarts and Potter, 1983).

***Nuptiality** refers to Marriage, separation, divorce, widowhood and remarriage in Demography. Their importance arises partly from their relationship with the age at which sexual relation begins and end and partly with the formation and dissolution of families and households.*

The Nepalese society is characterized by early and nearly universal marriage. Marriage usually takes place early and by the age of 30 almost every woman is already married. In populations, where use of contraception is low, early marriage leads to longer exposure to child bearing. Therefore, early and universal marriage practice in Nepal results in long-term social and economic consequences including higher fertility.

**Table 2.5 : Percentage of Women Never Married by Age, Nepal, 1961-2006**

Age group	1961	1971	1981	1991	2001	2006
15-19	25.7	39.3	49.2	52.7	66.1	67.7
20-24	5.3	7.9	13.1	12.8	21.0	17.9
25-29	1.9	2.6	5.4	3.7	5.6	4.4
30-35	1.0	1.4	3.1	1.9	2.6	1.6
35-39	0.8	1.1	2.6	1.3	1.8	1.4
40-44	0.7	0.9	2.5	1.1	1.5	1.3
45-49	0.6	0.8	2.9	0.9	1.2	1.2

1961-91 data are from censuses and 2001 are based on NDHS2001.

Source: CBS 1995, 2002; MOH 2002 and 2006

## 2.4.1 Widow/Widower

In Nepal, as discussed earlier, almost all of the childbearing takes place within marriage. Therefore proportion of population widower or widow will also have an effect on fertility. Data on widowhood for both men and women have been presented in Table 2.6. Table 2.6 indicates that from 1961 to 1991 the number of both widow and widower have gone down significantly. This indicates that mortality for adult population has declined over the years. For example, among men, in 1961 percentage of widower was 4.8, which decreased to 3.0 by 1991. Among women in 1961, percentage widowed was 14.3, which decreased to 7.2 by 1991. Nepal Family Health Survey 1996 provided estimate of widowhood as 2.7 per cent, for women 15 years and older. The census of 2001 indicated that of the total male population 10 years or older only 1.3 percent are widowers while this figure is 3.7 for women aged 10 years or older. This sharp decline in proportion of widow and widower is due to fall of mortality among adult population. Proportionately more women are widowed compared to males for all age categories. This could be partly explained by a) age difference between males and females at the time of marriage; as husbands are older it is more likely that proportionately more women become widows b) a substantial proportion of males remarry when they are widowers, while very few women remarry when they are widowed and c) during reproductive years female mortality could also be higher, as depicted by a high maternal mortality.

**Table 2.6 : Percentage of widow/widower, 10 years and above, Nepal, 1961 - 2001**

Sex	Census Years				
	1961	1971	1981	1991	2001
Male	4.8	3.7	2.4	3.0	1.3
Female	14.3	10.1	5.5	7.2	3.7

Source : CBS 1995, 2002.

Divorce and separation between husbands and wives are another important variable, which affects fertility. Although the proportion of men and women divorced or separated is increasing over time, this figure is still too low to have any significant effect on fertility.

## 2.4.2 Age at First Marriage

In Nepal, with parental consent, legal minimum age at marriage for both girl and boy has been set at 18 years. If the boys and girls want to marry on their own then the minimum legal age at marriage for both girls and boys is 20 years. In many ethnic groups, this was hardly followed in the beginning and the mean age at marriage was quite low then. In some societies, girls are still married at younger ages indicating that the above mentioned legal provision is yet to be practiced to a full extent.

As discussed earlier, the increase in the proportion of men and women remaining single for different age group indicates that the mean age at marriage for men and women is increasing over the years.

The trend of age at marriage since 1961 is provided in Table 2.7. It should be noted that the age at marriage provided below is calculated from the census data and is based on persons remaining single for different age categories. These means are thus called singulate mean age at marriage.

**Table 2.7 : Singulate Mean Age at marriage by sex, Nepal 1961-2001**

Sex	Age at the marriage				
	1961	1971	1981	1991	2001
Male	19.5	20.8	20.7	21.4	22.9
Female	15.4	16.8	17.2	18.1	19.5
Difference of age at marriage between male and female	+4.1	+4	+3.5	+3.3	+3.4

Source : CBS 1995, 2003

Table 2.7 indicates that the age at marriage for both the males and the females has been increasing gradually over the years. The 1991-2001 decade has shown a remarkable change in the Singulate mean age at marriage. Perhaps, this increase is due to increasing urbanization and education (including literacy) among men and women. Although data have not been presented here, the NDHS, 2001 has shown that education and urban residence are the key variables associated with higher ages at marriage among Nepalese men and women.

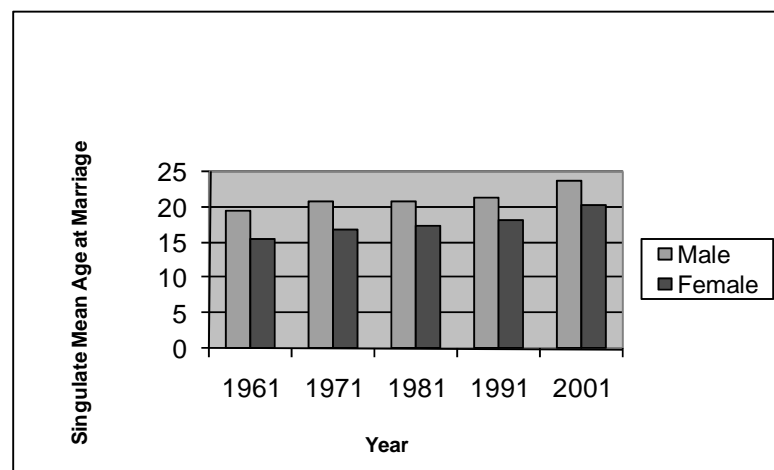


Figure 2.2: Singulate Mean age at Marriage Men

## 2.5 Effect of Changes in Marital Status on Fertility:

The above discussions have shown that the singulate mean age at marriage is increasing (15 in 1961 to 20 years in 1991) and the proportion of widowed is decreasing (14.3percent in 1961 to 7.2percent 1991).

The increase in age at marriage has a negative impact on fertility for two basic reasons. First women who marry later have a shorter reproductive life span and second the factors that affect the age at marriage also affects the desired family size norms thereby reducing fertility. For example, if a woman marries later because she is studying then her fertility will also be lower as her desired family size is smaller.

On the other hand, as most all of the births take place within marriage, decrease in the proportion widowed in the reproductive ages will increase the number of women at risk of child bearing. It is of interest to know the balancing effect of these two opposite forces operating on fertility. From the analysis of 1961 and 1991 census figures, it is observed that fertility was lower by 8.1 percent because of increased age at marriage, while it increased by about 2.2 percent due to declining widowed (CBS, 1995). In other words, the effect of increasing the age at marriage on fertility is much higher than the fertility increasing effect of lowering widowhood in Nepal.

## 2.6 Family Planning

Nepal's Family planning programme started with the organization of Family Planning Association of Nepal in 1959. In fact, Nepal was one of the first countries of South Asia, where information about family planning was available through a non-governmental programme. Since 1968 Government of Nepal has been actively involved in providing family planning services with the establishment of Nepal Family Planning and Maternal Child Health (NFP and MCH Project) project. Initially family planning programme was integrated with maternal child health services. Since the nineties, as all the health services were brought together, family planning has become an integral part of the country's health services.

Currently, besides the governmental programmes, different NGOs and INGOs are also providing family planning services as well as information education and communication services related to the family planning. Some of these institutions are a) Nepal Family Planning Association b) Care Nepal c) Plan international d) Nepal Red Cross society e) ADRA and f) Mary Stoves etc.

The National Health Policy (1991) related to the National Reproductive Health and Family Planning (RH/FP) Programme aims at increasing the coverage of the family planning services to the village level through health facilities and activities, such as a) hospitals, b) primary health care (PHC) centres, C) Health posts (HP), d) Sub health posts (SHP), e) PHC outreach clinics and f) mobile voluntary surgical contraception (VSC) camps. This health policy also attempts to sustain adequate quality of family planning services through adequately trained manpower as well as supplies.

At the same time, the health policy also aims at mobilizing NGOs, social marketing organizations, and private practitioners to complement and supplement the efforts of the government. The governmental family planning programmes have trained and fielded community-level volunteers (TBAs, FCHVs) for the promotion of condom distribution and the re-supply of oral pills. Intensified IEC activities are also being carried out utilizing different media to increase awareness on RH/FP in the community. Moreover, through active involvement of FCHVs and Mothers' Groups, it is expected that a high level of awareness will be reached in the community levels.

In Nepal family planning services are provided using a cafeteria approach; which means that different methods of contraception are made available to most of the health institutions and a client is to choose the method that suits his or her objectives. It is expected that this approach will not only increase the prevalence of contraceptive use but also reduce the fertility. This approach is also based on client's right and option.

### 2.6.1 Objectives of Family Planning Programme in Nepal

Following are the major objectives of the family planning programme in Nepal.

- Space and/or limit their children,
- Prevent unwanted pregnancies,
- Adolescent Reproductive Health and
- Manage infertility

### 2.6.2 Targets

Nepal's Family Planning programmes have the target of reducing the TFR from 4.1 per women in 2001 to 3.6 per women by the end of the Tenth Plan (2007) and to 2.1 in 2017. If we refer to the fertility chapter we can say that fertility targets for the 9<sup>th</sup> plan have already been met as indicated by the NDHS, 2001.

In order to meet the fertility targets mentioned earlier, the contraceptive prevalence rate (CPR) has been envisaged to increase to 37 percent of currently married women of reproductive age (MWRA). As we will observe later in this chapter, this target has also been already met as indicated by the NDHS, 2001. The long-term target is to increase the CPR to 65percent by 2017.

Below we discuss the summary of findings in family planning obtained from the NDHS2001 survey.

### 2.6.3 Knowledge of Contraception

In Nepal, the year 1976 marks the beginning of the first national level family planning and fertility survey. Since then a survey is being carried out at five year intervals. The first survey was the Nepal Fertility Survey, which was conducted in 1976 and the latest survey was conducted in 2006 which is known as Nepal Demographic Health Survey (NDHS 2006).

There has been a five-fold increase in the percentage of currently married women, who have heard about modern methods of contraception in the last 25 years (from 21 percent in 1976 to nearly 100 percent in 2006). This high level of knowledge is a result of the successful dissemination of family planning messages through the mass media as well as interpersonal communication established through mother groups, FCHVs and TBAs

### 2.6.4 Demand for Contraception

Unmet need for family planning has been defined as the proportion of women who want no more children or want children only after two years but are not using any form of contraception. On the other hand, current users of family planning methods are categorized as having a met need for family planning. The total demand for family planning is defined as the sum of these two components. The Fertility, Family Planning and Health Survey of 1991, Nepal Family Health Survey of 1996 and NDHS2001 provide data on met and unmet need of contraception. These data have been summarized in Table 2.8.

From the Table it is clear that the total demand for family planning has been increasing over the years. In 1991 it was 51 percent, which increased to 67 percent in 2001. In a like-wise manner, there has been a nearly 72 percent increase in CPR during these 10 years. Because of the increase in CPR over the years the proportion of unmet need has decreased during the period 1996 and 2001. However, it is still around 28 percent indicating that the family planning programmes should target these groups to make their family planning demand met. If the programmes were successful in fulfilling the demand for family planning then the CPR would increase to 67 percent. In fact, the family planning programmes should have a two-pronged strategy in this area. One is to work towards fulfilling the unmet demand of contraception and the other is to increase the demand for family planning by decreasing the family size norm through intensive IEC activities.

**Table 2.8 : Demand for contraceptives among currently married women aged 15-49, Nepal, 1991-2001.**

Years	Unmet need for contraception	percent currently using contraception (met need)	Total demand for contraception
1991	27.7	22.8	50.5
1996	31.4	28.5	59.9
2001	27.8	39.3	67.1
2006	24.6	48.0	72.6

Source : MOH, 1993, 1997, 2002, 2007

Out of the total demand, the demand for spacing is estimated to be 14.1 percent (4.8 percent use family planning to space, plus 9.4 have unmet need for spacing).

## 2.6.5 Current Use of Contraception

The current use of contraception or Contraceptive Prevalence Rate (CPR) is expressed as the percent of currently married women who report using a method at the time of the interview. The level of modern contraceptive use in Nepal has increased gradually in the last two decades. This trend has been shown in Table 2.9 and Figure 2.3. The current use of contraceptives has gone up from 3 percent in 1976 to 48 percent in 2006. Of this 48 percent sterilization accounts for 24 percentage points and the users of temporary methods of contraception account for about 24 percentage points. Among methods, female sterilization has become most popular with nearly 18 percentage points, whereas male sterilization has not gained similar popularity.

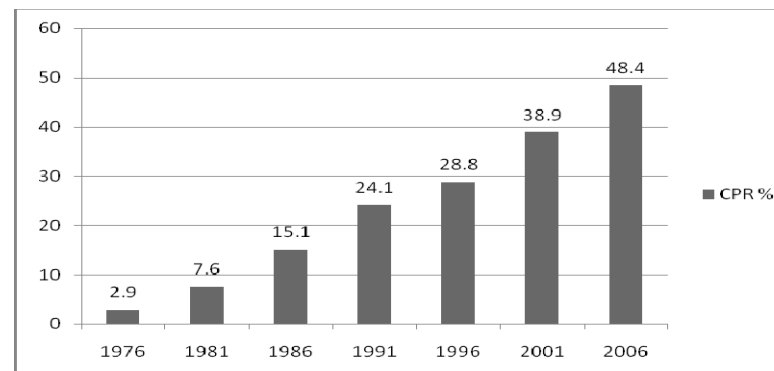
**Table 2.9 : Current use of Contraception among non-pregnant women (percent)  
Nepal 1976 - 2006**

Method	1976 NFS	1981 NCPS	1986 NFFS	1991 NFFS	1996 NFHS	2001 NDHS	2006 NDHS
Any modern method	2.9	7.6	15.1	24.1	28.8	38.9	44.2
Female sterilization	0.1	2.6	6.8	12.1	13.3	16.5	18.0
Male sterilization	1.9	3.2	6.2	7.5	6.0	7.0	6.3
Pill	0.5	1.2	0.9	1.1	1.5	1.8	3.5
InjecTables	0.0	0.1	0.5	2.3	5.0	9.3	10.1
Condom	0.3	0.4	0.6	0.6	2.1	3.2	4.8
Norplant	-	-	-	0.3	0.5	0.7	0.8
IUD	0.1	0.1	0.1	0.2	0.3	0.4	0.7

*NFS-Nepal Fertility Survey; NCPS-Nepal Contraceptive Prevalence Survey; NFFS - Nepal Fertility and Family Planning Survey, NFHS - Nepal Family Health Survey, NDHS Nepal Demographic Health Survey.*

Source :MOH 2002a, 2006

Among the temporary methods of contraception, Depo-Provera accounts for 9 percentage points indicating that it is the most popular temporary methods of contraception. Although, one expects a larger proportion of CPR to come from temporary methods, it is still lower than the permanent methods. However, surveys have indicated the increasing trend in the use of temporary methods of contraception in Nepal. This is an indication that more and more women are using contraception to space rather than limit births



*Figure 2.3: Contraceptive Prevalence Rate Nepal, 1976-2006*

Although the uses of family planning methods have been increasing over the years, CPR in Nepal is still low. Serious efforts need to be carried out to increase the demand for the family planning services and to fulfill the unmet need for the family planning services. If family planning programs are to make a bigger dent on fertility then the IEC programmes should bring down the family size norms.

## 2.7 Breastfeeding

Breastfeeding is another important proximate determinants of fertility. Although breastfeeding in Nepal is almost universal and prolonged, most women are not aware of its contraceptive effect. Breastfeeding increases the length of post-partum amenorrhea, thereby providing protection against pregnancy for some time after the birth of the child. Nepal Demographic Health Survey 2001 indicated that breast-feeding is nearly universal and about 98 percent women breastfed their children after birth, indicating that this proportion has been more or less constant over the years. Differentials in breast-feeding indicate that younger, urban, and educated (literate) women are less likely to breast feed their children than their counterparts. Median duration of breastfeeding in Nepal has been observed to be 33 months in Nepal.

The fertility reducing effect of breastfeeding arises from its role in lengthening the period of postpartum amenorrhea and consequently in extending the birth interval (in the absence of use of contraception). Studies have shown that the average length of inter-birth interval in Nepal is more than 30 months and there is a direct positive correlation between duration of breastfeeding and birth interval (UNFPA, 1989).

## 2.8 Abortion

Abortion is one of the ways to limit fertility. Practice of abortion is as old as the society itself. Although, access to induced abortion is restricted by law and prohibited by religion and customs in Nepal, its practice can not be denied.

Many studies have found that abortion is widely practiced in Nepal. However, due to the fear of legal punishment, majority of women seek abortion clandestinely and most often they consult unskilled or unqualified health persons for abortion. This in most cases results in complications resulting in the deaths of mothers or hospitalization.

Recently, (in March 2002), the parliament has passed a bill legalizing abortion. The bill is to be noted. It is legal to have an abortion under the following three conditions provided the fact that conditions (a) and (b) are met a) the health worker performing abortion is a skilled professional with license from Government of Nepal and b) if the woman, who is pregnant, consents to have an abortion.

- If the fetus is less than 12 weeks old
- If the pregnancy is the result of incest or rape and the pregnancy is less than 18 weeks
- If the pregnancy results in health hazard of the mother or the unborn child or the pregnancy results in deformed/disabled child.

## Chapter 3

# Mortality

### 3.1 Mortality

Like fertility mortality is also one of the factors, which affect the structure, size and growth of a population. Mortality rates are based on death statistics, which usually come from vital registration data. Vital registration system normally follows the definition of death put forward by UN and WHO, which define death as "the permanent disappearance of all evidence of life at any time after a live birth has taken place". Here one should note that birth refers to a live birth.

*Mortality refers to deaths that occur within a population. While we all eventually die, the probability of dying within a given period is linked to many factors, such as age, sex, race, occupation, and social class. The incidence of death can reveal much about a population's standard of living and health care.*

*Death is the permanent disappearance of all evidences of life at any time after live births has taken place. A death can occur only after a live birth has occurred. The definition of a death can be understood, therefore only in relation to the definition of live birth.*

In Nepal, earlier decline of mortality and later decline in fertility have resulted in relatively high rate of natural growth of population. The mortality decline is relatively faster due to increased access and improved health services. There has been secular decline in mortality during the recent past, but the decline in fertility is slower than the mortality. Consequently Nepal's population is increasing fast.

Like fertility, there are different indices for the description of trend and level of mortality. Here we discuss some of these indicators. These are:

- a) Crude Death Rate
- b) Infant Mortality Rate
- c) Child and Under 5 Mortality Rate
- d) Maternal Mortality Ratio and
- e) Life Expectancy

The main source of death data is the hospital death records and vital registration system. As vital registration system is still not efficient, there is a serious under registration of vital events. Consequently, the mortality indicators discussed below are either based on stable or quasi-stable population analysis or data based on survey, where both the direct and indirect measures of estimation are employed.

### 3.1.1 Crude Death Rate (CDR)

Crude Death Rate (CDR) is defined as the ratio of annual number of deaths to the person years of exposure to death during that period multiplied by a constant (usually 1000). It should be noted that for simplicity and ease of approximation, person-years of exposure is usually approximated by mid-year population. Like crude birth rate this is usually widely understood and is very frequently used summary measure of mortality. However, like CBR, CDR is also heavily affected by age and other compositional structure of the population. For example, it should be noted that age specific death rate at age 15-19 is very low compared to age specific death rate at 0-4 or 60-64 years of age. Therefore, combining all the deaths into one group and calculating the rate for all the population combined, ignores the age composition of the population. In two populations even if, the age specific death rates are exactly the same, if age-sex structure is different then they will have different crude death rates (CDR).

Different estimates of CDR for Nepal available since 1954 are provided in Table 3.1. Because most of these estimates are based on stable population techniques, these estimates do not present a very consistent trend. Moreover, this could be also due to the use of different data that come either from censuses or surveys. It should be borne in mind that both of these sources of data suffer from inherent errors.

The Table indicates that CDR was a little over 35 in 1950s, which decreased to less than 20 in 1970s, and further to 9.6 in 2001. Despite fluctuations in the estimate of CDR, it can easily be concluded from the Table that mortality in Nepal has been declining over the years.

Another thing that emerges from the Table is that these estimates consistently indicate higher mortality for females than males. Nepal is one of the few countries in the world where female mortality is higher than male mortality. There is no reliable information on Age Specific Death Rates (ASDR) in Nepal, which could provide mortality information for different age groups. The lack of reliable estimates of adult mortality by age has led us to use CDR.

**Table 3. 1; Crude Death Rate, Nepal, 1954 - 2006**

Source	Estimate d duration	Crude death rate		
		Total	Male	Female
1. Vaidhyanathan & Gaige, 1973	1954	36.7	-	-
2. CBS, 1977	1953-61	27.0	28.0	24.8
3. Guvaju, 1975	1961	22.0	-	-
4. CBS, 1977	1961-71	21.4	21.3	22.6
5. CBS, Demographic Sample Survey, 1976	1974-75	19.5	18.6	20.4
6. CBS, Demographic Sample Survey, 1977	1976	22.2	21.5	22.8
7. CBS, Demographic Sample Survey, 1978	1977-78	17.1	17.9	16.2

8. CBS, 1977 (Census data)	1971-81	13.5	12.2	14.9
9. New Era, 1986	1984	10.9	10.8	11.0
10. CBS, Demographic Sample Survey, 1986	1985-86	16.1	-	-
11. CBS Census	1991	13.3	12.9	13.6
12. CBS	1996	11.6	-	-
13. MOPE*	2001*	9.62	-	-
14. MOHP	2006	9.0	-	-
15. CBS	2008	8.3	-	-

Source : CBS, 1995; CBS, 1998; MOPE, 1998

\* Projected Mortality

### 3.1.2 Infant Mortality Rate (IMR)

The IMR is the number of deaths under one year of age per 1000 live births during a year. Although it is called a rate, in fact, it is the probability of dying before the first birthday. Several factors affect the IMR of a country:

- a) Nutrition of mothers and children
- b) Birth intervals
- c) Parity
- d) Age of mother at child's birth
- e) Mother's education and economic status
- f) Basic health services including:
  - i. Immunization
  - ii. ARI
  - iii. Diarrhea
  - iv. Safe motherhood program
  - v. Environment etc;

In other words, IMR usually declines with a certain level of socio-economic development as reflected by the above mentioned factors. Therefore IMR has been commonly considered as an indicator to assess socio-economic development and general health condition of a society. However the adult mortality is relatively lower even in developing countries and a smaller proportion of population is in the older group, a substantial number of deaths occur during the first five years of life. In developing countries where health system is not fully developed, infant death is a substantial part of under five deaths. Therefore, reduction in IMR is a fundamental strategy to achieve a significant reduction in the overall mortality. Moreover, the interdependent relationship between fertility and infant mortality suggests that a reduction in infant mortality will trigger a subsequent decline in fertility. It has also been found that a lower IMR motivates couples to produce fewer number of children.

**Table 3.2: Infant Mortality Rate, Nepal, 1954 – 2006**

Source	Reference Period	Infant mortality rate		
		Total	Male	Female
1. Vaidhyanathan & Gaige, 1973	1954	-	260	250
2. Guvaju, 1974	1961-71	-	200	186
3. CBS, 1974	1971	172	-	-
4. Nepal Fertility Survey, 1976	1976	152	-	-
5. CBS, 1985	1978	144	147	142
6. New Era, 1986	1981	117	136	111
7. Fertility and Family Planning Survey, 1986	1983-84	108	117	98
8. Fertility and Family Planning Survey, 1991	1989	102	-	-
9. Census, 1991	1991	97	94	101
10. Nepal Family Health Survey, 1996	1993-96	79	-	-
11. Nepal Demographic Health Survey, 2001	2001	64	79.2*	75.2*
12. Nepal Demographic Health Survey, 2006	2006	48	60*	61*

Source : CBS, 1995; MOH 1997, 2002a.

\* IMR estimates are based on births 10 year prior to the survey

Table 3.2 provides estimates of infant mortality based on different sources. It should be noted that since 1991 all the estimates of infant mortality are based on direct estimates of the rates except for the census estimate for 1991, which used indirect techniques of estimation. Since the 1991 survey it has been argued that the quality of pregnancy history data has improved and there is a little omission of births and deaths especially during the recent past. As the effect of these omissions on the calculation of demographic rates is minimal, direct method of IMR estimation has been used since then.

Table 3.2 indicates that a high IMR of around 250 per thousand live births prevailed in the country during the fifties. In the sixties it was decreased to around 150 to 200 per thousand live births. Since the mid seventies, decline in IMR is secular and during 2001-2005 it has reached 51 per 1000 live births. This also indicates that IMR for female babies are slightly lower than that for male babies.

Infant mortality is affected by various socio-economic and demographic factors. These factors are of particular interest, since these provide clues for the identification of priority groups in policy formulation and program implementation. Differentials in IMR have been presented in Table 3.3.

Before the data in Table 3.3 is discussed, it should be noted that the estimate of IMR from NFHS 1996 and NDHS 2006 presented in Table 3.2 were based on births that occurred during the preceding three to five years. The estimate of infant mortality differentials presented in Table 3.3 is based on births that occurred during the preceding 10-year period. Both of these surveys indicate that mother's education, place of residence; birth interval and age of mother have great influence on IMR. IMR for those babies whose mothers age is less

than 20 years and are born in the birth interval of less than two years, are much higher than those babies whose mother's are aged 20+ and are born after a birth interval longer than two years. In general the differentials observed during the 1996 survey seem to have decreased in the 2001 and 2006 surveys. This indicates that decrease in IMR is somewhat faster in groups where IMR used to be higher.

**Table 3.3: Infant Mortality Rates by socio-economic & demographic characteristics, Nepal, 1996-2001**

(for ten year period preceding the survey)

Characteristics	NFHS 1996	NDHS 2001	NDHS 2006
<u>Residence</u>			
Urban	61.1	50.1	37
Rural	95.3	79.3	64
<u>Ecological Region</u>			
Mountain	136.5	112	99
Hill	87.4	66.2	47
Terai	90.9	80.8	65
<u>Development Region</u>			
Eastern	79.4	77.5	45
Central	86.3	77.4	52
Western	84.3	60.1	56
Mid-western	114.8	72.9	97
Far western	124.3	112.2	74
<u>Education</u>			
No education	97.5	84.6	69
Primary	80	61	58
Secondary	53.4	49.9	35
SLC and above	-	-	13
<u>Age of mother at birth**</u>			
< 20	120.1	108.2	83
20-29	79.5	67.6	50
30-39	103.9	72.9	62
40-49	-	-	91
<u>Previous birth interval**</u>			
< 2 yrs	141.4	124.4	96
2-3 yrs	78.8	67.8*	57
3	-	45.2	38
4 +	44.7	38.9	28
<u>Sex of Child**</u>			
Male	101.9	79.2	60
Female	83.7	75.2	61

\*Refers to two year birth interval. Source : MOH, 1997, NDHS2001

\*\*Refers the rates calculated for 10 year period preceding the survey.

### 3.1.3 Child and Under 5 Mortality

Before we present the data from the two recent surveys i.e. NDHS 2001 and NDHS 2006, the definitions of these mortality indicators are in order. Child mortality rate is defined as the probability of dying between age one and five. This assumes that the child has already survived to age one to begin with. Under-five mortality rate is defined as follows. Of the 1000 children born today how many will die before their 5<sup>th</sup> birthday?. In other words, it is probability of dying between birth and before their fifth birthday. It should be noted once again that the estimate of these indicators are based on the births that occurred during the last five years. Data on child and under five mortality obtained from NDHS 2006 has been summarized in Table 3.4.

**Table 3. 4: Child and under 5 mortality rates for five year periods preceding the survey Nepal 2006**

Years preceding the Survey	Child Mortality	Under 5 mortality
0-4	14	61
5-9	26	96
10-14	38	117

Source : NDHS 2006, MoHP

The Table indicates that the child mortality 0-4 years preceding the survey is 38 percent of what it was 10-14 years preceding the survey. In other words there has been a remarkable decline in child mortality during the last 15 years. A very similar picture in decline in under five mortality can also be seen.

**Table 3. 5: Child and under 5 Mortality Rates by socio-economic & demographic characteristics, Nepal, (for ten years period preceding the survey)**

Characteristics	NDHS 2001		NDHS 2006	
	Child Mortality	Under 5 Mortality	Child Mortality	Under 5 Mortality
Residence				
Urban	16.7	65.9	10	47
Rural	35.4	111.9	21	84
Ecological Regions				
Mountains	51.2	157.4	32	128
Hill	29.7	93.9	16	62
Terai	34.8	112.8	21	85
Development Regions				
Eastern	29.6	104.8	15	60
Central	36.4	110.9	17	68
Western	25.1	83.7	18	73
Mid Western	41.2	111.0	28	122
Far western	41.7	149.2	28	100
Education				

No education	39.5	120.7	25	93
Primary	13.4	73.5	10	67
Secondary	14.3	63.5	5	40
S.L.C.+	3.7	14.9	0	13
Age of the mother at birth of the child				
<20	28.5	133.6	20	102
20-29	32.6	98.0	18	67
30-39	42.5	112.3	23	84
40-49			42	103
Previous Birth Interval				
< 2 Years	54.8	172.4	37	130
2-3 Years	40.0*	105.1*	21	78
3 Years	22.4	66.6	14	52
4 or more years	20.1	58.2	9	37
Sex of the Child				
Male	27.8	104.8	21	80
Female	40.2	112.4	18	78

Source MOH 1997,2002a \*Figures refer to a 2 year birth interval. \*\* Includes secondary plus SLC or higher level of education.

The current (2006) estimate of child mortality in Nepal is 13 indicating that of the 1000 babies surviving to age one, 13 die before they reach the age of five. In a likewise manner, under-five mortality is 61 indicating that of the 1000 children born today 61 will die before they reach the age of five.

Table 3.5 provides the differentials in child and under-five mortality for Nepal obtained from NDHS 2001 and NDHS 2006 surveys. It should be noted that for the differentials in infant child mortality, births that occurred during the last ten-year period have been taken into account.

The same factors, which were important in the differentials of infant mortality are also important for child and under-five mortality. These are mother's education, mother's age, previous birth interval and ecological regions etc.

Like the infant mortality the differentials in child and under-five mortality has decreased over the last five years again suggesting that the programs aimed at reducing child mortality is also reaching those groups where child and under-five mortality used to be higher, however the differentials still persist in child and under 5 mortality.

### 3.1.4 Maternal Mortality

Maternal deaths are defined as any death that occurred during pregnancy, childbirth or within six weeks after the birth or termination of pregnancy. Maternal mortality is defined as the ratio of maternal deaths and number of live births during the same period multiplied by 100000. NDHS 2006 collected data on maternal mortality through sisterhood method. In other words, ever-married women of reproductive age were asked whether they had any sisters,



if yes, whether they are still alive, if dead whether the death was a maternal death. The maternal mortality usually not estimated frequently due to the lack of sufficient cases of deaths in the sample, however some surveys and studies done in Nepal has estimated it. Estimation of maternal mortality ratio utilizing the sisterhood method yielded a ratio of 281 deaths per 100000 live births. This ratio is one of the highest in the world indicating that a large number of mothers die due to causes related to childbirth. Even though the Maternal Mortality and Morbidity Study 2008/9 conducted in eight districts of Nepal is not a national representative survey, it revealed that the maternal mortality ratio is 229 deaths per 100000 live births. In order to combat this high ratio of maternal mortality Government of Nepal has embarked on a number of programs under Family Health Division's Safe Motherhood Program. In this effort the government is also supported by different donor agencies such as UNICEF, DFID, USAID, GTZ and other INGOs.

### 3.2 Life Expectancy at Birth

Life expectancy at birth is defined as the average number of years a new born baby will survive if s/he is subjected to the current mortality pattern. Life expectancy like the TFR is also a synthetic cohort measure. This measure of mortality like the IMR is free from distortions of age composition and thus international comparisons can readily be made. To calculate life expectancy we need the age specific mortality rates, which are difficult to obtain, as it requires a survey of large sample size. Furthermore, as the coverage of birth and death registration data is poor, life expectancy in Nepal is usually estimated based on the census data, employing indirect techniques. Table 3.6 provides estimated life expectancy at birth from 1954 to 2010.

**Table 3.6: Expectation of Life at Birth, Nepal, 1954 – 2010**

Source	Estimated duration	Life Expectancy		
		Male	Female	Total
1. Vaidhyanathan & Gaige, 1973	1954	27.1	28.5	-
2. CBS, 1974	1953-61	35.2	37.4	-
3. CBS, 1977	1961-71	37.0	39.9	-
4. Gubhaju, 1982	1971	42.1	40.0	-
5. Demographic Sample Survey, 1977	1976	43.4	41.1	-
6. CBS, 1986	1981	50.9	48.1	-
7. CBS, 1987	1983	51.8	50.3	-
8. CBS, 1993	1991	55.0	53.5	-
9. CBS, 2001	2001	60.1	60.7	60.4*
10 CBS 2006	2006	63	64	63
11 CBS 2010	2010	63.6	64.5	64.1

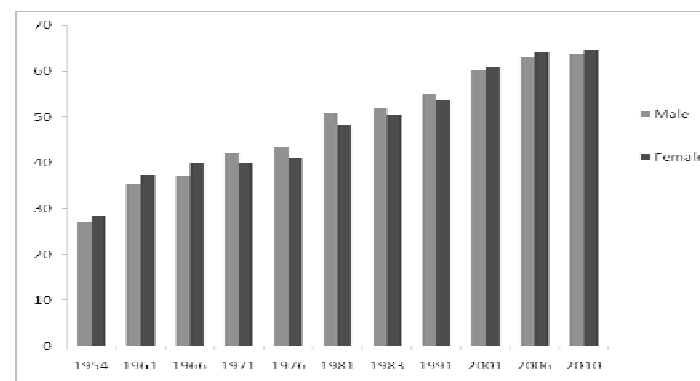
\* Estimates are based on projection.

Source : CBS, 1995; MOPE, 1999., CBS 2002 2006, 2010,

As indicated by the Table the expectation of life at birth for both the males and females has been increasing gradually over the years. The expectation of life at birth for males was 27.1 in 1954. The corresponding figure for females was 28.5 years. These figures increased to 55 and 53.5 years in 1991,

respectively for male and females. Mortality estimates used in the population projection (MOPE 1999) life expectation of life at birth for the Nepalese has reached 64.1 years. Such a significant change in life expectancy is due to the improvement of health facilities that has reduced death rates, especially among infant and children during the last decade.

Increasing trend in life expectancy can also be clearly seen from the figure 3.1 provided below.



**Figure 3.1: Life expectancy at birth**

It is no Table that the female's life expectancy at birth was less than that of males in previous years, however it is higher than that of males since 2001. It indicates that the maternal health has been improved in this decade.

## Chapter 4

# Migration

Migration is the third basic factor affecting change in population of an area along with fertility and mortality. It can be defined as the movement of people from one clearly defined place to another. According to Shryock et al. (1975) "Migration as a form of geographic or spatial mobility involving a change of usual residence between clearly defined geographic units. It should be noted that in present definition temporary movements are not included".

**Life time migration** is one who has moved from his place of birth to the present place of destination where he is enumerated at the time of the census irrespective of the number of times he migrates.

**Migration Stream** is the number of migrants identified on the basis of their volume within a given period of time from one geographical area to another such as mountain to hill, hill to Terai or Terai to mountain and hill and mountain to Terai. Another typical migration stream is usually measured on the basis of migration from rural to rural, urban to rural and urban to rural areas.

**In-migrants and out-migrants**-In migrants are defined as those internal migrants who have migrated to the destination from the origin. All migrants who may have migrated and settled in the destination from various origins are called in-migrants in the destination. On the other hand, out-migrants are those internal migrants who have left their place of origin and migrate to different destination areas. For the place of origin, they are defined as out-migrants.

**Net Migration** is the difference between out migration and in migration in any defined geographical areas within a specified period of time.

**Gross Migration** indicates the magnitudes of total mobility in a defined geographical area within a specified period of time

**Period Migration** refers to those people whose place of residence is different from the place of enumeration for the specified period

Migration has a profound effect on structure, composition and growth of population in a country therefore it is an important component of population analysis, migration. For the demographic purpose migration is defined in two broad types; internal and international migration. In this chapter we will deal with these two components of Migration.

### 4.1 Internal Migration

Internal migration is defined as movement of population within a country with change in address. Volume of internal migration depends on the size of the defined geographical area. For example, area can be defined as a ward of a VDC and any movements between wards could be regarded as migratory movement. Likewise, the geographic area could also be defined as a VDC or a district or Terai, Hill and Mountains. It should be noted that the larger the geographic area smaller the migratory movements. The defined geographic

areas, time unit are also play an important role in the measurement of internal migration. In Nepal, internal migration data usually comes from national censuses where data on place of birth and place of residence is usually collected and information is provided for migratory movement on a lifetime basis.

