NEPAL POPULATION REPORT 2016

SUBMITED
TO

GOVEMENT OF NEPAL
MINISTRY OF POPULATION & ENVIRONMENT

SUBMITED
BY

POPULATION EDUCATION & HEALTH RESEARCH CENTER(P) Ltd.

Acronyms

AHW	:	Auxiliary Health Worker
AIDS	:	Acquired Immuno-deficiency Syndrome
ANC	:	Antenatal Care
ANM	:	Auxiliary Nurse Midwife
ASRH	:	Adolescent Sexual and Reproductive Health
BCC	:	Behavior Change Communication
CBS	:	Central Bureaus of Statistics
CEDPA	:	Central for Development and Population Activities
CPR	:	Contraceptive Prevalence Rate
DFID	:	Department for International Development
FCHV	:	Female Community health Workers
FP	:	Family Planning
FPAN	:	Family Planning Association of Nepal
GBV	:	Gender-based Violence
GDP	:	Gross Domestic Products
GFATM	:	Global Fund for AIDS, Tuberculosis and Malaria
GoN	:	Government of Nepal
GPI		The Gender Parity Index
HA	:	Health Assistant
HDI	:	Human Development Index
HDR	:	Human Development Report
HIV	:	Human Immuno-deficiency Virus
I/NGOs	:	International Non-governmental Organisation
ICDP	:	The International Conference on Population and Development
IEC	:	Information and Educatin Center
ILO	:	International Labour Organization
MCHWs	:	Maternal and Child Health Worker
MCRW	:	Micro-Credit for Rural Women
MDG	:	Millennium Development Goal

MMR	:	Maternal Mortality Ratio
MOAC	:	Ministry of Agriculture and Co-operatives
MOHP	:	Ministry of Health and Population
MOPE	:	Ministry of Population and Environment
MOYS	:	Ministry of Youth and Sports
MSM	:	Men having Sex with Men
MWCSW	:	Ministry of Women, Child and Social Welfare
NAC	:	National AIDS Council
NAYS	;	Nepal Adolescents' and Youth Survey
NCASC	:	National Centre for AIDS and STD Control
ND	:	No Date
NDHS	:	Nepal Demographic and Health Survey
NFHP	:	Nepal Family Health Programme
NGO	:	Non-Government Organization
NHSP	:	Nepal Health Sector Programme
NLSS	:	Nepal Living Standard Surveys
NPC	:	National Planning Commission
NTAG	:	National Technical Advisory Group
NYP	:	National Youth Policy
PAF	:	Poverty Alleviation Fund
PHC	:	Primary Health Care Center
P&D.		Population and Development
PPI	:	Population Poverty Index
PPP	:	Population Perspective Plan
PRSP	:	Tenth Five-Year Plan, Poverty Reduction Strategy Paper
SBA	:	Skilled Birth Attendants
SDC	:	Swiss Agency for Development and Co-operation
SHP	:	Sub Health Post
SLTHP	:	Second Long Term Health Plan
TB	:	Tuberculosis
TYIDP	:	Three Year Interim Development Plan

TFR	:	Total Fertility Rate
UN	:	United Nations
UNAIDS	:	United Nations Program on HIV/AIDS
UNFPA	:	United Nations Population Fund
VDC	:	Village Development Committee
VERS	:	Vital Events Registration System
WB	:	World Bank
WHO	:	World Health Organization

Table of Contents

CHAPTER 1

Demographic Situation

1.1 Define Demography, Population and Population Economics:

The word "Population" refers to the number of inhabitants living in defined areas at a particular time. Several aspects of population such as size, growth rate, composition, distribution pattern, density, mobility pattern are the common phenomenon that poses several opportunities and constraints to resources and infrastructure planning and development. Population is always dynamic due to birth, death, and migration .Out of these three processes, birth and deaths are associated with issues of public health but third aspect migration is associated with human geography. The study of human population can be encompassed into two types of demography: formal demography and Population studies and recently various researchers and scholars define demography and population by linking with traditional micro and micro economics. The brief definition has been presented below.

Demography *is the statistical and mathematical study of the size, composition, and spatial distribution of human populations, and the effects of changes on the composition and growth of such populations and a change over times these aspects through the operation of the five processes of fertility, mortality, marriage, migration and social mobility".*

Donald Bogue (1969)

Demography *is the study of human population in relation to the changes brought about by the interplay of births, deaths and migration.*

Pressat 1985)

Demography is the scientific study of human populations, primarily with respect to their size, their structure, and their development.

United Nations, (1953)

Population studies *are 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.*

Demographic economics or population economics *is the application of economic analysis to demography, the study of human population, including size, growth, density, distribution, and vital statistics. The field of population economics is fertility, mortality, morbidity, migration, gender issue, GDP, GNP, and so on.*

Relationship between Population Economics and Other Economics

Population Economics and Macro and Micro Economics

The various researches show the relationship between population dynamics and public choice, and the impact of population on the distribution of income and wealth. Theory of micro and macro economics can be applied in applied population management. In micro-level it examine individual, household or family behavior, including household formation, marriage, divorce, fertility choices, education, labor supply, migration, health, risky behavior and aging. In macro-level investigations may address such issues as economic growth with exogenous or endogenous population evolution, population policy, savings and pensions, social security, housing, and health care. Moreover, economics always calculate National income for example, GDP , GNP and Per capita income based on the population of that country.

Population and Development Economics

This fear of population growth is not new. Thomas Robert Malthus and other classical economists worried that as the growing population made land increasingly scarce, rising food prices would eventually choke off further economic and population growth, leading to the "stationary state." For classical economists, natural resource constraints, particularly of land, were at the heart of the problem. However, Ester Boserup and the late Julian Simon, argued forcefully that population growth has positive economic effects. Simon pointed out that another birth means another mind that can help think up ways of using resources more efficiently. More population could also stimulate investment demand, break down traditional barriers to the market economy, spur technological progress, and lead to harder work (the latter because the presence of more dependents in the household raises the marginal utility of income relative to leisure and leads to longer hours of work). They noted also that a larger population can more easily bear the costs of providing certain kinds of social infrastructure—transportation, communications, water supply, government, research—for which the need increases less than proportionately with population. Indeed, Simon argued that the ultimate resource was people, and that the world would be better off with more of them.

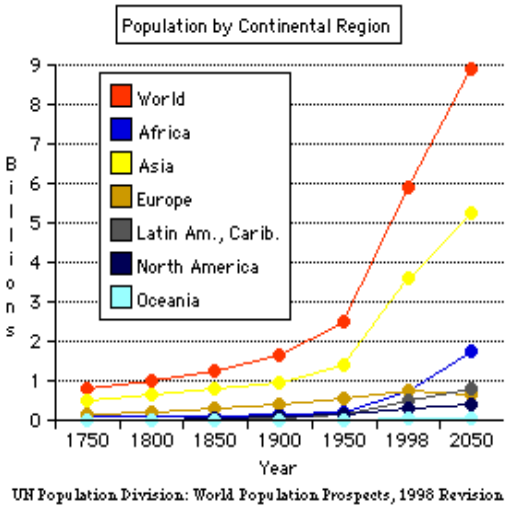
By the 1980s, policymakers were confused. Was population growth good? Was it bad? Did it matter at all? A reassessment in the 1980s revealed a surprisingly high degree of agreement among economists that population growth matters less than had previously been thought, in part due to the flexibility of free, competitive markets. In market economies, when population growth makes resources more scarce, the prices of those resources rise. This leads consumers to reduce their use of these resources and to find substitutes. The higher prices of resources also give producers an incentive to find new supplies and to substitute cheaper resources as inputs. But, more important, technological progress often reduces prices of resources, even in the face of higher demand.

Population and Health Economics:

The concept of health economics has been developed by Petty,(1623-1687) attempt to quantify the value of human life by measuring and expressing of an individual's value in terms of that persons' contribution to national production. Similarly Vein Dine (1916) estimates the economics effects of malaria in India in terms of lost output resulting from mortality, disability, and debility. Much of it was termed medical economics, and included gathering financial and social information on health care utilization patterns, investigating the efficiency of hospitals, exploring the desirability of health insurance and looking as the business side of medical practice. Such information shows the causal link between population and health economics.

1.2 The Global Population Situation:

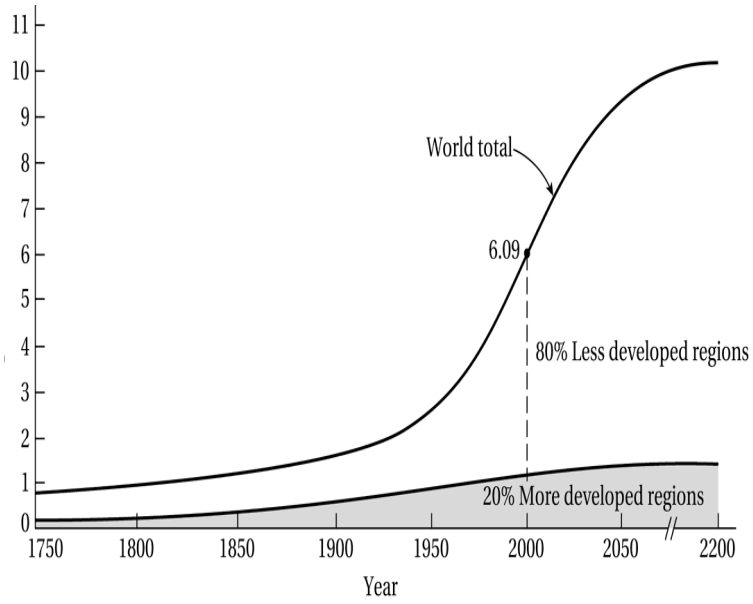
Historically, the world's population was estimated at about 300 million in the year A.D.1, which increased to about 500-800 million by 1750 A.D. The average annual growth rate of population during the period 1 A.D. to 1750 A.D was around 0.56 per 1000 per year, while the growth rate for the period 1750 to 1800 was estimated around 4.4 per 1000 per year. In the beginning of the 19th 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 world's population increased by 50 percent between 1900 and 1950 and by 140 percent between 1950 and 2000, and is projected by the United Nations to increase by just fewer than 50 percent between 2000 and 2050. Of the 3.44 billion increase in the number of people between 1950 and 2000, only 8 percent was in developed (i.e., rich) countries. The remaining 92 percent of the increase was in less-developed, or poor, countries (LDCs), reflecting the large difference in fertility levels and, to some degree, the different age distributions.