In Nepal till the fifties, Terai area was infested with high prevalence of Malaria. Till then internal migration from Hills and Mountain Region to Terai area was very limited. After the successful control of Malaria in the Terai region migratory movement from Hill and Mountain areas to Terai started to increase. Major factors in this migratory movements included harsher condition in the Hills and Mountains for example; limited supply of arable land, lack of employment and educational opportunities, and lack of infrastructural facilities in these areas. Moreover, availability of arable land in Terai immediately after the control of malaria and better infrastructural facilities, increased migration from Hills and Mountains to Terai. This migratory movement of people from Hills and Mountains to Terai was also facilitated by the resettlement program set up by the government in the late sixties.

The trend of internal migration has been increasing in Nepal. In 1971 445,128 people migrated within the country, which accounted for 3.9 per cent of the total population. It increased to 929,585 in 1981, comprising 6.2 per cent of total population. Hence, in the decade the volume of migration increased by 108.8 per cent. In 1991, volume of internal migration increased by 32.1 per cent as compared to a decade back, to make the number of migrants to 1,228,356, which is 6.6 per cent of total population. In 2001, the number of migrants within the country was 1,727,350 which was 7.46 percent of the total population, which was an increase by 40.6 percent compared to 1991 census.

The Table 4.1 clearly shows that during 1971-2001, nearly all the migrants to Terai came from the Hills, in other words, proportion of migrants from the Mountain area was rather small. Because of this migration from Mountains and Hills to Terai, Terai region gained a population of 399,925 by the time 1971 census was conducted. The census of 1981, 1991 and 2001 showed these figures to be 686,178; 915,578 and 1,085,862 respectively. This indicates that the migration to Terai from Hills and Mountains is still increasing.

The significant migration from Mountain and Hill to Terai can be explained by the pull factors such as: a) resettlement program b) availability of fertile arable land c) employment opportunities and d) better communication and transportation facilities.

A survey conducted by Central Department of Population Studies in 1996 indicated that out of the total population in Nepal, 22 percent were internal migrants. Migration rate among females was far higher than males. It does not necessarily mean females are more mobile than males rather it could be due to marriage migration, because in this survey, movements from VDC to VDC were also regarded as migration. Persons aged 15-39 were more mobile than

other age groups. Part of this could also be due to education related mobility of the population. Percentage of older people (60 or older) migrating was only 6.3 percent of the total internal migrants.

**Table 4. 1: Internal migrant by place of birth and place of enumeration, Nepal 1971-2001**

Place of Enumeration	Total	Place of Birth			Net migration
		Mountain	Hill	Terai	
<b>(1971)</b>					
Mountain	9,698 (2.2%)	-	9,258	440	-39,959
Hill	25,366 (5.7%)	15,667	-	9,699	-3,59,966
Terai	4,10,064 (92.1%)	33,990	3,76,074	-	+3,99,925
Total	4,45,128 (100)	49,657 (11.2%)	3,85,332 (86.6%)	10,139 (2.3%)	0
<b>(1981)</b>					
Mountain	35,619 (3.8%)	-	33,423	2,196	-2,61,467
Hill	1,69,923 (18.3)	1,34,254	-	35,669	-4,24,711
Terai	7,24,043 (77.9%)	1,62,832	5,61,211	-	+6,86,178
Total	9,29,585 (100)	2,97,086 (32%)	5,94,634 (64%)	37,865 (4%)	0
<b>(1991)</b>					
Mountain	36,674 (3.0%)	-	32,003	4,671	-1,61,655
Hill	1,73,968 (14.2%)	76,503	-	97,465	-7,53,923
Terai	10,17,714 (82.8%)	1,21,826	8,95,888	-	+9,15,578
Total	12,28,356 (100)	1,98,329 (16.1%)	9,27,891 (75.5%)	1,02,136 (8.3%)	0
<b>(2001)</b>					
Mountain	40319 (2.3%)	-	33,895	6,424	-255,103
Hill	360,171 (20.9%)	125,597	-	234,574	-830,759
Terai	1,326,860 (76.8%)	169,825	1,157,035	-	+1,085,862
Total	1,727,350 (100.0)	295,422 (17.1%)	1,190,930 (68.9%)	240,998 (14.0%)	0

Source: CBS 1995, 2002

## 4.2 International migration

International migratory movements may be classified as temporary or permanent movement of individuals or families, movement of whole nations or tribe, movements of citizens or aliens, movement of voluntary or forced and movement for study, work and others purpose. International migration in Nepal has been a matter of great concern in the context of open border with India and people. The unrecorded movement of Nepalese and Indians across Nepal-India border and the role of remittance in the economy mean that the implications of short-term and circular movement (international) are far reaching. Internal and international migrations are not comparable in terms of their impact in the economy and polity in the country. In the following sections international migration situation has been discussed under two headings: emigration (going abroad) and immigration (entry of aliens).

### 4.2.1 Emigration

The 1916 agreement of Nepal with British India, Nepalese males from Mountain and Hill regions started emigrating for employment in British India. This migration of Nepalese males took place mainly to obtain military jobs under the British government in India. Initially this number was rather small, it started gaining momentum in the later years. According to 1981 census 2.7 per cent of Nepal's population i.e. 4,02,977 persons had emigrated to India between 1971-1981. Out of these emigrants, 89.3 per cent came from the Mountain and the Hill regions.

The census of 1991 revealed that the number of emigrants increased to 6,58,337 between the period 1981-1991. This was a 63.4 per cent increase over the period 1971-81. This amounts to 3.6 per cent of the total population of the country. Nearly 9 out of 11 of these emigrants went to India (89.2). The percentage distribution for other countries and areas are: 0.76 to other countries of South Asia, 3.05 per cent to other Asian countries, 0.96 to Arabian countries, 0.97 to Europe, 0.33 to North America, and 0.9 per cent to rest of the countries. However, 4.64 per cent of emigrants' destination was not stated. Of these emigrants from Nepal, nearly two third had gone out for employment.

The census of 2001 revealed that the number of emigrants during the 1991-2001 Period were 762181. Persons immigrating to India constituted nearly 68 percent of the total emigrants followed by Saudi Arabia with 8.9 percent. Figures for Qatar and Hong Kong are respectively 3.2 and 1.6 percent. Other countries accounted for nearly 18 percent.

### 4.2.2 Immigration

Immigration is an important component of international migration. The history of immigration in Nepal dates back to its early settlement and the process of state formation. Nepal's historical and cultural linkages with India and the ethnic and caste diversity in contemporary Nepal are lucid examples of

immigration into Nepal. Indians remain foremost group among total immigrants in Nepal due to open border with India and the free flow of citizens.

The analysis of immigration pattern is based on data available from census documents. Population census 1961 for the first time reported data on foreign born population and foreign citizens (nationals) in Nepal. All subsequent decennial censuses have reported this information. Census 1961 reported a total of 337,620 foreign born population in Nepal and this constituted 3.6 percent of the total population of the country. Over the past four decades census data have portrayed erratic trend on the volume of foreign born population in the country. Between 1961 and 2001, an overall increase by 80 percent is evident (Table 4.2). Data on foreign citizens in Nepal demonstrate a similar situation as that presented by the foreign born population in the country.

**Table 4. 2: Foreign Born Population, 1961-2001**

Census year	Foreign born population	Foreign born as % of total	Foreign citizens in Nepal	Foreign citizens as % of total	Total population
1961	337,620	3.59	110,061	1.17	9,412,996
1971	337,448	2.92	136,477	1.18	11,555,983
1981	234,039	1.56	483,019	3.21	15,022,839
1991	439,488	2.38	90,427	0.49	18,491,097
2001	608,093	2.67	116,571	0.59	22,736,934

Source: CBS, Population Censuses.

However, the number is far lower than the former ones. The latest census recorded the proportion of foreign citizens in the country to be only 0.6 percent of the total population. Between 1991 and 2001 the number of foreign born population in the country increased by 38.4 percent i.e., an addition of 168,605 persons. Even the proportional share of foreign born population has increased although by a small percentage points i.e., from 2.38 to 2.67.

### 4.3 Reasons for Migration

The 2001 census included five main reasons for migration such as trading, agriculture, employment, study/training and marriage. We can observe the main reasons of migration. Table 4.3 shows the percentage distribution of internal and international migrants by reasons. The category in other reasons comprised Marriage (27%), agriculture (15.8%), employment (10.6%), study and training (9.3%) and trading (6%) follow this. The dominant reason for migration of females was marriage (47.1%). As a result of this, all other reasons for migration were dominantly in favor of males because males did not report marriage as one of their reasons for migration. Among the inter-district migrants, similar proportions in terms of gender were reported by the 2001 census. However, when the reason in other category for both sexes and

especially, marriage for females assumed such a high proportion that other reasons were significantly underrated in the response during the census operation. One high proportion but not unusual is the reason of marriage among foreign born females (65.8%).

**Table 4. 3: Percentage distribution of internal and foreign migrants by reasons of residence, Nepal, 2001**

Reasons	Percent	Inter-District Migrants	Foreign Born
Trading	6.03	5.53	8.43
Agriculture	15.79	18.08	4.77
Employment	10.58	11.50	6.13
Study/Training	9.33	10.34	4.47
Marriage	26.95	22.99	45.99
Others	31.32	31.55	30.21
Total Number	3,537,155	2,929,064	608,092
<b>Males</b>			
Trading	10.26	8.61	22.24
Agriculture	21.25	22.84	9.66
Employment	20.65	21.13	17.12
Study/Training	13.89	14.69	8.06
Others	33.96	32.72	42.91
<b>Females</b>			
Trading	2.87	2.97	2.49
Agriculture	11.71	14.12	2.66
Employment	3.05	3.49	1.40
Study/Training	5.92	6.72	2.92
Marriage	47.10	42.13	65.79
Others	29.35	30.58	24.74

Source: CBS, 2002.

## Chapter 5

# Urbanization

Urbanization is going to be a significant in the years to come in Nepal. The rapid increase in number of economically active population in rural area, their improved literacy status and aspiration for employment in the non-agricultural sector will induce urbanization. However, analysis of urbanization and urban growth in Nepal is confounded by definitional inconsistencies both over time and space. By any definition, Nepal's level of urbanization is low and the country falls among one of the least urbanized countries of the world. Before discussing the status of urbanization in Nepal, it is necessary to elucidate on the concept of urbanization. While the term 'urban' relates to towns and cities, urbanization refers to the process of becoming urban. In general usage, the term urbanization refers to the relative concentration of a territory's population in towns and cities. It is expressed as the proportion of population living within designated urban areas of a specified territory.

In Nepal usually, the population censuses report population living in designated urban areas as urban population and those living in rural area as rural population. Urban areas in Nepal are referred by various names based on size and concentration of population and sometimes the functional dominance in the national and local economy. *Shahar*, *Nagar Panchayat* and *Nagarpalika* are the common Nepali terms used to denote urban places. These nomenclatures are variously used in the population censuses carried out at various times. It is generally defined as the percentage of total population living in urban settlements. In other words, urbanization is the growth in the proportion of persons living in urban settlements. In the context of Nepal, urban settlements are the designated urban areas. The latest legal instruments i.e., Municipality Act 1992 and Local Self-governance Act 1999 recognize further subdivision in the definition of municipality. Based on the population size, annual revenue and level of infrastructure facilities available in the municipalities, they are categorized as metropolitan (*Mahanagarpalika*), sub-metropolitan (*Upa-mahanagarpalika*) and municipality (*Nagarpalika*). While providing municipal status to a settlement, a regional dimension is recognized in terms of population size. The requirements for the Hill are lower than that for the Terai.

### 5.1 Growth of Population

Data on urban population in Nepal is available only since census 1952/54. The total population living in the 'Shahar' area was only 238,275 by then which means only 2.9 percent population of the total population in the country were in urban areas. By 2001, the proportion living in designated urban areas reached 13.9 percent. Similarly, the total population size of urban population has reached 3.2 million. The urban population as percent of the total and rural population in each of the successive census records is given in Table 5.1. Between 1952/54 and 2001, the urban population size has increased by 13.6 times whereas in terms of urban population as percent of total population it increased by nearly fivefold.

**Table 5.1: Population of Nepal by rural-urban residence, 1952/54 - 2001**

Census year	Urban population	Total population	Urban population as percent of	
			Total population	Rural population
1952/54	238,275	8,256,625	2.9	3.0
1961	336,222	9,412,996	3.6	3.7
1971	461,938	11,555,983	4.0	4.2
1981	956,721	15,022,839	6.4	6.8
1991	1,695,719	18,491,097	9.2	10.1
2001	3,227,879	23,151,423	13.9	16.2

Source: Population censuses

### 5.2 Growth of Urban Places

The pattern of growth of urban places along with population since the 1952/54 population census is shown in Table 5.2. Number of urban places has increased from 10 in 1952/54 to 58 in 2001. This increase is basically due to addition of new urban areas to the existing ones.

Increases in urban population between censuses have been different over the years. Increase was the highest (107 per cent) during the period of 1971 and 1981, which decreased to 77 per cent during the period 1981–1991. In other words, tempo of urbanization slowed down during the period between 1981 and 1991. As mentioned earlier, this tempo again rose to 90 per cent during the period 1991–2001.

Growth of urban population is attributed to several factors: natural increase, non-urban to urban migration, international migration and boundary expansion including reclassification. In Nepal, the major contribution to the increase is attributed to migration and urban reclassification. Particularly, boundary and administrative reclassification have major impact in the overall increases of the urban population.

**Table 5.2: Growth of urban places and population in Nepal, 1952/54 - 2001**

Census year	Number of urban places	Urban population	Percent of urban population	Intercensal increase in urban population (percent)
1952/54	10	238,275	2.9	-
1961	16	336,222	3.6	41.1
1971	16	461,938	4.0	37.4
1981	23	956,721	6.4	107.1
1991	33	1,695,719	9.2	77.2
2001	58	3,227,879	13.9	90.2

Source: Central Bureau of Statistics (CBS), Population censuses.

### 5.3 Geographical Pattern of Urbanization

Among 75 districts of the country only 43 districts have designated urban areas. At present, 13 districts have more than one urban area. Amongst the five development regions, the central development region has the largest share of urban population as well as the largest number of urban places. Among geographical regions, the hills region is the most urbanized region while the mountains region is the least urbanized.

There is a wide variation in the level of urbanization among the districts. In 2001, among 43 districts with urban places, Sarlahi contained 2.9 per cent of urban population while Kathmandu was about 66 per cent urban. In other words, Kathmandu district is the most urbanized district in the country. Bhaktapur (53%), Kaski (52%), Lalitpur (48%), Chitwan (27%) and Sunsari (25%) are other districts with significant proportion of its population living in urban areas.

**Table 5.3: Population and growth rate of urban population by municipalities, Nepal, 1991- 2001**

Municipality	District	Census Year		Population Difference	Average annual growth rate
		1991	2001		
Ilam	Ilam	13,197	16237	3,040	2.07
Bhadrapur	Jhapa	15,210	18145	2,935	1.76
Biratnagar	Morang	1,29,388	166674	37,286	2.53
Dharan	Sunsari	66,457	95332	28,875	3.61
Dhankuta	Dhankuta	17,073	20668	3,595	1.91
Rajbiraj	Saptari	24,227	30353	6,126	2.25
Lahan	Siraha	19,018	27654	8,636	3.74
Janakpur	Dhanusha	54,710	74192	19,482	3.05
Birgunj	Parsa	69,005	112484	43,479	4.89
Hetauda	Makwanpur	53,836	68482	14,646	2.41
Bharatpur	Chitwan	54,670	89323	34,653	4.91
Lalitpur	Lalitpur	1,15,865	162991	47,126	3.41
Bhaktapur	Bhaktapur	61,405	72543	11,138	1.67
Kathmandu	Kathmandu	4,21,258	671846	250,588	4.67
Pokhara	Kaski	95,286	156312	61,026	4.95
Tansen	Palpa	13,599	20431	6,832	4.07
Siddhartha Nagar	Rupandehi	39,473	52569	13,096	2.87
Butwal	Rupandehi	44,272	75384	31,112	5.32
Tribhuvan Nagar	Dang	29,050	43126	14,076	3.95
Nepalgunj	Banke	47,819	57535	9,716	1.85
Birendra Nagar	Surkhet	22,973	31381	8,408	3.12
Dhangadhi	Kailali	44,753	67447	22,694	4.10

Mahendra Nagar	Kanchanpur	62,050	80839	18,789	2.65
Damak	Jhapa	41,321	35009	-6,312	-1.66
Jaleswor	Mahottari	18,088	22046	3,958	1.98
Kalaiya	Bara	18,498	32260	13,762	5.56
Banepa	Kavre Palanchok	12,537	15822	3,285	2.33
Kapilvastu	Kapilvastu	17,126	27170	10,044	4.62
Dipayal Silgadhi	Doti	12,360	22061	9,701	5.79
Inarwa	Sunsari	18,547	23200	4,653	2.24
Malangwa	Sarlahi	14,142	18484	4,342	2.68
Dhulikhel	Kavre Palanchok	9,812	11521	1,709	1.61
Bidur	Nuwakot	18,694	21193	2,499	1.25
Gaur	Rautahat	20,434	25383	4,949	2.17
Tulsipur	Dang	22,654	33876	11,222	4.02
Khadbari	Sankhuwasabha	18,756	21789	3,033	1.50
Siraha	Siraha	21,866	23988	2,122	0.93
Kamala Mai	Sindhuli	19,266	32838	13,572	2.98
Panauti	Kavre Palanchok	20,104	25563	5,459	2.22
Madhyapur -Thimi	Bhaktapur	31,970	47751	15,781	4.01
Prithvi Narayan	Gorkha	20,633	25783	5,150	2.23
Waling	Syangja	16,712	20414	3,702	2.00
Baglung	Baglung	15,219	20852	5,633	3.15
Narayan	Dailekh	15,758	19446	3,688	2.12
Tikapur	Kailali	25,639	38722	13,083	4.12
Dasarath Chand	Darchula	18,054	18345	291	0.16
Byas	Tanahu	20,124	28245	8,121	3.39
Mechi Nagar	Jhapa	37,108	49060	11,952	2.79
Itahari	Sunsari	26,824	41210	14,386	4.29
Triyuga	Udaypur	37,512	55291	17,779	3.88
Bhimeshwor	Dolakha	19,266	21916	2,650	1.29
Kirtipur	Kathmandu	31,338	40835	9,497	2.65
Ratna Nagar	Chitwan	25,118	37791	12,673	4.08
Lekhnath	Kaski	30,107	41369	11,262	3.18
Putali Bazar	Syangja	25,870	29667	3,797	1.37
Ramgram	Nawalparasi	18,911	22630	3,719	1.80
Gularia	Bardiya	30,631	46011	15,380	4.07
Amargadhi	Dandeldhura	16,454	18390	1,936	1.11
<b>Total Urban Population</b>		<b>2287487</b>	<b>3227879</b>	<b>940392</b>	<b>3.44</b>

Source: CBS 1998 and 2002

## Education, Language, Religion and Ethnicity

### 5.4 Caste/Ethnicity by Urban Residence

There are differences in caste/ethnicity by urban–rural residences. According to the 2001 population census, Bahun, Newar and Chhetri together accounted for about 51 per cent of the urban population of the country while the corresponding rural population of these three groups together was only about 31 per cent. Magar, Muslim, Tharu, Tamang, Gurung, Rai and Kami each contained more than two per cent of total urban population in 2001.

Among different caste/ethnic groups, the following groups had more than half of their total population residing in urban areas in 2001: Jain (88%), Marwadi (73%), Halkhor (69%), Munda (57%) and Bengali (56%). Other Terai caste/ethnic groups with a significant proportion of urban population included Kayastha (41%), Baniya (30%) and Terai Brahman (24%). Among hill caste/ethnic groups, Newar (47%), Thakali (40%) and Bahun (20%) had significant percentages of urban population.

Among other major caste/ethnic groups of the country, Gurung (19%), Muslim (14%), Thakuri (13%), Teli (12%) and Rai (11%) had more than 10 per cent of their total population residing urban areas. Magar, Tharu, Tamang, Kami, Yadav, Limbu and Sarki, on the other hand, had less than 10 per cent of their population in urban areas.

### 5.5 Urbanization and Poverty

According to the Living Standards Surveys of Nepal, poverty level of the country fell from 42 per cent to 31 per cent between 1995/96 and 2003/04. During the period of eight years, poverty declined faster in urban areas than in rural areas of the country. The incidence of poverty in urban areas declined from 22 per cent in 1995/96 to 10 per cent in 2003/04 while it declined from 43 to 45 per cent in rural areas. Five drivers have been identified for this poverty reduction: a significant increase in remittances, increase in wages, increased connectivity and access to facilities, urbanization and falling birth rates.

Urbanization has been regarded as a powerful driver of this poverty reduction. About 20 per cent of the total decline in poverty between 1995-96 and 2003-04 was attributed to the shift of population from poorer to richer localities. This shift basically occurred due to the urbanization process prevailing in the country..

### 6.1 Education & Literacy

The common Nepalese people did not have way in to education till 1950 (before democracy). Prior to 1951, higher education in Nepal was in a very deprived condition. After democracy, the new political system made provision for education for all Nepali people. Since then, Nepal has targeted to increase literacy rate along with educational attainment of the people in each plan.

Census data are the main source of literacy in Nepal since very few studies on literacy at the national level have been carried out. In earlier censuses of Nepal literacy is defined as the ability to read and write. Since 1991 population census the definition of literacy was redefined and it incorporated the ability to read and write with understanding and to perform simple arithmetic calculations (CBS, 1995). The literacy rate has increased gradually over the last 45 years. The trend of literacy has been shown in Table 6.1.

**Table 6. 1: Literacy trend in Nepal for persons 6 years and above by sex, 1952/54-2001**

Year	Male	Female	Total
1952/ 54	9.5	0.7	5.3
1961	16.3	1.8	8.9
1971	23.6	3.9	13.9
1981	34	12	23.3
1991	54.5	25	39.6
2001	65.5	42.8	54.1

Source : CBS, 1995; MOE 2000, CBS2002.

From a very low level of literacy in 1950s, Nepal has made a substantial progress in increasing literacy over the years. The census of 2001 has indicated that currently the literacy rate among the population of 6 years or older in Nepal is 54 percent with male literacy rate of 65 and female literacy rate of 43.

### 6.2 Language

Nepal is a multi-lingual, multi-religious and multi ethnic society. Data on language spoken at home is usually analyzed through mother tongue. A mother tongue is defined as one spoken by a person in his/her early

childhood. The 1952/54 census collected information on 36 languages but tabulated only 24. The 1961 census collected information on 52 languages but tabulated only 36 mainly because of limited number of cases for some languages. After 1971 census only 20 or less languages are being tabulated by different variables. However, the National Language Policy Advisory Commission has listed 60 living languages in the kingdom.

According to 2001 census about 50 percent of total population has Nepali as their mother tongue followed by Maithili, Bhojpuri, Tharu, Tamang, Newari, Magar, Abadhi and others.

**Table 6. 2: Population Distribution by Mother Tongue, Nepal 2001**

Mother Tongue	Number	Percent
Nepali	11053255	48.61
Maithali	2797582	12.3
Bhojpuri	1712536	7.53
Tharu(Dagaura/Rana)	1331546	5.86
Tamang	1179145	5.19
Newar	825458	3.63
Magar	770116	3.39
Awadhi	560744	2.47
Bantawa	371056	1.63
Gurung	338925	1.49
Limbu	333633	1.47
Bajjika	237947	1.05
Urdu	174840	0.77
Rajbanshi	129883	0.57
Sherpa	129771	0.57
Hindi	105765	0.47
Chamling	44093	0.20
Santhali	40193	0.18
Chepang	36807	0.16
Danuwar	31849	0.14
Dhangar/Jhangar	28615	0.13
Sunuwar	26611	0.12
Bangla	23602	0.10
Marwari/Rajasthani	22637	0.10
Majhi	21841	0.10
Thami	18991	0.08
Kulung	18686	0.08
Dhimal	17308	0.08
Angika	15892	0.07
Yakkha	14648	0.06
Thulung	14034	0.05
Sangpang	10810	0.05

Bhujel/Khabas	10733	0.05
Darai	10210	0.04
Khaling	9288	0.03
Kumal	6533	0.03
Thakali	6441	0.03
Chhanttyal	5912	0.03
Sanketic(Nepali Symbolic sign)	5743	0.03
Tibetan	5277	0.02
Dumi	5271	0.02
Jirel	4919	0.02
Wambule/umbule	4471	0.02
Puma	4310	0.02
Yholomo	3986	0.02
Nachhiring	3553	0.02
Dura	3397	0.02
Meche	3301	0.01
Pahari	2995	0.01
Lepcha/Lapche	2826	0.01
Bote	2823	0.01
Bahing	2765	0.01
Koi/Koyu	2641	0.01
Raji	2413	0.01
Hayu	1743	0.01
Byangshi	1734	0.01
Yamphu/Yamphe	1722	0.01
Ghale	1649	0.01
Khadiya	1575	0.01
Chhiling	1314	0.01
Lohorong	1207	0.01
Punjabi	1165	0.01
Chinese	1101	0.00
English	1037	0.00
Mewahang	904	0.00
Sanskrit	823	0.00
Kaike	794	0.00
Raute	518	0.00
Kisan	489	0.00
Churauti	408	0.00
Baram/Maramu	342	0.00
Tilung	310	0.00
Jero/Jerung	271	0.00
Dungmali	221	0.00
Criya	159	0.00
Lingkhim	97	0.00
Kusunda	87	0.00



Sindhi	72	0.00
Munda	67	0.00
Haryanwi	33	0.00
Magahi	30	0.00
Sam	30	0.00
Kurmali	23	0.00
Kagate	13	0.00
Dzonkha	10	0.00
Kuki	9	0.00
Chhintang	8	0.00
Mizo	8	0.00
Nagamise	6	0.00
Lhomi	4	0.00
Assamese	3	0.00
Sadhani	2	0.00
Unidentified languages	168340	0.75
<b>Total</b>	<b>22736934</b>	<b>100.00</b>

Source: CBS 2002.

Table 6.2 provides data on mother tongue obtained from the 2001 census. **This census records 92 different languages spoken in Nepal with a 93<sup>rd</sup> category as “unidentified”.** Data indicate that the major language spoken in Nepal are Nepali (48.6 percent) , Maithili (12.3 percent) , Bhojpuri (7.5 percent), Tharu (5.9 percent), Tamang (5.2 percent), Newari (3.6 percent), Magar (3.4 percent), Awadhi (2.5 percent), Bantawa (1.6 percent), Gurung (1.5 percent), Limbu (1.5 percent) and Bajjika (1.1 percent). Other languages constitute less than one percent of the population.

### 6.3 Distribution of Language Families by Place of Residence

Table 6.3 shows the percentage distribution of population by language families of Nepal. About 92 percent of the population who fall in Indo-European language family resided in rural areas in 1991 which reduced to 87 percent in 2001. Similar kind of trend can be observed for other language families also.

**Table 6. 3: Population Distribution of rural and urban population by mother tongue (1991-2001).**

Language Families	1991		2001	
	Rural	Urban	Rural	Urban
Indo-European	91.99	8.01	87.00	13.00
Sino-Tibetan	84.87	15.22	82.00	18.00
Austro-Asiatic	97.97	2.10	96.30	3.70
Dravidian	–	–	95.28	4.72
Not stated/Unknown	93.05	6.95	83.89	16.11

### 6.4 Religion

Nepal is constitutionally a Hindu kingdom with legal provisions of no discrimination against other religions. The Hindu population in the country has been consistently over 80 percent since 1950s.

The second largest religion in Nepal is Buddhism; practiced by about 11 percent, while Islam constitutes about 4.2 percent of the population. Kirat religion accounts for nearly 3.6 percent of the population.

**Table 6. 4: Population Distribution by Religion, Nepal, 1961 - 2001**

Religion	Census Year				
	1961	1971	1981	1991	2001
Hindu	87.69	89.39	89.50	86.51	80.62
Buddhist	9.25	7.50	5.32	7.78	10.74
Islam	2.98	3.04	2.66	3.53	4.20
Kirat	-	-	-	1.72	3.60
Christian	-	0.02	0.03	0.17	0.45
Jain	0.01	0.05	0.06	0.04	0.02
Others	-	-	2.43	0.14	0.39
Unspecified	0.06	-	-	0.10	-
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.0</b>

Source: CBS 1995, 2002

### 6.5 Ethnicity

Classification of population by caste and ethnicity is only tentative. While the 1991 census has recorded 60 caste and ethnic groups, the National Ethnic Groups Development Committee has identified 65 such groups. The census of 2001 has listed 103 caste/ethnic groups including “unidentified group”. The caste system of Nepal is basically rooted in Hindu religion. On the other hand, the ethnic system has been rooted mainly in mutually exclusive origin myths, historical mutual seclusion and the occasional state intervention (NESAC 1998)

According to the 1991 census (CBS 1995) an overwhelming majority (68.36percent) of caste belong to the caste that originated from the hills. The caste originating from Terai constitute only 30.93 percent, and the mountain caste is only less than 1 percent. Moreover, most of the people originated in Terai do not live in the hills or mountains, but about one fifth of hill originated caste live in Terai region.

Out of 60 castes identified by the 1991 census, Chhetri constituted 16.1percent, followed by Hill Brahmins 12.9 percent, Magar 7.2 percent, Tharu 6.5 percent, Newar 5.6 percent, Tamang 5.5 percent, Kami 5.2 percent, Yadav-Ahir 4.1 percent, Musalman 3.5 percent, Rai and Kirat 2. 8 percent,

Gurung 2.4 percent, and Damai 2 percent. Other castes constituting over 1 percent each are Thakuri, Limbu, Sarki, Teli, Kushwaha and Chamar.

The major caste/ethnic group identified by the 2001 census area Chhetri (15.8percent) Brahmin Hill (12.7percent), Magar (7.1percent), Tharu (6.8percent) Tamang (5.6percent) Newar (5.5percent), Muslim (4.3percent) Kami (3.9 percent), Yadav (3.9 percent) Rai (2.8 percent), Gurung, (2.4 percent) Damai/Dhobi (1.7 percent). Other caste ethnic group constitutes less than 2 percent of the population and their list can clearly be seen from Table 6.5

**Table 6. 5: Population Distribution by Caste/Ethnicity, 2001**

<b>Caste /Ethnic Group</b>	<b>Number</b>	<b>Percent</b>
Chhettri	3593496	15.80
Brahman-Hill	2896477	12.74
Magar	1622421	7.14
Tharu	1533879	6.75
Tamang	1282304	5.64
Newar	1245232	5.48
Muslim	971056	4.27
Kami	895954	3.94
Yadav	895423	3.94
Rai	635151	2.79
Gurung	543571	2.39
Damai/Dhobi	390305	1.72
Limbu	359379	1.58
Thakurl	334120	1.47
Sarki	318989	1.40
Teli	304536	1.34
Chamar, Harijan, Ram	269661	1.19
Koiri	251274	1.11
Kurmi	212842	0.94
Sanyasi	199127	0.88
Dhanuk	188150	0.83
Musahar	172434	0.76
Dusad/Paswan/Pasi	158525	0.70
Sherpa	154622	0.68
Sonar	145088	0.64
Kewat	136953	0.60
Brahman-Terai	134496	0.59
Baniya	126971	0.56
Gharti/Bhujel	117568	0.52
Mallah	115986	0.51
Kalwar	115606	0.51
Kumal	99389	0.44
Hajam/Thakur	98169	0.43

Kanu	95826	0.42
Rajbansi	95812	0.42
Sunuwar	95254	0.42
Sudhi	89846	0.40
Lohar	82637	0.36
Tatma	76512	0.34
Khatwe	74972	0.33
Dhobi	73413	0.32
Majhi	72614	0.32
Nuniya	66873	0.29
Kumhar	54413	0.24
Danuwar	53229	0.23
Chepang(Praja)	52237	0.23
Haluwai	50583	0.22
Rajput	48454	0.21
Kayastha	46071	0.20
Budhae	45975	0.20
Marwadi	43971	0.19
Santhal/satar	42698	0.19
Dhagar/Jhagar	41764	0.18
Bantar	35839	0.16
Barae	35434	0.16
Kahar	34531	0.15
Gangai	31318	0.14
Lodha	24738	0.11
Rajbhar	24263	0.11
Thami	22999	0.10
Dhimal	19537	0.09
Bhote	19261	0.08
Bing/Binda	18720	0.08
Bhediyar/Gaderi	17729	0.08
Nurang	17522	0.08
Yakkha	17003	0.07
Darai	14859	0.07
Tajpuriya	13250	0.06
Thakali	12973	0.06
Chidimar	12296	0.05
Pahari	11505	0.05
Mali	11390	0.05
Bangali	9860	0.04
Chhantel	9814	0.04
Dom	8931	0.04
Kamar	8761	0.04
Bote	7969	0.04
Brahmu/Baramu	7383	0.03

Gaine	5887	0.03
Jirel	5316	0.02
Adibasi/Janajati	5259	0.02
Duga	5169	0.02
Churaute	4893	0.02
Badi	4442	0.02
Meche	3763	0.02
Lepcha	3660	0.02
Halkhor	3621	0.02
Punjabi/Sikh	3054	0.01
Kisan	2876	0.01
Raji	2399	0.01
Byangsi	2103	0.01
Hayu	1821	0.01
Koche	1429	0.01
Dhunia	1231	0.01
Walung	1148	0.01
Jaine	1015	0.00
Munda	660	0.00
Raute	658	0.00
Yehlmo	579	0.00
Patharkata/Kuswadiya	552	0.00
Kusunda	164	0.00
Dalit/Unidentified	173401	0.76
<b>Unidentified Caste/Ethnicity</b>	<b>231641</b>	<b>1.02</b>

CBS 2002.

## Chapter 7

# National Health Policies and Programs

### 7.1 National Health Policy, 1991

The Ministry of Health and Population adopted a National Health Policy in 1991 to bring about an improvement in the health conditions of the Nepalese people. The primary objective of the National Health Policy was to extend the primary health care system to the rural population so that they benefit from modern medical facilities and from trained health care providers. The National Health Policy (1991) has emphasized the Preventive, Promotive and Curative health services, basic primary health services, ayurvedic(alternatives medicine) and other traditional health services, community participation in health services, development of human resources for health, resource mobilization in health services, private, non governmental health services and intersectoral coordination and health research and decentralization.

### 7.2 Second Long Term Health Plan, (1997-2017)

The Ministry of Health and Population has developed a 20-year Second Long-Term Health Plan (SLTHP) for the period 1997-2017. The major aim of the SLTHP is to guide health sector development in the improvement of the health of the population; particularly those whose health needs are not often met.

The SLTHP addresses disparities in healthcare, assuring gender sensitivity and equitable community access to quality health care services. The aim of the SLTHP is to provide a guiding framework to build successive periodic and annual health plans that improve the health status of the population; to develop appropriate strategies, programmes, and action plans that reflect national health priorities that are affordable and consistent with available resources; and to establish co-ordination among public, private and NGO sectors and development partners.

The SLTHP vision is a healthcare system with equitable access and quality services in both rural and urban areas. The health system includes self reliance, the concepts of sustainability, full community participation, decentralization, gender sensitivity, effective and efficient management and private and NGO participation.

#### The objectives of the SLTHP are as follows:

- To improve the health status of the population of the most vulnerable groups, particularly those, whose health needs are not often met— women and children, the rural population, the poor, the underprivileged, and the marginalized population.

- To extend cost-effective public health measures and essential curative services for the appropriate treatment of common diseases and injuries to all districts.
- To provide the appropriate numbers, distribution and types of technically competent and socially responsible health personnel for quality healthcare throughout the country, particularly in under-served areas.
- To improve the management and organization of the public health sector and to increase the efficiency and effectiveness of the healthcare system.
- To develop appropriate roles for NGOs, and the public and private sectors in providing and financing health services.
- To improve inter-and intra-sectoral co-ordination and to provide the necessary conditions and support for effective decentralization with full community participation.

**Following targets have been set for the second long term Health plan (1997-2017).**

- To reduce the infant mortality rate to 34.4 per thousand live births;
- To reduce the under-five mortality rate to 62.5 per thousand;
- To reduce the total fertility rate to 3.05;
- To increase life expectancy to 68.7 years;
- To reduce the crude birth rate to 26.6 per thousand;
- To reduce the crude death rate to 6 per thousand;
- To reduce the maternal mortality ratio to 250 per hundred thousand births;
- To increase the contraceptive prevalence rate to 58.2 percent;
- To increase the percentage of deliveries attended by trained personnel to 95percent;
- To increase the percentage of pregnant women attending a minimum of four antenatal visits to 80percent;
- To reduce the percentage of iron-deficiency anaemia among pregnant women to 15percent;
- To increase the percentage of women of child-bearing age (15-44) who receive tetanus toxoid (TT2) to 90percent;
- To decrease the percentage of newborns weighing less than 2500 grams to 12percent;
- To have essential healthcare services (EHCS) available to 90% of the population living within 30 minutes' travel time to health facility;
- To have essential drugs available round the year at 100% of facilities;

- To equip 100% of facilities with full staff to deliver essential health care services; and
- To increase total health expenditures to 10% of total government expenditures.

**7.3 The Tenth Plan (2059/60-2063/64)**

The national objective of the Tenth Plan is to reduce the magnitude of poverty among the Nepalese people substantially and sustainably by developing and mobilizing the healthy human resources in order to provide capable and effective type of curative, preventive, promotional and rehabilitative health services and to make the reproductive health and family planning services available to reduce the rising population.