UN Population Division: World Population Prospects, 1998 Revision

Life expectancy in developed countries rose from 66.1 years during the period from 1950 to 1954, to 75.3 years in 2000. For LDCs, life expectancy rose from only 41.0 years during the same period to 63.0 years in 2000. Over that same time, the number of births per woman fell from 2.8 to 1.6 in developed countries and from 6.2 births per woman to 3.0 in LDCs. Birth rates in LDCs remain high enough to contribute substantially to population growth. Lower birthrates and longer lives lead to "population aging" (i.e., more elderly people and fewer children). Population aging is most rapid, and has gone furthest, in the developed world. The median age in developed countries rose from 28.6 in 1950 to 37.3 in 2000, while in the United States it rose from 30.0 to 35.2. In LDCs, by contrast, the median age in 1950 was only 21.3, rising to 24.1 in 2000. Of course, individual countries vary. In Japan, Italy, and Switzerland the median age was over 40 in 2000, whereas in Uganda, Yemen, Niger, and Somalia it was under 16 (source)

The figure 1, 2 shows the historical trends in population growth rate. The figure indicates that when the population was 6.09 billion in the world , 80 percent remain in less developed countries and 20 percent population is in the developed countries. Because of this developed countries are motivating the young population from less developing countries for labour.



(a) Absolute size

Table 1.2: Selected Demographic Indicators of World, 2015

Indicators		World	MDR*	LDR**	LDR***	Asia	Nepal
Population		7336	1254	4702	938	4397	280
Rate of Natural increases							
Projected population (million, mid 2030)		8505	1255	5779	1300	4939	32.4
Projected population (millions, Mid- 2050)		9804	1310	7120	1887	5324	36.0
Crude Birth Rate		20		24	24	18	22
Crude Death rate		8		7	7	7	7
2050 Population as a multiple of 2010							
Urban population (percent)							
Infant Mortality Rate		37	5	44	40	33	33
Life expectancy at birth	Total	71	79	69	62		
	Male	69	76		60		
	Female		82	72	63		
Total Fertility Rate		2.5	1.7	3.0	4.3	2.2	2.4
Population under Age 15		26	16	32	40	25	33

years (%)						
Population aged 65 years above (%)	8	17	5	4	8	
Percent of married women 15- 49 years uses contraception						
Any method	62	67	54	37	66	50
Modern method	56	59	46	32	60	47
Population with HIV/AIDS among the population aged 15- 59 years (%)						
Urban	53	77	46	29	47	
Rural						
Population Density (per sq. miles)	523	238	612	54	938	1322
GNI per capita (2012 in US$)	15030	39020		2270		
GDP, 2007- 2011						
Mobile phone subscribers per 100 inhabitants						

Source: PRB Data Sheet, 2013.and CBS, Nepal

* *MDR= More Developed Region, LDR= Less Developed Region; LDR = Least Developed Region*

1.2 Most Populous Countries, 2013 and 205 Table 1.2 shows the most populous ten countries in the world in the year 2015 and projected for 2050. China is the most populous country in 2015 while as India will be most populous country in 2050. In 2050, three countries from SAARC will reached at most ten populous countries.

Table 1. 1: Most Populous Countries, 2015 and 2050

2015		2050	
Country	Population (million)	Country	Population (million)
China	1,372	India	1,660
India	1,314	China	1,366
USA	321	Nigeria	397
Indonesia	256	United states	398
Brazil	205	Indonesia	366
Pakistan	199	Pakistan	344
Nigeria	182	Brazil	226
Bangladesh	160	Bangladesh	202
Russia	144	Congo, Dem. Rep.	194
Japan	127	Ethiopia	165

Source: PRB Data Sheet, 2015

1.3 Countries with the Highest and Lowest Total Fertility Rates

According to the world population data sheet (2015), worldwide, the total fertility rate (TFR or average number of children per woman) is 2.5 and 4.4 in the poorest countries. TFRs range from a low of 1.2 in Bosnia-Herzegovina to a high of 7.6 in Niger. With a current population of 4.3 billion, Asia will likely experience a much smaller proportional increase than Africa, but will still add almost 1 billion people by 2050—determined in large part by trends in China and India. By 2050, Africa is projected to increase to 2.4 billion from 1.1 billion today, making it the region with the largest population growth. But this projection should be treated very cautiously, because it assumes that birth rates will decline smoothly in all African countries in much the same way as birth rates declined in other regions. Asia is home to 60 percent of global population. China and India account for more than half of Asia's total population. In Latin America/Caribbean population growth has been slow decline in this region due to lower birth rate in Brazil and Mexico. In North America, immigration is a significant engine of population growth in the United States and Canada due to the fertility decline. Europe's population of 740 million is projected to decrease to 726 million by 2050, but even that lower number depends on whether immigration helps to stall a more-rapid decline. In Australia and New Zealand, continued growth from higher birth rates and immigration is expected. Table 1.3 shows the highest and lowest TFR countries in the world.