**The health sector has the two following major objectives;**

- Apart from improving the quality of health services, extend the access of the poor and back ward people of the rural and remote areas to these services.
- Besides systematizing the rising population, access of reproductive health and family planning services will be extended to the rural areas extensively in consideration of maternal health service.

The following strategies have been developed in the Tenth plan to fulfill the above mentioned objectives:

- Investment will be increased to provide essential health service to the poor and the backward communities.
- Development of Ayurveda, naturopathy services and traditional healing systems (like homeopathy, Unani) as the supplementary health service. These remedial systems will be developed by the use of local medicinal herbs and by enhancing skills and expertise.
- Decentralization of the Health services according to the Local Self-governance Act.
- Enhancement of the essential health services in rural and remote areas through special services.
- All government, non-government and private health institutions from the local level health institutions providing basic health services to the central level institutions providing specialist services will be managed effectively and strengthened by means of two-way communication system.
- For the improvement of the quality of health services provided by the collaboration of the government, private and non-government sectors, the human, financial and physical resources will be managed effectively.
- The reproductive health programme has an important role in making population management more effective. Family planning services will

be made more extensive and effective based on the increasing choices. Moreover, it helps to reduce maternal and child mortality as well.

#### 7.4 The Three year Plan (2007/08-2009/10)

Good health is an important asset for every citizen in a nation. Healthy human resources are essential for an overall development of a nation.

"Health as a fundamental right of the people" is a globally recognized value, which is also incorporated in the Interim Constitution of Nepal, 2007. This indeed is a historical manifestation of the state's responsibility towards ensuring the citizens' right to health. In line with the concept of social inclusion, the present Plan focuses its attention on the need of ensuring access to quality health services to all citizens, irrespective of the geographic regions, class, gender, religion, political ideals and socio-economic status they belong to. It is believed that with good health the living standard of the people will improve and thereby contribute to the cause of poverty alleviation and economic prosperity.

- Considering their success, Community Drug Program and Community Cooperative Clinic services will be encouraged.
- Mutual relationship between health science and medical and public health studies will be strengthened to make health services effective, efficient and pro-people.
- Research in health sector will be encouraged, promoted and expanded.

#### Long Term Vision

The vision is to establish appropriate conditions of quality health services delivery, accessible to all citizens, with a particular focus on the low-income citizens and contribution to the improvement in the health of all Nepalese citizens.

#### Objective

The main objective is to ensure citizens' fundamental right to have improved health services through access to quality health services without any discrimination by region, class, gender, ethnicity, religion, political belief and social and economic status keeping in view the broader context of social inclusion. The constituent elements of such an objective are:

1. To provide quality health service.
2. To ensure easy access to health services to all citizens (Geographical, cultural, economic and gender).
3. To ensure enabling environment for utilizing available health services.

#### Quantitative Targets

Sn	Health Indicator	Status by 2007	Three Year Plan Target
1	Access to Essential Health Service (%)	78.83**	90
2	Availability of prescribed essential drugs at selected health agencies (%)	93.3**	95
3	Women receiving 4 times anti-natal care	29.4*	40
4	TT vaccination to women (age 15-44 yrs) (%)	63*	75
5	Delivery attended by trained health worker (%)	19*	35
6	Contraceptive prevalence rate (%)	44.2*	53
7	Condom users for safer sex (14-35 year age) (%)	77*	85
8	Total fertility rate (15-44 year age women) (%)	3.1*	3.0
9	Maternal mortality ratio (per 100,000)	281*	250
10	Neo-natal mortality ratio (per 1000 live birth)	34*	30
11	Infant mortality ratio (per 1000 live birth)	48*	44
12	Child mortality ratio (per 1000 live birth)	61*	55

\* Demographic and Health Survey, 2006

\*\* Annual Report, 2005/06, Department of Health services, 2007

#### Strategies

The strategies are as follows:

- Upgrading of sub-health posts to health posts, and in the electoral constituencies, where there is no primary health center primary health care centers will be established.
- Public health promotion will be focused on through public health education.
- Public health related preventive, promotive and curative programs would be implemented according to the principle of primary health care services. Accordingly, essential health services will be extended.
- Inter linkages between Health Profession Education, treatment and public health services will be strengthened as part of the health sector management for making health services pro-people and efficient.
- District health system will be operated as an integrated system and the referral system will be further promoted.
- Management of human, financial and physical resources will be made more effective in order to upgrade the quality of health services being provided by the private, government and nongovernment sectors.
- Quality drugs will be made available at reasonable prices and in adequate quantity, with proper pharmacy services throughout the country.
- Special attention will be given to health improvement of the economically and socially disadvantaged people and communities.

- A policy to deal with NGOs, the private sector, community and cooperatives will be prepared and implemented.
- Various health services will be provided from one place in a coordinated way.
- Decentralization process will be strengthened as an integral part of community empowerment.
- *Ayurvedic* and other alternate health service systems will be developed and extended.
- Tele-medicine service will be established and extended.
- Mobile health service camps with specialized services will be launched for the benefit of the marginalized, poor, *Adibasi Janajati*, the *Madhesi* and Muslim communities.
- Free and basic health services, and other health provisions will be brought into practice and in every health institution, a citizens' charter will be placed in a distinctly visible manner.
- Services currently in operation for the benefit of the victims of conflict, who are afflicted physically, mentally and with sexual violence, will be continued with more effectiveness in cooperation with NGOs, civil societies, and professional bodies.
- Communicable disease control programs will be continued with added emphasis to the problems of drug addicts, and control of HIV/AIDS. Measures will be developed for the prevention and cure of non-communicable diseases like cancer, cardio-vascular, and mental diseases. Necessary preparedness will be put in place to cope with the possible outbreak of dangerous diseases like dengue, bird-flu, etc.

#### **Health Policies:**

##### **Essential and Basic Health Services**

- Sub-health posts will be upgraded gradually to health posts as per need on the basis of population density and geographical remoteness. Health institution of electoral constituencies, if there is no primary health care center, will be upgraded to primary health care center.
- With special focus on the health promotion need of the socially and economically disadvantaged people; women, *Adibasi Janajati*, Dalit and Muslim communities, senior citizens and the persons with disability; health improvement measures will be taken as part of the efforts towards fulfilling and improving the citizens' right to free basic health services.
- Arrangements will be made to benefit the people of neighboring districts from free beds in the government and private teaching hospitals. In addition, measures will be taken to provide free or concessionary health services from the private hospitals and health teaching institutions, to the people of selected areas.

- Special attention will be given to increase the access of the people of Far-western and Mid-western development regions marginalized people areas to health services by developing physical infrastructure, and by managing health human resources.
- Under the basic health services principles, preventive, diagnostic, promotive and curative health services will be continued, with additional emphasis on surgery, safe motherhood (reproductive and sexually transmitted diseases, uterus collapsed, etc.) and communicable disease control.
- Under the child health program, immunization and nutrition components will be promoted with special efforts.
- Gynecologists in the district hospitals will be gradually provided.
- Urban and geriatric health services will be initiated.
- To provide health services (including *Ayurvedic* and other alternate health systems) to people in their own choice in district health institutions and health institutions under them; human resources will be mobilized in a coordinated way for the national programs.
- Country-wide eye treatment services being provided by the nongovernment sector will be continued and facilitated for further coverage.

##### **Health Sector Reform and Infrastructure Development**

- Hospital based services will be gradually improved and extended.
- Health science education, treatment and public health services will be interlinked and strengthened to make health services more effective, pro-people and efficient.
- Policy of requiring MBBS passed doctors under the government scholarship program to serve at least for 2 years in the health posts, or district, zonal or regional hospitals, as posted by the Ministry of
- Health and Population will be enforced more effectively as a precondition for getting the license of the Nepal Medical Council license.
- The organizational structure of health posts will be reviewed and the health staff readjusted as necessary, and the drugs, equipment and other requisite facilities will be provided.
- In the central, regional and zonal hospitals, there will be provision for operating their own pharmacy.
- District hospitals will be developed and equipped as referral hospitals for the district based health institutions with adequate physical infrastructure, beds, human resources and necessary drugs and equipments.

- As a policy, high-income hospitals will be made autonomous after their review, and the resources now being provided by the government will be reallocated to the backward areas.

#### **Public-Private Partnership**

- A policy of health sector management with private sector partnership will be initiated.
- Policy will be made clear and effective in order to enable the government, NGOs, private and cooperative sectors to establish, manage and operate health institutions. Further, to provide quality health services through such institutions, human resources, financial and physical resources will be adjusted and managed in an effective way. Regulatory mechanism will be developed and adopted to make service delivery and management effective.
- Non-profit organizations will be encouraged to operate community based hospitals.
- After a study on the private sector's contribution to the health sector, a policy of public-private partnership as appropriate will be developed and necessary program will be implemented.

#### **Decentralization of Health Institution Management**

- There will be a coordination committee formed at the central level for an effective management of health institutions.
- The competence of the community in the operation of institutions will be gradually enhanced by making functional analysis of the health institutions.
- The district health services will be operated as an integrated system, as per the concept of decentralization in order to enhance access of all people (socially and economically marginalized communities, women, Adibasi Janajati, the Muslim community, senior citizens and the persons with disability) to basic health services.
- Operation and management committees of the health institution will be given orientation training to fulfill their roles.
- Hospitals will be gradually made autonomous.
- Supervision, monitoring and progress review will be done at the central and regional levels without external interference.

#### **Drug Production**

- Quality drug production within the country, according to the WHO prescribed GMP process, will be promoted to minimize drug import and ensure their distribution at fair prices.

- Mechanisms to extend community drug programs will be promoted to provide health services based on cooperatives. A health insurance scheme with the participation of local communities will be managed to provide such coverage to a larger number of families.

#### **Health Research**

- The National health research policy will be reviewed and a research system will be developed and extended, according to the essential national health research concept.
- Health research system development and extension will be encouraged with the support of necessary resources.
- With the initiative of the Health Research Council, priority will be given to health system research, health financing research, Ayurvedic research and public health research. An effective process of utilizing such research outputs in the preparation of policy and strategy will be established.

#### **Health Service Technology Policy**

- There will be a health equipment repair and maintenance center established in each of the five development regions, for the use of health institutions.
- Reconstruction of damaged buildings, routine repair and maintenance of health equipment of various health institutions at the district levels, will be carried out effectively by improving the management of the district-based institutions. New construction, and repair and maintenance of staff quarters in the remote areas will be done on a priority basis. All such works will be carried out on the basis of an inventory of the physical infrastructure.
- A fair pricing will be entrusted in a joint participation of the private sector, the drug manufacturers and the Ministry of Industry and Commerce to increase access of essential drugs.
- Global tender will be called for generic drug procurement. No drugs near to their date of expiry and under-standard will be procured.
- Legal provisions, as required to comply with the international convention on intellectual property rights will be made, to better utilize such opportunities.
- According to the requisition system now being followed for the supply of basic drugs, a policy of local procurement of basic quality drugs will be followed.
- To improve the drugs and equipment supply system, funds now being made available to the health institutions will be augmented as necessary.

- Strategy will be implemented to ensure the adequate supply of items required for post-natal care, safe abortion, and emergency contraceptives and family planning.

### **FREE ESSENTIAL HEALTH SERVICES PROGRAMME**

The policies and programmes of the MoHP and the action and activities of its officials is being directed by the spirit and mandate of the last Jan Andolan (People's Movement) 2006. Ten points position paper has been introduced by MoHP for operational guidelines on policies and programmes of MoHP.

The Interim Constitution of Nepal 2063 has emphasized that every citizen shall have the rights to basic health services free of costs as provided by the law. Ultimately, government of Nepal decided to provide essential health care services (emergency and inpatient services) free of charge to poor, destitute, disabled, senior citizens and FCHVs up to 25 bedded district hospitals and PHCCs (December 15, 2006) and all citizens at SHP/HP level (8 October, 2007). But MoHP decided to implement from 15<sup>th</sup> Jan 2008 for its preparations to manage.

After the evolution of 1<sup>st</sup> republic budget of Nepal in 19<sup>th</sup> Sep 2008, Nepal Government has been emphasized to make free health services up to 25 bedded district hospital especially to targeted people with listed essential drugs to all citizens. Therefore MoHP have decided to provide free health service to all citizens in all PHCC since 16<sup>th</sup> Nov 2008 on the basis of equity. In the same way MoHP decided to provide free health care services to all targeted people at district hospitals having less than 25 bedded and making free essential drugs to all citizens since 14<sup>th</sup> Jan 2009. In order to implement effectively, the MoHP has introduced the operational guide line of national free health service programme based on new budget policy.

#### **Free Health Care Policy:**

Free Health Care policy is directed by the Interim Constitution of Nepal 2007, which is the spirit of People's Movement II 2062/63 (2006). This policy is based on the citizen's rights. Policy of free health care is to provide primary health care services free of cost to every citizen and special attention, that is, safety net to poor, vulnerable and marginalized people. This is an extended form of current free service and strong commitment of the Interim government.

#### **OBJECTIVES**

- To secure the right of the citizens to the health services;
- To increase access of health services especially for the poor, ultra-poor, destitute, disabled, senior citizens and FCHVs;
- To reduce the morbidity and mortality especially of the poor, marginalized and vulnerable people;

- To secure the responsibility of state towards the people's health services;
- To provide quality essential health care services effectively;
- To provide equity of health services.

### **7.5 NATIONAL HEALTH SECTOR PROGRAMME (NHSP-IP)**

The Government of Nepal is committed to bring about tangible changes in the health sector development process and aim to provide an equitable, high quality care services to the people of Nepal. Towards this aim, and in line with Poverty Reduction Strategy Paper (PRSP) and tenth five year plan, government of Nepal has formulated the Health Sector strategy: An Agenda for Reform.

Nepal Health Sector Program (NHSP) is a sector wide Program focused on performance results and health policy reforms implemented under a Sector Wide Approach (SWAp) with an agreed set of program performance indicators and policy reform milestones for the program duration. The policy reform milestones are outlined in the Nepal Health Sector Program Implementation Plan (NHSP-IP). Of the eight outputs NHSP, three are defined for strengthening the health service delivery: a) delivery of essential health care services, b) decentralized management of service and c) public private partnership. The enduring five outputs are designed for improvement in institutional capacity and management development in the areas of: a) sector management, b) health financing and financial management including alternative financing, c) physical asset management and procurement, d) human resource management, e) health management information system and quality assurance.

Nepal Health sector program seeks to address inequities in the system and improve the health of the Nepalese population, especially the poor and vulnerable. The Health Sector Strategy with its Nepal Health Sector Program Implementation Plan is a building block of sector wide rationalization driven towards aid harmonization, strong performance and reform focus.

NHSP strategic program activities are broadly organized in two components that consolidate the eight areas of work in the NHSP-IP: a) Strengthened Service Delivery through the expansion of essential health care services, greater local authority over and responsibility for service provision, and public-private partnerships; b) Institutional Capacity and Management Development through improved health sector management; sustainable health financing and financial management; human resource development; physical asset management and procurement; and health management information system and quality assurance.



## Purpose

This programme seeks to address disparities in the system and improve the health of the Nepali population, especially the poor and vulnerable. NHSP marks a new approach in Nepal which aims at the delivery of basic services to poor and rural populations and the aid resources will increasingly support a sector programme, rather than isolated projects. The programme design was led by the efforts of Nepali themselves and is built under a sound sector strategy. Hence, the Health Sector Strategy with its Nepal Health Sector Programme Implementation Plan is a building block of sector wide rationalization aimed towards aid harmonization, strong performance and reform focus.

## Objective

The objective of NHSP is to improve health outcomes by expanding access to and increasing the use of Essential Health Care Services (EHCS), especially for the poor with a nationwide coverage.

## Strategic Programme Activities

NHSP strategic programme activities are broadly organized in two components that consolidate the eight areas of work in the NHSP-IP: a) Strengthened Service Delivery through the expansion of essential health care services, greater local authority and responsibility for service provision, and public-private partnerships; b) Institutional Capacity and Management Development through improved health sector management; sustainable health financing and financial management; human resource development; physical asset management and procurement; and health management information system and quality assurance.

## Summary of Achievements during 2009/2010 : Programme Performance Measurement Status

As defined in the NHSP-IP four key programmatic indicators were agreed to assess annual achievement in programme performance: (a) contraceptive prevalence rate (CPR) (b) skilled attendance at birth (c) immunization coverage and (d) population's knowledge about at least one method of preventing HIV/AIDS. As of the Nepal Demographic and Health Survey (NDHS), 2006 all the above indicators have shown a remarkable improvement over the period 2001.

According to Health Management Information Section (HMIS) of DoHS the CPR has slightly increased from 40.90 % to 43.56% and delivery by trained health workers increased from 31.60% to 41.28% in 2064/65 to 2066/67. Although the routine immunization coverage has slightly increased from 81% to 82% for DPT/Hep-B 3 in compared to the last fiscal year 2065/66. Measles coverage also increased 79% to 86% in 2064/65 to 2066/67.

## 7.6 Reproductive Health

International Conference on Population and Development (ICPD) defines reproductive health as "a state of complete physical, mental and social wellbeing not merely the absence of disease or infirmity in all matters relating to the reproductive system and to its functions and processes".

The National Reproductive Health Strategy of Nepal (adopted in 1997) emphasize on the need for empowerment of women ,community participation and services specifically designed to reach poor and marginalized groups .The strategy is based on the essential elements of comprehensive reproductive health care, an integrated reproductive health package has been adopted. The integrated RH package is to be delivered through the existing primary health care system. A substantive gender perspective, community participation, equitable access and intersectoral collaboration are to be in all aspects of the package. The package includes:

- Family planning
- Safe motherhood
- Child health
- Prevention and management of complications of abortion
- RTI/STD/HIV/AIDS
- Prevention and Management of infertility
- Adolescent reproductive health, and
- Problems of elderly women, particularly cancer treatment at the tertiary level/private sector.

### 7.6.1 Family Planning

The National (FP) Programme is the main thrust of the National Health Policy (1991) is to expand and sustain adequate quality family planning services to the community level through all health facilities: hospitals, primary health care (PHC) centers, health posts (HP), sub health posts (SHP), PHC outreach clinics and mobile voluntary surgical contraception (VSC) camps. The policy also aims to encourage NGOs, social marketing organizations, as well as private practitioners to complement and supplement government efforts. Female community health volunteers (FCHVs) are to be mobilized to promote condom distribution and re-supply of oral pills. Awareness on FP is to be increased through various IEC/BCC intervention as well as active involvement of FCHVs and Mothers Groups as envisaged by the National Strategy for Female Community Health Volunteers program.

In this regard, family planning services are designed to provide a constellation of contraceptive methods/services that reduce fertility, enhance maternal and neonatal health, child survival, and contribute to bringing about a balance in

population growth and socio-economic development, resulting in an environment that will help the Nepalese people improve their quality of life.

Within the context of reproductive health, the main objectives of the Family Planning Programme are to assist individuals and couples to space and/or limit their children, prevent unwanted pregnancies, improve their overall reproductive health.

Periodic and long-term targets for the Family Planning Programme have been established as follows:

#### **Total Fertility Rate (TFR)**

Reduce TFR from 4.1 children per women to 3.5, by the end of the 10th Five Year Plan.

#### **Contraceptive Prevalence Rate (CPR)**

To raise the Contraceptive Prevalence Rate (CPR) from 39 percent in 2001 to 47 percent by the end of 10th Five Year Plan period, 50 percent by the end of NHSP-IP (2005-2009) and to 58.2 percent by 2017.

#### **Voluntary Surgical Contraception (VSC)**

VSC services include vasectomy, minilap, and laparoscopy. At least one type of VSC service was made available in all districts through hospitals and/or mobile camps.

#### **Spacing Methods**

Spacing methods include Depo Provera (injecTables), Oral Pills and Condoms (which are available up to the community level), and Norplant and IUCDs (which are available at selected HPs, PHCCs and Hospitals). Spacing methods were also made available through private practitioners, Contraceptive Retail Sales (CRS) outlets, pharmacies, and other NGOs and INGOs.

#### **FP Counseling**

Counseling is an important activity for assisting clients to make informed choices regarding an appropriate family planning method. FP Counseling services are provided to potential clients by FP providers.

#### **Referral**

Referral is one of the main approaches for increasing access to family planning services. From the community level, condoms and pills are re-supplied, through a network of FCHVs, while requests for other family planning services are referred upward to the PHC Outreach clinics, SHPs or to mobile VSC camps. In

turn, the SHPs refer Norplant, IUCD, and VSC clients to the HPs, PHC centers or hospitals as appropriate.

#### **7.6.2 Adolescent Health**

Adolescent health is one of the key components of reproductive health. The main goal of the National Adolescent Health and Development (NAHD) Strategy is to improve the health and socio-economic status of the adolescents. The objectives of the NAHD Strategy are to increase accessibility and utilization of adolescent health and counseling services for adolescents; to create safe and supportive environments for adolescents in order to improve their legal, social and economic status and to increase the availability and access to information about adolescent health and development and provide opportunities to build skills of adolescents, service providers and educators in Nepal.

#### **7.6.3 Safe Motherhood**

The main goal of National Safe Motherhood Programme is to reduce maternal and neo-natal mortality by addressing factors related to various morbidities, death and disability caused by complication of pregnancy and childbirth. The global evidence shows that all pregnancies are at risk, and complications during pregnancy, delivery and the postnatal period are difficult to predict. Experience also shows that three key delays are of critical importance to the outcomes of an obstetric emergency: These delays include delay in seeking care, delay in reaching care and delay in receiving care. Three major strategies have been adopted to reduce the risks associated with pregnancy and childbirth and they are;

- Provision of 24-hour emergency obstetric care services (basic and comprehensive) at selected public health facilities in every district
- Promoting the use of skilled birth attendants at every birth, either at home or in a health facility
- Promoting birth preparedness and complication readiness, particularly the availability of blood, transport and money.

The Safe Motherhood Programme since 1997 has made significant progress in terms of the development of policies and protocols as well as expands in the role of service providers. The Policy on Skilled Birth Attendants endorsed in 2006 by Ministry of Health and Population specially identifies the importance of skilled birth attendance at every birth and embodies the Government's commitment to training and deploying doctors and nurses/ANMs with the required skills across the country. Similarly, endorsement of revised National Blood Transfusion Policy 2006 is also a significant step towards ensuring the availability of safe blood supplies in the event of an emergency.

The National Safe Motherhood Plan (2002-2017) has been revised, with extensive partner participation and the revised Safe Motherhood and Neonatal

Health Long Term Plan (SMNHLTP 2006-2017) includes recognition of the importance of addressing neonatal health as an integral part of safe motherhood program; the policy for skilled birth attendants; health sector reform initiatives; legalization of abortion and the integration of safe abortion services under the safe motherhood umbrella; addressing the increasing problem of mother to child transmission of HIV/AIDS; and recognition of the importance of equity and access efforts to ensure that most needy women can access the services they need. The SMNHLTP goal and purpose is to improve maternal and neonatal health and survival, and to increase healthy practices, and utilization of quality maternal and neonatal health services, especially by the poor and excluded, delivered by a well-managed health sector respectively. Eight outputs (Equity and access, services, public private partnership, decentralization, human resource development, skilled birth attendant strategy, information management, physical assets and procurement and finance) are specified in the plan, each with individual indicators. Safe Motherhood goals and objectives are to be achieved through the implementation of the following strategies:

1. *Promoting inter-sectoral collaboration by ensuring advocacy for and commitments to reproductive health, including safe motherhood, at the central, regional, district and community levels focusing poor and excluded groups;*
  - *Ensuring the commitment to SMNH initiative at all levels by promoting collaboration between sectors like health, education, and social welfare, legal and local development. (Strengthening RHSC, RHCC District RHCC and SMNSC)*
  - *Mobilizing national authorities, District Health Management Committee (DHMC), community leaders and community members to play active roles in creating suiTable environment for promoting safe motherhood.*
2. *Strengthening and expanding delivery by skilled birth attendant, basic and comprehensive obstetric care services (including family planning) at all levels. Interventions include the following:*
  - *Developing the infrastructure for delivery and emergency obstetric care.*
  - *Standardizing basic maternity care and emergency obstetric care at appropriate levels of the healthcare system;*
  - *Strengthening human resource management;*
  - *Establishing functional referral system and advocating for emergency transport systems and funds from communities to district hospitals for obstetric emergencies and high-risk pregnancies;*
  - *Strengthening community-based awareness on birth preparedness and complication readiness through FCHVs, increasing access of all relevant maternal health information and service.*
3. *Supporting activities that raise the status of women in society;*

4. *Promoting research on safe motherhood to contribute to improved planning, higher quality services, and more cost-effective interventions.*

#### **7.6.2.1 Antenatal Services**

*The objective of providing antenatal services is to improve the health of mothers and newborns through the following activities:*

- *Four antenatal visits;*
- *Monitor Blood Pressure, weight and Fetal Heart Rate;*
- *Provide Information, Education and Communication (IEC) and Behaviour Change Communication (BCC) for danger signs and care during pregnancy, delivery and postnatal and immediate newborn care for mother and newborn and timely referral to the appropriate health facilities;*
- *Birth preparedness and complication readiness (BPCR) for both normal and obstetric emergencies (delivery by skilled birth attendants, blood, transportation and money);*
- *Detection and management of complications;*
- *Provision of tetanus toxoid (TT) immunization, iron Tablets, anthelmintics to all pregnant women and malaria prophylaxis where necessary.*

#### **7.6.2.2 Delivery Services**

*The objective of providing safe delivery services is to protect the life and health of the mother, and to ensure the delivery of a healthy baby through the following activities:*

- *Provision of skilled birth attendants at deliveries (either home-based or facility-based), early detection of complicated cases and referral after providing obstetric first aid by health worker to appropriate health facility where 24 hours emergency obstetric services are available;*
- *Provision of obstetric first aid at home and HP/SHP using Emergency Obstetric Care Kit (EOC kit).*
- *Identification and management of complications during delivery and referral to appropriate health facility as and when needed;*
- *Encourage registration of births and maternal and neonatal deaths.*

#### **7.6.2.3 Postnatal Services**

*Postnatal services include:*

- *Three postnatal visit;*
- *Physical examination of mothers for early complication detection, treatment or referral;*

- Identification and management of complications of postnatal period and referral to appropriate health facility as and when needed;
- Promotion of exclusive breastfeeding;
- Personal Hygiene and nutrition education, post-natal vitamin A and iron supplementation;
- Immunization of newborns;
- Post-natal family planning counseling and services.

#### 7.6.2.4 Newborn Care

- Health education and behaviour change communication on essential newborn care practices which includes cord care, prevention and management of hypothermia, initiate immediate breastfeeding within one hour;
- Identification of neonatal danger signs and timely referral to the appropriate health facility.

#### 7.6.2.5 Post Abortion Care Services (PAC)

Abortion complication is a major problem in Nepal because 20 percent of maternal deaths in the health facilities are due to complication of abortion (GOVERNMENT OF NEPAL/UNICEF 2000). Post Abortion Care services include:

- Management of complications of unsafe abortion; and
- Post abortion family planning counseling and services.

#### 7.6.2.6 Comprehensive Abortion Care (CAC)

Comprehensive abortion care services includes examination by the trained doctor or health worker, counseling on abortion and family planning options and services, abortion service using Manual Vacuum Aspiration (MVA), effective pain management and other reproductive health services if needed.

In March 2002, Nepal's parliament approved the 11<sup>th</sup> amendment of the country's civil code, which gives latitude to women to terminate unwanted pregnancies. The Act allowed abortion under following circumstances:

- Up to 12 weeks gestation for any woman,
- Up to 18 weeks gestation if the pregnancy results from rape or incest; and
- Any time during pregnancy with recommendation of an authorized medical practitioner, if the life of mother is at risk, if her physical or mental health is at risk, or if the fetus is deformed.

### 7.6.3 Child Health

The Child Health programme includes Expanded Programme of Immunization (EPI) including Hepatitis B vaccination (Supplemental immunization programs), Community Based Integrated Management of Childhood Illnesses (CB-IMCI) Control of Diarrhoeal Diseases (CDD) and Acute Respiratory Infection (ARI) and Nutrition Programme.

The Ministry of Health and Population recognises that Acute Respiratory Infection (ARI) is one of the major public health problems in Nepal among children <5 years of age and the majority of deaths in this age group are due to ARI-related. The MoHP followed the World Health Organisation (WHO) guidelines for the classification of ARI cases. Therefore, all cases of ARI assessed by health workers should be classified into the following categories:

- Very severe disease;
- Severe pneumonia;
- Pneumonia; or
- No pneumonia.

The programme recognizes the significant role of mothers and other caretakers in identifying the difference between the need for home care and the need for referral to health facilities. Therefore all health workers should be able to communicate the necessary information effectively to mothers and caretakers.

The main objective of the ARI Programme is to reduce under-five ARI-related morbidity and mortality and to improve the situation of child health in Nepal.

#### 7.6.3.1 Control of Diarrheal diseases:

A diarrheal disease is one of the major public health problems among children less than five years of age in Nepal. The National Control of Diarrheal Diseases Programme (NCDDP) has been in priority status by the government of Nepal.

The main objective of the National Control of Diarrheal Diseases Programme (NCDDP) is to reduce mortality due to diarrhea and dehydration (from the estimated 30,000 deaths per year in the past) to a minimum, and to reduce morbidity from 3.3 episodes per child per year to a minimum.

#### 7.6.3.3 Nutrition

**Malnutrition** remains a serious interruption to child survival, growth and development in Nepal. The most common forms are protein-energy malnutrition (PEM) and micronutrient deficiency states (iodine, iron and vitamin A deficiency). Each type of malnutrition causes its own particular

disorder on the human body, and to make matters worse, they often appear in combination.

There is wide variation in the state of malnutrition throughout Nepal, both ecologically and regionally. Stunting is more common in the mountain areas than in the Terai, but underweight and wasting are more common in the Terai area than in the mountain areas. There are many causes of PEM. An important cause of PEM in Nepal is low birth weight as 30-50 percent of children have birth weight below 2.5 kg. Low birth weight also leads to an intergenerational cycle of malnutrition.

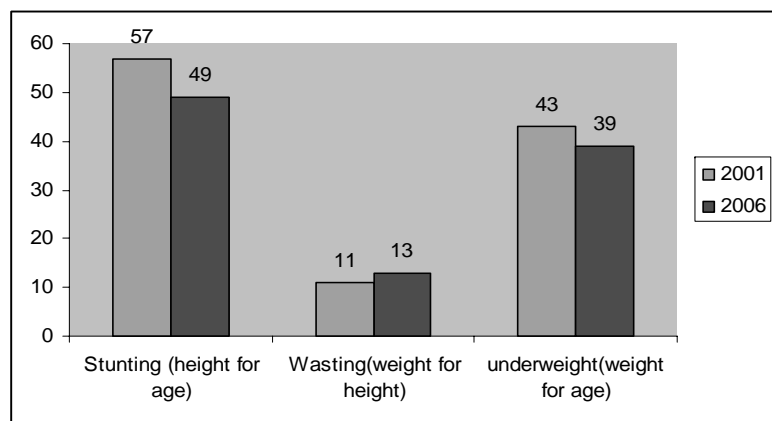


Fig 7.1 Trends of nutritional status of children under five years

Source NDHS 2006

**Iodine deficiency** disorder was another most endemic problem in Nepal, especially in the western mountains and mid hills during 1970s. To overcome this public health problem the ministry adopted a policy in 1973 to fortify all edible common salt with iodine under the 'Universal Salt Iodization (USI) Program'. Later in 1998, Ministry issued a 'two-child logo' for quality certification of iodized packet salt with 50 ppm iodine at production level. This logo is the identification as well as quality assurance for iodized salt for the consumer.

Salt Trading Corporation Limited Nepal has already implemented the internal monitoring system to assure proper and uniform distribution of adequately iodized salt. Department of Food Technology and Quality Control is monitoring the quality of iodized salt under the standard specification of Food Act, 2027. Similarly, a special Act on iodized salt was formulated in 1998 by the parliament to regulate the trading of iodized salt. Currently, Nutrition Section/ Child Health Division is conducting the external monitoring activity on iodized salt using available human resources.

**Vitamin A** deficiency still remains to be a public health problem among school-aged children and women. Rates of night blindness increase with age in both children and women. Furthermore, rates are higher in rural areas. Among preschool children, no cases of night blindness are reported in urban areas. The highest rate of night blindness is seen in the eastern and central Terai.

**The prevalence of worm infestation** in Nepal is very high. Worm infestation in children leads to decreased resistance to infection, induces malnutrition, and also, leads to anemia and also impairs cognitive function in children. Therefore in 1999, the MoHP integrated deworming of children aged two to five years of age into the national biannual vitamin A supplementation and gradually expanded the entire country in October 2004 with the initial support of UNICEF.

The deworming impact survey conducted in 2003/04 noted that children below the age of 2 years also are severely affected by worm infestation. Because of this and in accordance with recent WHO recommendation, the MoHP in 2004 lowered the age limit for deworming from two years to one year. The implementation of this new policy started in the October 2004 distribution round.

Similarly, de-worming of all pregnant women with single dose of albendazole Tablet after first trimester of pregnancy in order to prevent anemia in them is being routinely practiced through all health facilities in Nepal.

Apart from this, primary school children in selected districts are being provided with deworming Tablets twice yearly by World Food Program, Plan Nepal and Save the Children (US).

**Anemia caused by iron deficiency** is a severe public health problem in Nepal affecting all segments of the population. Approximately three-quarters of the pregnant women in Nepal are affected by iron deficiency anaemia. The prevalence of anaemia was higher in preschool children (78 percent) than in pregnant women (75 percent). Moreover, astonishingly high rate of 90 percent was found in infants 6-11 months old (NMSS, 1998).

A study to examine the nutritional status of adolescent girls with special focus on micronutrients has been conducted at a Public Girls School in Kathmandu during Sept. 2004 to March 2005. This study has tested the effectiveness of weekly iron supplementation, deworming followed by weekly iron supplementation and behavioral change communication on diet for adolescent girls in prevention and control of anemia and improved general health.

Recognizing the severe consequences of iron deficiency anemia, and its effects on health, learning capacity, productivity and maternal and neonatal survival, the Child Health Division, Department of Health Services, and Ministry of Health and Population developed and approved a strategy for the control of iron deficiency anemia among women and children in Nepal in June,

2002. The strategy is designed to improve the iron stores of individuals of all ages; while highest priority is given to pregnancy, adolescence and early childhood.

Iron supplementation during pregnancy has been a key health initiative in Nepal since 1980. According to the government policy, all pregnant women are supplied with iron Tablet containing 60 mg. of elemental iron, free of cost. It is provided to all pregnant women since the beginning of second trimester of pregnancy and continued up to 45 days postpartum (225 days in total).

In order to increase coverage and compliance of iron Tablets among pregnant and postnatal mothers, the Nutrition Section of the Child Health Division has been implementing the 'Intensification of Iron Supplementation Program (IAISP)' since 2060\61. Intensification of Antenatal Iron Supplementation Program is operated through the existing health facilities as well as through community-based outlets like FCHVs.

There have been extensive efforts to increase awareness about anemia and the need for iron supplementation during pregnancy. Awareness raising activities mainly include advocacy, information through public media and training of health workers/volunteers at all levels. IEC materials such as flip chart and posters are also being distributed for this purpose.

Realizing a need for a comprehensive document on nutrition policy and strategy for generating support and effective implementation of the program, a National Nutrition Policy and Strategy was compiled and approved in a single document form in FY 2061/62. During the development of this document, several new areas like household food security, improved dietary habit, life cycle related diseases, school health and nutrition, nutrition in exceptionally difficult circumstances and analyzing, monitoring and evaluation of nutrition situation for future activity were also identified.

School aged children, especially in the government - run schools are also one of the vulnerable groups to suffer from PEM problems. This leads to an under nutrition situation in them and thus they suffer from PEM, vitamin 'A' deficiency and iron deficiency anemia. To address these issues, a 'National School Health and Nutrition Strategy' has also been approved by MoHP as an integral part of the comprehensive National Nutrition Policy and Strategy.

The overall goal of the nutrition is to achieve nutritional well being of all people in Nepal so that they can maintain a healthy life and contribute to the socio-economic development of the country in collaboration with relevant sectors.

In order to improve the overall nutritional status of children and pregnant women, the national nutrition programme has set the following objectives:

#### **Control of Protein Energy Malnutrition**

To reduce protein-energy malnutrition in children under three years of age through a multi-sectoral approach;

#### **Control of Iodine Deficiency Disorders**

To virtually eliminate iodine deficiencies disorders and achieve its elimination by the year 2010;

#### **Control of Vitamin A Deficiency Disorders**

To virtually eliminate vitamin A deficiency and achieve its elimination by the year 2010;

#### **Control of Anaemia**

To reduce the prevalence of anaemia (including iron deficiency) by one third by the year 2010;

#### **Low Birth Weight**

To reduce the incidence of low birth-weight to 19 percent of all births by the year 2007;

#### **Protection and Promotion of Breastfeeding**

To promote exclusive breastfeeding till the age of six completed months. Thereafter, introduce complementary foods along with breast milk till the child completes 2 years or more.

#### **7.6.4 HIV/AIDS**

The HIV/AIDS, a virus induced pandemic, is one of the most serious health concerns in the world today, because of its high case fatality rate and lack of a curative treatment or vaccine. Studies on the mode of transmission of AIDS have identified sexual intercourse, intravenous injections, blood transfusions and fetal transmission from infected mothers as some of the main routes of transmission of AIDS.

*Since the detection of the first AIDS case in 1998, the HIV epidemic in Nepal has evolved from a low prevalence to concentrated epidemic. Since some of the population groups like IDUs, migrants are having more than 5% of prevalence. As of 2007, national estimates indicate that approximately 70,000 adults and children are infected with the HIV virus in Nepal with an estimated prevalence of about 0.49% in the adult population.*

NCASC/MoHP has developed a new strategy for HIV and AIDS for 5 years (2002 to 2006) and consequently an operational work plan has developed for 5 years (2003 to 2007).

**Table 7. 1: Important milestone in the response to HIV/AIDS**

1988	Launched the first National AIDS prevention and control Program
1990-92	First medium term plan
1993-97	Second medium term plan
1993	National policy on blood safety
1995	National policy on HIV/AIDS
1997-2001	Strategic plan for HIV/AIDS prevention
2000	Situational analysis of HIV/AIDS
2002-06	National HIV/AIDS strategic plan
2003-07	National HIV/AIDS operational plan
2006-2011	New national HIV/AIDS strategic plan
2006-2008	National HIV/AIDS action plan

For the effective prevention and control of HIV/AIDS and STIs a multi-sectoral effort is needed and strategies have been planned for each of the five identified priority areas: Vulnerable groups; Young people; Treatment, care and support; Epidemiology, research and surveillance, management and implementation of an expanded response. The major mode of transmission of HIV in our country is heterosexual. The reported number of HIV and AIDS cases since 1988 to 2006 is given in the Table below.

**Table 7. 2 :Estimation of HIV infections, 2007**

Population Groups	Adults living with HIV
IDU	6516
MSM	2477
Female sex workers	1132
Clients of sex workers	9940
Seasonal labour migrants	26305
<b>Sub total at risk</b>	<b>46370</b>
Trafficked women returned to Nepal	793
Urban female low risk	3492
Rural female low risk	13525
<b>Sub total low risk</b>	<b>17810</b>
<b>Grand Total</b>	<b>64180</b>

Source-Annual report 2007,DOHS

## Chapter 8

# Women Empowerment

Women empowerment is the women's capacity to participate as equal partners as men in all walks of life in the society. The role of women in Nepalese society is different than in other developed countries. Some of our social norms and values could be barriers for women empowerment. Therefore it is needed to some practical change in social and cultural values of the society. But gradually Nepal has made much progress specially health and education indicators among women in the recent year.

*The women empowerment have been very much emphasized by the International Conference on Population and Development (ICPD) held in Cairo in 1994 and suggested that it is a basic tool for a country's overall development and improving the quality of people's life. The ICPD has also declared that 'advancing gender and the empowerment of women and the elimination of all kinds of violence against women, and ensuring women's ability to control their own fertility are corner stones of population and development related programmes' (UNFPA, 1998).*

If we look at the sex distribution of total population women constitute more than half (50.04 percent). But regards to use of social, economic and others facilities and opportunities still women are backward in all indicators compared with men. In this chapter we are dealing about the women's health, education and employment status in Nepal.

### 8.1 Women's Education

Education is an important indicator of the women development and empowerment. In Nepal literacy levels have increased significantly, particularly during the last two decades. The female literacy rate increased more than trebled, from 12.0 percent in 1981 to 43 percent in 2001 (Table 8.1). The progress in literacy levels of the younger group is quite significant. The difference in male/female literacy levels has declined by half among the 15-19 age children between 1991 and 2001. But, in the younger age group the progress seems to be much slower, indicating the stickiness of the problem. The benefit of education for girls is indisputable, but not all parents perceive this. There are tremendous gaps in literacy level, school enrolment and the length of time boys and girls stay in school.

**Table 8. 1: Percent Literate by Residence, Age 6 Years and Above**

Indicators	1981		1991		2001	
	Male	Female	Male	Female	Male	Female
Urban	61.1	38.2	80.0	51.2	81.2	61.9
Rural	32.0	10.3	54.2	20.4	62.6	39.6
Nepal	34.0	12.0	54.1	24.7	65.5	42.8

Sources: CBS, 2001 and 1995

Moreover, as education levels increase, the number of women with comparable educational degrees decreases. While 77 women had primary education per hundred men with similar level of education in 2001, only 43 had SLC or higher degrees and only 23 had graduate or higher degrees (Table 7.6). The latter ratio has remained virtually unchanged since 1991. Women and girls constituted only 43 percent of all full-time students in 2001.

**Table 8. 2: Educational Achievement- Number of Females per 100 Males, 2001**

Indicator	1981	1991	2001
Literate 6 years +	33.8	46.3	65.8
Primary education	41.5	53.5	76.8
Female percent among full-time students	27.2	34.7	43.1
SLC and above	21.0	28.2	43.6
Graduates and above	18.4	22.5	22.9

Sources: CBS, 2001 and 1995

Gender parity in enrolment has not been achieved even at the primary level. The gross enrolment gender parity index was 0.98 and the net enrolment gender parity index was 0.95 in 2006 whereas at the secondary level the index is respectively 0.87 and 0.86. The nation's overall gross enrolment in 2006 was 131 percent and 134 percent for girls and boys, respectively at the primary level, and at the secondary level it was 67 percent for girls and 76

The link between education and reproductive health is two-directional. Educating women benefits the whole of society. It is also the most influential factor in improving child health and reducing infant mortality as well as for the improvement of family health and to reducing fertility rates.

*The ICPD has given special attention to women and girls, recognizing that education is a cornerstone of women's empowerment because it enables them to respond to opportunities, to challenge their traditional roles and to change their lives. The ICPD Program of Action also states, "Education is one of the most important means of empowering women with the knowledge, skills and self-confidence necessary to participate fully in the development process."*

*The conference also emphasized eradication of illiteracy as a prerequisite for human development. Globally, nearly 600 million women remain illiterate today, compared with about 320 million men.*

In almost every setting—regardless of region, culture, or level of development—better-educated women are more likely:

- To marry later, use contraception, bear fewer children and raise healthier children;
- To make better decisions for themselves and their children;
- To make greater economic contributions to the household.

One of the strongest statistical correlations in developing countries is between mothers' education and infant mortality: the children of women with more years of schooling are much more likely to survive infancy. Better-educated women have a greater say in decisions about marriage and to plan their family accordingly...

## 8.2 Women's Health

The overall health situation in Nepal has improved in the current decade with the increase in the women's health status. There has been a tremendous improvement in the decline in maternal mortality, infant and child mortality, early child bearing control in frequent pregnancies by family planning services and prenatal care and safe delivery services by spreading medical facilities up to rural areas.

However, the greatest dangers to life faced by women occur during pregnancy and childbirth. This is the reason why researchers argue that safe motherhood is unsafe in Nepal. Malnutrition is another health problem in Nepal and is more severe in the case of women. The situation of women's health in Nepal is discussed more under the heading of Reproductive Health. Some of the indicators of women's health are also presented in this section and discussed.

As shown by the NDHS 2001, for nearly half of the births, mothers received antenatal care from health service providers and the situation has not improved as of NDHS 2006 results as well. This shows that a vast majority of births in Nepal, mothers did not receive any ANC, which puts them at risk.

For more than 72 percent of births, mothers received two or more doses of TT during pregnancy. This shows that women and children are not totally protected against neonatal tetanus.

An important component to decrease maternal mortality is to increase the proportion of babies delivered under medical supervision. The NFHS 1996 found that only 17 percent of births were delivered under health facilities and under the supervision of medical practitioners. While the data from NDHS 2001 indicated that there has been very little improvement in this area. However, the NDHS 2006 shows the same indicator increased to 33 percent. This shows that use of health facilities is still way down for average Nepalese women. There could be the two possible reasons for this. First they are not aware of the importance and availability of the services or they may think that the qualities of services at health institutions are not adequate and it will not make any difference for them to a health facility or deliver at home under the supervision of some knowledgeable person.

The nutritional and health condition of Nepalese women and adolescent girls is extremely poor. It is generally manifested in the inadequate intake of calories and protein and in poor access to health services. Many studies have shown that the weight and height of Nepalese women are substantially less than that of women in developed countries.



Anemia is one of the major problems in the case of Nepalese women during their various stages of health cycle. According to NDHS 2006 one-third of women in reproductive age are anemic. However, studies have also shown that this proportion is at the top for the pregnant women (UNICEF/New ERA 1999). Though there have been improvement in the recent past, the high prevalence of anemia among Nepalese women could be one of the causes for high maternal morbidity as well as mortality in Nepal.

### 8.3 Women's Employment

In Nepal, poverty is a major factor influencing - unemployment, malnutrition, illiteracy, low status of women and limited access to social and health services. All these are associated with low productivity as well as high fertility, morbidity and mortality. For this resource constraint is also a great obstacle. Being predominantly agricultural country, 30 years ago more than 60 percent of her GDP was contributed by agriculture. Now the scenario has slightly changed and the economy is more dependent on non-agriculture sector. The structural changes in economy have contributed towards increasing economic opportunities for women. All of the above factors have greatly influenced the women's employment in Nepal. Most women are employed in family enterprises as family members. Women in Nepal work for longer hours than men have much lower opportunity for gainful employment and possess extremely limited property rights (NESAC, 1998).

During the last few years, the employment of women in the formal activities has significantly increased. As a result, women have lesser amount of time and opportunities to carry out the household activities. This has also shown that the children of the households with working mothers are becoming more deprived of due care and attention, ultimately affecting the growth of the children. So, both of these situation should be groomed properly by the family in order to get a good result by empowering women in the economic activity of the society.

**Table 8. 3: Activity Rates by Sex, Nepal 1971-2003/4**  
(Population 10 years and older).

Year	Male	Female	Total
1971	82.9	35.1	59.3
1981	83.1	46.2	65.1
1991	68.7	45.5	57.0
1996a	75.2	66.4	70.6
1998-99	83.6	79.4	81.4
2001	67.6	48.9	58.2
2003/4	85.0	82.7	83.8

1996a figures are based on NLSS data. 1998-99 figures are based on NLFS data.

Source: CBS, 1995, 1997; 1999, 2001, 2003/4; MOH, 1997

**Table 8. 4: Some of the Indicators revealing the Status of Women Empowerment in Nepal**

Female Indicators	Status
Female Population	11,587,502 (50.05 %)
Sex Ratio	99.8
Child Woman Ratio	701 (per 1000)
Female Head of the Household	14.5
Female Literacy	42.8
Female School Enrollment	71.4
Female in Higher Education (SLC & Above)	30.2
Female Ownership on House	5.5
Female Ownership on Land	10.8
TFR	3.1
GFR	117
CBR	28.4
MMR	281
Life Expectation at Birth	62.2 years
Never Married	30.4
Female Age at Marriage	19.5 years
Currently using any modern FP Method	44.2
Desire for no more children for those who have 2 children	59
Those taking iron Tablets during pregnancy	59.3
Taking antenatal care from health professionals	44
Last birth protected against Neo-natal TT	71.6
Delivery by health professionals & in health facility	33
Vaccinations of children	
Fully immunized	83
BCG & DPT1	93
Polio1	97
Measles	85
None	3
Employed women in	
White collared job	19.1
Other job	63.1
Agriculture	17.8

Source: CBS, 2001; NDHS, 2006

Looking at the women status in education, health and employment, the indicators shows some good signs. However, in order to empower women lots of efforts have to be made. With this in view the government is fully committed for women's empowerment largely influenced by UN resolution on women and working with Ministry of Women and Child Welfare. And this of course is a positive direction for the upliftment of women in Nepal.

## Chapter 9

# Ageing

Recently, worldwide population aging has been considered one of the most important demographic phenomena. It is the product of clear decreases in birth and mortality rates and an increase in life expectancy, which is reflected in the socio-economical progress of countries. The worldwide population aged 60 years and older will surpass from approximately 770 million in 2010 to an estimated one billion in 2020, and 20.0% of these people will be concentrated in developing countries. It is particularly important the increase of the oldest old (people older than 80 years old) and the relatively higher percentage of elderly women, these two phenomenons will be present in almost every country and represent an important economic and social effect. Thus, needs to be addressed and proper attention should be given to the elderly people.

*Ageing refers to the increasing inability of the body to maintain itself and to perform the functions it once did. As the body begins to decline, our abilities withstanding the stresses and strains of life are diminished by developing more ailments to heal and more time to recover.*

Ageing is a natural outcome of demographic transition from high fertility and mortality to low fertility and mortality. An increase in the longevity of the individuals or an increase in the average length of life pertaining to a population results from improvements in the quality of the environment and from medical advances among other factors.

*The old age is a relative concept. Demographers consider 65 years of age as the old age for international comparison of elderly people. The World Assembly on Aging adopted, as its main focus of concern, the population aged 60 or over as elderly population. The age 60 is also a convenient one for its statistical analysis. The United Nations considers 60 years as the boundary of old ages. The age cut-off for the elderly population varies across the countries and overtime.*

The problem of age structure changes in population in developed country results in the growing proportion and absolute number of elderly people; whereas in developing countries it results with the problem of increasing young age structure. However, the proportions, changes therein and the direction of changes are important measures of old and of an aging population.

In Nepal, recently ageing is an emerging social issue for Nepal because fertility has started going down in recent years, the mortality is declining fast and the life expectancy is continuing to increase for both sexes in Nepal. It is important to understand the ageing issue in the proper demographic and national context.

The definition of old age itself varies across the country and that variation appears also to affect the social position of the aged. The age of 60 or 65 is

equivalent to retirement age in most developed countries, and is said to be the beginning of old age. The age of 60 as a cut-off point is consistently employed in third world countries to define the elderly. However, the retirement in civil servants are varies in Nepal. Nepal Government fixed 58 years for retirement in general administration cadre, and 2 years more in health cadre than this. Moreover, in judiciary service court and university services, the retirement age is fixed at 63 years. The retirement age of the chief justice and other members of the Supreme Court along with other constitutional bodies are 65 years in Nepal. However, in the agriculture sector such a distinction for the retirement age is not evident.

Demographically, age of senior citizens can be classified into two clusters (a) active life (b) care life. Active life is productive age recognized up to 75 years and care life is 75 and beyond this. There is no retirement to be member of political parties, social workers and consultant and thus, many retired person has been practicing in consultant services to maintained their capacity and healthy environment.

### 9.1 Status

This rapid increase in the proportion and absolute number of aged people among the total population will impact on socio-economic and health policies and the culture in future society of Nepal. The elderly population growth rate per year is always more than total population growth rate of the population in Nepal (Table 9.1).

**Table 9.1: Growth rate of total and the elderly population, 1952/54-2001**

Census Year	Inter-census Growth Rate Percent of Total Population	Elderly Population Growth Rate Percent
1961	1.65	1.79
1971	2.07	2.42
1981	2.66	3.26
1991	2.1	2.26
2001	2.25	3.5

Source: CBS, 1952/54, 1961, 1971, 1981, 1991 and 2001.

The percentage of ageing population is highest (more than 7 percent in 2001) found in 1991 and 2001 census of Nepal (Table 9.2).

**Table 9.2: Percent distribution of the elderly population by sex for ecological zones, Nepal, 1991-2001 censuses**

Age	Mountain		Hill		Terai	
	Male	Female	Male	Female	Male	Female
60+ in 1991	6.6	6.0	6.4	6.1	5.4	5.4
60+ in 2001	7.2	7.1	7.1	6.9	6.0	5.9

Source: Pantha and Sharma, 2003, Vol. 1, p. 73.

The percentage distribution of elderly in 1991 and 2001 by sex makes it clear that elderly females outnumber the males in urban areas and vice versa in rural areas of Nepal (Table 9.3)

**Table 9.3: Percentage distribution of the elderly by sex for rural-urban Nepal, 1991 - 2001 censuses.**

Age	Urban		Rural	
	Male	Female	Male	Female
60+ in 1991	4.7	5.3	6.1	5.8
60+ in 2001	5.4	6.1	6.8	6.5

Source: Pantha and Sharma, 2003, Vol. 1, p. 71.

According to the directory of elderly people related institutions in Nepal, 2004 there are 52 government-registered and currently functioning institutions, 82 government-registered but currently defunct, but 7 elderly related institutions not registered but currently functioning. Apart from these 7 government-ministries/committee (ministry of women, children and social welfare; health; education and sports; information and communication; local development; labor and transportation; and social welfare committee), and 3 international agencies and INGOs (United Mission to Nepal, United Nations Population Fund, Help Age International) are in existence to provide technical and economic assistance to the institutions working in the field of elderly people

### 9.3 Consequences

The dispersal of the family members, leading to the breakdown of the large/joint/extended family and the new status and role of women is making the caring of the elderly population very difficult. It is imperative that the elderly should not be deprived of their independence, their sense of responsibility, their personality and their feelings that the family and community neglect them. Any breakdown of these basic components can affect their mental health, which in turn can reduce their physical and psychological activity, leading to rapid health deterioration and untimely death.

### 9.4 What needs to be done?

- The greater attention should be paid to this issue, particularly to such aspects as how the aged segment of the population could make active contribution to the family and society.
- There is an urgent need to create awareness and change the attitude of family members in the community towards elderly people. There is a lack of awareness and understanding in the family members and in the community towards the independence, participation, self-fulfillment, dignity and care of elderly people. The breakdown of family, changing status of women, elderly population deprived of their independence, and the change in the tradition and the culture are

making elderly people to rely on their own, even in their own communities.

- The society should be responsive to the needs of the elderly people and cater services to them.
- It is the time to use them as a resource to utilize their knowledge and skills and keep the elderly active and lively. The elderly people are pride of the nation. They are living history. They are property of the nation. They are rich in experience, knowledge and skills that can be useful for the younger generation to learn from them and continuity to the traditional skill.
- It is essential to assess elderly peoples' needs and collect information about their demographic characteristics, socio-economic and health status conducting researches.

*Dominant theories of gerontology suggest that the status of the elderly people is high in agricultural communities and societies where extended family system touches on the rudiments of ageing, and the elderly status begins to decline with modernization (Cogs0 Will, 1986).*

*The elderly remain as an inseparable part of the society and therefore their needs, problems and prospects require a holistic solution and not a fragmented approach. The most important concern is how best to provide economic and social security and support for the elderly.*

### 9.5 International Conferences on ageing

Date	Place and description
1982	The First World Assembly on Ageing adopted the Vienna International Plan of Action on Ageing which was endorsed by the United Nations General Assembly in its Resolution 37/51. The plan recommended the promotion of training and research as well as the exchange of knowledge and information in order to provide an international basis for social policies and action.
1991	The UN General Assembly adopted the UN Principles of Older Persons. Provide 18 Principles, a broad base framework for action, organized into five clusters: independence, participation, care, self-fulfillment and dignity of older persons.
1998	Macau Plan of Action on Ageing was passed
1999	The "International Day of Older Persons" was celebrated.
2002	The second World Assembly on Ageing, Madrid, adopted an International Plan of Action on Ageing with 19 articles & some recommendations organizing in three priority directions (a) older persons and development (b), advancing health and well being into old age (c) ensuring enabling and supportive environment.
2009	Strategic Framework for Active Healthy Ageing in the South East Asia Region, Colombo, Sri Lanka. It has focused for the established geriatric center

The UN General Assembly meetings have urged developing countries in particular, to consider policies and programs for older persons as part of overall development policies.

To materialize the commitments expressed in various regional and international conferences by Nepal as well as in various national development plans our responsibility for senior citizens has become more serious.

## 9.6 Nepal's response

Area	Date	Main theme
Constitution arrangement	2009	• Social security in direction policy
	2006	• Right of social security (women, child, old )
Policy	2009	• Addressed by Nepal Health Sectors Reforms II
	2009	• knowledge of the elderly people
	2008 2006	• Increase old age pension from Rs 100 to 500 for aging person
	2006	• Free of cost for senior citizens
	1995	• Subsidiary policy and social security ( putting the last first) started from eighth five years plan
	2001	• Tthe Karnali zone ( the remote areas of Nepal) • Senior citizen policy and working plan
	1992	• Mobilization of NGO or Civil society
	- 2002	• 10 Percent pension increase to the civil servants those who reach 75 years old
	1998	• Strong commitment to Madrid International plan, on aging
		• Regional macro plan of action on aging
Demographic point of view	2008	• Active life of aging population reduced from 75 to 70 years
Program	2009 200/1010	• Mobilization of civil society Awareness program in Local level population management • Geriatric Hospital in Patan Hospital as for pilot project for clinical treatment.
Institution	1872	• Established Pasupati Bidharasram ( shelter for old people
	-	• Established Ashram for pld people
Research	2009	• Very few research and innovation activities has been conducted in clinical aspects
	2009	• Research has been conducted on the collaboration of WHO

### 9.6.1 Senior Citizens Policy and working policy 2058 Jeshta Nagrik Sambhadhi Ain, 2063 (2007).

1. To recognize the knowledge, skill and expertise of the senior citizens to utilize in development plans and programs.

2. To enact new legislation or amend or review the existing one necessary to legally guarantee social security of the senior citizens and their rights and their rights and interests.
3. To initiate programs to orient a person, family, institution, association, and stakeholders to give respect to senior citizens in the family and society; to give concessions and prizes to persons or associations carrying out such works; and to prepare the text materials for teaching in different institutions that increase emotional honor and respect to senior citizens.
4. To introduce a national pension scheme, create a social security fund, initiate programs like the elderly home, day care centers, senior citizen clubs, old age allowance, mobile health clinics and systematize the programs operated so far.
5. To establish a central level committee for integrating, coordinating and monitoring the programs related to senior citizens. The local bodies coordinate senior citizen programs in each district (Senior Citizen Policy-2058).

### 9.6.2 Senior Citizens – National work Plan

To implement senior citizens policies the following working policies/programmes/ activities shall be pursued in short term, medium term and long term development plans. The long term goal/objective of senior citizen functional policy is to make old age secured and easy, developing the capacity of elderly utilizing their knowledge, skills, experiences and expertise in various spheres of nation building whilst providing them social and economic security with a life in dignity. These programmes/activities have been sub-divided into 7 different aspects and 52 work plans: economic aspect consisting of 6, social security -11, Health services and nutrition -9, Participation and engagement -8, Education and entertainment aspect – 5, Legislation enactment -2, and miscellaneous -11 work plans.

#### Economic Aspect

1. Allowances shall be provided to the weak and socially insecure senior citizens and a study shall also be conducted to provide other facilities (2062BS onwards).
2. The old age allowance distribution process shall be made simple, easy and regular (continuing since 2062/63).
3. While formulating a local level project, arrangement shall be made to provide some percent of old age allowances from the income to be generated from the local source (during X & XI Plan Period).
4. National pension scheme shall be prepared and proposed to implement in the context of extensive social insurance system (during X & XI Plan Period).
5. The disaggregated data base of senior citizens shall be prepared and updated (2064 onwards regularly).

6. A study shall be conducted to provide an income generating opportunity to involvement age group 60-74 years elderly people according to their capacity, skill, knowledge and interest (2062/63 onwards).

#### **Social Security**

1. *Senior citizens consultation service center* shall be established in various places to hear grievances of distressed and neglected elderly and make proper suggestions for promoting security system based on family (2062/63 onwards).
2. Rehabilitation and reunion service shall be provided to internally displaced senior citizens and those in emergencies (X plan onwards).
3. Old age homes shall be established, improved and run in five development regions (2062 onwards, continuously)
4. Day care centers will be established and run (continuity to established organizations)
5. Home service shall be provided to very poor, very old, and disabled senior citizens in health and other basic services (2064/65 onwards, continuously)
6. Free legal advice/help and consultation services shall be provided to poor and needy senior citizens for their economic, social security and dignity (2063 onwards)
7. *Senior Citizen Welfare Fund* will be established/run/improved for the social security of the elderly people (During X plan period)
8. Non governmental and private organizations shall be encouraged to establish and operate the paid elderly homes (From 2065 till XI plan period)
9. Inter generational understanding shall be promoted (2062 onwards, continuously)
10. Audio visual materials shall be produced and seminars conducted to develop positive attitude towards the elderly (2062 onwards, continuously)
11. Seats shall be reserved and exemptions in charges shall be given to the elderly in the means of transport and communication (2062/63 onwards, continuously)

#### **Health Services and Nutrition**

1. Arrangement for concessional medical treatment for elderly shall be made in governmental and private hospitals and health centers (From 2062/63 to X plan period)
2. A study shall be conducted and a report produced on the health condition and nutritional status of the senior citizens (From 2062/63, within one year)

3. Geriatric wards shall be established and run along with trained health professionals/manpower in central/regional/zonal hospitals (From 2062/63 to X plan period)
4. Awareness programs shall be conducted to develop a healthy state via preventive measures and healthy behavior in senior citizens (2062/63 onwards, continuously)
5. Free clinics and health camps shall be organized for the elderly (2062/63 onwards, continuously)
6. Health related materials shall be freely distributed among the elderly (2062 onwards, continuously)
7. Training shall be provided to elderly care takers in elderly homes/day care centers (2062 onwards, continuously)
8. Concept of health insurance system shall be developed and family health insurance system shall be promoted (2063 onwards, continuously)
9. A study on elderly female special health and nutritional status shall be conducted and health services shall also be provided (2063 onwards, continuously served)

#### **Participation and Engagement**

1. Coordination and monitoring committee to coordinate programs relating to the elderly in central and district level shall be established. (2062 till 2063)
2. Senior citizens shall be engaged in local community development activities (2063 onwards, continuously)
3. An arrangement shall be made in the service in which the elderly retired from the service because of the age so that they can remain in the same service up to the involvement age if they desire so (2064 onwards)
4. Supervision and monitoring will be regularly conducted to coordinate and improve the work efficiency among the institutions working on senior citizens (2062 onwards, continuously)
5. Existing practice of working for many consecutive hours a day in the employment and service sectors shall be made suitable for the elderly by making the time division gradually flexible (During X plan period)
6. A study shall be conducted on the possible areas of transferring the elderly skills (During X plan period)
7. The information and the data on elderly skill, capacity, expertise shall be collected, updated and shared (2064 onwards, continuously)
8. The income generating activities according to their skills and interests shall be promoted in the elderly homes/day care centers (2062/63 onwards, continuously)

### **Educational and Entertainment Aspects**

1. Organizations or stakeholders shall be motivated to provide entertainment and other special exemptions/discounts to senior citizens (2062/63 onwards).
2. The established senior citizen clubs shall be used for advocacy in favor of the elderly people along with entertainment, place of speech delivery and study (2062/63 onwards).
3. Activities like training and seminars shall be conducted to prepare for retirement age, old age, rights for the elderly and development (2062/63 onwards).
4. Gerontology subject contents shall be introduced in higher education and university (2062/63 onwards).
5. Elderly care, respect, honor, freedom, participation contents shall be included in school curricula and elderly volunteer service programs shall also be developed and extended (from 2063 during X plan period).

### **Legislation enactment**

1. Act, regulation relating to the right and interest of the senior citizen shall be studied and amended (During 2063/64)
2. Legislation shall be enacted to replace the existing system of imprisonment with parole and probation system for elderly of the secured group (2063/64 onwards, continuously)

### **Miscellaneous**

1. Data-base of the elderly people with outstanding achievements in different fields of life shall be compiled, updated and communicated (2063 onwards, continuously)
2. Consideration shall be given to percentage of ageing population while formulating a long term plan in every sector (2063/64 onwards, continuously)
3. National programs shall be proposed regarding senior citizens for international aid (During X plan period)
4. The organizations, institutions or stake holders working on senior citizens shall be rewarded on their performance (2062 onwards, continuously)
5. The implementation status of the senior citizen National work plan shall be evaluated (2063 onwards every year).
6. Senior citizen related programs shall be included while formulating local level annual work plans (2063 onwards, continuously)
7. Community awareness programs shall be conducted by organizations, politicians, lawyers, professors, civil servants,

journalists and others regarding the care, security, respect, rights, etc. of the elderly (2063 onwards, continuously)

8. Easy access shall be provided for elderly to public places, buildings, transportation and other physical environment (2063 onwards, continuously)
9. Information network system regarding elderly shall be established at governmental and non-governmental level (From 2062/63 till the end of X plan period)
10. Governmental and non-governmental associations and institutions providing special exemptions in health care, transportation, recreation and in other fields shall be motivated (During X and XI plan period)
11. The capacity of the governmental and non-governmental associations, institutions and stake holders related to the elderly shall be built up (2062/63 onwards)

The major implementing agencies are Ministry of women, children and social welfare; local development; finance; health and population; home; information and communication; education and sports; labor and transportation; culture, tourism and civil aviation; physical planning and construction; justice, law and parliament. However, the rules and regulations have not yet been implemented for “*Jeshtha Nagarik Sambandhi Ain, 2063*”.

### **Challenges of Aging People**

Ageing is a natural outcome of demographic transition from high fertility and mortality to low fertility and mortality. An increase in the longevity of the individuals or an increase in the average length of life pertaining to a population results from improvements in the quality of the environment and from medical advances among other factors. Because of this, dependency ratio by children and aging people is high in Nepal. Thus, some issues and challenges has been arises issues that how to switch them into the productive life?

The dispersal of the family members, leading to the breakdown of the large/joint/extended family and the new status and role of women is making the caring of the elderly population very difficult. It is imperative that the elderly should not be deprived of their independence, their sense of responsibility, their personality and their feelings that the family and community neglect them. Any breakdown of these basic components can affect their mental health, which in turn can reduce their physical and psychological activity, leading to rapid health deterioration and untimely death. Again another challenge is being how to bridge the gap between senior citizens and young?

In the traditional family support system, sons are considered as the means of security in the old age. Due to the breakdown of the traditional large family system in Nepal the traditional family support system for the elderly parents is

eroding nowadays. Sons consider take care of the parents as the burden rather than their moral obligation.

In fact, the elderly people are pride of the nation. They are living history. They are property of the nation. They are rich in experience, knowledge and skills that can be useful for the younger generation to learn from them and continuity to the traditional skill. Thus; it is being additional challenges that how to utilize their experience in productive sectors? The rural-urban migration, migration to big cities or foreign countries and the occupational change have weakened the land-based ties. In such situations, the elderly are unable to manage their land and house activities. The offspring some times help financially if they have good earning but fail in remittance if they are faced with increased hardship and thus the parents are left alone at home feeling lonely. It has been felt by the elderly that once the children leave their home for education or employment for longer time they do not return home permanently. Many infrastructures have been developed even in rural areas but the question is there who will utilize such infrastructures for the senior citizens especially in rural area?

The older people from all classes and ethnicity, caste and gender backgrounds share a common view: love, affection, care and protection which are as important for them as warm clothes in winter. Almost all of the elderly like to live in the family even with disgrace from family members. The elderly who live in old age homes get health care, timely food, freedom and other facilities but still they suffer from psychological depression and final challenges is there how to change junior citizens mind towards citizens. It is high time for the younger generation people of today, who will be the future elderly, to be seriously aware, try to understand today's elderly and start immediately saving some money and immovable property for the future security, develop a positive attitude from the beginning in children towards the elderly, so that you may not face dependence like today's destitute and vulnerable elderly upon your children and other members in the family.

### Conclusion

The elderly people have long experience and remain as an inseparable part of the society and therefore their needs, problems and prospects require a holistic solution and not a fragmented approach. However, changing Nepalese life style from traditional ways to western ways may pose serious problem of ageing in Nepal in decades to come. Therefore it is being an urgent need to make concrete plan and policy to change the attitude of family members, policy makers, planners, and professional in the community towards elderly people.

## Chapter 10

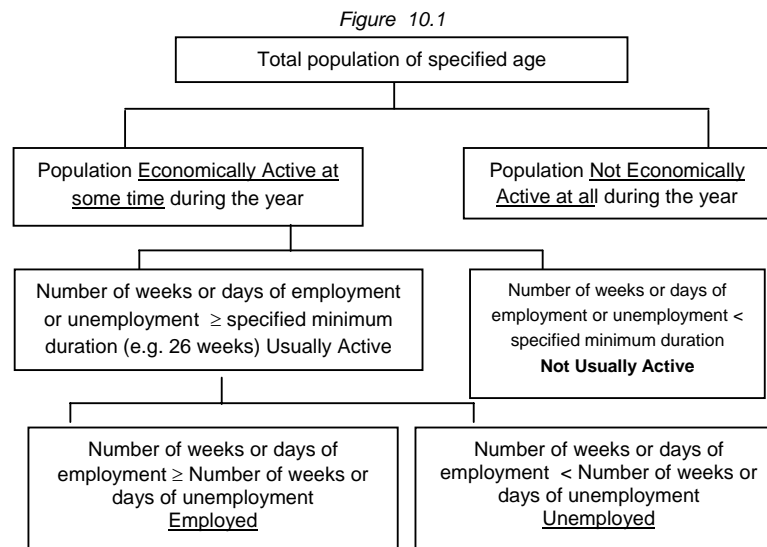
### Economically Active Population

Persons of all ages consume goods and services while only a part of the entire population of a country is engaged in producing such goods and services. Obviously, youngest, oldest and physically and mentally incapacitated do not engage in such economic activity because of the inability to do so. Some do not engage or partially or fully engaged in producing goods and services. The economically active is that part of the manpower which actually engages or attempts to engage in the production of goods and services (Shryock H. and Seigel S, 1971).

A person who is involved and/or willing/available to involve, for the minimum specified time during the specified reference period, in the production of goods and services is considered as Economically active for the period.

#### 10.1 ILO Frame work

For economic activity data collected in a census, the ILO recommends a framework for measuring Usual Activity of population (ILO, 1990). For the measurement, the framework make use of data collected during the reference period of one year and on the basis of specified definition, classifies total population of specified age in groups and sub-groups. The recommended framework for measurement of the "Usually Active Population" is presented in the Figure 1.



Source : ILO, 1990.

The framework is a fundamental base for classifying national workforce and could be used to arrange population in various groups and sub-groups. The framework is useful to standardize the population statistics and also enables to compare with population of other nation(s) similarly classified.

A review of census questionnaires reveal that population censuses of Nepal have been collecting information on economic activity of individuals, in various fashion, since the beginning of census taking. But the documentation of information is available only since 1952/54 censuses. In addition, in the year 1998/99 Central Bureau of Statistics (CBS) conducted Nepal Labour Force Survey for the first time in Nepal. In the survey, definition and coverage of work (production of goods and services) was used as per the SNA 1993 definition. The survey produced, for the first time, a comprehensive report (CBS, 1998/99) on economic activity of population of Nepal by using both labour force (reference period – one week) and usual activity (reference period – one year) concept.

System of National Accounts has defined kind of goods and services produced that are counted as economic work activities and kind of services that are not counted as economic work activities. Also, production boundary for goods and services has widened in 1993 compared to 1968 definition. "Report on the Nepal Labour Force Survey 1998/99" provides some examples for economic and non-economic work activities as defined by SNA -

### 1. Activities which are considered as Economic work are –

#### 1.1 Work activities performed outside home

A. Wage job – workers employed in factories, business enterprises, farms, shops, service undertakings, and other economic units engaged in production of goods and services intended for sale on the market.

- Employees of the government, other social and cultural institutions, hotels, restaurants, transport and communication.
- Politicians who get remuneration, lawyers, doctors, shopkeepers, farmers etc.

B. Any business operated by person: Managing one's own business or farm even though not involved in producing the output.

#### 1.2 Home based Activities:

- Agricultural activities – growing or gathering field crops, fruits and vegetables, producing eggs, milk and food. Hunting animals and birds, catching fish, crabs and shellfish. Gathering berries or other uncultivated crops. Burning charcoal.
- Milling and other food processing – Threshing and milling grain, making butter, ghee and cheese, slaughtering livestock, curing hides and skins, preserving meat and fish. Making beer and alcohol.

- Handicrafts – Collecting thatching and weaving material, making mats, weaving baskets and mats, making clay pots, weaving cloths, dressmaking and tailoring, making furniture.
- Construction and major repairs – constructing of dwellings, farm buildings, clearing land for construction, major renovation of dwelling, private road, wells and other private facilities.
- Fetching water and cutting and/ or collecting of firewood,
- Other Activities – Activities of a member of a religious order such as a monk, or a priest, cooking food for labouror's working on one's farm when food is provided as part of labourer's wage.

### 2. Non-Economic Work Activities

Production of Services for own Household Consumption is not Considered as Economic work.

Such as –

Cooking / serving food for the household, Cleaning utensils/ house, Shopping for the household, Caring for the old, sick, infirm; Child caring (including feeding, caring, taking to school etc), Minor household repairs, Other voluntary and /or community services are non-economic activity.

### 10.2 Current Status of Economically active population

Population censuses of Nepal have been collecting economic activity data on Usual Activity basis (using reference period of one year). Table 10.1 clearly shows the percentage of economically active population from the year 1971-2001

**Table 10. 1: Economically Active Population 10+ Years of Age by Sex, Nepal, 1971-2001.**

Year	Economically Active population (in % )		
	Male	Female	Total
1971	82.9	35.1	59.3
1981	83.1	46.2	65.1
1991	68.7	45.5	57.0
2001	71.7	55.3	63.4

Source : Population Monograph of Nepal 1995, National Report 2002, CBS.

From the Table it is clear that in the case of males, the activity rate remained the same from 1971 to 1981, but dropped remarkably in 1991. One among the reason could be changes in job expectation of people after restoration of democracy in 1990. In the case of females, response was low in 1971, the activity rate increased in 1981, stayed almost the same in 1991 and increased again in 2001.