Table 1.3: Countries with the Highest and the Lowest Total Fertility Rates

Highest	TFR	Lowest	TFR
Niger	7.6	Bosnia-Herzegovina	1.2
Chad	4	Taiwan	
Somalia	6	Moldova	
Congo.Dem.Rep.	7	Poland	
Angola	3	Portugal	
Burundi	9	Singapore	
Uganda	2	South Korea	
Central African Republic	10	Spain	
Mali		Solvakia	
Burkina Faso		Hungary	

Source: PRB Data Sheet, 2015

1.4 The SAARC Region Population Situation

Table 1.4 shows the comparative demographic situation in the SAARC region. India is the most populous country followed by Pakistan. Total fertility rate is the highest in Afghanistan and other demographic indicators also show the worse situation in the country.

Table 1.5: The SAARC Region Population Situation

Indicators		Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri-Lanka
Population Million Mid-2015		32.2	160.4	0.8	1,314.1	0.3	28.0	199.0	20.9
Projected Population (million, Mid- 2025)		45.8	185.1	0.9	1, 512.9	0.4	32.4	254.7	22.5
Projected Population (million, Mid- 2050)		64.3	201.9	1.1	1, 660.1	0.6	36.0	344.0	23.0
Crude Birth rate		34	20	18	21	22	22	30	18
Crude Death rate		8	6	7	7	3	7	7	6
Urban Population		25	23	38	32	45	18	38	18
Infant Mortality Rate		74	38	47	42	9	33	69	9
Life Expectancy at Birth	Total	61	71	68	68	74	67	66	74
	Male	60	70	68	66	73	66	66	71
	Female	62	71	69	69	75	69	67	77
Total Fertility Rate		4.9	2.3	2.2	2.3	2.2	2.4	3.8	2.3
Population Under age 15 years %									
Contraceptive prevalence Rate	Any method	21	62	66	54	35	50	35	68
	Modern method	20	54	65	47	27	47	26	53
Population Per sq Km		415	2,089	764	842	11, 565	1, 322	939	1,672
GNI PPP per capita		1,980	3,340	7, 560	5, 760	12, 770	2, 420	5, 100	10, 270
GDP Growth 2007-2011 (%)									
Percent Population Who use Improved sanitation									
	Urban								
	Rural								

Source: PRB Data Sheet, 2015

1.5 Population clock

A population clock is a specific tool that is used to predict the population of a certain place at any given time. The most common is the world clock which takes the count after every second. Table 1.5 describes the world Population Clock of 2015. According to this, in every minute, 160 people are adding to the world. In which only 3 additions in more developed compared to 157 additions in less developed countries. This unbalanced spatial addition of the population is the greater challenged for the balanced development of the world.

Table 1.5: Population clock population in developed, more developed and less developed country

		World	More Developed Countries	Less developed Countries
Population		7,33,64,35,000	12,54,19,99,000	6,08,22,35,000
Birth Per	Year	14,59,73,000	1,37,60,000	,13,22,13,000
	Day	3,99,926	37,700	3,62,226
	Minute	278	26	252

Death Per	Year	5,70,52,000	1,22,83,000	4,47,69,000
	Day	1,56,306	38,652	1,22,654
	Minute	109	23	85
Natural Increase per	Year	8,89,21,000	14,77,000	87,44,000
	Day	2,43,620	4,047	2,39,373
	Minute	169	3	166
Infant Death per	Year	93,51,000	73,000	52,78,000
	Day	14,660	201	14,459
	Minute	10	bbb	10

Source: PRB Data sheet, 2015

1.6 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;

a) It describes the changes that have taken place in fertility and mortality over time.
b) It attempts to construct theoretical causal models to explain the changes that have taken place.
c) 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).

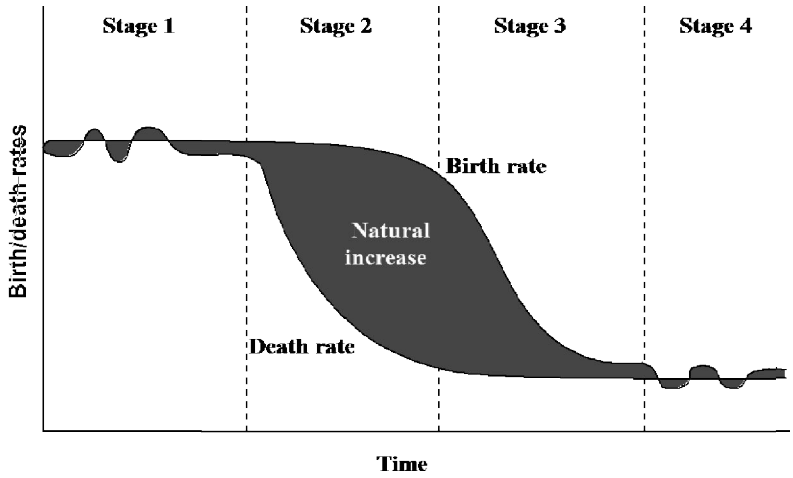
Caldwell provided further critique to demographic transition theory by stressing the importance of western values regarding nuclear families. In another words, western values were more important than the level of development (Caldwell1976). Caldwell's argument has also been challenged by different studies, 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).

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).

Table XX Stages of Demographic Transition theory

Stage	Characteristics
First	Birth Rate and Death rate are both high. Population growth is slow and fluctuating.Birth rate is high because of the lack of family planning, high high infant mortality rate: putting babies in the 'bank', need for workers in agriculture, religious beliefs that children as economic assets .Death rate is high because of high levels of disease, famine, lack of clean water and sanitation, lack of health care and war, competition for food from predators such as rats lack of education. Typical of Britain in the 18th century and the Least Economically Developed Countries (LEDC's) today.
Second	Birth rate remains high. Death rate is falling. Population begins to rise steadily because of improved health care (e.g. smallpox vaccine) improved hygiene (water for drinking boiled) and improved sanitation food production and storage, improved transport for food decreased infant mortality rate. Typical of Britain in 19th century; Bangladesh; Nigeria
Third	Birth rate starts to fall death rate continues to fall and population rising due to the available of family planning services, lower infant mortality raising the living standard of people.
Fourth	Both birth and death rate is low and population steady due to increase of education, job, and health facilities.

Fig 1.2- Demographic Transition Model



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.

1.7 Size and Growth Rate of Population of Nepal.

Geographically Nepal is situated between China and India. These two neighbors are the most populous countries in the world with both having more than one billion people. Nepal's population of 26.4 million is very small compared to its neighbors. Although the size of the Nepalese population compared to its neighbors is quite small, its distribution 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 2011, Nepal's population was 26494504 as of June 2011. The average annual growth rate of population during the last decade i.e. 2001-2011 was 1.35 percent (CBS 2012). The census also revealed that the sex ratio i.e. males per 100 females was 94.6. In other words, in Nepal's population, 48.5% are male and 51.8% are female and there are exactly 796422 female populations in the country. 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

Table 1. 6: Population size, growth rate and doubling time, Nepal,1911 – 2011

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
2011	26,494,504	33,43,081	1.35	52

Source; CBS 2002, 2012

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 (1.35 percent). 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.

1.8 Population Distribution

1.8.1 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 49.7 percent of the total population in 2011. The *Terai* region lies below the elevation of 610 meters. It comprises of 23 percent of the total land area and contains more than half (50.3%) 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 - 2011.

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
2011	1781792 (6.7)	11394007 (43.0)	13175799 (49.7)	13318705 (50.3)	26494504

Note: The figures in Parenthesis indicate percentages.

Source: CBS 1995, 2002, 2012.

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.

1.8.2 Population Growth Rate by Ecological Region

Population Growth Rate by Ecological Region, Nepal, 1961/71 – 2001/2011 are presented in Table 1.8. 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. During 2001-2011, the population growth rate has been decreased in all ecological regions and 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 – 2001/2011

Geographic region	Inter-census period Average Annual Growth Rate				
	1961/71	1971/81	1981/91	1991/01	2001/11
Mountain	1.85	1.35	1.02	1.57	0.54
Hill		1.65	1.61	1.97	1.06
Terai	2.39	4.11	2.75	2.62	1.72
Total	2.05	2.66	2.08	2.25	1.35

Source: CBS, 1995 CBS 2002.

1.8.3 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 the 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 – 2011

Development	Distribution of Population (%)				Average Annual Growth Rate (%)			
Region	1981	1991	2001	2011	1971-81	1981-91	1991-2001	2001-11
Eastern	24.49	24.05	23.09	21.93	2.86	1.83	1.84	0.84
Central	32.68	33.44	34.09	36.45	2.42	2.33	2.61	1.84
Western	20.83	20.39	19.74	18.60	2.49	1.88	1.92	0.75
Mid-West	13.02	13.04	13.01	13.39	2.77	2.11	2.26	1.63
Far-West	8.78	9.08	9.47	9.63	3.25	2.44	2.26	1.53
Total	100	100	100	100	2.66	2.08	2.25	1.35

Source: CBS 2002, 2003, 2011

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 (2.66 percent), while the second highest rate of growth was recorded for Central Development Region (2.61 percent). Similarly during the decade 2001-2011, the growth rate in all development regions have been decreased and the highest growth rate is in central development region (1.84 percent) and the lowest growth rate is in western development region (0.75 percent).

1.9 Growth Rate and Distribution of Population

1.9 .1 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 1.10. Kathmandu district has the largest population as indicated by the different censuses of Nepal. The census of 2011 showed a population of 1744240 in the Kathmandu district. The smallest population was recorded in the Manang district which has a population 6538 in 2011. 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 4416 persons per square kilometer. The lowest population density was observed in Manang district with 3 persons per square kilometer.