The population censuses and Nepal labour force survey 2003/4 have been the major source of economic activity data in Nepal but concept and definition used in the census for collecting data on economic activity of population we find that they are not consistent, and changes from one census to another. For example - the minimum duration of work of at least 8 months in 1971 and 1981 changed to duration less than 3 months. The production boundary used in 1991 has been widened in 2001 and so forth. For comparing proportion of economically active population over time no attempt was made to allocate the proportion in one timeframe duration. Moreover, neither attempt was made to standardize data to suit Nepalese situation nor made for international comparison. This probably confused users and lead to under value or under utilize economic activity data generated by censuses of Nepal.

## 10.2 Census 2001

Beginning from census preparatory work, series of discussions were held to formulate questions, set concept and definition to standardize and measure economic activity of population and to collect census 2001 data in line with SNA 1993 definition.

To measure economic activity of population of Nepal age 10 years and above, census 2001 formulated and administered a question –

### what work activity did ..... do during the year preceding census?

The response was structured in four categories –

1. Economic work ..... month
2. Extended economic work ..... month
3. Looking for job (available for work ) ..... month
4. Did not do any work activity ..... month.

Total of four categories has to be 12 months. Each response category of work activity was defined in line with SNA 1993. Computation of month was on an average basis.

But as we can observe in the first publication (CBS 2002, National Report), data on economic activity part deviated from the track of standard. The census could not keep track with standard classification as expected. Later, a pioneering work has been made to standardize and classify 2001 economic activity data in line with ILO frame work and classified data has been published (Niroula B. P. in Population Monograph of Nepal, 2003) by CBS. This inspired CBS to further tabulate Economic activity data as per the standardized classification, and then population was classified in groups and sub groups as - economically active at some time and not economically active at all group, usually active and not usually active, Employed and Unemployed and then occupation, industry of employed population has been tabulated and published for various levels of residence (CBS, 2003). In previous censuses, occupation and industry was tabulated for economically active (who did some work) only; population was never classified by employed and unemployed because collected data was not comprehensive for such classification. By

standard definition, one of the components - seeking job, required for such classification, was never inquired in previous censuses.

As per ILO classification, reason for not being active needs to be computed for “Not Usually Active” group and this, for the first time in the history of analyzing economic activity data of Nepal, is recently published in Tathyankagatibidhi (see - Niroula B.P., Tathyankagatibidhi, 2063/64, first issue, pp. 50-53, CBS). According to the standardized classification published by CBS, distribution of population in groups and sub-groups by type of residence is presented in Table 2.

**Table 10. 2.: Economically Active and Not Active Population Age 10 years and Over by Sex and Type of Residence, 2001,**

Area of Residence	Sex	Total Population		Economically Active at Some time				Not Usually Active	Not Economically Active at all
				Population	Usually Active				
		Number	%		Total	Total	Employed		
Nepal	Both sex	16,770,295	100.0	63.4	58.2	53.1	5.1	5.2	36.6
	Male	8,330,597	100.0	71.7	67.6	62.6	5.0	4.1	28.3
	Female	8,439,698	100.0	55.3	48.9	43.7	5.2	6.4	44.7
Rural	Both sex	14,221,579	100.0	65.4	59.9	54.8	5.1	5.6	34.6
	Male	7,015,828	100.0	72.8	68.4	63.3	5.0	4.4	27.2
	Female	7,205,751	100.0	58.3	51.6	46.4	5.2	6.7	41.7
Urban	Both sex	2,548,716	100.0	52.3	49.0	43.7	5.3	3.3	47.7
	Male	1,314,769	100.0	65.7	63.5	58.5	5.0	2.2	34.3
	Female	1,233,947	100.0	38.0	33.5	28.0	5.5	4.5	62.0
Mountain	Both sex	1,101,884	100.0	79.4	71.4	67.7	3.7	7.9	20.6
	Male	543,825	100.0	79.9	71.9	68.0	3.9	8.0	20.1
	Female	558,059	100.0	78.9	71.0	67.5	3.5	7.9	21.1
Hill	Both sex	7,531,347	100.0	65.9	60.3	56.3	4.0	5.6	34.1
	Male	3,644,811	100.0	70.2	65.4	61.2	4.2	4.8	29.8
	Female	3,886,536	100.0	61.8	55.5	51.7	3.8	6.4	38.2
Terai	Both sex	8,137,064	100.0	59.0	54.5	48.1	6.4	4.5	41.0
	Male	4,141,961	100.0	71.9	69.0	63.1	5.9	2.9	28.1
	Female	3,995,103	100.0	45.6	39.5	32.6	6.8	6.1	54.4

Source: Population Census 2001, Selected Economic Activity Tables, CBS 2003.

The classification is based on usual activity for which reference period is one-year preceding the census. The distribution shows that population nearly less than two-thirds (63 %) of population are active and more than one-thirds (37 %) are Not Economically Active at all. We can see that there is diversity in activity composition of population by type of residence. Relatively small

proportion of work force of urban and Terai area are found active, below national average, compared to work force of the other areas, Mountain and Hill. Proportion of females of the area reporting economically active are even smaller. Census reveals that only about half of urban residents are found active against 79 per cent in the Mountain region. From the Table we can compute that census unemployment rate for total population of Nepal is 8.1 per cent (which accounts about 5 % of the total population 10 + years of age). Among the regions, the census highest unemployment rate (11 %) is found in Terai region followed by in Urban. Gender disparity is obvious in employment situation, females in the Terai (15 %) and in Urban areas (14.5 %) are more unemployed compared to their male counter parts and females of other areas. Nepal Labour Force Survey 1998/99 estimated over all unemployment rate of 1.8 per cent. Nepal Living Standard Survey 1995/96 estimated the rate of 4.9 per cent As the definition of economic work activity covers collection of essentials for livelihood such as - water, fuel wood, processing of primary products, more people in the Mountain and Hill region probably spend time for these essentials and hence more people active. Life in the Mountain and Hill is much harder than in the Terai and urban areas. However, further investigation is required in this area for justification.

Table 10.3 shows distribution of not economically population, given in the last column of Table 10.2, for each sex and by reason for not being economically active. Also in this distribution we find gender disparity, because among not active more than three-fifths are females. Major reporting on reason for not being active is found in two groups - study/training and household work, about half of not active reported in study/training and one-thirds reported in household work. If we separate the distribution by gender in Table 10.3, we find a marked gender gap, three-fourths of males (probably boys) reported in study/training against little over one-third (36 %, probably girls) females. On the other side, only 6 per cent males reported involvement in household work as reason for not being active against half of females reported the reason.

**Table 10. 3: Population 10 + years of Age by Sex and Reason for not Being Active**

Reason for not being Active at all	Both Sex	Male	Female
<b>Total, N</b>	<b>6,133,038</b>	<b>2,359,550</b>	<b>3,773,488</b>
<b>%</b>	<b>100.0</b>	<b>38.5</b>	<b>61.5</b>
Study/Training	51.1	29.0	22.0
Household Chores	33.2	2.3	30.9
Aged	8.4	3.2	5.2
Pension/income	1.6	1.0	0.6
Phy/Mentally Handicapped	1.4	0.7	0.7
Sick	1.8	0.8	1.0
Other Reason	1.1	0.5	0.6
Not Stated	1.4	0.9	0.5

Note: Percentage is given for all totals.

Source : Tathyankgatibidhi 2063/64 first issue, CBS

The distribution is given in terms of total population who were not economically active at all as given in Table 10.4.

**Table 10. 4: Population 10 + years of Age by Sex and Reason for not Being Active during Reference Year, 2001 (Percentage given for each sex)**

Reason for not being Active	Both Sex	Male	Female
<b>Total</b>	<b>6,133,038</b>	<b>2,359,550</b>	<b>3,773,488</b>
<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Study/Training	51.1	75.5	35.8
Household Chores	33.2	6.1	50.2
Aged	8.4	8.3	8.5
Pension/income	1.6	2.6	1.0
Phy/Mentally Handicapped	1.4	1.8	1.2
Sick	1.8	2.1	1.6
Other Reason	1.1	1.4	1.0
Not Stated	1.4	2.2	0.8

Source : Tathyankgatibidhi, (four monthly Statistical Bulletin), 2063/64, Year 28, No. 1, CBS

In Table 10.3 and 10.4 distribution of not economically active, given in last column of Table 2 is presented for each sex by reason for not being active. Among them females are more than three fifths and males are less than two-fifths (38.5 %), that means more females were not involved in economic work activity compared to male partners. Now the question arises what they did or what was the main reason for not doing economic work?

The census reporting exhibits that more than 80 per cent of each sex reported in the first two categories of reasons for not being active. That is more than three-fourths among males, probably mostly boys, were involved in study/training against 36 per cent of females, probably mostly girls, reported in this category. On the other hand, only 6 per cent of males reported involved in household duties against more than half of females.

This finding vividly shows gender disparity in allocation of work activities in the society. Though currently not active, more males are found involved in the process of doing creative work for the future where as more females are involved in services consumed by household. Reporting on other reasons for not being active appear to be less and similar for each sex.

Census 2001 data can be compared with economic activity data generated by past censuses. However, this requires further tabulation to suit comparison.

## Chapter 11

# Sources of Demographic Data

Reliable, timely and relevant demographic data have been considered essential to develop, implement, monitor and evaluate the population and associated programmes. Sufficient data need to be made available at national, regional and local level to undertake research works and policy decisions concerning population and development.

Basically demographic data can be obtained from six different sources such as

1. Population Censuses
2. Demographic Sample Surveys
3. Qualitative Data
4. Vital Registration
5. Population Registers
6. Administrative Statistics/Official records

### 11.1 Population Censuses

The word 'Census' comes from the Latin 'Censere' which means to value or tax. In other words, earlier censuses were carried out either for taxation or for military purposes. Evidences of censuses have been available in earlier times i.e. in 17<sup>th</sup> century; however, it is difficult to decide where and when the first scientific census was carried out.

*United Nations (1958) defines census as "A census of Population May be defined as the total process of collecting compiling and publishing demographic economic and social data pertaining at a specified time or times to all persons in a country or delimited territory."*

A modern census has following four essential characteristics (UN 1970):

- a) Each individual is enumerated separately and the characteristics of each person are recorded separately.
- b) The census covers a precisely defined territory and includes every person present or residing within its scope.
- c) Population is enumerated with a well-defined point of time, and date is in terms of a well-defined reference period.
- d) The census is taken at regular intervals.

American constitution made a provision of carrying out a census every ten years. Since then censuses have been conducted in USA every ten years. In

a like-wise manner, most European and Asian countries also started taking a national census every ten years since the 19<sup>th</sup> century. However, there are some countries where census is also conducted every 5 years such as Japan. The first population count in Nepal was carried out in the year 1911. Since then censuses in Nepal are being carried out at an interval of more or less ten years. The first scientific census with the technical assistance from the United Nations was conducted in 1952/54. The eastern half of the country was enumerated in 1952 while the western half was enumerated in 1954. This census also followed the United Nations definitions for different demographic measurements. Since the country was not enumerated at the same time, the 1961 census is regarded as the first scientific census of Nepal, in terms of internationally accepted definition of a census. Latest census was carried out in 2001.

*Censuses in general, suffer from two types of errors a) coverage errors and b) content errors. Coverage errors refer to errors in undercount or over-count of a population. In most of the cases it is the undercount of a population resulting in the under count of special groups of population which is mobile, live in remote areas or city slums etc.;. Content error refers to the errors resulting from faulty transcription of data during collection processing and tabulation of the data. Magnitude of content errors is very difficult to estimate. However, coverage errors can be detected through post enumeration surveys.*

The census of 1971 was the first one, where a mainframe computer was used to process data. Till 1991, mainframe computer were used in the processing of the census data. The census of 2001 is the first census, where desktop personal computers were used to process the census data.

### 11.2 The Demographic Sample Surveys

A sample survey is cheaper and easier to administer than a census. It involves the selection of people who represent the whole population, or a particular section of it. A sample can get more detailed and higher quality information than a census, because more time and effort can be spent on each interview. World Fertility Survey, Demographic and Health Surveys and Contraceptive Prevalence Surveys are the examples of international surveys (including Nepal) on population related topics.

Table 11. 1: Major Demographic and Population Surveys conducted in Nepal:

S.N	Name of the Survey	Year Of Survey	Organisation
1	Demographic Sample Survey (DSS)	1974	CBS
2	Demographic Sample Survey(DSS)	1975	CBS
3	Demographic Sample Survey(DSS)	1976	CBS
4	Nepal Fertility Survey (NFS)	1976	MOH
5	Nepal Contraceptive Prevalence Survey(NCPS)	1981	MOH

6	Fertility and Mortality Rates in Nepal	1984	New ERA
7	Nepal Fertility and Family Planning Survey(NFFS)	1986	MOH
8	Nepal Fertility Family Planning and Health Survey(NFFHS)	1991	MOH
9	Nepal Family Health Survey(NFHS)	1996	MOH
10	Nepal Living Standards Survey(NLSS)	1996,2003, 2009	CBS
11	Birth, Death and Migration Study	1998	CDPS
12	Nepal Labour Force Survey (NLFS)	1998	CBS
13	Between Census Household information for monitoring and Evaluation system (BCHIMES)	2000	CBS
14	Nepal Demographic and Health Survey (NDHS)	2001	MOH
15	Nepal Demographic and Health Survey (NDHS)	2006	MOHP
16	Nepal Adolescent and Youth Survey	2010/11	MoHP

In Nepal, since 1974 a number of sample surveys relating to population have been conducted. Some of the major surveys related to population are provided in Table 11.1

It can be seen since 1976, a fertility and family planning type survey is being conducted every 5 years under the auspices of Ministry of Health and Population. The latest one in this series is the Nepal Demographic Health Survey 2006. These surveys have provided reliable estimates of fertility, family planning, mortality and health indicators for Nepal.

### 11.3 Qualitative Data:

While statistical sample surveys provide us with the quantitative data, qualitative data are also very much useful and are usually obtained from ethnographic studies, participant observation, focus group discussions, life histories and genealogies, case studies and interview of key informants. Traditionally in demographic literature very little attention was given to qualitative data. Because of extensive field-work carried out by different demographers including Caldwell and Hill (1988) qualitative data have been gaining importance in demography since then.

Qualitative data have the advantage of explaining the way things are, while they are weak in measuring the level and magnitude of change in the demographic variables. Like the quantitative data, it has both the advantages and disadvantages. The data obtained from qualitative studies are very difficult to process and at times standardization of results is very difficult meaning that different researchers may come up with different conclusions with the same set of data. In recent years there has been substantial development in this field and consequently more and more qualitative data are available in the field of population studies.

### 11.4 Vital Registration

Censuses and surveys provide cross-sectional data i.e. the state of population at a fixed point in time. Vital Statistics viz; data on births deaths, migration, marriages, and divorces etc; provide data on a continuous basis. Therefore these data are very useful in studying population dynamics over the years.

*Vital registration act in Nepal was passed in 2033(1976/77). With the implementation of this law and regulation passed in 2034 (1977/78) vital registration in Nepal was launched in 1<sup>st</sup> Baishakh 2035(14<sup>th</sup> April 1978). Later this system was gradually expanded to all the 75 districts of the Kingdom and is currently maintained by Ministry of Local Development. Provision has been made for the recruitment of a VDC secretary, who also serves as the registrar for the Vital registration.*

#### The vital registration system in Nepal covers the following events

- a) Birth
- b) Deaths
- c) Marriage
- d) Migration and finally
- e) Divorce.

Very little efforts have been made to increase the coverage of the vital registration system in Nepal. Penalty of not registering a vital event is nominal and the use of registration certificate is also limited. As a consequence, most of the events are not registered or even if they are registered, they are registered very late, that is, years after the events have taken place.

At the same time, very little evaluation studies have been carried out in this regard and recently no evaluation studies regarding the effectiveness of coverage and improvement of the vital registration system has been done. Thus no body knows the percentage of under registration of vital events and whether it is improving or deteriorating. Thus the data obtained from the vital registration system are not used for demographic analysis.

### 11.5 Population Register:

Another source of population data is Population Register, which provides a continuous record of changes in population movements. Population movements and changes therein are registered in population registers in an integrated manner. There are a number of countries, which maintain population registers. Like the vital registration system if the population registers are not maintained regularly then data available becomes less useful. There are a number of countries such as Japan, Taiwan, Germany, Scandinavian countries and Italy etc; etc; where population register data have been well maintained. Basically the population registers are maintained for data on a) vital events b) Current estimate of the population both at the national and sub-national level and c) statistics on migratory movements.

Although these registers provide useful data, this system is not maintained in Nepal.

### **11.6 Administrative Statistics/Official Records:**

Population related data are also available through administrative records/official records. These records are maintained as part of the service delivery by the government. For example, the Family Health Division under Department of Health maintains data on number of sterilization performed under the mobile sterilization services. More detailed data on the health services delivered are available through the annual report of the Department of Health. In a likewise manner, the annual reports and different reports published by the Ministry of Education and other ministries are important sources of data related to population.

#### **Issues concerning demographic and health data in Nepal**

- Collection and analysis of gender-disaggregated data need to be strengthened in order to increase status of women in social and demographic process.
- Comprehensive and reliable database need to be developed allowing linkages between population, education, health, poverty, family well-being, environment and development issues.
- Timely and quality data need to generate in cost effective approach to meet the millennium development goal, ICPD PoA and others.
- Data need to be analyzed in depth for proper utilization
- Close coordination among various data collection agencies need to be strengthened. Duplication and redundancies in the statistics on population need to be avoided.
- Measurement of migration need to be covered for assessing its implications.
- Data bank has to be geared down to ecological regions, development regions, districts, village and wards level.
- Vital data especially on births and deaths need to be strengthened.
- National level coordination mechanism has to be strengthened to integrate the information collected by various agencies into a single system to minimize errors.

#### **Demographic and Health Research:**

Population and health research works undertaken by government sector agencies are mainly carried out by the Ministry of Health and Population, Central Bureau of Statistics and others. Tribhuvan University, Central Department of Population Studies is actively contributing to meet the research needs in the field of migration, employment, labor force, child labor etc. The Center for Economic Development and Administration of Tribhuvan University

has also been conducting research on population and environment, mortality, women participation etc. In addition, FPAN and many other NGOs have also been working on population and RH research works. The following are important issues on research.

- Close coordination among concern research institutes need to be strengthened to avoid duplication of research works.
- Research on basic and applied biostatistics, bioinformatics, clinical trials, epidemiological, sexuality, gender roles, applied demography etc. will have to be carried out in accordance with the national development strategies.
- Proper dissemination of research findings is necessary for the sharing of information and making use of research findings effectively.
- Serious attention need to be focused on the effective use of research outcomes/recommendations for policy and programme development.
- Socio-cultural and economic research need to be built into population and development programmes and strategies.

## Chapter 12

# Population Policies and Programmes

Policy is defined as a “formalized set of procedures designed to guide behavior” (Weeks 1986). Population policy may be defined as deliberately constructed or modified institutional arrangements and/or specific programs through which governments influence, directly or indirectly, demographic change (Demeny, 2003). It refers to formalized set of procedures designed to guide human behavior about population related activities. Policies are designed keeping in view the future perspectives in mind. For example, population policy makers may envisage that if the present trend of fertility continues, current population will continue increasing and may lead to overcrowding in the future. Thus, fertility-reducing policies are intended so that the future could be changed. Population policies, in general, can be either direct or indirect. Direct policies affect population variables directly. The example, shown earlier, is the example of a direct policy intervention. Similarly, encouraging immigration can result increase in growth rate. Indirect policies refer to those policies, which do not have a direct bearing on the population variables but have indirect effect on them. For example, it can be observed that total fertility rate is likely to be much lower for women who are educated. Thus policies, which increase the level of education among women, will have indirect effect on the reduction of fertility.

Maintaining the existing status of population indicators is also known as direct population policy. As this envisages that continuation of present situation is desired for the future and maintaining a status quo will lead us there. Different sources have suggested that indeed the high growth rate of population is having negative impact on different aspects of human life. Thus the policy of reducing population growth rate has always been a priority in Nepal's population policy.

It is well understood that effective policies can have significant influences in overcoming demographic and population challenges of the country. Nepal's population policies have been geared to improve socio-economic situation of the country. Population policies of Nepal have been guided through the periodic plans of the country. Nepal has adopted the policy of incorporating population concerns into the periodic plans of the country ever since the first five year plan launched in 1956. Population issues have been addressed in all periodic plans of the country. This clearly indicates that Government of Nepal has been concerned on population dimensions ever since the initiation of planned development process in the country.

## 12.1 Review of Population Policies

The initiation of population policies in Nepal goes back to late fifties since Nepal launched its first five year plan. The population related issues, policies and programmes have been gripped more or less in all these periodic plans. In essence, population concerns form a substantial part of the development planning process in Nepal. A review of population policies, strategies, targets and programmes pursued through the periodic plans since 1956 is presented below.

- A. **The First Plan (1956-61)** did not have any specific policy on population; however, in this period there was a programme to redistribute population from densely populated Hill region to thinly populated Terai region. During this period 'The Family Planning Association of Nepal' was also established. This can be considered as one important attribute on population related programmes during this period.
- B. **In the Second Plan (1963-65)**, management aspect of increasing population was addressed through the establishment of Nepal Resettlement Company. Extension of social services and increased employment opportunities through labor intensive schemes were considered as supplementary policies related to population. In this period, the concept of family planning was also accepted in the policy level.
- C. **The first population policy was formally initiated during the Nation's Third Plan Period (1965-70).** There was a chapter on 'Population and Man Power' under the miscellaneous category in the health sector. The main focus was on family planning, however, it took two years to organize and formulate family planning policies and action programmes for the third plan. A phased three-year plan was made for the period 1967-70. The objective was to bring about a reduction in the crude birth rate (CBR). For this a target in terms of acceptors and subsequently distribution of contraceptives was prepared. In the same period Nepal Family Planning and Maternal and Child Health Board was also established under the Ministry of Health.
- D. **The Fourth Plan (1970-75)** suggested two ways to reduce birth rate.
  - i. Bringing changes in socio-economic condition and cultural practices of people, and
  - ii. Implement family planning programmes at different levels. For this, national, regional and district level targets on family planning were also set.

During this period, a task force was formed in 1974 to prepare a population policy document for Nepal and the task force prepared a population policy document for Nepal. This policy covered all the three areas of population, viz; (a) fertility (b) mortality and (c) migration.

E. **The Fifth Plan (1975-80)** followed the major recommendations of the Task Force mentioned above. The plan realized the adverse effects of high population growth. It envisaged to reduce birth rate, regulate immigration, promote planned migration, and to develop small towns where there were no urban areas. Various demographic targets were set. During this period, a vital registration system was introduced in some districts as a pilot project under UNFPA assistance. A Population Policy Coordination Board was also constituted in this period. Later this organization developed into National Commission on Population (NCP).

F. **The Sixth Plan (1980-85)** included a chapter on population by dealing with both policy and programmatic issues. During this period many demographic targets were set, family planning programmes were popularized. In this plan, the due attention was given to manage population distribution and internal migration. During the plan period in 1983, National Population Commission developed a National Population Strategy, which was approved by the government of Nepal. This strategy contained both short term and long term strategies. Major policy goals were to reduce TFR from 6.3 to 5.8 by the year 1985, to 4.0 by the year 1990 and to 2.5 by the year 2000.

Similarly the Sixth Plan also aimed at reducing the population growth rate of 2.6 percent to 2.2 percent by the year 1985 to 1.6 percent in 1990 and 1.2 percent in the year 2000. Given the socio-economic situation of the country as well as relatively weak implementation of different population programs, it soon became obvious that most of these targets were overly ambitious.

G. **The Seventh Plan (1985-1990)** brought into picture the concept of unmet need for contraception. It accorded due priority to unmet need in family planning and at the same time attempted to integrate population programmes with other development activities such as agriculture, forest, environment and so on. As it was realized that low status of women in the Nepalese society was an impediment to the control of fertility, a number of activities were proposed to uplift the status of women in the Nepalese society. In the policies, plans were made to mobilize both the local and non-governmental organizations to this effect. In fact the policy document was more comprehensive in dealing with different issues such as a) women and development b) child development c) family planning and the concept of unmet need d) population and development and e) various other social issues. Policies dealing with the control of immigration were also formulated, however, the implementation of these policies was very weak and thus it did not have desired effect on the control of population growth.

H. The objectives of the **Eight Plan (1992-97)** were to bring about a balance between population growth and socio-economic development and the environment. This will naturally result in the helping people fulfill their basic human needs. This was the first plan

formulated and implemented after the restoration of democracy in the kingdom. The targets set by the 7th plan were found to be too ambitious and were accordingly revised in the eighth plan. The revised major targets were:

- To reduce TFR from 5.8 to 4.5.
- To increase the life expectancy from 54.4 to 61 yrs.
- To reduce IMR from 102 to 80 per thousand.
- To reduce child mortality from 165 to 130 per thousand.
- To reduce maternal mortality from 850 to 720.
- To regulate internal migration.

The eighth plan gave priority to the family planning and maternal child health programmes, and women's development programmes. However, the assessment of the eighth plan suggested that performance of the population programmes in the eighth plan was less than satisfactory.

I. **The Ninth Plan (1997-2002)**

The ninth plan was developed as a part of a 20 years long term plan. The main thrust of the ninth plan is poverty alleviation.

The ninth plan has taken population management as one of the major sectors of development thrust. The long-term objective of reducing the total fertility rate to the replacement level within the 20 years has been adopted. The objectives of the Ninth Plan are:

- To attract couples towards a two-child family norms.
- To implement various programmes to bring down the fertility rate to replacement level within 20 years.
- To make quality family planning and maternal child health services easily accessible and available.

Specific targets of the Ninth Plan are presented in Table 12.1. The Table 12.1 indicates that most of the targets set for the 9th plan in the population sector have been met.

**Table 12. 1: Targets of the Ninth Plan**

Indicators	Target of the Ninth Plan	Status in 2001
TFR	4.2	4.1
CPR	37.0	39.3
Percent of Married woman aged 15-49 years	36.1	42.1
IMR	61.5	64.4
CMR(U5)	102.3	91.2

Source : NPC, 1998 and MOH 2002.

## J. The Tenth Plan (2002-2007)

Poverty alleviation is the overriding objective of the tenth plan to promote faster broad based economic growth, equitable access to social and economic infrastructure and resources for the poor and marginalized groups, and ensure social inclusion. In the context of population related issues, many of the commitments made during ninth plan period have been renewed for the tenth plan period. The progress achieved during the ninth plan period on population and demographic issues is commendable in several areas, however it should be noted that gains have been made from a relatively low base. There is a need to continue further for having more impressive results. The major concerns have been incorporating population issues into the total development process and bringing behavioral change for accomplishing the demographic targets.

### Long term Concept

The long term concept on population management of the country has been to achieve the replacement level fertility by 2017 and to contribute towards poverty alleviation through educated, healthy and skilled human resource development for having a prosperous society.

### Objectives

The objectives of the tenth plan concerning population management are as follows.

1. To associate the people into development activities through the development of small and quality family.
2. To systematize the migration process.

### Quantitative Targets and Current Achievements

The quantitative targets set for the tenth plan period are as follows:

**Table 12. 2 Targets of the Tenth Plan and Progress Status 2006**

S. No.	Description	Status of the Ninth Plan	Targets of the Tenth Plan		Status in 2006*
			At expected growth rate		
			3.5	At Normal growth rate	
1.	Total Fertility Rate	4.1	47	3.6	3.1
2.	Contraceptive Prevalence Rate (%)	39.3	45	46	48
3.	Infant Mortality Rate (per 1000 live births)	64.4	72	47	51
4.	Child Mortality Rate under 5 years (per 1000 live births)	91.2			65

\* Nepal Demographic and Health Survey, 2006

Source: Ministry of Health and Population, National Planning Commission

Table 12.2 indicates that almost the targets set for the tenth plan has been met by the year 2006.

### Strategies:

The following strategies have been set for accomplishing specified objectives of the tenth plan as stated above.

- i. Strategies relating to first objective of the tenth plan, i.e. promoting small and quality family are the followings:
  - Easy access to reproductive health services, delayed marriage and encouragement in breast feeding.
  - Public awareness on massive scale has been emphasized in population management.
  - Special attentions and programme has been carried out by targeting on adolescent and youth (10-24 years) groups.
  - Emphasis has been given on effective population management through the review of population related laws and policy reforms.
  - Special emphasis towards the enhancement of family and social status of women, skills development and increased employment opportunities for women, women literacy and education for girls.
  - Formulation and implementation of population education programmes and enhancement of educational institutions significantly.
  - A policy of increasing the participation of local bodies has been pursued as per decentralization concept while undertaking population management programmes.
  - A policy of undertaking population management programmes has been adopted on participatory approach as the concept of partnerships with the private and non-government sector.
- ii. In accordance to second objective of the plan, both internal as well as external migration will be made systematic.

## K. Three year Interim Plan 2008-2010

According to the census of 2001, Nepal's total population reached 23,151,423 and the annual growth rate have remained high (2.25%). If this growth rate is maintained, the population of Nepal will double in 31 years. Hence effective management of the population has become a compulsory need. In the Population Perspective Plan (PPP), it has been integrated with health and family planning programs and attempts have been made to coordinate with other sectors. By 2017, the total fertility rate has been targeted to be equal to the replacement level. The concept has thus been formed to help all the Nepalese people live a quality life with reduction of poverty and hunger by owning different aspects of population management as the integral part of development and human rights, through



effective population management. It has not been possible to adopt the program of study, research monitoring and evaluation get success to avoid duplication in the implementation of population related programs and in the review of the policies and laws of ministries and sectoral agencies related to population as well as coordination among sectoral agencies. This plan is focused on the adoption of the action plans to the Nepalese context endorsed by international conferences and with commitments from the government, along with the development of institutional mechanisms of the network to reach population management to the doorsteps of the people at the local level.

### **Review of the Situation**

The annual growth rate of the population of Nepal is still high. In 1981, The total fertility rate was 6.3, which dropped to 3.1 in 2006. The crude birth rate has reached 28.4 and the use of family planning means at 48 percent. Although the fertility rate in urban areas is decreasing, it is still high in rural areas. The number of dependents in the structure of population (children and old) is higher. Expected outcomes have yet been achieved in reproductive health. Likewise, there has been duplication in the implementation of programs related with population and inadequate coordination among sectoral programs. Although the indicators of the elements influencing the change in population like birth, death and migration have pointed at positive directions for the last few decades, they are not adequate.

### **Problems, Challenges and Opportunities**

#### **Problems**

At the national level, total fertility rate has started to decrease. But the total fertility rate in rural areas is higher than that of urban areas. There seems to have been duplication in the implementation of population programs and problems of coordination sectoral agencies. It has not been possible to reduce maternal mortality rate and infant mortality rate as hoped for due to superstitious beliefs, early marriages on a customary manner, and bearing children at an early age. The migration process has not been properly managed and is still high.

#### **Challenges**

It has not been known to what extent the implementation of the action plans endorsed by international conference with commitments of Nepal has occurred in the Nepalese context. As the number of children and those among the elderly has been found to be high, programs targeting the children and the old have not been formulated and implemented. Effective programs, to reach population management programs to the doorstep of the people, have not been formulated.

#### **Opportunities**

Despite different problems and challenges in relation to population management, increasing awareness due to education and communication media is accepted as the major opportunity. Likewise, the policy commitments at the national and international levels have become another positive aspect. Further, a condition prevails for the continuity of different programs being launched in this sector through NGOs and the civil society. In addition to this has continuity of international cooperation in this sector another important opportunity.

#### **Long Term Vision**

The long term vision is to provide the help to the Nepalese people live a quality life for all by owning different aspects of effective population management as an integral part of development and human rights. By 2017, the vision is to bring the fertility rate to the level of replacement through the medium of women empowerment and poverty alleviation.

#### **Objectives**

Nepal's population policy will be effectively combined with the goal of poverty and hunger reduction. Special objectives are as follows:

- To support poverty alleviation by reducing the population growth rate.
- To integrate population management process with development programs.
- By promoting reproductive and sexual health rights of the females and males,
- To manage the migration process.

#### **Strategies**

- Based on the Population Perspective Plan, management of the programs will be gradually carried out in order to provide access to the people at the village level by preparing an action plan related to population.
- Priority will be accorded to public awareness works for the targeted groups in order to develop small families as well as to reduce the population growth rate.
- Special programs targeting the youth (10-24 years) will be launched with priority.
- In order to implement, monitor and evaluate the conducted programs related to population by the government, non-government or the private sector in a coordinated manner, the agencies from all sides, at the central and local levels will be made active. Likewise, at the local level, programs for population management will be extended.

- By reviewing the current policies related to population, population management programs will be made effective through the promotion of male and female reproductive and sexual health rights. For this, encouragement will be given to small families for the education of women, the importance of family planning, late marriages, breastfeeding, and nutrition reproductive health.
- Programs will be launched directed towards youths, *Dalits*, *Adibasi*, *Janajatis*, women and senior citizens through debates on population and related subjects, and the stakeholders related to population management.
- In order to launch and coordinate population related programs in an effective manner, by enhancing the capacity of the manpower related to population, the arrangement to look at population aspects in the concerned agencies will be done by establishing population units at the local level.
- Institutional reforms will be made on information and statistics for giving emphasis on study and research related to population.
- In order to manage migration, by identifying programs in a coordinated manner, appropriate policies and programs will be formulated and emphasis will be laid on study and research.
- In order to manage internal migration, development of small towns will be emphasized and special attention will be given to urban area management by enhancing the inter-linkages with urban regions.

### **Policy and Working Policies**

To maintain population balance by reducing the population of the country has remained a challenge. Likewise, the fertility rate in urban areas has come down to the level of replacement, while it is still high in the rural regions. In order to strengthen population management the following policies are adopted:

- The programs of population management will be launched at the central and local levels by integrating it with other programs, linking population policy with MDGs and the eradication of poverty and hunger.
- By advancing the concept of small and quality family, in order to decrease population growth promotional measures will be adopted in the rural areas.
- Emphasis will be given to make targeted youth programs result oriented Statistical system will be strengthened for population management from the gender perspective.
- Priority will be given to study and research on population.
- Institutional development will be carried out in order to make adjustments on the population related studies and research carried out by the private and non- government sector within one umbrella.

- Migration will be considered as an important part of population management.
- In order to promote the reproductive and sexual health rights, local level participation will be enhanced for increasing the access to population management programs.
- Forward and backward linkages of population with other aspects and sectors related to it will be established.
- Measures to make studies and research on the different aspects of population will be adopted.

### **Programs**

The programs related to population management to be carried out during the Plan period have been categorized under the following five headings.

#### **Awareness Programs**

- To run awareness programs related to population targeting different classes/groups.
- To make diagnosis and consultations to bring positive changes in the conduct of youths.
- To run programs on public awareness in an effective manner also in local languages to inform on matters like:
  - controlling the impact on women due to terror against them;
  - motivation for late marriage;
  - advocating the importance of family planning;
  - encouraging breast-feeding; and
  - Sending daughters to schools.

#### **Capacity Enhancement Programs**

- To arrange for a fixed person to look after population aspects in local bodies.
- Practical and competency enhancement program related to population management including the promotion of female and male reproductive and sexual health rights will be conducted.
- Orientation programs will be conducted in coordinate and partnership at the central and local levels.
- In order to mainstream population in development, capacity related to gender, population and development will be enhanced.

#### **Encouragement-oriented Programs**

- Encouragement programs will be developed for living a small and quality family life through population management programs.

- Programs will be conducted to make necessary statistics and IEC materials available to information centers to be established at the district level by strengthening Population Management Information (PMIS).

#### **Targeted Programs**

- Targeting the adolescent youth (10 – 24 years), adolescent friendly programs will be run for their personality development including reproductive health (also male) and sexual health rights.
- Population management will be diagnosed, by running programs related to population targeting the women, *Adibasi Janajatis*, *Madhesis*, Muslims, deprived and other groups.
- Programs will be run especially to provide access to the target group by strengthening the availability of contraceptives.
- To make necessary services available to health institutions by considering the impacts on physical and mental health from terror against women as the major theme of public health.

#### **Policy and Institutional Strengthening Program**

- Program to integrate HMIS and PMIS will be run.
- Mechanism to receive information from local bodies will be developed.
- Study on international migration will be made to keep records at entry points in a gradual way.
- Different studies and research will be adjusted with the identification of NGOs/CBOs related to migration.
- Initiatives will be taken for the formation and implementation of actions related to population for the management of urban areas.
- Programs to deliver population information up to the lower level in partnership with government and NGOs at the local level.
- Giving attention to major subject matters of perspective population planning, detailed action plan will be prepared in a coordinated way. In this process, coordination with different stakeholders' agencies will be ensured, by making local bodies focal points.

#### **Expected Outcomes**

- With the capacity enhancement of human resources and institutions involved in population management, the institutional system will be strengthened.
- Population management will be made effective by raising awareness related to population among the youth.
- The relevance of the programs will be increased with easy access of the targeted communities particularly *Adibasi Janajatis*, people with different languages, disadvantaged groups etc. to the population related programs.

- Policy and institutional basis for managing the migration process will be prepared. Quality of programs will be increased with the increase in coordination and partnership between population, health and development program.
- District information centers related to Population management will be strengthened.
- A foundation will be laid to manage migration with the increase in rural urban linkages for initiating the formation and implementation of acts.
- For the management of urban areas, acts, rules and action plans related to population will be prepared. Institutional and systemic foundation will be laid and all the stakeholders would experience the feeling of ownership and will receive the meaning of the programs.

#### **Implementation, Monitoring and Evaluation**

The concept of public private partnership will be adopted in order to make the effective implementation of programs related to population as expected. Under this, especially awareness-oriented programs, capacity enhancement programs, targeted programs and incentive and reward programs in the context of NGOs and local women group, youth community and civil society, will be made active partners. The reaction of the targeted groups on the programs will be considered as a base for program reforms. In the context of policy and institutional strengthening at the central level, the role of NPC, MoHP and at the local level concerned offices and stakeholders, will be made further effective, also in the program implementation process. Policy, program and institutional coordination will be given special attention. Likewise, efforts will be made to make monitoring and evaluation result oriented. For this, the review of programs will be institutionalized. Further resources, other inputs and human resources will be effectively mobilized. Reforms after making the right and proper use of such resources will be carried out. For monitoring, the competence of human resources will be enhanced, and will be mobilized as far as possible. Monitoring and evaluation reports will be used as a base for the preparation of annual programs.

#### **L. Three Years Interim Plan Approach Paper (2010/11 - 2012/13)\***

##### **Sector: Population and Human Resources**

The policy and practice of incorporating population management as integral part of planned development had been initiated in the Eighth Plan. According to the Census of 2001 the total population of Nepal was 23,151,423 and annual growth rate was 2.25 percent. As the food production growth does not keep with the growth of population it has been necessary to carry out population management programs in coordination with the development programs.

From the efforts made in the past, reproductive and health services have been expanded in the country. Although this has led to the reduction in the rate of

infant, child and maternal mortality, there is much to do from the perspective of population and human resource management. As compared to other countries, rate of population growth is high and average life expectancy of both women and men is low. In the composition of population the largest group is youth which intimates the possibility of continued growth in future. The trend of urbanization and migration are on the rise. However, employment opportunities are not increased proportionately. The labor force lacks basic skills and competencies. Infrastructure required for socioeconomic development is inadequate. Increasing unemployment among the educated people raises question of relevance, utility and effectiveness of education system. The practice of developing human resources based on systematic projection of human resource requirements of the country across different sectors is yet to be established. On the other hand, there is a rising trend of highly skilled professionals produced by the country through huge investment are leaving the country for overseas employment. Poverty, low rate of economic growth, high dependency ratio, and current rate of morbidity and illiteracy are obstacles on the way to human capital formation. Low rate of economic and human development have slowed the pace of demographic transition. However, expanding infrastructure, increasing literacy and reducing poverty as well as birth and mortality rates are paving way for population management and human resource development. The Plan visualizes integrated population management programs focusing on all geographic regions and people from all class, caste, ethnicity and gender.

### Objectives

1. To lower birth rate of Nepal to replacement level by 2022 by enhancing accessibility of people from all class, caste, region and age groups to population management programs.
2. To contribute to socioeconomic development of the country through proper management of population and human resource development.

### Strategy

1. Emphasize on balanced regional distribution of population through proper analysis and management of population growth as well as through regulation of migration.
2. Facilitate demographic transition by mainstreaming population in all sectors and aspects of development.
3. Make population management and human resource development mutually reinforcing and synergistic through multi-sectoral collaboration and coordination.
4. Deliver all services and facilities related to population management and human resource development at the doorsteps through one door system and decentralization.

### Working Policy

- 1.1 Appropriate reforms will be initiated at the policy, institutions and programs levels, after reviewing existing policies and programs related to population management to improve coverage and effectiveness.
- 1.2 Population growth will be managed by promoting the use of contraceptives as well as through education and awareness.
- 1.3 Efforts will be made to achieve balanced regional distribution of population through balanced distribution of physical infrastructure and socioeconomic services in rural and backward regions, promotion of satellite towns, development of integrated settlements and management of migratory trends.
- 1.4 Appropriate population policy will be formulated keeping in view with internal as well as international migration.
- 2.1 By increasing regional investment in infrastructure, education, health, employment as well as inclusive and equitable development, access of people from all class, region, caste, ethnicity and gender to quality services and facilities will be improved.
- 2.2 Population and human resource development will be integrated and mutually interlinked in all national, regional and local level interventions by identifying potential contribution of different sectors to population management.
- 2.3 For the personality development of every citizen, enabling environment will be created to engage them in productive work based on her/his talents and interests.
- 2.4 Appropriate programs will be carried out to reverse the trend of brain drain.
- 2.5 Awareness will be raised among communities and all stakeholders about inter-linkages between population, environment, resource consumption, poverty reduction and sustainable development.
- 2.6 Immigration trends will regulate, stemmed or managed based on the number and characteristics of immigrants.
- 2.7 Population education will be launched as campaign.
- 3.1 Private, nongovernmental and cooperative sector institutions will be encouraged to contribute to the development of employable skills and human resources particularly in the rural areas.
- 3.2 Emphasis will be given on capacity building of all institutions working in population management and human resource development at all levels.
- 4.1 Intensive services related to awareness, reproductive health, mother and child health and family planning will be made available to promote quality families after identifying target groups.

- 4.2 Special programs will be carried out to address the nutritional needs of children, pregnant women, *mothers of new born babies*, senior citizens and vulnerable people.
- 4.3 Government, nongovernment, private and cooperative sectors will be mobilized in a coordinated way for population management and human resource development.
- 4.4 Institutional strengthening of national statistical systems will be done to carry out study and research, collect and process data and develop effective information system.
- 4.5 Based on the results of National Census - 2011, an outline of population management and human resource development plan will be prepared by making sector wise projection of human resources.

#### Expected Outcome

1. Birth rate would have been reduced with the considerable increase in contraceptive prevalence rate.
2. Strategy for systematic development of human resources would have been prepared and implemented.
3. Access of targeted groups to socioeconomic services and facilities would have been increased thereby promoting human development.
4. Population growth rate would have been reduced.
5. Mortality rate would have been reduced.

\* Source: *Three Years Interim Plan Approach Paper (2010/11 - 2012/13) Draft, National Planning Commission (www.npc.gov.np)*

### 12.4 Population Perspective Plan (2010-2031)

The concept of population perspective plan (PPP) was first conceived in the ninth five year plan (1997-2002). The plan was brought in response to reduce fertility to replacement level and alleviating poverty. Though not formally termed as PPP, the ninth plan adopted long term policy to reach replacement fertility along with socio-economic development. Following the ninth plan, the tenth plan (2002-2007) advanced the concept of long term population policy. A need was felt to develop a PPP in the plan. Further, the tenth plan was based on the Poverty Reduction Strategy Paper (PRSP) which provided following grounds to conceive PPP:

- Integration of population concern at policy level so that the PPP becomes a comprehensive document that compliments with other sectoral plans;
- To help prioritize specific sectoral policy/programme areas related to population that bear on aspects of poverty alleviation and sustainable development; and
- To attempt to address commitments that Nepal has made in endorsing programme of action related to issues of population in

various international forums, particularly ICPD 1994 and MDG 2000-2015.

#### Objective of PPP

In broader perspective, the PPP admits the programme of action of ICPD and MDGs in Nepalese context with overall vision of population management integrating in development policies and programmes. The specific objectives include:

- Integration of population concerns in all areas of development
- Facilitate rapid demographic transition through:
  - Expanded and effective access to health care for poor/vulnerable groups
  - Right-based comprehensive reproductive health care
  - Universal access to quality primary education
  - Gender equality and empowerment of women
  - Decentralised governance and community participation
  - Facilitate spatio-economic development processes conducive to poverty alleviation.
- Suggest implementation mechanisms and institutional arrangements for the effective coordination, and monitoring of population programmes.

#### Scope of PPP

The PPP identifies the following population themes to integrate with development activities and population management:

- Demographic analysis
- Reproductive health
- Economic dimension
- Poverty dimension
- Spatial dimension
- Gender mainstreaming
- Social dimension
- Decentralization
- Institutional mechanisms

**The Plan of Action of PPP** constitutes the core of PPP with goals and strategies to attain the expected outcomes of the long term population plan. To make the PPP really working an appropriate action plan is required to be developed. Therefore, this plan of action is designed to translate the broader concept and vision of PPP into people's wellbeing. The plan of action consists

of different sectors and sub-sectors within the broader dimension. Making it comprehensive, the action plan has been designed in log frame format to meet the vision endorsed by the PPP.

In Summary, A perspective plan is basically an attempt to manipulate the prevailing trend to achieve the desired goals and cannot provide the details as in periodic plans of shorter duration. Therefore, this is an indicative plan with statements on the major objectives for population and development with projection of population and policies/strategies to be adopted to achieve the long term targets. It seems necessary to explain that this perspective plan will be terminating in 2031. This long-term perspective plan will be an indicative plan of action for future periodic plans. In effect, this population perspective plan should be considered as a blue-print to be refined through revisit during the formulation of the next periodic plans as new information becomes available.

### 2.5 Local Level Population Management Programme

Achievements made in the social sector like population management can be felt in the longer period only. By having encouraged population for small family size contributes towards decrease of population growth leading to poverty alleviation in the one hand and also contributes towards human resource development and management in the other hand. Balancing between population growth rate and new opportunities for employment generation helps in achieving qualitative employment management. Reduction in population growth rate leads to better utilization of the local resources, which in turn makes the balanced development and migration management easier.

Realizing the facts, Population Division has launched Local Level Population Management Programme (LLPM) implemented through the lead role of District Public Health Office with coordination with District Development Committee from FY 2065/66 in 10 districts. Currently LLPM are in 50 districts (2067/68 BS) and will target to complete all 75 districts from FY 2068/69. The major programmes under LLPM are Population Issue finding, ageing, Safe migration, establishment of Districts population information centre, gender, adolescent and youth, preparation of district population report etc. Though it is new programme at local level, so expectation having proper management of population growth, composition and distribution leads to quantitative and qualitative accomplishments in materializing the long term concept on population.

## Chapter 13

# International Conferences

### 13.1 International Conference on Population and Development (ICPD)

The International Conference on Population and Development (ICPD) was held in Cairo, Egypt from 5 to 13 September, 1994. The Conference was organized under the auspices of the UN. It was the largest international conference on population and development ever held, with 11,000 participants from governments, UN agencies and organizations, INGOs and the media. More than 179 countries including Nepal took part in negotiations to finalize a Program of Action in the area of population and development for the next 20 years.

*The Program of Action (POA), which was adopted by acclamation on 13 September 1994, endorses a new strategy that emphasizes the integral linkages between population and development and focuses on meeting the needs of individual women and men, rather than on achieving demographic targets. The key to this new approach is empowering women and providing them with more choices through expanded access to education and health services, skill development and employment and through their full involvement in policy and decision-making processes at all levels. Indeed, one of the greatest achievements of the Cairo Conference has been the recognition of the need to empower women, both as the end in it and as a key to improving the quality of life for everyone.*

#### 13.1.1 Nepal's response to ICPD

Nepal is one of the signatories of ICPD POA. So, Government of Nepal is fully committed to implement the POA of ICPD. In response to the Cairo Conference, three new ministries were established in 1995. They were: Ministry of Population and Environment, Ministry of Women and Social Welfare and Ministry of Youth and Sports. Later on, these ministries have been reformed with merging with Other related ministries however the portfolios of the ministries are not gone beyond the recommendations of the conference.

To follow up ICPD POA, a high level meeting of the countries from the ESCAP region was organized in Bangkok, Thailand in March 1998. The Meeting mainly concentrated on solving the problems being faced by the member countries in implementing the ICPD/POA. Another high level meeting as a follow-up to the POA of ICPD was held in the Hague, Netherlands in February, 1999 (also known as the Hague Forum). This meeting was attended

by the representatives from government and non-governmental sectors as well as parliamentarians. At the Ministerial level meeting Nepal was represented by the Minister for Population and Environment. In addition to the Forum, which is also known as the ICPD+5, Nepal has also participated in the Special General Assembly on Population at the UN. A ministerial level "Fifth Asian and Pacific Population Conference was held in Bangkok in December 2002. During this meeting Nepal reiterated its commitments towards the ICPD/POA.

Major quantitative goals of ICPD and the achievements so far, in this regard, have been summarized below:

#### 13.1.1.1 Reproductive Health and Family Planning

*All countries should strive to make reproductive health care service accessible through the primary health care system to all individuals of appropriate ages as soon as possible and no later than 2015.*

Reproductive health service is a major component of basic health services being delivered by all of the health institutions. To further increase access of these services these services are being offered as PHC outreach services, which are offered twice or thrice a month. These services at the moment are targeted towards currently married women of reproductive age.

*All countries should strive to develop referral system for treatment of pregnancy complications.*

In order to solve the problems of pregnancy complications a concept of Basic and Comprehensive EOC services has been planned and is being implemented. At present PHCC /Health posts serve as basic EOC service facilities and Hospitals perform as comprehensive EOC service facilities. For obstetric services, although referral system has been in place, it does not function well. Moreover, for the basic as well as comprehensive EOC services these health institutions need to have adequate equipments and trained manpower. Although the department of health is working towards these effects it might take quite some time before these services are available at the peripheral level regularly and the referral system works well.

*All countries should take steps to meet the family planning needs of their population by the year 2015.*

In Nepal, the Contraceptive Prevalence Rate (CPR) is increasing gradually over the years. During the last 5 years, nearly a ten percentage point increase in the CPR was observed. Current CPR as indicated by NDHS,2006 is around 48 percent. This survey also indicated that although the unmet need has declined a little bit this is still quite high i.e. around 25 percent. This indicates that not only should the family planning program cater towards this unmet need but also work towards increasing demand for the FP services.

#### 13.1.1.2 Mortality

*All countries should make access to basic health care for all by 2000.*

The government of Nepal has established a sub-health post or higher level health institutions at each and every VDC in the Kingdom. Moreover, to provide basic services a PHC outreach services are also offered from sub-health posts to areas further away from the health institutions. These policies and programmes of the government of Nepal have increased the availability and accessibility of the health services to common people. Currently at the governmental level there are 3,126 sub health posts, 677 health posts, 209 PHCC, and 81 (Zonal, district and center) hospitals throughout the country.

*Specific infant and child mortality-reduction goals aim to reduce the gap between developed and developing countries as soon as possible.*

The goals of the Second long term health plan are to achieve the IMR and child mortality of 34.4 and 62.5 and a life expectancy of 68.7 by the year 2015. For this, besides the regular health services, government of Nepal has prioritized following programmes:

- Immunization
- CDD
- ARI
- Nutrition including Micro-nutrition programmes

Currently IMR is around 48 per 1000 live births and under 5 mortality is around 61 per 1000 live births. Although mortality especially among children is decreasing, still a lot needs to be done to further decrease infant and child as well as adult mortality in Nepal to meet the long term objectives stated earlier.

*By 2015, all countries should aim to achieve an infant mortality rate below 35 per 1,000 live births and an under-5 mortality rate below 45 per 1,000.*

Because of high levels of infant child mortality in Nepal, Impressive decline in mortality has been achieved during last 10 years through basic health programmes such as immunization, vitamin A supplementation and CDD, ARI, programmes. However to attain a target of IMR of 35 per 1000 live births, preventive programmes are not enough. Thus health institutions need to be strengthened to curb the IMR.

*Countries with the highest levels of mortality should aim to achieve a life expectancy at birth greater than 65 years by 2005 and greater than 70 years by 2015.*

Nepal is one of the few countries where mortality is still high. Estimate of current life expectancy (both sexes) is around 59.7 years. The faster decline in infant and child mortality experienced during last 10 years were to continue

in future, then there is a good chance that the target for the expectation of life at birth for the year 2015 could be met.

### 13.1.1.3 Education

*All countries should strive to ensure complete access to and achievement of primary education by both girls and boys as soon as possible and before 2015.*

In this respect the Ministry of Education has been helping in the increase of primary schools in different parts of the country.

## 13.2 Beijing Conference

A United Nations conference was held in Beijing in 1995, where Nepal was one of the 181 countries, which took part in the conference. This conference focused on gender equality and women empowerment. These issues are pertinent in the context of Nepal as the status of women in Nepal is low and the Nepalese delegation expressed its commitment to the Beijing Plan for Action (BPFA). In this conference 12 areas of critical concern were identified. It is nearly 8 years since the conference was held in Beijing. It is of important to know what has been achieved in Nepal, since then. The following discussions are based on a report by Baidya (2000).

### A. Women and Poverty:

Since the Beijing conference, Nepal has implemented the 9th plan with several programmes to alleviate poverty. For example 9th plan attempts to reduce the proportion of people living in absolute poverty from 42 percent to 32 percent by the end of the plan period and to 10 percent by the year 2017. Although government of Nepal has taken positive steps in this direction, nevertheless still a lot is to be done to in reducing poverty among women.

### B. Education and Training of Women

There has been substantial progress in the field of education during these intervening years(see education chapter for details).

### C. Woman and health

Although there has been substantial improvement in the health status of the population over the years nevertheless, women's health in Nepal is still at a lower level. This can be seen in chapter 6.

### D. Violence against woman

Nepalese women suffer from different kind of violence including domestic violence and trafficking. For this, an action plan is being implemented to stop girl/woman trafficking. Others plan and programmes include empowerment of women, establishment of women's police cells at centre and at different districts. Nepal's

commitment to this is fully reflected in her attempts to bring about a change in legal provision, budgetary efforts to gender equality. Although, steps are being taken in the right direction, it might take quite some time before their effects can be felt.

### E. Women and armed conflict

In Nepal, issues of the Bhutanese refugees and the problems caused by the Maoist insurgency are two main issues related with women and armed conflict. Bhutanese refugee issue is being tackled diplomatically with the government of Bhutan, however, progress in this area is quite slow.

### F. Women and economy

Labour force participation rate of Nepalese women in the Nepalese economy is quite high, however, employment of women are often confined to less productive sector of the economy. More often women's contribution to the national economy is ignored. The government's commitment to gender mainstreaming and several other programmes such as micro-credit are bringing women to the mainstream of the economy.

### G. Women in Power and Decision Making

In Nepal, women's participation in decision making remains quite low despite launching of administrative reform act and Local self-governance act 1999 by the government of Nepal. government of Nepal has not implemented any affirmative plan in this regard. Institutional mechanisms for the advancement of women

In this regard establishment of Ministry of Women and Social Welfare is an important step in the institution building towards this effect. Moreover, during 2002 government of Nepal organized a National Commission for Women. Establishment of these institutions were made possible specially with the active participation of NGOs active in this field with post Beijing initiatives.

Human Rights of women Nepal's constitution accords equal rights to both men and women. Nepal has amended many laws to improve the human rights of women. However, because of prevailing illiteracy, traditional structure of Nepalese society and cultural bias against women prevents them from fully enjoying human rights. The active participation of civil society is a significant positive factor in this regard.

### H. Women and the media

Although participation of women in the media is slowly increasing, their participation is still very low. In this regard Nepal has formulated a National Plan of Action to increase women's participation in the media but due to ineffective enforcement of the plan there is still a lot to be desired. .



Women and the Environment. As women are the caretakers of the family, environmental degradation affects their lives negatively. In this regard Nepal has undertaken institutional, legislative and policy measures to improve the environment with the establishment of the Ministry of Population and Environment, enactment of Environment Protection Act 1997, adoption of National Conservation Strategy, Creation of the Environment Protection Fund and development of environmental impact assessment guidelines for the development projects. Nepal has also introduced vehicle emission control in the Kathmandu valley and even has banned polluting vehicles. The enforcement of different legal provisions and implementation of policies are weak because of a) lack of awareness in the public b) adequate knowledge among the implementers and c) weak implementation of government of Nepal policies.

#### I. The girl child

In Nepalese society, a strong preference for sons exists. In other words, discrimination against girls starts as soon as they are born. Thus they are deprived in the field of education, health and other sectors. Government of Nepal has taken both legal and social initiatives to address the existing discriminatory practices, however, the progress in this regard is slow mainly because of a) traditional patriarchal attitude b) poverty c) weak enforcement of legal provisions.

To sum up there has been a substantial positive steps taken by the government of Nepal in these twelve points plan of action, however, their effectiveness is limited because of their weak implementation.

## Chapter 14

# Millennium Development Goals

### 14.1. Background

“We will spare no effort to free our fellow men, women and children from the abject and dehumanizing conditions of extreme poverty, to which more of a billion of them are currently subjected. We are committed to making the right to development a reality for everyone and to freeing the entire human race from want.”(UN Millennium Declaration September 2000).

In September 2000, the United Nations general Assembly issued the Millennium Declaration, designed to focus and intensify development efforts. Drawing on the UN conferences of the 1990s, the declaration sets out eight broadly stated goals of social and economics development: the Millennium Development Goals or MDGs and specific, time- bound targets for each goal. A year later, in September 2001, the secretary general issued a Road map to implementation of the UN millennium Declaration, which structured and formalised the goals and targets and put forth a set of indicators to monitors progress.

The goals and targets that make up the MDGs are shown in Table 14.1

**Table 14. 1: MDG Indicators**

MDG	Indicators
Eradicate extreme poverty and hunger	Reduced by half the proportion of people living on less than on dollar a day
	Reduced by half the proportion of people who sufferer from hunger.
Achieve universal primary education	Ensure that all boys and girls complete a full course of primary schooling
Promote gender equality and empower women	Eliminate gender disparity in primary and secondary education preferably by 2005 and at all levels by 2015
Reduce child mortality	Reduced by two -thirds the mortality rate among children under five
Improve maternal health	Reduced by three -quarters the mortality ratio
Combat HIV/AIDs , malaria and other diseases	Halt and begins to reserve the incidence of malaria and other major diseases.
Ensure environment sustainability	Integrate the principles of sustainable development into country policies and programmes : reverse loss of environmental resources.

	Reduce by the proportion of people without sustainable access to safe drinking water
	Achieve significance improvement in the lives of at least 100 million slum dwellers, by 2020.
	Develop further an open trading and financial system that is rule-based, predictable and non discriminatory. This commitment to good governance. Development and poverty reduction -nationality and internationally
	Address the least- developed countries special needs. This includes tariff and quota-free access for their exports: enhanced debt relief for heavily indebted poor countries: cancellation of official bilateral debt: and more generous official development assistance for countries committed to poverty reduction.
	Deal comprehensively with developing countries debt problems through national international measures to make debt sustainable in the long term.
	In co-operation with the developing countries develop decent and productive work for youth
	In co-operation with pharmaceutical companies provide access to affordable essential drugs in developing countries.
	In co-operation with the private sector, make available the benefits of new technologies- especially information and communications technologies.

The Millennium Declaration has set 18 targets and 48 indicators (See Annex 1 for details) for eight goals, which are to be achieved for most goals over a 25-year period between 1990 and 2025. The year 1990 has been set as a base year to monitor the progress of MDGs. The targets and indicators have been prepared collaboratively by the UN, the World Bank, IMF and OECD to ensure a common assessment and understanding of the status of MDGs. Seven goals and their corresponding targets and indicators are monitored at the country level where as the Goal 8 can only be monitored at the global level.

#### 14.2. Nepal's Response

The Government of Nepal has been focusing on the sectors like agriculture, trade and industry, health, education, employment generation, etc. since the first development plan (1956-61) and, revising and refocusing the priorities coming to the current Tenth Plan (2002-2007). In the sixth and seventh plans additional focus was given to meeting the basic needs of people. Similarly, women's development issue was included in the seventh plan and, the more focus has been given to women's empowerment and gender equality since the Ninth Plan (1997-2002) based on UN Convention on the Elimination of all

Forms of Discrimination Against Women, 1979 (CEDAW) as well as Beijing Platform for Action, 1995. The issues of women's development, child development and environment have been getting a good space in the development plans since late 1980s and more space since beginning of 1990s. After the restoration of democracy in 1990, almost all sectors, for instance; education; health; trade, commerce and industry; agriculture diversification; economic liberalization; drinking water and sanitation; decentralization; gender; human, women and child's rights trade; population; environment, etc. have getting more focus on the national agenda. It indicates that the Government of Nepal has been giving attention on implementing provisions of UN and International Declarations including, MDGs in which Nepal is a party.

The sectors/issues enshrined in the MDGs are not the exactly new ones, but they have been included in the various UN Declarations and International Instruments such as, UN Convention / Declaration on Human Rights Declaration, 1948; Elimination of all Forms of Racial Discrimination, 1966; UN Covenant on Economic, Social and Cultural Rights, 1966; Convention on the Elimination of all forms of Discrimination against Women, 1979; Convention on the Rights of the Child, 1989; ICPD, 1994 and other conferences of SAARC together with optional protocols and declarations of special sessions of United Nations. However, the beauty of the Millennium Declaration is that it quantified the targets by the time-line which the state parties should have to monitor the progress accordingly.

One of the objectives of the Ninth Plan (1997-2002) was elimination of poverty, where as the sole objective of the current Tenth Plan is to reduce poverty including enhance human wellbeing and contribute towards attaining the MDGs (poverty level from 38% in 2002 to 30% in 2007). The Plan has set forth a four-pillar strategy - Broad based economic growth; social sector including human development; targeted programs including social inclusion, women's empowerment and gender together with targeted programs for the ultra poor, vulnerable and deprived groups; and good governance including civil service reforms. All four pillars are essential for mainstreaming deprived groups into development process, and they are closely inter-related with MDGs together with some provisions of other international instruments. The Plan also stresses on some strategic cross-cutting approaches like motivating private sector to employment and income generation, and encouraging NGOs and INGOs in implementing key activities to socio-economic development process. Similarly, the Plan places strong emphasis on monitoring progress towards the attainment of key poverty reduction goals including the Millennium Development Goals (MDGs).

The government has adopted a new strategy for the next three years that will continue to emphasize employment generation, poverty reduction, food security, and responses to climate change. Poverty monitoring and effective implementation of plans and programmes have been emphasized with the introduction of Medium-Term Expenditure Framework and Results-Based Development Management. In order to make progress towards meeting the

MDGs in their entirety, there are still several weak spots that need attention and special effort. The major challenge with regard to poverty is identifying and capturing those who are currently below the poverty line; how does the country pull the bottom 25 per cent up? How is the gap between the haves and the have-nots reduced? The issue of food security also requires urgent attention. Within the context of the national political scenario as well as larger geopolitics, the challenge is to create a better environment for private-sector investment, reduce imbalances with major trading partners, and better utilize foreign aid. With the country's relatively new focus on institutionalizing inclusion, designing and enforcing relevant policies is going to be a demanding task. Ensuring a place in the development process for all is essential; pervasive gender discrimination and lack of entitlement for Dalit and Janajati groups, people with disabilities and the marginalized must be overcome. Meeting the demand for energy and improving water supply and sanitation remain major problems for the country. Regarding climate change, there is a lack of scientific data for the country, and the issue is how to internalize it in development processes by pursuing climate change resilient strategies

### 14.3. MDG Needs Assessment (NA)

MDG need assessment has been conducted to identify required interventions for each goal and estimated costs for the interventions. It includes the sectors like, agriculture (hunger), education, health, drinking water and sanitation, rural infrastructure (rural transportation and electrification), gender and environment considered as cross cutting issues. The following Table presents public investment requirement, available government resources and the financing gap.

**Table 14. 2: Public Investment Requirement (in million Rs.)**

MDG Sector	2005-2015		
	Public Investment Requirement	Government Resources	Financing Gap
Hunger	227,185	45,478	181,707
Education	289,655	162,433	127,222
Health	146,240	67,136	79,104
Drinking Water and Sanitation	105,530	29,978	75,552
Rural Transport and Electrification	98,370	28,151	70,219
Total	866,980	333,176	533,804
Total in US \$ (million)	12,385	4,760	7.9 Billion

The Government of Nepal is trying to interlink between MDGs and the forthcoming three years interim plan. In addition, the efforts in localizing MDGs are under way.

### Challenges to Meet MDGs

- Needs to include more country specific targets
- Conflict/rights sensitive approach in policy and program formulation and implementation
- Continuation of increasing foreign aid
- Efforts needed to address poverty pockets
- Inequality in HDI and income between urban and rural
- Poor quality of sectoral service delivery system

### Conclusions

The government of Nepal is committed to attain MDGs. Although the MDGs are declared in 2000, the government has been effortful to focus on the issues raised in the MDG in the development plans prior to the UN declaration. In addition, the issues are not completely new ones in protecting and promoting the human rights but, the MDGs clearly spelled out the targets by the time line.

Despite the decades long interventions on the issues of health (including child health, women's health/reproductive health and HIV/AIDS), education, drinking water, women's development, gender equality, child rights, environment etc, the qualitative as well as quantitative progress (in majority cases) against the targets has been at a very slow pace. Only few targets have been in encouraging level.

The policy advocacy, implementation coordination, stakeholder's ownership, result based implementation modality, cost effectiveness of interventions/efficiency of the project and/or program, systematic data management system etc. have to be improved and, policy linkage should be strongly developed. In addition, localization of MDGs has to be internalized and well addressed in plans, policies, programs, monitoring and evaluation with a capacity development of concerned stakeholder.

## Chapter 15

# Poverty in Nepal

### 15.1. What is poverty ?

Poverty can be defined in a number of ways. The most common is the cost-of-basic-needs (CBN) approach, in which poverty lines are calculated to represent the level of per capita expenditure required to meet the basic needs of the members of a household, including an allowance for non-food consumption. First, a food poverty line is established, being the amount necessary to meet basic food requirements. Then a non-food allowance is added, an amount equal to the typical non-food expenditure of households whose food expenditure is equal to the food poverty line. Because prices vary among geographical areas, poverty lines can be calculated separately for different regions for which price information is available. Alternatively, as done in case of Nepal, household per capita expenditure can be adjusted using regional price indices to give real per capita expenditure, in which case a single poverty line can be applied across the country. For Nepal, this amount has been calculated as 7696 Rupees per year, in average 2003 Nepalese Rupees. Thus in the CBN approach, poverty measures are functions of household per capita expenditure.

*Poverty incidence* for a given area is defined as the proportion of individuals living in that area who are in households with an average per capita expenditure below the poverty line. *Poverty gap* is the average distance below the poverty line, being zero for those individuals above the line. It estimates how far below the poverty line the poor are on average as a proportion of that line. It thus represents the resources needed to bring all poor individuals up to a basic level. *Poverty severity* measures the average squared distance below the line, thereby giving more weight to the very poor. The squared poverty gap takes into account not only the distance separating the poor from the poverty line, but also inequality among the poor, thereby giving more weight to the poorest people than the less poor.

The Nepal Living Standards Surveys (NLSSs) conducted for the first time in 1995/96 and a second round in 2003/04 by Central Bureau of Statistics (CBS) are the major source of poverty data in Nepal. The NLSS follows the methodology of the World Bank's Living Standard Measurement Survey. It contains an integrated household questionnaire designed to collect data at both the household- and individual-level on socio-demographic characteristics in addition to detailed information about expenditure and food consumption patterns.

### 15.2. How many are the poor?

Data from 1995-96 and 2003-04 Nepal Living Standards Surveys (NLSS-I and II) have provided estimates of poverty incidence in Nepal and their trends during 8 years between these two surveys. Headcount rates suggest that poverty has dramatically declined in Nepal between 1995-96 and 2003-04 (Table 1). In 2003-04, 31 percent of population was poor in Nepal, compared to 42 percent in 1995-96. Thus, the incidence of poverty in Nepal declined by about 11 percentage points (or 26 percent) over the course of eight years, a decline of 3.7 percent per year. The incidence of poverty in urban areas more than halved (it declined from 22 to 10 percent, a change of 9.7 percent per year). While poverty in rural areas also declined appreciably, at one percentage point per year, its incidence remained higher than in urban areas.

Trends of poverty gap and squared poverty gap observed with the headcount rates show an even faster decline (in percent terms). Both measures confirm that the incidence of urban poverty remained lower than that of rural poverty through-out the eight-year period; they also suggest that urban areas experienced greater reductions than rural areas in the depth and severity of poverty

**Table 15. 1: Nepal 1995-96 and 2003-04, Poverty Measurement**

	Headcount rate (P0)			Poverty Gap (P1)			Squared Poverty Gap (P2)		
	1995-96	2003-04	change in %	1995-96	2003-04	change in %	1995-96	2003-04	change in %
<b>Nepal</b>	41.76	30.85	-26	11.75	7.55	-36	4.67	2.7	-42
<b>Urban</b>	21.55	9.55	-56	6.54	2.18	-67	2.65	0.71	-73
<b>Rural</b>	43.27	34.62	-20	12.14	8.5	-30	4.83	3.05	-37

The incidence of poverty in 2003-04 varied considerably across different parts of the country, ranging from a low of 3.3 percent in Kathmandu to 42.9 percent in rural Eastern Hill and 38.1 percent in rural Western Terai. Between 1995-96 and 2003-04, poverty declined in both urban areas under consideration: in Kathmandu by 23 percent, and in "other urban" areas by 59 percent. In rural areas, the fastest decline in poverty occurred in rural Eastern Terai (33 percent) and rural Western Hills (32 percent). The incidence of poverty declined in rural Western Terai by 17 percent. By contrast, poverty in rural Eastern Hills increased from 36 to 43 percent. These changes affected the poverty rankings of the regions, with Eastern Hill undergoing the most dramatic shift, from having the third lowest incidence of poverty in 1995-96 to having the highest incidence in 2003-04.

Table 15.2 also shows that poverty rates declined across all development regions. At 27 percent, the Central and Western regions continued to have a poverty incidence below the national average in 2003-04, while the Mid- and Far-Western regions continued to be above the average (45 and 41 percent, respectively). In terms of poverty incidence across the belts of Nepal, the

Terai belt has the lowest poverty rate at 28 percent, compared with 33 percent in the Mountains and 35 percent in the Hills.

**Table 15. 2: Poverty head count rate by regions**

	Poverty Headcount Rate		
	1995-96	2003-04	change in %
Urban	21.6	9.6	-56
Rural	43.3	34.6	-20
Total			
<b>NLSS regions</b>			
Kathmandu	4.3	3.3	-23
Other urban	31.6	13.0	-59
R. Western Hill	55.0	37.4	-32
R. Eastern Hill	36.1	42.9	19
R. Western Terai	46.1	38.1	-17
R. Eastern Terai	37.2	24.9	-33
Total			
<b>Development regions</b>			
Eastern	38.9	29.3	-25
Central	32.5	27.1	-17
Western	38.6	27.1	-30
Mid-western	59.9	44.8	-25
Far-western	63.9	41.0	-36
Total			
<b>Ecological belts</b>			
Mountain	57.0	32.6	-43
Hill	40.7	34.5	-15
Terai	40.3	27.6	-32
Nepal	41.8	30.8	-26

Number of poor estimated for the year 2003/04 stands at 7.5 million against 8.5 million in 1995/96. The absolute decline of 1 million poor in eight years is considered to be a remarkable achievement. Nonetheless, the poverty decline may not sustain amid slow economic growth in recent years.

**Table 15. 3: Head count rate and estimated number of poor**

Regions	1995/96		2003/04	
	Poor population in %	Number of poor	Poor population in %	Number of poor
Urban	3.6	307545	4.7	353432
Rural	96.4	8235371	95.3	7166396
<b>NLSS Regions</b>				
Kathmandu	0.3	25629	0.6	45119
Other urban	3.3	281916	4.1	308313

R. West. Hill	32.7	2793534	23.6	1774679
R. East. Hill	19.4	1657326	29.4	2210829
R. West. Terai	18.4	1571897	18.9	1421247
R. East. Terai	25.9	2212615	23.5	1767160
<b>Dev Regions</b>				
Eastern	21	1794012	23.4	1759640
Central	26.9	2298044	32.2	2421385
Western	18.7	1597525	16.7	1255811
Mid-western	18.5	1580439	17.7	1331010
Far western	14.8	1264352	9.9	744463
<b>Ecological belts</b>				
Mountain	10.7	914092	7.5	563987
Hill	41.9	3579482	47.1	3541839
Terai	47.4	4049342	45.4	3414002
Nepal	100	8542916	100	7519828

#### 15.4. Who are the poor ?

A poverty profile describes who the poor are by indicating the probability of being poor according to various characteristics, such as the sector of employment and the level of education of the household head, the demographic composition of a household (i.e., household size, number of children, caste-ethnic status), and the amount of land a household possesses.

**Table 15. 4: Employment Sector of the Household Head**

	Poverty Head count Rate			Distribution of the Poor			Distribution of Population		
	1995-96	2003-04	change in %	1995-96	2003-04	change in %	1995-96	2003-04	change in %
	(A)			(B)			(C)		
<b>Self-employed in</b>									
Agriculture	43.1	32.9	-24	60.7	66.9	10	58.8	62.7	7
Manufacturing	41.4	31.2	-25	3.4	4.5	32	3.4	4.4	29
Trade	32.2	11.1	-66	4.3	1.6	-62	5.6	4.5	-19
Services	25.3	14.4	-43	1	1.5	53	1.6	3.2	98
<b>Wage earner in</b>									
Agriculture	55.9	53.8	-4	15.7	10.9	-31	11.7	6.2	-47
Professional	8.3	2.1	-74	0.4	0.2	-53	2.2	2.9	35
Other	39.7	28.8	-28	10.6	10	-6	11.1	10.7	-4
Unemployed	9.5	2.9	-69	0.1	0	-68	0.3	0.2	-23
Non-active	30.5	26.9	-12	3.9	4.4	14	5.3	5.1	-4
Total	41.8	30.8	-26	100	100	-	100	100	-

Households headed by agricultural wage laborers are the poorest in Nepal. In 1995-96 the incidence of poverty among this group was almost 56 percent and it declined only slightly to 54 percent in 2003-04. As a share of the

national population this group is small and in decline. Comprising 12 percent of the population and 16 percent of the poor in 1995-96, in 2003-04 this group made up 6 percent of the total population and 11 percent of all poor.