Table 1.10: Distribution and the Growth Rate of Population by Districts, Nepal 1981-2011

Population District	1981	1991	2001	2011	Area in sq. Kms.	Population Density per sq km 2011	Average Annual Growth Rate2001-2011
Taplejung	120780	120053	134698	127446	3646	35	-0.55
Panchthar	153746	175206	202056	191817	1241	155	-0.52
Ilam	178356	229214	282806	290254	1703	170	0.26
Jhapa	479743	593737	688109	812650	1606	506	1.66
Morang	534692	674823	843220	965370	1855	520	1.35
Sunsari	344594	463481	625633	763487	1257	607	1.99
Dhankuta	129781	146386	166479	163412	891	183	-0.19
Terhathum	92454	102870	113111	101577	679	150	-1.08
Sankhuwasabha	129414	141903	159203	158742	3480	46	-0.03
Bhojpur	192689	198784	203018	182459	1507	121	-1.07
Solukhumbu	88245	97200	107686	105886	3312	32	-0.17
Okhaldhunga	137640	139457	156702	147984	1074	138	-0.57
Khotang	212571	215965	231385	206312	1591	130	-1.15
Udayapur	159805	221256	287689	317532	2063	154	0.99
Saptari	379055	465668	570282	639284	1363	469	1.14
Siraha	375358	460746	572399	637328	1188	536	1.07
Dhanusha	432569	543672	671364	754777	1180	640	1.17
Mahottari	361054	440146	553481	627580	1002	626	1.26
Sarlahi	398766	492798	635701	769729	1259	611	1.91
Sindhuli	183705	223900	279821	296192	2491	119	0.57
Ramechhap	161445	188064	212408	202646	1546	131	-0.47
Dolakha	148510	173236	204229	186557	2191	85	-0.91
Sindhupalchok	234919	261025	305857	297798	2542	113	-0.27
Kavrepalanchowk	307150	324329	385672	381937	1396	274	-0.10
Lalitpur	199688	257086	337785	468132	385	1216	3.26
Bhaktapur	144420	172952	225461	304651	119	2560	3.01
Kathmandu	426281	675341	1081845	1744240	395	4416	4.78
Nuwakot	210549	245260	288478	277471	1121	248	-0.39
Rasuwa	30241	36744	44731	43300	1544	28	-0.33
Dhading	236647	278068	338658	336067	1926	174	-0.08
Makawanpur	243411	314599	392604	420477	2426	173	0.69
Rautahat	332526	414005	545132	686722	1126	610	2.31

Bara	318957	415718	559135	687708	1190	578	2.07
Parsa	284338	372524	497219	601017	1353	444	1.90
Chitawan	259571	354488	472048	579984	2218	261	2.06
Gorkha	231294	252524	288134	271061	3610	75	-0.61
Lamjung	152720	153697	177149	167724	1692	99	-0.55
Tanahun	223438	268073	315237	323288	1546	209	0.25
Syangja	271824	293526	317320	289148	1164	248	-0.93
Kaski	221272	292945	380527	492098	2017	244	2.57
Manang	7021	5363	9587	6538	2246	3	-3.83
Mustang	12930	14292	14981	13452	3573	4	-1.08
Myagdi	96904	100552	114447	113641	2297	49	-0.07
Parwat	128400	143547	157826	146590	494	297	-0.74
Baglung	215228	232486	268937	268613	1784	151	-0.01
Gulmi	238113	266331	296654	280160	1149	244	-0.57
Palpa	214442	236313	268558	261180	1373	190	-0.28
Nawalparasi	308828	436217	562870	643508	2163	298	1.34
Rupandehi	379096	522150	708419	880196	1360	647	2.17
Kapilvastu	270045	371778	481976	571936	1738	329	1.71
Arghakhanchi	157304	180884	208391	197632	1193	166	-0.53
Pyuthan	157669	175469	212484	228102	1309	174	0.71
Rolpa	168166	179621	210004	224506	1879	119	0.67
Rukum	132432	153554	188438	208567	2877	72	1.01
Salyan	160734	181785	213500	242444	1462	166	1.27
Dang	266393	354413	462380	552583	2955	187	1.78
Banke	197152	285604	385840	491313	2337	210	2.42
Bardiya	198544	290313	382649	426576	2025	211	1.09
Surkhet	167111	225768	288527	350804	2451	143	1.95
Dailekh	165612	187400	225201	261770	1502	174	1.50
Jajarkot	99312	113958	134868	171304	2230	77	2.39
Dolpa	22043	25013	29545	36700	7889	5	2.17
Jumla	68797	75964	89427	108921	2531	43	1.97
Kalikot	79736	88805	105580	136948	1741	79	2.60
Mugu	35287	36364	43937	55286	3535	16	2.30
Humla	28721	34383	40595	50858	5655	9	2.25
Bajura	81801	92010	108781	134912	2188	62	2.15

Bajhang	124010	139092	167026	195159	3422	57	1.56
Achham	185962	198188	231285	257477	1680	153	1.07
Doti	153135	167168	207066	211746	2025	105	0.22
Kailali	257905	417891	616697	775709	3235	240	2.29
Kanchanpur	168971	257906	377899	451248	1610	280	1.77
Dadeldhura	86853	104647	126162	142094	1538	92	1.19
Baitadi	179136	200716	234418	250898	1519	165	0.68
Darchula	90218	101683	121996	133274	2322	57	0.88

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

Source: CBS 1995, 2002, 2012.

1.9.2 The Highest and Lowest Population Districts

There is a sort spatial concentration of concentration of population since the earlier census. Table 1.11 and 1.12 present ten most populated and ten least populated districts. Table 1.11 shows that Kathmandu and eastern and central terai districts have been the 10 most populated districts in Nepal. These 10 districts share about one third of the total population (Thapa, A.2013).

Table 1.11: Ten Most Populated Districts 1991-2011

SN	1991			2001			2011		
	District	Population	Percent	District	Population	Percent	District	Population	Percent
1	Kathmandu	675341	3.65	Kathmandu	1081845	4.67	Kathmandu	1,744,240	6.58
2	Moran g	674823	3.65	Morang	843220	3.64	Morang	965,370	3.64
3	Jhapa	593737	3.21	Rupendehi	708419	3.06	Rupendehi	880,196	3.32
4	Dhanusa	543672	2.94	Jhapa	688109	2.97	Jhapa	812,650	3.07
5	Rupendehi	522150	2.82	Dhanusa	671364	2.90	Kailali	775,709	2.93
6	Sarlahi	492798	2.67	Sarlahi	635701	2.75	Sarlahi	769,729	2.91
7	Sapatari	465668	2.52	Sunsari	625633	2.70	Sunsari	763,487	2.88
8	Sunsari	463481	2.51	**Kailali**	616697	2.66	Dhanusa	754,777	2.85
9	Siraha	460746	2.49	Siraha	572399	2.47	**Bara**	687,708	2.60
10	Mahottari	440146	2.38	Sapatari	570282	2.46	**Rautahat**	686,722	2.59

Source: CBS, 1995, 2003, 2012. Population Report 2014

These districts are almost same in each census and have shared about 29 percent, 30 percent, 33 percent of total population in 1991, 2001, 2011 census respectively and the percent of population of those districts has been increasing in each successive census after 1991. The ten least populated districts are the mountain districts. These districts are same from 1991 to 2010. Not surprising, Terathum and Jumla that came in the list of the least populated districts in 2011.Not only the mountain district but also hill district came into the list in 2011. As given in Table 1.12, the ten least populated districts shared 2.76, 2.85; and 2.39 percent of the total population, in the census 1991, 2001, and 2011 respectively. These districts not only reducing the percent of population but importantly also reduce the absolute number as well. For instance, the total population of those ten districts was 506,138 in 1991; 657,895, in 2001 that reduce to 636,159 in 2011.

Table 1.12: Ten Least Populated Districts 1991-2011

S.N.	1991			2001			2011		
	District	Popn	% to total popn	District	Popn	% to total popn	District	Popn	% to total popn
1	Manag	5363	0.03	Manag	9587	0.04	Manag	6,538	0.02
2	Mustang	14292	0.08	Mustang	14981	0.06	Mustang	13,452	0.05
3	Dolpa	25013	0.14	Dolpa	29545	0.13	Dolpa	36,700	0.14
4	Humla	34383	0.19	Humla	40595	0.18	Rasuwa	43,300	0.16
5	Mugu	36364	0.20	Mugu	43937	0.19	Humla	50,858	0.19
6	Rasuwa	36744	0.20	Rasuwa	44731	0.19	Mugu	55,286	0.21
7	Jumla	75946	0.41	Jumla	89472	0.39	**Terhathum**	101,577	0,38
8	Kalikot	88805	0.48	Kalikot	105580	0.46	Solukhumbu	105,886	0.40
9	Bajura	92010	0.50	Solukhumbu	170686	0.74	**Jumla**	108,921	0.41
10	Solukhumbu	97200	0.53	Bajura	1087781	0.47	Myagdi	113'641	0.43

Source: CBS, 1995, 2003,2012. Population Report 2014

1.10 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. 13: Population density (person per sq. km.) by ecological zones & development regions, Nepal, 1981-2011.

Zones/Regions		Eastern	Central	Western	Mid Western	Far Western	Total
Mountain	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
	2011	38	82	3	18	58	34
Hill	Area sq.km.	10749	11805	18319	13710	6762	61345
	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
	2011	149	375	153	123	128	186
Terai	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
	2011	525	505	398	201	253	392
Total	Area sq.km.	28456	27410	29398	42378	19539	147181
	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
	2011	204	352	168	84	131	180

Source: CBS 2002, 2012.

Table 1.13 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.

1.11 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 1.14 shows that females have slightly outnumbered males, mainly because adult males used to go abroad in search of livelihood.

Table 1. 14: Sex Ratio by Ecological Regions, Nepal, 1952/54 – 2011

	Sex Ratio(per100 female)						
Ecological Regions	1952/54	1961	1971	1981	1991	2001	2011
Mountain	95.95	94.26	100.79	104.71	98.43	98.39	93.8
Hills			98.02	102.14	95.34	95.84	91.4
Terai	100.10	102.14	106.39	108.33	103.85	103.77	96.7
Nepal	96.80	97.05	101.37	105.02	99.47	99.80	94.2

Source: CBS, 1995, 2002, 2012.