The second poorest group in Nepal is made up of those who live in households headed by self-employed in agriculture. Unlike agricultural wage households, this group experienced a substantial decline in poverty from 43 to 33 percent between 1995-96 and 2003-04. This is the most populated employment sector category with 67 percent of all poor in 2003-04 falling to this category.

Households whose heads' main occupation is in trade and services experienced a dramatic decline in poverty between 1995-96 and 2003-04, and had a relatively low incidence of poverty (11 and 14 percent, respectively) in 2003-04. Households headed by professional wage earners and those headed by the unemployed comprise categories with the lowest poverty incidence (2.1 and 2.9 percent, respectively, in 2003-04). Similarly, households headed by those who are out of the labor force are less poor on average than those in all other employment categories, indicating that both the unemployed and the inactive can afford to stay in these states because they are more likely than the others to have other sources of income.

## 15.5. Education of the household head

Differences in educational attainment of heads of households are reflected in dramatically different poverty rates. Households with illiterate heads had a 42 percent poverty rate in 2003-04, which is the highest rate among all education groups. The poverty rate progressively declines as the level of education attainment by a household head increases. Having attended primary school brings down the probability of being in poverty to 28 percent; having attended secondary school brings it down to 23 percent; and having attended high secondary school brings it down to 8.4 percent in 2003-04.

**Table 15.5: Poverty Measurement by Education Level of the Household Head**

	Poverty Head count Rate			Distribution of the Poor			Distribution of Population		
	1995-96	2003-04	change in %	1995-96	2003-04	change in %	1995-96	2003-04	change in %
	(A)			(B)			(C)		
Illiterate	50.9	42	-18	72.9	70.9	-3	59.8	52.1	-13
5 or less years of schooling	35.7	28.2	-21	15.1	16.8	12	17.7	18.4	4
6-7 years	28.5	23.3	-18	6.7	8.1	21	9.8	10.7	9
8-10 years	19.8	8.4	-58	4.5	3.9	-14	9.6	14.5	52
11+ years	11.4	1.6	-86	0.9	0.2	-75	3.2	4.3	35
Total	41.8	30.8	-26	100	100	-	100	100	-

The poverty incidence declined between 1995-96 and 2003-04 for all education groups, but the most dramatic decline was for households headed by someone with 8 to 10 years of schooling (high secondary level) or 11 or more years (higher education level). Importantly, education attainments increased in the general population and the proportion of the population living in households with illiterate heads declined from 60 percent in 1995-96 to 52 percent in 2003-04 (Table 5).

## 15.6. Demographics

There is little difference in the headcount poverty rate related to the age of the household head, a pattern constant across years. There are large differences, however, between male- and female-headed households. While in 1995-96 households headed by females represented 9 percent of the population and had a poverty rate of 42 percent (equal to the Nepal average), in 2003-04 the proportion of the population residing in female-headed households increased to 14 percent of the population and the poverty rate among these households declined to 24 percent (below the Nepal average), (Table 6). A tentative explanation for this pattern is that households headed by females tend to have a main breadwinner working elsewhere who supports the household by sending remittances.

**Table 15.6: Nepal 1995-96 and 2003-04 Poverty Measurement by Household Head's Age and Sex**

	Poverty Head count Rate			Distribution of the Poor			Distribution of Population		
	1995-96	2003-04	change in %	1995-96	2003-04	change in %	1995-96	2003-04	change in %
	(A)			(B)			(C)		
Male 25 year or younger	40.5	32.5	-20	5	3.5	-30	5.1	3.3	-35.4
Male 26-45 years old	43.8	32.5	-26	41.5	37.9	-9	39.6	35.9	-9.3
Male 46 years and older	40.2	31.6	-21	45	47.6	6	46.7	46.4	-0.8
Female-headed	41.6	23.8	-43	8.5	11.1	31	8.5	14.4	68.8
Total	41.8	30.8	-26	100	100	-	100	100	-

Both an increase in the number of small children and an increase in the number of household members are related to an increase in the poverty headcount rate (Table 7). The higher level of poverty headcount in larger households or households with more children is, at least in part, related to the fact that the definition of poverty line for Nepal does not incorporate *economies of scale*. However, the pattern of slower-than-average poverty reduction rate among households with 2 or more small children or 6 or more family members may attest to structural factors that prevent these households from escaping poverty.

The proportion of the population living in households with 7 or more members has declined from almost 50 to 40 percent (Table 7). Given that these households have the highest incidence of poverty of all households both in 1995-96 and 2003-04, this development may have contributed to the overall poverty decline.

**Table 15. 7: Nepal 1995-96 and 2003-04 Poverty Measurement by Demographic Composition**

	Poverty Head count Rate			Distribution of the Poor			Distribution of Population		
	1995-96	2003-04	change in %	1995-96	2003-04	change in %	1995-96	2003-04	change in %
	(A)			(B)			(C)		
Number of children 0-6 year old									
0	23.5	13.7	-42	14.9	14.8	-1	26.5	33.3	25.7
1	39.9	29.3	-27	23.8	26.2	10	24.9	27.7	11.1
2	49.4	41.6	-16	32.6	31.6	-3	27.5	23.4	-14.9
3 or more	56.9	54	-5	28.8	27.4	-5	21.1	15.6	-26
Total				100	100	-	100	100	-
Household size									
1	7.7	7.2	-7	0.1	0.1	34	0.5	0.6	6.8
2	14.5	11	-24	0.8	1.1	35	2.3	3	30.7
3	22.9	11.7	-49	3	2.6	-15	5.6	6.9	23.5
4	28.1	19.3	-32	7.1	8.5	21	10.5	13.7	30.1
5	35.9	24.9	-31	13.5	14.5	8	15.7	18	14.7
6	43.8	33.5	-24	17.6	19.6	11	16.8	18	7.2
7 or more	49.7	41.4	-17	57.9	53.6	-7	48.6	39.9	-17.9
Total	41.8	30.8	-26	100	100	-	100	100	-

## 15.6. Caste and Ethnicity

Poverty rates in 2003-04 were highest among Hill and Terai Dalits (46 percent) and Hill Janajatis (44 percent), Table 1.4.5. Both groups experienced a decline in poverty between 1995-96 and 2003-04 (by 21 and 10 percent, respectively). While the poverty rate among the Tharu (Terai Janajati) was comparable with that of these two groups in 1995-96, it declined to 35 percent in 2003-04 (a 34 percent decline). The poverty rate among the Muslim population declined only slightly, from 44 to 41 percent between 1995-96 and 2003-04. In terms of the distribution of the poor, the Hill Janajati represents a single group with the highest concentration of the poor in 2003-04.

Upper Caste (Hill-Terai) households had the third lowest incidence of poverty in 1995-96 (after Yadavs residing in Middle and Central Terai). After experiencing the most substantial decline in poverty of all considered groups (by 46 percent) they became the group with the second lowest poverty rate in 2003-04. Overall, 3 caste and ethnic groups – Upper Caste, Yadavs, and Newars – have poverty rates below the average in 2003-04.

**Table 15. 8: Nepal 1995-96 and 2003-04, Poverty Measurement by Caste and Ethnicity of the Household Head**

	Poverty Head count Rate			Distribution of the Poor			Distribution of Population		
	1995-96	2003-04	change in %	1995-96	2003-04	change in %	1995-96	2003-04	change in %
	(A)			(B)			(C)		
Upper Caste (Hill-Terai)	34.1	18.4	-46	26.7	15.7	-41	32.7	26.3	-20
Yadavs (Middle C. Terai)	28.7	21.3	-26	2.9	1.9	-33	4.2	2.8	-34
Dalits (Hill-Terai)	57.8	45.5	-21	10.6	10.9	3	7.7	7.4	-4
Newar	19.3	14	-28	2.5	3.4	35	5.5	7.5	38
Hill Janajati	48.7	44	-10	19.7	27.8	41	16.9	19.5	16
Tharu (Terai Janajati)	53.4	35.4	-34	10.4	9.2	-12	8.2	8.1	-1
Muslims	43.7	41.3	-6	5.7	8.7	53	5.4	6.5	19
Other	46.1	31.3	-32	21.4	22.3	4	19.4	21.9	13
Total	41.8	30.8	-26	100	100	-	100	100	-

*Note: The trends in poverty rates across caste-ethnic groups should be treated with caution.*

## 15.7. Land ownership

Land ownership reduces the probability of being poor in rural areas, a pattern constant across years. Incidence of poverty among households who own 0.2 ha. or less of land (a quarter of all rural households) is almost 40 percent and is roughly similar to that of households who own 0.2 to 1 ha. (a half of all rural households). Poverty headcount rate had declined more for households with larger landholdings, as compared to the ones with the smaller ones. In addition, the proportion of households with smaller landholdings had increased over time, while the proportion of households with large (2 or more hectares of land) has declined substantially (from 16 to 11 percent of all rural households, Table 15.9).

**Table 15. 9: Nepal 1995-96 and 2003-04 Poverty Measurement, by Land Ownership (rural areas only)**

	Poverty Head count Rate			Distribution of the Poor			Distribution of Population		
	1995-96	2003-04	change in %	1995-96	2003-04	change in %	1995-96	2003-04	change in %
	(A)			(B)			(C)		

Less than 0.2 ha. of land	47.7	39.3	-18	22.9	25.2	10	20.8	22.2	7
0.2 – 1 ha. of land	45.0	38.1	-15	43.7	51.2	17	42.0	46.5	11
1 - 2 ha. of land	38.8	27.3	-30	18.7	16.0	-15	20.9	20.3	-3
More than 2 ha. of land	38.9	23.8	-39	14.6	7.6	-48	16.3	11.0	-32
<b>Total</b>	<b>41.8</b>	<b>30.8</b>	<b>-26</b>	<b>100</b>	<b>100</b>	<b>-</b>	<b>100</b>	<b>100</b>	<b>-</b>

## 15.8 Where are the poor ?

### 15.8.1 Distribution of the poor

In terms of the distribution of the poor across urban and rural areas (Table 10), although the poverty rate in urban areas declined almost 3 times faster than it did in rural areas, the concentration of the poor in urban areas actually increased from 4 to 5 percent of all poor. This higher concentration is due to a twofold increase in the urban population during the study period (Table 10).

In 2003-04 the largest share (29 percent) of the total number of poor people in Nepal resided in rural Eastern Hill. This is an appreciable change from 1995-96, when rural Western Hill housed a third of all poor, the highest concentration in that year. Both a rapid reduction in rural Western Hill's headcount poverty rate and a significant reduction in the proportion of the population residing there contributed to the region's change in ranking.

In terms of the distribution of the poor across development regions, the Central region continues to house the greatest number of poor Nepalese, while having a poverty incidence below the national average. The Mid-Western and Far-Western regions have the highest levels of poverty, 45 and 41 percent, respectively, but, on the account of low population density, house only 18 and 10 percent of all poor, respectively. In terms of the distribution of the poor across the belts, the Hills and Terai have roughly similar proportions of poor people – 47 and 45 percent, respectively – with the Mountains accounting for 8 percent.

**Table 15. 10: Nepal 1995-96 and 2003-04, Poverty Measurement by Geographic Regions**

	Distribution of the Poor			Distribution of Population		
	1995-96	2003-04	change in %	1995-96	2003-04	change in %
	(B)			(C)		
Urban	3.6	4.7	30	6.9	15.0	117
Rural	96.4	95.3	-1	93.1	85.0	-9
Total	100.0	100.0	-	100.0	100.0	-
<b>NLSS regions</b>						
Kathmandu	0.3	0.6	118	2.6	5.4	110

Other urban	3.3	4.1	23	4.4	9.7	121
R. Western Hill	32.7	23.6	-28	24.8	19.4	-22
R. Eastern Hill	19.4	29.4	51	22.4	21.1	-6
R. Western Terai	18.4	18.9	3	16.7	15.3	-8
R. Eastern Terai	25.9	23.5	-9	29.1	29.1	0
Total	100.0	100.0	-	100.0	100.0	-
Eastern	21.0	23.4	12	22.5	24.7	10
Central	26.9	32.2	20	34.6	36.6	6
Western	18.7	16.7	-11	20.3	18.9	-7
Mid-western	18.5	17.7	-4	12.9	12.2	-5
Far-western	14.8	9.9	-33	9.7	7.5	-23
Total	100.0	100.0	-	100.0	100.0	-
<b>Ecological belts</b>						
Mountain	10.7	7.5	-30	7.9	7.1	-10
Hill	41.9	47.1	13	43.0	42.1	-2
Terai	47.4	45.4	-4	49.2	50.8	3
Nepal	100.0	100.0	-	100.0	100.0	-

The population in the urban areas of Nepal has done relatively better than that in the rural areas, and it is reasonable to assume that better prospects in the urban areas have attracted rural residents. While a deep understanding of the effect of migration on poverty requires an examination of the characteristics of migrants, their decision to migrate, their economic activities before and after migration, and their decision to send remittances to relatives who remain in rural areas, there is a measurement tool that allows us to decompose the change in poverty over time into three components. These three components are the intra-regional effect, which measures the contribution of within-sector change in poverty to the overall change in national poverty; the regional population shift, which measures how much national poverty would have changed if population shifted across regions but poverty within regions remained unchanged; and a third component that accounts for the interaction of the intra- and inter-regional effects. Applying this method to NLSS-I and II data shows that about 80 percent of the reduction in poverty at the national level can be attributed to the intra-regional effect. This effect reduced poverty by 8.58 percentage points (accounting for almost 80 percent of the overall poverty decline), Table 11. The inter-regional population movement (or differential population growth rate across regions) accounts for 2.29 percentage points (or 21 percent) of the overall poverty reduction (i.e., in the absence of an increase in the proportion of population in areas with faster poverty decline, the decline in poverty would have been 2.29 percentage points lower). The covariance effect was small.

The largest regional contributions to overall poverty reduction (driven by the pace of poverty reduction and by the large share of the population residing there) occurred in rural Western Hill and rural Eastern Terai regions. An increase in poverty in rural Eastern Hill more than outweighed the poverty reduction in rural Western Terai in terms of its effect on the National poverty headcount level.



**Table 15. 11: Regional Poverty Decomposition (Nepal 1995-96 and 2003-04)**

	Absolute change in poverty headcount	As a percentage of the total
Change in poverty	-10.92	100
Total intra-regional effect	-8.58	78.62
Population shift effect	-2.29	21.00
Interaction effect	-0.04	0.38
Intra-regional effects:		
Kathmandu	-0.03	0.23
Other urban	-0.82	7.47
Rural Western Hill	-4.36	39.93

### 15.9 Income and Price

Income and price has a great influence on the people who are poor. Although the Tenth Five-Year Plan envisaged limiting inflation to five per cent, it actually averaged 5.5 per cent during the plan period. Rapid rises in the price of food and petroleum products were driving forces behind high inflation in 2007/08. Consumer price inflation reached 13.1 per cent year-on-year in mid-March 2009.

The Nepal Living Standards Survey 2003/04 (CBS, 2004) found that households spent an average of 59 per cent of their budget on food, with the poorest wealth quintile spending 73 per cent and the richest wealth quintile spending 40 per cent. This indicates that rises in food prices affect the poor most severely. Furthermore, rises in food prices force the poor to spend less on education, health, and water supply and sanitation. Low-income groups have also benefited less from economic growth, even when inflation rates are low. This is evident from the declining share of the lowest consumption quintile in total consumption from 7.6 per cent in 1995/96 to 6.2 per cent in 2003/04 (CBS, 1996 and CBS, 2004)

Table 15. 12: Household consumption and its distribution by expenditure category (percentage)

Consumption quintile	Consumption (NRs million)	Food	Housing/rent	Education	Health	Other non-food items
Poorest	21,704	73.0	5.8	1.3	3.7	16.2
Second	32,611	66.9	6.8	1.8	5.0	19.5
Third	44,478	64.8	7.4	2.3	5.4	20.0
Fourth	64,666	58.1	9.4	3.2	6.7	22.6
Richest	186,523	40.1	15.5	4.8	7.0	32.6
Nepal	349,981	59.0	9.5	2.8	5.7	23.0

Source: UNICEF, 2010

## Chapter 16

# Population Projections for Nepal 2001 – 2021

Information regarding population is the major foundation for development planning at all levels. Population projection is an exercise at calculating the future plausible values from the given population

*Population census is the mammoth undertaking to collect information about the size and structure of the population along with other socio-economic benchmark data in Nepal at decennial intervals. The latest census was conducted in 2001. However information from the censuses are not enough for planning beyond census years, so based on the information collected in the population census, projections have to be made to determine the most plausible growth of the population. They have to be prepared by age and sex for National, development regions, districts as well as urban and rural areas to facilitate the planning process in Nepal at all levels.*

Population projections are most valuable inputs for development planning and there is no doubt that they should be as accurate as possible. The estimates will be accurate if data used are accurate and assumptions involved in the projections hold true in reality. In general, three scenarios of population projections are usually made. They are named as high, medium and low variants. The high variant represents declining mortality and fast decline in fertility, medium variant represents the same trend of declining mortality and medium decline in fertility and low variant represents the same trend of declining mortality and low decline in fertility. In these three scenarios net migration has been assumed as insignificant. The assumptions used in the medium variant represent the most likely assumptions in future giving plausible estimates of the population in future years.

Based on the above fundamentals the Population Projections for Nepal have been made for 2001-2021 by using component method. In this method separate projections of fertility, mortality, immigration and emigration are made. Population projections have been made at the national and sub-national level. Similarly, age sex population projections for all 75 districts at an interval of five years have also been made.

### 16.1 Selection of the base year population

The reported and the final result of the population size according to census 2001 are as follows.

Population	Reported	Final Result
Total	22,736,934	23,151,423
Male	11,359,378	11,563,921
Female	11,377,556	11,587,502

The final results of the population of census 2001 are obtained from the reported population and by estimating the population of disturbed areas in the census from the household listing or the observed growth of population between 1991 and 2001. Hence, this final result of the population of the census 2001 is taken as the base year population for the projection.

## 16.2 Estimation of Fertility Level and Trends

For the population projection, the estimates of fertility levels are needed. For the population projection at the medium variant, the following estimates of fertility levels are assumed.

<i>Medium decline in TFR</i>	
<b>Year</b>	<b>TFR</b>
2001	4.0
2006	3.5
2011	3.0
2016	2.9
2021	2.8

The decline is in accordance with normal decline in the tenth five year plan (.10 per year) up to 2011 and then after slower decline (UN, 1992, p.13).

### 16.2.1 Estimation of mortality level and trend

The mortality levels in 2001 and onwards for medium fertility decline are shown below.

<i>Life Expectancy at birth</i>		
<b>Year</b>	<b>Male</b>	<b>Female</b>
2001	60.1	60.7
2006	62.9	63.7
2011	64.7	65.7
2016	66.2	67.4
2021	67.4	68.8

### 16.2.2 Estimation of migration level and trend

The estimates of net migration by various methods vary in accuracy and the adjustment in the population projection needs great caution. Moreover, the effects of net migration have been estimated to be about 2 percent and as such, have been assumed to be insignificant.

### 16.2.3 Sex ratio at birth

The sex ratio at birth is estimated to be 1.05 male births per female birth (Joshi, 2003). This is assumed to be constant throughout the period of the projection.

## 16.2.4 Urban population projection

Urbanization is taking place rapidly in Nepal since the last several years. In 1991 the number of urban areas was only 33. This number increased to 58 in 2001. For the population projection, urban population is defined as population residing in urban areas. As such urban populations are affected by several factors like natural growth, migration and reclassification of areas. Urban – Rural population projections are made by United Nations method of urban and rural population projections.

## 16.3 Annual Population

Annual total population by sex has been computed by the procedure know as the "Central difference method" using first and second differences.

### *Population Projections for Nepal (2001-2021) Medium Fertility Decline (summary)*

	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>
<b>Fertility</b>					
TFR	4	3.5	3	2.9	2.8
<b>Mortality</b>					
Male LE	60.1	62.9	64.7	66.2	67.4
Female LE	60.7	63.7	65.7	67.4	68.8
Total LE	60.4	63.3	65.2	66.8	68.1
<b>Vital Rates</b>					
CBR per 1000	33.3	30	26.2	25.2	23.8
CDR per 1000	10	8.7	7.8	7.4	7.1
GR percent		2.23	1.98	1.83	1.74
<b>Population</b>					
Total	23,151,423	25,886,736	28,584,975	31,327,341	34,172,144
Male	11,563,921	12,963,722	14,343,343	15,745,554	17,199,235
Female	11,587,502	12,923,014	14,241,632	15,581,787	16,972,909
0-14years (%)	39.3	37.47	35.58	34.02	31.96
15-64 years (%)	56.79	58.55	60.31	61.66	63.44
65 years and more (%)	3.91	3.98	4.11	4.31	4.61
Female 15-49 years (%)	79.79	51.39	52.61	53.07	53.8

Source : Population Projection for Nepal (2001-2021), MOPE & CBS, 2003

### *Population Projections for Nepal (2001-2021) Slow Fertility Decline (summary)*

	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>
<b>Fertility</b>					
TFR	4	3.7	3.4	3.2	3
<b>Mortality</b>					
Male LE	60.1	62.9	64.7	66.2	67.4

Female LE	60.7	63.7	65.7	67.4	68.8
Total LE	60.4	63.3	65.2	66.8	68.1
<b>Vital Rates</b>					
CBR per 1000	33.3	31.5	29.3	27	24.8
CDR per 1000	10	8.8	7.9	7.3	7
GR percent		2.33	2.22	2.06	1.88
<b>Population</b>					
Total	23,151,422	26,005,554	29,060,622	32,218,336	35,387,188
Male	11,563,920	13,024,707	14,587,723	16,203,640	17,823,998
Female	11,587,502	12,980,845	14,472,898	16,014,695	17,563,184

Source : Population Projection for Nepal (2001-2021), MOPE & CBS, 2003

**Population Projections for Nepal (2001-2021) Fast Fertility Decline (summary)**

	2001	2006	2011	2016	2021
<b>Fertility</b>					
TFR	4	3.3	2.7	2.1	2.1
<b>Mortality</b>					
Male LE	60.1	62.9	64.7	66.2	67.4
Female LE	60.7	63.7	65.7	67.4	68.8
Total LE	60.4	63.3	65.2	66.8	68.1
<b>Vital Rates</b>					
CBR per 1000	33.3	28.4	24	18.9	19
CDR per 1000	10	8.6	7.7	7.2	7.2
GR percent		2.14	1.79	1.37	1.19
<b>Population</b>					
Total	23,151,422	25,767,918	28,177,454	30,174,692	32,030,764
Male	11,563,920	12,902,735	14,133,942	15,153,209	16,098,580
Female	11,587,502	12,865,183	14,043,510	15,021,481	15,932,185

Source : Population Projection for Nepal (2001-2021), MOPE & CBS, 2003

**Urban Population Projection of Nepal (Medium Variant)**

	2001	2006	2011	2016	2021
<b>Country's Total Population</b>					
GR percent		5.77	5.17	4.91	4.69
<b>Urban Population</b>					
Total population	3,239,443	4,322,996	5,598,886	7,156,789	9,047,244
Male population	1,670,325	2,232,313	2,893,611	3,700,328	4,677,931
Female population	1,569,118	2,090,682	2,705,275	3,456,461	4,369,313

Source : Population Projection for Nepal (2001-2021), MOPE & CBS, 2003

**Population Projection by age group 2001-2021 (Medium Fertility Decline)**

AGE	2001			2006		
	Total	Male	Female	Total	Male	Female
0-4	3,168,560	1,629,110	1,539,450	3,568,600	1,832,732	1,735,868
5-9	3,038,060	1,545,440	1,492,620	3,112,108	1,603,608	1,508,500
10-14'	2,891,580	1,463,450	1,428,130	3,017,657	1,535,618	1,482,039
15-19	2,483,820	1,218,870	1,264,950	2,869,366	1,452,401	1,416,965
20-24	2,119,350	1,014,630	1,104,720	2,457,240	1,205,933	1,251,307
25-29	1,806,373	860,346	946,027	2,091,314	1,001,466	1,089,848
30-34	1,544,853	750,970	793,883	1,777,559	846,995	930,564
35-39	1,309,530	648,741	660,789	1,513,800	735,895	777,905
40-44	1,098,296	549,778	548,518	1,274,854	630,870	643,984
45-49	913,668	463,030	450,638	1,058,220	528,209	530,011
50-54	755,015	388,062	366,953	866,006	436,625	429,381
55-59	619,807	319,610	300,197	697,708	355,765	341,943
60-64	496,652	253,824	242,828	551,122	280,939	270,183
65-69	374,473	190,162	184,311	417,278	210,038	207,240
70-74	250,738	127,864	122,874	290,840	145,150	145,690
75-79	161,578	82,007	79,571	173,077	86,999	86,078
80+	119,070	58,027	61,043	149,987	74,479	75,508
<b>Total</b>	<b>23,151,423</b>	<b>11,563,921</b>	<b>11,587,502</b>	<b>25,886,736</b>	<b>12,963,722</b>	<b>12,923,014</b>

AGE	2021	
	Total	Female
0-4	3,812,200	1,854,427
5-9	3,607,197	1,751,907
10-14'	3,499,732	1,699,143
15-19	3,486,195	1,692,702
20-24	3,059,236	1,483,234
25-29	2,952,905	1,451,084
30-34	2,790,504	1,378,645
35-39	2,372,290	1,208,446
40-44	1,997,083	1,041,809
45-49	1,667,912	876,053
50-54	1,380,762	715,049
55-59	1,111,560	569,759
60-64	859,771	441,031
65-69	631,385	324,154
70-74	433,593	222,413
75-79	268,787	138,528
80+	241,032	124,525
<b>Total</b>	<b>34,172,144</b>	<b>16,972,909</b>

Source : Population Projection for Nepal (2001-2021), MOPE & CBS, 2003

*Single Year Population Projection by Sex, Nepal 2001-2021 (Medium Variant)*

<b>Year</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
2001	11,563,921.00	11,587,502.00	23,151,423.00
2002	11,845,495.24	11,855,956.08	23,701,451.32
2003	12,126,262.36	12,123,734.32	24,249,996.00
2004	12,406,222.36	12,390,836.72	24,797,059.08
2005	12,685,375.24	12,657,263.28	25,342,638.00
2006	12,963,722.00	12,923,014.00	25,886,736.00
2007	13,240,233.26	13,187,166.42	26,427,399.00
2008	13,515,938.39	13,450,642.99	26,966,581.38
2009	13,790,836.41	13,713,443.73	27,504,280.14
2010	14,066,637.94	13,977,106.06	28,043,744.01
2011	14,343,343.00	14,241,632.00	28,584,975.00
2012	14,621,284.82	14,507,231.78	29,128,516.59
2013	14,900,130.15	14,773,695.15	29,673,825.30
2014	15,179,879.01	15,041,020.13	30,220,899.14
2015	15,461,686.62	15,310,383.74	30,772,071.00
2016	15,745,554.00	15,581,787.00	31,327,341.00
2017	16,032,171.28	15,855,933.12	31,888,104.40
2018	16,320,848.32	16,132,118.88	32,452,967.20
2019	16,611,584.12	16,410,343.28	33,021,927.40
2020	16,904,378.68	16,690,606.32	33,594,985.00
2021	17,199,235.00	16,972,909.00	34,172,144.00

Source : *Population Projection for Nepal (2001-2021), MOPE & CBS, 2003*

**Chapter 17**

**Social Exclusion, Population and Conflict**

**17.1. Introduction:**

The concept of exclusion and inclusion came to developmental debate in the seventies in Europe .This came to be consistency of discussion among the development activists and planners after the failure of the notion of state welfares. Many development agencies like the World Bank, International Labor Organization, DFID, and IMF, helped this concept broaden in the world in the undercurrent of development activities. In the context of Nepal, the notion of exclusion and inclusion came to prominence in the late nineties

Social exclusion is a multidisciplinary approach, and variables of it are conditioned by social and economic dynamics on the first hand, and then will be linked with overall nature of the society on the other. Because of the complex nature and host of social issues, social exclusion is difficult just to consider purely a social issue, as it sometimes goes beyond the social and political arena. And at the same time, it will be linked with resource access and distribution if it is linked with economic attribute of a particular society. According to Fadila Boughanémi, Nicole Dewandre (1995) the concept of social exclusion can be seen in three levels I: namely the macro, meso and micro. Macro level includes the labor and market, meso level includes poverty and micro the structures of daily life of a particular population.

Rene Lenoir (cited in Amratya Sen: 1, 2000) regards the social excluded groups and people as:

mentally and physically handicapped suicidal people, aged invalids, abused children, substance abusers, delinquents, single parents, multi problem households, marginal, asocial persons and other social misfits.

Though social factors like poverty and deprivation have high domain in the issue of exclusion, the idea social exclusion attempts to capture the complexity of powerlessness in modern society rather than simply focusing on one of its outcomes. In this regard, the UK government Social Exclusion Unit defines exclusion in terms of a combination of

"linked problems such as unemployment, poor skills, low incomes, poor housing, high crime, environments, bad health and family breakdown "( Social Exclusion Unit , 1998).

Similarly, the 1995 Copenhagen World Summit on Social Development involves exclusion as:

lack of income and productive resources to ensure sustainable livelihoods; hunger and malnutrition; ill health; limited or lack of access to education and other basic services; increased morbidity and mortality from illness; homelessness and inadequate housing; unsafe environments and social discrimination and exclusion. It is also characterized by lack of participation in decision-making and in civil, social and cultural life (United Nations, 1995:57).

Further, social exclusion is more than the concept of poverty and deprivation, which is generally held to be the main conceptual parameters of exclusion. Duffy contends:

"social exclusion is broader concept than poverty, encompassing not only low material means but the inability to participate effectively in economic, social, political and cultural life and in some characterizations alienations and distance from mainstream society" (Cited in Dave Muddiman, Duffy, 1995).

Viewing the nature of it, social exclusion is considered quite contextual to a particular nation or society in which certain social and economic paradigms that are applied will not be compatible to another one. This nature of it makes social exclusion just as a theoretical concept. Though it incorporates several variables of capability deprivation: ranging from social, economical, and to power relations and structures of a society, but they are not all in all. Broadly welfare programs, developmental practices, and state policies, institutionalization of social and political institutions can be some measuring rod in figuring out the degree and intensity of exclusion. At the same time, the power factors like process, agencies are some other factors for deprivation leading to exclusion. Charles Taylor (1998) contends exclusion in terms of power factor and relation and influential power exercising groups. Though philosophically, democracy is inclusive, yet the practices of the institutions under it can push towards exclusion. The exclusion germinates through the byproducts of democratic processes that cannot be accessible to the disadvantaged groups of the people. The exclusion that emerges in many democratic institutions are that they just give justice to the voices of collective identities or voices of the people, and so the disadvantaged groups of people cannot legitimately exercise their power as compared to those who have high domain in the particular society, and as a result of it exclusion tends to be unavoidable. Moreover, in a society, the prevalence of high degree of historic ethnic unity, the sense of common bond has been bound up for so long with the common language culture, ancestry and so on, and people feel a certain discomfort about accommodating fellow citizens of other origins (Charles Taylor, 1998 pp: 143-145).

Similarly, the right perspective is another domain that has something to do with exclusion. Iris M. Young (2000) is of the opinion that political right does not merely mean equality in decision making, but a spirit of inclusion in equal terms. All must have equal right to express their interest and concerns, at the same time they should be at the position to question one another and equal

effective opportunity to comment and view others' arguments and proposals. However all this cannot be met until there is free speech without any domination (Iris Young 2000, pp: 22-23).

Arjan de Haan (1998) holds the opinions that social exclusion can be reflected through some underlying factors which contribute to exclusion. More prominently, institutions, policies and approaches of governmental programs to the people who are considered marginalized and disadvantaged groups, where state presence is almost negligible, are pushed to exclusion making people deprived in one way or another. Obviously, there are some gaps which policies cannot tackle, thereby manifesting some exclusionary practices. Similarly, Gore and Figueiredo (1997: p:8 cited in Cecile Jackson, 1999, pp:127-128) study social exclusion comprising of ingredients that are linked with negative state or process ; and it is reflected in subjective or objective inferiority and as being martially deprived, individual disadvantages, and finally denial of the goods and services, activities, and resources which are generally associate with citizenry rights. At the same time, Atkinson (1998) projects three elements of social exclusion, namely relativity, agency, and prospect. Among the three elements, relativity indicates particular time or society that is excluded; agency indicates the people, and the prospect is in reference to the probability for future inclusion. However Room( 1999) goes to see exclusion in terms of poverty, yet holds his views that social exclusion is different from poverty in certain contexts, describing social exclusion as multi dimensional, a case of dynamics, possibility for opportunities , and relational.( cited in Jane Millar,1999 p: 186).

### Three paradigms of Social Exclusion:

The three paradigms of social exclusions discussed by Hillary Silver namely: Solidarity, Specialization, and Monopoly which is applied worldwide. This concept of exclusion is embedded in the explanation.

**Table 17.1: Three paradigms of social exclusion**

	<b>Solidarity</b>	<b>Specialization</b>	<b>Monopoly</b>
Conceptions of integration	Group solidarity/ cultural boundaries	Specialization/ separate spheres/ interdependence	Monopoly/ social closure
Source of integration	Moral integration	Exchange	Citizenship rights
Ideology	Republicanism	Liberalism	Social democracy
Discourse	Exclusion	Discrimination, underclass	New poverty, inequality, underclass
Seminal thinkers	Rousseau, Durkheim	Locke, Madison, Utilitarians	Marx, Weber, Marshall

Hillary Silver (1994) elaborately discusses about three paradigmatic approaches to exclusion: the solidarity, specialization, and monopoly. She states exclusion occurs when the social bond between the individual and society known as social solidarity breaks down. This results in disintegration of the social bond among different individuals or groups in the society at large.

Whereas the specialization renders exclusion as a consequence of specialization, due to the economic disparity and market and group influence. Finally, the monopoly paradigm interprets exclusion as consequence of the formation of the group monopoly, conditioned by hierarchal power relations and interplay of the social classes, serving the interests of those who are included (Silver, 1994, pp: 541-544).

## 17.2. Social Inclusion:

Let now discuss the concept of social inclusion, which to our mind has not been as well discussed or theorized as the concept of social exclusion, probably because the two terms are considered obverse of each other, like two sides of a coin.

According to one definition social inclusion is stated as "Social exclusion is defined as the opposite of social integration, mirroring the perceived importance of being part of society, of being 'included' "(European Foundation 1995:4, cited in de Haan n.d.: 26). This dualistic or binary logic has been criticized by several authors on various grounds (O'Reilly 2006; Jackson 1999; Hanney 2002). O'Reilly (2006: 84), for example, argues,

*The language of inclusion and exclusion implies a binary logic, that one is either included or excluded... [However] people are included or excluded in relation to some variable. The question of inclusion, therefore, is best conceptualized as a sort of sliding scale rather than as a binary function, so that inclusion and exclusion are the extreme poles of a continuum of relations of inclusion/exclusion.*

Hanney (2002) goes further and argues, citing Askonas and Stewart (2000), that social exclusion is not the obverse of exclusion, rather "social inclusion is a distinct project with its own logic" (Haney 2002: 266). Hanney, unfortunately, does not discuss what this logic is and I do not have access to the book edited by Askonas and Stewart, which discuss different theories of inclusion. A kind of debate elaborate that social exclusion is the opposite of social integration. In the case of Dalits, Varna system includes Dalits as a lowest rung which is adverse inclusion, resulted hardcore exclusion. Any group of population or community feels to be included in the mainstream of society and state is the social inclusion.

In Nepal, the debate on social inclusion and exclusion concentrate on caste, gender, ethnicity and geography ( Madheshi). Moreover, religious minority, handicapped/disables people and third sex are also included as excluded group of population. In a boarder term, any population group deprived in any dimensions such as language, culture, geography, poverty, identity etc are the excluded group of population. In the debate of the inclusion, political parties, activists, policy makers, international/national NGOs have suggest for inclusion is:

- Removal of the institutional barriers to inclusion through participation in social and economic development and mainstreaming state and social spheres

- Socio-economic empowerment of socially and economically deprived group of population gradually,
- Equally participate in development process of the marginalized group of population
- Proportional representation and participation for equality in social and economic opportunity
- Social justice and rights for all

Beside these, the process of social inclusion facilitate to accessibility in resources and utilization of it without discrimination. There is no any discrimination in the decision making process and participation in state governance in the inclusive society and state.

## 17.3. Importance of Inclusion

- Right guarantee of the citizens in terms of social, cultural, religious, language, gender, caste/ethnic diversity and plural identity
- Elimination of group monopoly of the specific class, caste, religion, language and culture
- Equality in opportunity and dignity of the excluded group of population
- Guarantee of humanitarian and human rights
- Solving the problems which is caused by exclusion
- Violent and non-violent conflict management through peacefully
- Guarantee of political, civil and social rights of the citizens
- For institutionalization of democracy through equality of opportunities and resource allocation
- Formation of equal society

The concept of social inclusion is support to all social groups to live with dignified life. Dignified life is possible when the causes of historical exclusion would be reduced. Process of empowerment is essential for the excluded groups. In the debate of the national building process, inclusion is crucial for the diversity accommodation.

## 17.4. Excluded Group of Population:

In the developmental scenario and inclusion debate of Nepal, there are four groups or communities to have fallen in the area of exclusion. They are women, indigenous nationalities, Madhesi people, and Dalits. Besides, the minorities Muslims disable, and third sex people are also taken as excluded groups. However, in terms of poverty stand point; there can be other groups or people who can fall in the premise of exclusion.

### 17.5. Social diversity:

Nepal is diverse country in terms of language, cultures and castes. The diversity is also predominant in geographical landscapes, as people live in different landscapes: hills, inner hills and Terai. In the different geographical locations, there live different people belonging to different castes, languages, and ethnicities. The diversity of this kind is also interlinked with the identity and social bearing of the persons. The social diversity inherent in a person also creates diversity in economy and politics. So, the diversity of social and cultural aspects also are associated with other diversities that can either connect or disconnect certain groups or societies in the broader social and political frame that help either in exclusion or inclusion.

### 17.5 Demographic and caste diversity:

When we study demographic features of the Nepalese population, we find 37.2 percent indigenous people, nearly 13 percent of Dalits, and 4.3 percent minority religious groups. This caste based diversity is prevalent in all the regions. The caste based positioning of the people in different regions also indicates that diversity of this kind reflects rather demographically complex spectrum which need to be analyzed holistically. Moreover, the government of Nepal has categorized 59 castes as Janjatis. All these castes also vary in terms of social networking and utilization of the economic resources. From the stand point of exclusion or inclusion, some of the castes are more excluded than others.

### 17.6. Linguistic diversity:

The census of 2058 B.S has stipulated that there are 92 nation languages. This clearly bears the fact that linguistic diversity is the characteristics of Nepal. The census of 2001 shows that 48.6 percent of the people speak Nepali language, then come Maithali and Bhojpuri 12.3 and 7.53 respectively. Similarly, Tharru, Tamang, Newar, and come respectively 5.86, 3.63, 3.39, Minorities languages like Abadhi, Rai Kirat, Gurung and Limbu are spoken by 2.47, 2.2, 1.49, and 1.47 respectively. This diversity of language shows that there are some languages which should be safeguarded by the state, and the linguistic rights of the people be properly guaranteed.

### 17.7. Gender:

In terms of languages, the people of are categorized into male, female, and third sex. In the fold of gender diversity, the status of males and females varies in different types of the societies. This shows that the inequality of the people in terms of gender, and therefore precipitate in different attentions. The debate on third sex is rarely in Nepal.

### 17.8. Religious diversity:

Nepal is religiously diverse country. The census of 2001 indicates that 80.6 percent of the people believe in Hindu religion. Similarly, the people who follow in Buddhism, Islam, and Kirat are respectively 10.7, 4.2 and 3.6. From

the perspective of religious stand point, the dominance of Hindu religion has encroached upon other religions of the country.

### 17.9. Regional and geographical diversity:

The geographical diversity reflects beauty and glory. The geographical situation of the landscapes ranging from the low hill, Chure hills, and hill hills also render diversity of developmental and economic activities of the people. The far western regions of the country show less economic activities and direct attention of the state and its machineries.

### 17.10. Inequality and exclusion:

Different kinds of diversities prevalent in the countries also breed inequality in social, political and economic level. Various such activities have explained in the following ways:

#### A. Economic Inequality

- Unequal land distribution
- Marginalized groups resource accessibility and rights deprivation
- Unequal in income distribution
- State mechanisms captured by dominant caste group
- Inequality in opportunities especially economic, labour, job market, positions in state governance
- Restrictions on job and economic opportunities on the basis of caste

Poverty outcomes on the basis of caste/ethnic groups are unequal because of the caste/ethnic exclusion and deprivation.

**Table:17. 2 Percent distribution of Caste/ethnic group by under poverty line and per capita income**

Caste/Ethnic Group	Population in under Poverty line	Per capita Income (NRS.)
Brahmin/Chhetri(Hill)	19	24427.41
Brahmin( upper caste Terai)	11.7	27370.21
Hill Dalit	47.6	13340.16
Terai Dalit	45.7	10888.56
Newar	14.2	38192.90
Hill Janajati	42.8	18792.88
Terai Janajati	33.0	12466.92
Other Backward Class of Terai	26.5	13073.92
Muslims	41.4	11014.49
<b>Nepal</b>	<b>31.00</b>	<b>20689.08</b>

Source: NLSS, 2004, GSEA, 20059Summary Report, World Bank, DFID

The Table 17.2 reveals that there is disparity in poverty of the different caste/ethnic groups. The unequal resource distribution and inequality in opportunities on resources resulted the under poverty line. From the above Table, poverty is not responsible only for exclusion, other factors like as culture, region, and state negation on different also crucial. If we observe the educational status which is also indicates for exclusion. The Table 17.33 shows the educational attainment of the different caste/ethnic groups in Nepal.

**Table 17.3 : the educational attainment of the different caste/ethnic groups in Nepal.**

Caste/ethnic group	Literacy (in %)	SLC and Above among Literate (in %)	Bachelors and Above among Literate (in %)
Brahmin/Chhetri	65.7	24.7	5.4
Other Backward Classes of Terai	41.7	16.7	2.7
Dalits	33.8	3.8	0.4
Janajatis	53.6	12.9	2.0
Minority religious group( Muslims)	34.5	9.0	1.6
<b>Nepal</b>	<b>54</b>	<b>17.6</b>	<b>3.4</b>

Source: Ministry of Education, 2007, CBS, 2001

In compare with different caste groups, Dalits are most problematic groups in the rights and resource accessibility. The educational attainments of Dalits is low (3.8 and 0.4) with other groups (24.7 and 5.4). The untouchability practices and discriminations cause them to be highly excluded groups in terms of social, economic and cultural dimensions. The negative process of the exclusions towards Dalits seems to participation in state governance and mainstreaming process. The identified key issues of Dalits from different researches which was presented in Citizens social forum in Nepal are as follows:

#### **B. Social and Cultural Inequality:**

- Discrimination by occupations
- Dignity and honor in terms of professions and caste
- Problem of entering temple
- Problem of water collection from public drinking water resources
- Problem of inter caste marriage
- Restrictions to public gathering
- Segregation from society

#### **17.11. Population and Conflict:**

Factors of exclusionary practices are believed to have given birth to the armed struggle in Nepal which overwhelmed the struggle country for ten years. The

recent struggles have also been cause of Terai struggles which has intensively been armed conflict involving more than dozens of armed struggles.

Until the inclusive practices are taken into realization, various kinds of struggles will cope up. Population and conflict is the perennial in the history social and human development. The conflict of a particular society takes place due to various social, political and economic disparities in a particular society. The political protest and social unrest in a particular society are the causes of conflict. Mainly, we can however, categorize conflicts into two forms: the violent and non-violent conflicts. The most latent factor of conflict breeds from the unequal distribution of right and resources.

#### **17.12. Characteristics of Conflict:**

There would be the height of shortsightedness to continue to disregard the increasing evidence concerning the relationship of population variables to conflict dynamics.

- Colonial Conflict
- The objectives is to overthrow a colonial power
- Wars of National Integration
- Territorial aggrandizement appears as a major objectives
- Domestic conflict Generated by Internal
- Political Instability
- Political conflict
  - Purely Political
  - Purely political ideology
  - Political, drawing upon population factors
- The objective is to establish or maintain a predominant ideology
- The objective is to exploit specific population factors
- Dynamic Mixed
- Process conflict

Conflict where the nature of the dispute undergoes substantial transformation in the course of the conflict. Claims, counter claims and negotiation is the process of conflict management. Any kind or form of the conflict will be managed through common consensus.

#### **17.13. The role of Demographic Factors:**

The International conference on Population, 1994 which includes the relationship between population dynamics, resource accessibility/availability, and technological development, on the one hand, and the behavior of the



states, on the other was complicated. Its purpose was to trace the international effects of different demographic, economic and military profiles. The size and growth of the population have contributed to the conflict behaviours:

- Population change tends to make worse the effect size
- Population distribution appears to be most susceptible to variation over the course of a conflict
- Population composition also frequently appears to set the parameters of conflict situations.

From the analysis of conflict, the historical situations identified a four step process for conflict dynamics: 1) Those factors that predispose towards national expansion; 2) those factors that lead to diplomatic conflicts at intersections of spheres of influence; 3) those factors that transfer diplomatic difficulties into military competitions; and 4) the more immediate factors or provocations that lead to overt violence. Besides these, the contributing factors of population on conflicts are age structure of the population, caste/ethnic group exclusion, Institutional biasness, migration of productive age population etc.

#### Conclusion:

Social exclusion and inclusion have direct association with population and conflict. As there is detached from the process of inclusion. There is also social and political unrest in the society which impacts a number of people in the society. In the context of Nepal, there prevails caste, regional, gender and cultural disparity, the conflict is therefore inevitably crop in a particular society. So, until inclusion of all kind is put to practices holistically conflict may persist, and would therefore impact people of the society.

#### Annex

### Population Projections 2001-2021

S. N.	Name of District	2001			2006		
		Both	Male	Female	Both	Male	Female
	Nepal	23151423	11563921	11587502	25767919	12902735	12865184
1	Ilam	282806	142434	140372	314910	158661	156248
2	Panchthar	202056	99042	103014	221594	109418	112176
3	Taplejung	134698	66205	68493	146810	72637	74173
4	Jhapa	688109	341675	346434	755494	376624	378870
5	Morang	843220	422895	420325	941614	472916	468698
6	Sunsari	625633	315530	310103	710842	358514	352328
7	Dhankuta	166479	81841	84638	182004	90062	91942
8	Tehrathum	113111	54932	58179	122720	60186	62534
9	Sankhuwasabha	159203	77853	81350	173516	85530	87986
10	Bhojpur	203018	97762	105256	216614	105580	111034
11	Solukhumbu	107686	53173	54513	117035	58103	58932
12	Okhaldhunga	156702	75361	81341	170847	83194	87653
13	Khotang	231385	112821	118564	249575	122757	126817
14	Udayapur	287689	143756	143933	324139	162351	161788
15	Saptari	570282	291409	278873	633966	322923	311042
16	Siraha	572399	293933	278466	638375	326388	311987
17	Dhanusha	671364	349422	321942	747402	385979	361423
18	Mahottari	553481	287905	265576	618694	319371	299323
19	Sarlahi	635701	329182	306519	714693	367647	347046
20	Sindhuli	279821	139280	140541	312346	155944	156403
21	Ramechhap	212408	100853	111555	231730	111770	119960
22	Dolakha	204229	99963	104266	224982	110940	114042
23	Sindhupalchowk	305857	152012	153845	336478	167805	168673
24	Kavrepalanchowk	385672	188947	196725	425694	210054	215639
25	Lalitpur	337785	172455	165330	381327	194052	187275
26	Bhaktpur	225461	114798	110663	254074	129030	125043
27	Kathmandu	1081845	576010	505835	1276754	671096	605658
28	Nuwakot	288478	142731	145747	317630	157877	159753
29	Rasuwa	44731	23355	21376	49637	25697	23940
30	Dhading	338658	165864	172794	375823	185405	190418
31	Makawanpur	392604	199144	193460	438101	221849	216252
32	Rautahat	545132	282246	262886	615706	316695	299011
33	Bara	559135	289397	269738	634542	326298	308245

S. N.	Name of District	2001			2006		
		Both	Male	Female	Both	Male	Female
34	Parsa	497219	260411	236808	563311	292319	270993
35	Chitwan	472048	235084	236964	534497	266960	267536
36	Gorkha	288134	134407	153727	315168	150044	165124
37	Lamjung	177149	83406	93743	194212	93072	101139
38	Tanahun	315237	146788	168499	347165	165068	182097
39	Syangja	317320	143619	173701	342883	159817	183065
40	Kaski	380527	184995	195532	428555	210190	218364
41	Manang	9587	5034	4553	11593	6026	5567
42	Mustang	14981	8180	6801	16076	8617	7459
43	Myagdi	114447	53178	61269	125115	59399	65716
44	Parbat	157826	72942	84884	171194	80968	90225
45	Baglung	268937	123528	145409	295080	138957	156123
46	Gulmi	296654	133771	162883	322724	150037	172687
47	Palapa	268558	125068	143490	293489	139559	153930
48	Nawalparasi	562870	278257	284613	632969	314295	318674
49	Rupandehi	708419	360773	347646	805662	409053	396609
50	Kapilbastu	481976	247875	234101	542579	277544	265035
51	Arghakhachi	208391	96349	112042	228438	108073	120365
52	Pyuthan	212484	98390	114094	235690	111471	124219
53	Rolpa	210004	101592	108412	231096	112787	118308
54	Rukum	188438	95432	93006	209025	105546	103479
55	Salyan	213500	106834	106666	235179	117685	117494
56	Dang	462380	228958	233422	521528	258942	262587
57	Banke	385840	198231	187609	438608	223903	214705
58	Bardiya	382649	192655	189994	432587	217469	215118
59	Surkhet	288527	142817	145710	323930	160788	163142
60	Dailekha	225201	110125	115076	249358	122666	126692
61	Jajarkot	134868	68508	66360	148818	75316	73502
62	Dolpa	29545	14735	14810	32587	16266	16321
63	Jumla	89427	45848	43579	98558	50232	48326
64	Kalikote	105580	53189	52391	116621	58654	57967
65	Mugu	43937	22250	21687	48709	24594	24115
66	Humla	40595	20962	19633	44769	22943	21827
67	Bajura	108781	53834	54947	119899	59605	60293
68	Bajhang	167026	80676	86350	184742	90218	94524
69	Achham	231285	108998	122287	254166	121937	132229
70	Doti	207066	103521	103545	230644	115531	115112
71	Kailali	616697	312311	304386	714485	361370	353115

S. N.	Name of District	2001			2006		
		Both	Male	Female	Both	Male	Female
72	Kanchanpur	377899	191910	185989	437125	221552	215573
73	Dadeldhura	126162	60965	65197	139669	68228	71440
74	Baitadi	234418	113538	113538	120880	257659	126078
75	Darchula	121996	59791	62205	134910	66589	68321

S. N.	Name of District	2011			2016		
		Both	Male	Female	Both	Male	Female
	Nepal	28177454	14133942	14043512	30174690	15153209	15021481
1	Ilam	346492	174496	171997	378624	190629	187996
2	Pachthar	240818	119671	121147	260647	130365	130282
3	Taplejung	158743	78989	79754	171145	85655	85490
4	Jhapa	821778	410945	410833	890060	446553	443507
5	Morang	1E+06	521870	516587	1E+06	571747	565049
6	Sunsari	795096	400691	394405	879941	443183	436758
7	Dhankuta	197287	98177	99110	213108	106661	106446
8	Tehrathum	132203	65406	66797	142124	70930	71193
9	Sankhuwasabha	187617	93128	94489	202273	101112	101160
10	Bhojpur	230201	113434	116767	244892	121981	122910
11	Solukhumbu	126254	62963	63290	135873	68077	67796
12	Okhaldhunga	184785	90999	93786	199264	99225	100039
13	Khotang	267580	132634	134946	286601	143168	143433
14	Udayapur	360087	180631	179456	396411	199192	197218
15	Saptari	696595	353395	343199	760388	384257	376131
16	Siraha	703283	357693	345590	769247	389234	380013
17	Dhanusha	822061	420893	401167	897953	455868	442084
18	Mahottari	682769	349472	333297	747724	379543	368182
19	Sarlahi	792409	404629	387781	870940	441548	429391
20	Sindhuli	344305	172315	171990	376733	189071	187662
21	Ramechhap	250729	122696	128034	270430	134240	136190
22	Dolakha	245356	121795	123561	266251	133086	133165
23	Sindhupalchowk	366538	183307	183230	397407	199374	198033
24	Kavrepalanchowk	464983	230920	234062	505200	252579	252620
25	Lalitpur	424219	215037	209182	467477	236118	231358
26	Bhaktapur	282245	142873	139372	310679	156812	153867
27	Kathmandu	1472707	763284	709423	1668936	852659	816276
28	Nuwakot	346249	172779	173470	375612	188234	187378
29	Rasuwa	54453	27926	26526	59359	30161	29198
30	Dhading	412317	204735	207581	449501	224716	224785

S. N.	Name of District	2011			2016		
		Both	Male	Female	Both	Male	Female
31	Makawanpur	482798	243921	238877	528160	266323	261837
32	Rautahat	685231	349876	335355	755332	382924	372408
33	Bara	708947	361920	347026	783827	397334	386493
34	Parsa	628481	322851	305630	694109	352985	341124
35	Chitwan	596082	298400	297681	658114	330330	327784
36	Gorkha	341771	165830	175941	369282	182552	186731
37	Lamjung	210996	102806	108189	228307	113087	115220
38	Tanahun	378559	183533	195026	410785	202991	207793
39	Syangja	368152	176281	191871	394750	193931	200818
40	Kaski	475905	235364	240541	523745	261298	262447
41	Manang	13643	7015	6628	15705	7990	7715
42	Mustang	17163	9017	8146	18323	9428	8895
43	Myagdi	135613	65686	69928	146478	72350	74128
44	Parbat	184382	89095	95287	198178	97777	100401
45	Baglung	320796	154590	166206	347295	171128	176166
46	Gulmi	348418	166568	181850	375179	184182	190997
47	Palapa	318028	154195	163833	343433	169714	173719
48	Nawalparasi	702048	350017	352031	771894	386628	385265
49	Rupandehi	901818	456337	445481	998594	503900	494695
50	Kapilbastu	602309	306323	295986	662672	335248	327424
51	Arghakhachi	248159	119933	128226	268502	132483	136018
52	Pyuthan	258416	125082	133334	281821	139182	142638
53	Rolpa	249295	123108	126187	273197	136224	136973
54	Rukum	228121	115203	112918	249990	126041	123949
55	Salyan	254086	127546	126541	278446	139965	138480
56	Dang	583036	291162	291874	638934	320347	318586
57	Banke	495943	252302	243641	543486	275037	268448
58	Bardiya	485224	244320	240905	531742	267699	264043
59	Surkhet	359714	179604	180110	394201	197626	196575
60	Dailekha	271416	134722	136694	297438	148684	148754
61	Jajarkot	161187	81525	79662	176639	89127	87512
62	Dolpa	35272	17677	17596	38654	19414	19240
63	Jumla	106567	54155	52412	116783	59067	57716
64	Kalikote	126500	63714	62786	138627	69801	68827
65	Mugu	53114	26822	26292	58205	29346	28860
66	Humla	48454	24715	23739	53099	26907	26192
67	Bajura	130738	65247	65491	141878	71107	70771
68	Bajhang	202022	99655	102367	219723	109494	110229

S. N.	Name of District	2011			2016		
		Both	Male	Female	Both	Male	Female
69	Achham	276483	134840	141643	299490	148427	151063
70	Doti	253659	127229	126429	277100	139223	137877
71	Kailali	811383	409607	401776	908605	457988	450617
72	Kanchanpur	495762	250626	245136	554607	279752	274855
73	Dadeldhura	152844	75412	77432	166329	82895	83434
74	Baitadi	280322	138458	141863	303681	151428	152253
75	Darchula	147505	73269	74235	160408	80208	80201

S. N.	Name of District	2021		
		Both	Male	Female
	Nepal	32030767	16098581	15932186
1	Ilam	412122	207426	204696
2	Pachthar	281801	141834	139967
3	Taplejung	184527	92875	91652
4	Jhapa	962768	484572	478196
5	Morang	1E+06	623575	615369
6	Sunsari	966428	486415	480014
7	Dhankuta	230082	115803	114279
8	Tehrathum	152928	76970	75957
9	Sankhuwasabha	218088	109766	108322
10	Bhojpur	261566	131649	129917
11	Solukhumbu	146311	73640	72671
12	Okhaldhunga	214879	108151	106728
13	Khotang	307587	154812	152775
14	Udayapur	433751	218312	215439
15	Saptari	827040	416259	410781
16	Siraha	837872	421711	416161
17	Dhanusha	977073	491772	485301
18	Mahottari	815088	410243	404845
19	Sarlahi	951832	479068	472764
20	Sindhuli	410429	206574	203855
21	Ramechhap	291651	146791	144860
22	Dolakha	288377	145143	143233
23	Sindhupalchowk	430167	216508	213659
24	Kavrepalanchowk	547656	275642	272015
25	Lalitpur	511838	257614	254224
26	Bhaktapur	339894	171073	168822
27	Kathmandu	1863768	938056	925712

S. N.	Name of District	2021		
		Both	Male	Female
28	Nuwakot	406731	204712	202019
29	Rasuwa	64497	32462	32035
30	Dhading	488445	245840	242605
31	Makawanpur	575311	289561	285751
32	Rautahat	827182	416330	410852
33	Bara	860211	432954	427257
34	Parsa	761163	383102	378061
35	Chitwan	721541	363160	358381
36	Gorkha	398775	200708	198067
37	Lamjung	246789	124212	122577
38	Tanahun	444932	223939	220993
39	Syangja	423981	213395	210586
40	Kaski	572945	288370	284575
41	Manang	17735	8926	8809
42	Mustang	19617	9874	9744
43	Myagdi	158138	79592	78545
44	Parbat	213212	107312	105900
45	Baglung	375549	189018	186531
46	Gulmi	404170	203424	200747
47	Palapa	370712	186584	184128
48	Nawalparasi	843837	424713	419124
49	Rupandehi	1E+06	552201	544935
50	Kapilbastu	724764	364782	359982
51	Arghakhachi	290226	146074	144152
52	Pyuthan	306268	154148	152120
53	Rolpa	295849	148904	146945
54	Rukum	271675	136737	134938
55	Salyan	301664	151831	149833
56	Dang	699532	352081	347449
57	Banke	597096	300526	296571
58	Bardiya	582764	293312	289452
59	Surkhet	430699	216776	213923
60	Dailekha	322985	162562	160423
61	Jajarkot	191514	96391	95123
62	Dolpa	41901	21089	20812
63	Jumla	126549	63694	62856
64	Kalikote	150370	75683	74687
65	Mugu	63238	31828	31410

S. N.	Name of District	2021		
		Both	Male	Female
66	Humla	57556	28969	28587
67	Bajura	155384	78206	77177
68	Bajhang	240641	121117	119524
69	Achham	328005	165089	162916
70	Doti	303476	152743	150733
71	Kailali	995084	500837	494247
72	Kanchanpur	607393	305708	301685
73	Dadeldhura	182164	91685	90479
74	Baitadi	332592	167397	165194
75	Darchula	175679	88421	87257

## References

- Aggrawal, Kokila 1998, Reproductive Health Case Study, Nepal, The Future Groups International, Washington.
- Baidya B.G. 2000, Beijing plus Five: An overview of the implementations of the Beijing Platform Action in Nepal in Nepal Population and Development Journal Ministry of Population and Environment Singha Durbar, Kathmandu.
- Bongaarts J. 1978 "A Framework for analyzing the proximate determinants of fertility" Population and Development Review 4(1):105-32.
- Bongaarts J. 1982 "The fertility inhibiting effects of the intermediate variables" Studies in family planning 13(6/7):179-89.
- Bongaarts and Potter 1983: Fertility, Biology and Behavior: An analysis of the proximate determinants New York, Academic Press.
- Caldwell J. C. 1976 Towards a restatement of Demographic Transition Theory, Population and development Review 2, pp579-616.
- Caldwell J. C. and Hill Alan 1988 Recent Developments using micro-demographic approaches to demographic research, in Caldwell and Hill (eds.) Micro-Approaches to Demographic reaserch, Keagan Paul London
- Central Bureau of Statistics (CBS), 1995, Population Monograph of Nepal, Kathmandu
- \_\_\_\_\_, 1998, Statistical Pocket Book, Nepal, Kathmandu.
- \_\_\_\_\_, 1999, Report on the Nepal Labour Force Survey, 1998-99, Kathmandu
- \_\_\_\_\_, 2000, Statistical Pocket Book, Nepal, Kathmandu.
- \_\_\_\_\_, 2002, Miscellaneous Publication Sheets 2001 census data, Kathmandu.
- \_\_\_\_\_, 2003, Population Monograph of Nepal, CBS, Kathmandu
- Central Department of Population Studies (CDPS), 1998, Fertility and Mortality Situation in Nepal, Kathmandu.
- \_\_\_\_\_, 1998, Migration Pattern in Nepal, Characteristics and Reasons, CDPS, Kathmandu.
- Chaudhary, Rafique Huda, 2000, "Health and Nutrition Status of Children and Women in South Asia" in Population and Development in Nepal (Vol. 17), CDPS, Kathmandu.
- Coale A.J.1974: "The History of Human Population" in The Human Population A Scientific American Book W.H. Freeman and Company San Francisco.
- Davis K. 1945; The World Demographic Transition Annals of the American Academy of Political and Social Science 273 pp1-11.
- Davis, K. and J. Blake 1956: "Social Structure and Fertility: An analytic framework" Economic Development and Cultural Change 4:211-235.
- Demeny P. 1972. Early fertility decline in Austria Hungary: A lesson in Demographic Transition in D.V. Glass and R. Revelle, eds. Population and social change London Edward Arnold.
- Knodel, J and E. van de Walle 1979: Lessons from the past: Policy implications of historical fertility studies, Population and Development Review 5, pp 217-45
- Lucas David and Paul Meyer, 1994, Beginning Population Studies (2nd edition), NCDS, ANU, Canberra.
- Ministry of Education (MOE), 1998, Educational Statistics of Nepal, (School Level), Kathmandu.
- \_\_\_\_\_, 2001, Educational Statistics of Nepal, Kathmandu.
- \_\_\_\_\_, 2002, Educational Statistics of Nepal, unpublished document, Kathmandu
- Ministry of Finance (MOF), 2000, Economic Survey, F.Y. 1999-2000, Kathmandu
- \_\_\_\_\_. 2000, Budget Speech of FY. 2000-2001, Kathmandu.
- Ministry of Health (MOH) 1993, Nepal Fertility Family Planning and Health Survey, 1991, Main Report, Kathmandu.
- \_\_\_\_\_.1997, Nepal Family Health Survey, Kathmandu.
- \_\_\_\_\_.2002a, Nepal Demographic and Health Survey, Kathmandu.
- \_\_\_\_\_.2002b, Annual Report Department of Health Services FY 2057/2058, Kathmandu.

Ministry of Labour (MOL), 1995, Report on the Social and Economic Conditions of Kamaiyas: Kathmandu

Ministry of Local Development (MOLD) 2002, Vital Registration Data Sheet (unpublished) Kathmandu

Ministry of Population and Environment (MOPE), 1997, Population Situation of Nepal, Kathmandu

\_\_\_\_\_, 1998, Population Projection for Nepal, 1996-2016, Vol. 1-3, Kathmandu.

\_\_\_\_\_, Nepal Population Report, 2002, MOPE

\_\_\_\_\_, A Study on Population Pressure Index (PPI) in Nepal, 2004, MOPE

\_\_\_\_\_, 1998 Population Policy in Nepal, Kathmandu.

\_\_\_\_\_, Nepal National Population Information, Education and Communication Strategy 1997-2001, Kathmandu.

\_\_\_\_\_, 2003, Population Projections for Nepal, 2001-2021, MOPE, CBS

Ministry of Health and Population, Nepal Population Report 2009, 2010, Kathmandu ,Nepal

Ministry of Health and Population, ICPD Plus 15, 2009, Kathmandu

Ministry of Women, Children and Social Welfare, 2004 AD, Senior Citizens Policy and Working Policy- 2058 (2002), Kathmandu.

Ministry of Women, Children and Social Welfare, 2005 AD, "Jeshtha Nagarik Rashtriya Karyayojana- 2062", Kathmandu.

Nepal Micro-nutrient Status Survey 1998 Kathmandu Nepal: Ministry of Health, Child Health Division, GOVERNMENT OF NEPAL/N, New ERA, Micro- Nutrient Initiative UNICEF Nepal and WHO.

Nepal South Asia Centre (NESAC), 1998, Nepal: Human Development Report, NESAC, Kathmandu.

Notestein, F.W. 1945: Population: The long view in T. W. Schultz ed, Food for the World, Chicago University of Chicago Press.

Population Reference Bureau 2001: World Population Data Sheet 2001.

Shryock, Henry S; Jacob S. Siegel and Associates, 1976, The Methods and Materials of Demography, U.S. Bureau of Census, Washington D.C.

Smith R.M. 1982, Fertility, Economy and Household Formation in England over three centuries, Population and Development Review 7, pp 595-622.

Sun T, H, Lin and R. Freedman 1978, Trends in fertility, Family Size Preference and Family Planning Practice, Taiwan 1961-1976. Studies in family Planning 9, pp 54-70.

Thompson, W. 1929: "Population", in American Journal of Sociology 34 pp 959-75.

UNAIDS and WHO, 1999, AIDS Epidemic Update: December 1999, Geneva.

UNICEF, 1996, Children and Women of Nepal. A Situational Analysis, Kathmandu

United Nation's Population Fund (UNFPA) 1989, South Asia Study on Population Policies and Programmes: Nepal, Kathmandu

\_\_\_\_\_, 1998, The State of World Population, New York

\_\_\_\_\_, 1999, The State of World Population, 1999, 6 Billion A Time for Choices, New York

\_\_\_\_\_, State of World Population 2003 investing in adolescent' health and rights, United Nations Population Fund, New Yourk.

United Nations 1958: Principles and Recommendations for National Population Censuses, Statistical Papers Series M, No. 27, p.3.

United Nations 1970: Principles and Recommendations for the Censuses Statistical Papers, Series M, No. 44, p.3-4.

UN-DESA 2011: Status of Older Persons in Nepal, Fact Finding Mission Report, 2011

## Definitions

**More developed** regions, following the UN classification, comprise all of Europe and North America, plus Australia, Japan, and New Zealand. All other regions and countries are classified as **less developed**. The **least developed** countries consist of 49 countries with especially low incomes, high economic vulnerability, and poor human development indicators. The criteria and list of countries, as defined by the United Nations, can be found at [www.unohrlls.org/en/ldc/](http://www.unohrlls.org/en/ldc/).

### Birth and Death Rate

The annual number of births and deaths per 1,000 total population. These rates are often referred to as “crude rates” since they do not take a population’s age structure into account. Thus, crude death rates in more developed countries, with a relatively large proportion of high-mortality older population, are often higher than those in less developed countries with lower life expectancy.

### Rate of Natural Increase (RNI)

The birth rate minus the death rate, implying the annual rate of population growth without regard for migration. Expressed as a percentage.

### Net Migration

The estimated rate of net immigration (immigration minus emigration) per 1,000 population for a recent year based upon the official national rate or derived as a residual from estimated birth, death, and population growth rates. Migration rates can vary substantially from year to year for any particular country, as can the definition of an immigrant.

### 2050 Population as a Multiple of 2010

Projected populations based upon reasonable assumptions on the future course of fertility, mortality, and migration

### Infant Mortality Rate

The annual number of deaths of infants under age 1 per 1,000 live births.

### Total Fertility Rate (TFR)

The average number of children a woman would have assuming that current age-specific birth rates remain constant throughout her childbearing years (usually considered to be ages 15-49).

### Population Under Age 15/Age 65+

The percentage of the total population in these ages, which are often considered the “dependent ages.”

### Life Expectancy at Birth

The average number of years a newborn infant can expect to live under current mortality levels.

### Percent Urban

Percentage of the total population living in areas termed “urban” by that country.

Countries define urban in many different ways, from population centers of 100 or more dwellings to only the population living in national and provincial capitals.

### Prevalence of HIV/AIDS

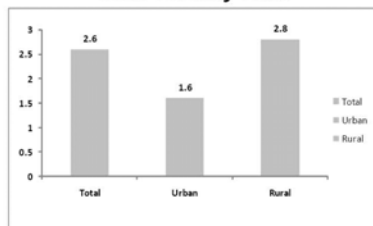
The estimated percentage of adults ages 15-49 living with HIV/AIDS.

### Contraceptive Use

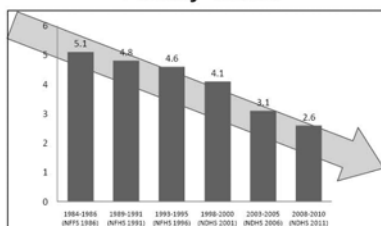
The percentage of currently married or “in-union” women of reproductive age who are using any form of contraception. “Modern” methods include clinic and supply methods such as the pill, IUD, condom, and sterilization.

# Priliminary Findings of Nepal Demographic and Health Survey 2011

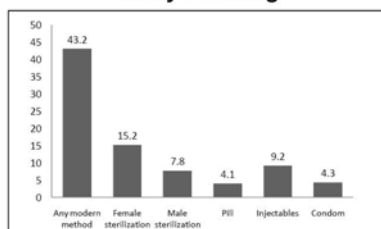
### Total Fertility Rate



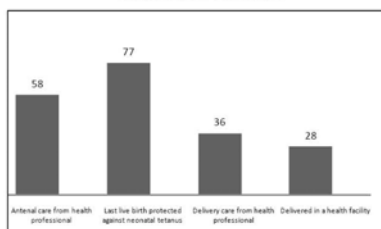
### Fertility Trends



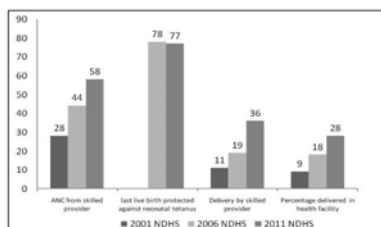
### Family Planning



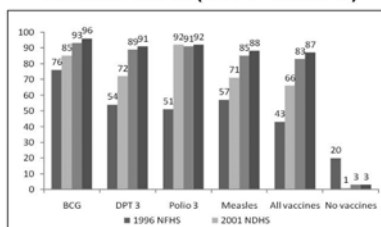
### Maternal Health



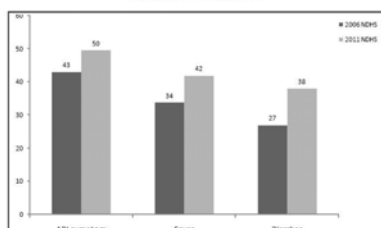
### Maternal Health Trend



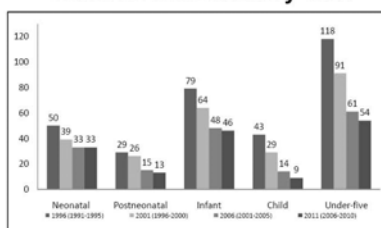
### Immization (12-23 Months)



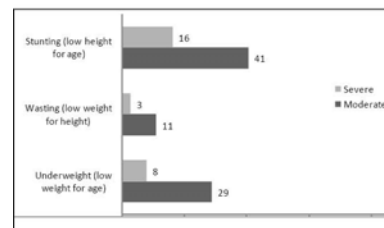
### Child Health



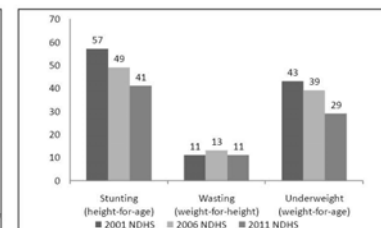
### Infant & Child Mortality Rate



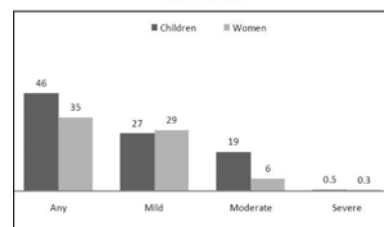
### Mal-nutrients Children Under age 5 Years



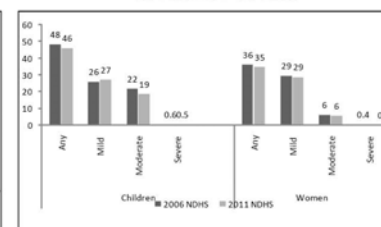
### Mal-nutrients Children Under age 5 Years : Trend



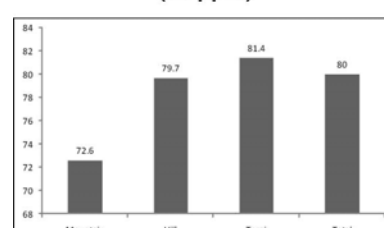
### Anemia among Children and Women



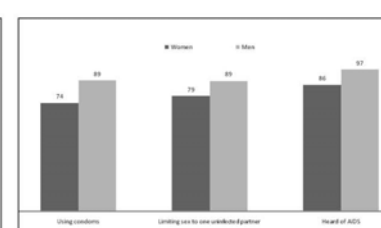
### Anemia among Children and Women : Trend



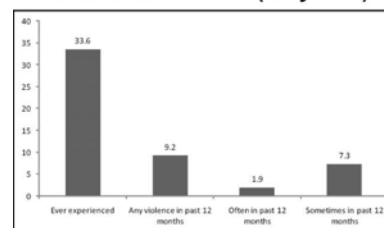
### Households using Iodized Salts (15 ppm)



### Knowledge on AIDS



### Domestic Violence ( Physical)





**For further inquiry or comments,**

Please contact us at:  
Population Division Ministry of  
Health & Population Ramshah Path, Kathmandu,  
Tel: 4262987

**Comments/enquiry**

**Sender Name :**

**Address :**

**E-mail :**

**Phone :**