However, in the censuses of 1971 and 1981 more males were counted than females. The censuses of 1991, 2001 and 2011 yielded more females than males and as a consequence overall sex ratio was less than 100. This sharp decline in sex ratio during 1981-2011 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 1.15 shows sex ratio of population by ecological and development regions from 1981 to 2001.

Table 1. 15: Sex Ratio of Population by Ecological & Development Regions, Nepal, 1981-2011.

Ecological Zones	Year	Development Regions					
		Eastern	Central	Western	Mid Western	Far-western	Total
Mountain	1981	102	107	108	107	102	105
	1991	96	100	109	103	94	98
	2001	97	99	116	103	96	98
	2011	91	91	116	102	92	94
Hill	1981	101	106	100	100	92	102
	1991	97	102	88	96	92	95
	2001	97	103	87	97	94	96
	2011	90	101	81	90	87	186
Terai	1981	108	107	109	107	116	108
	1991	103	106	103	102	101	104
	2001	102	107	102	101	103	104
	2011	94	102	95	94	94	97
Nepal	1981	105	107	103	103	105	105
	1991	100	104	93	99	96	99
	2001	100	105	93	99	98	100
	2011	92	101	87	93	91	94

Source : CBS, 1995,2002, 2012.

1.12 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 1.16

The Table 1.16 shows that the population of Nepal is composed primarily of young people and since 1960s it has remained young. About 35 percent of its present population is under 15 years of age. Similarly, about 57 percent of the population is in the age group 15-59. This age structure indicates approximately three person is in the working ages (15-59 years) have to care for two persons with age less than 15 years old and aged 60 years or more. This age structure of Nepalese population is mainly due to declining fertility and mortality.

Table 1. 16 Percentage Distribution of Population by Five-year age groups, Nepal, 1981-2011

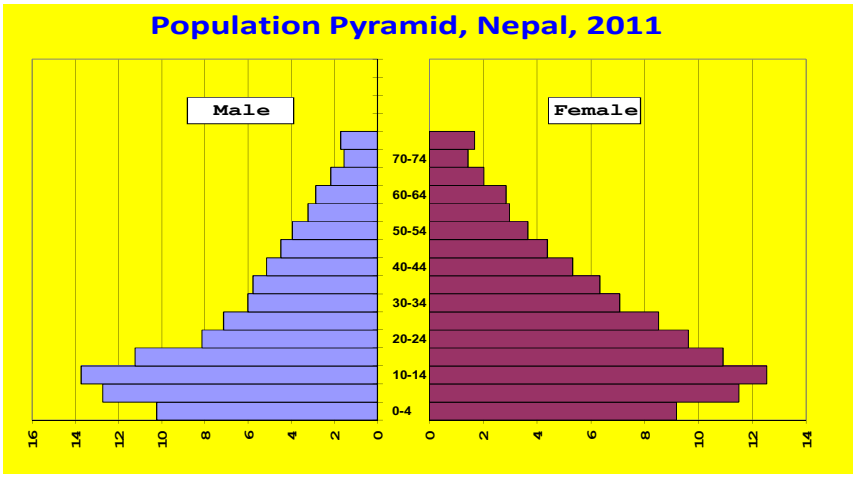
Age Groups	1981		1991		2001		2011		
	Male	Female	Male	Female	Male	Female	Male	Female	Total
0–4	15.5	15.3	14.9	14.4	12.29	11.95	10.23	9.18	9.69
5–9	14.5	14.6	15.5	14.8	14.38	13.87	12.73	11.50	12.10
10–14	11.9	10.8	13.1	12.1	13.50	12.73	13.73	12.54	13.12
15–19	9.0	8.6	9.5	9.9	10.44	10.57	11.23	10.91	11.07
20–24	8.3	9.5	7.9	9.3	8.33	9.40	8.13	9.63	8.90
25–29	7.4	8.1	7.0	7.8	7.23	7.95	7.14	8.52	7.85
30–34	6.1	6.9	6.0	6.5	6.39	6.71	6.00	7.07	6.55
35–39	6.0	5.9	5.6	5.5	5.73	5.79	5.76	6.33	6.06
40–44	4.9	5.1	4.5	4.7	4.75	4.82	5.14	5.32	5.23
45–49	4.3	3.9	4.1	3.9	4.13	3.99	4.48	4.38	4.43
50–54	3.8	3.4	3.3	3.1	3.46	3.28	3.94	3.66	3.80
55–59	2.4	2.2	2.7	2.3	2.80	2.49	3.21	2.97	3.09
60–64	2.5	2.4	2.3	2.3	2.31	2.27	2.87	2.85	2.86
65+	3.4	3.1	3.6	3.4	4.26	4.16	5.41	5.13	5.28

Source: CBS, 1995, 2002, 1012.

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 10-14 age group population is highest in the 2011 population census. Under normal situation age group 0-4 should have the largest population. 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, 2011.



Source: CBS, 2012

1.13 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 52 percent are 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.

Population distribution by region

State	Total Population	Male	Female	Households
1	4534943	2166536	2368407	992445
2	5404145	2717938	2686207	932308
3	5529452	2747633	2781819	1270797
4	2397855	1088228	1309627	576870
5	4736008	2253253	2482755	930718
6	1339584	657566	682018	254193
7	2552517	1217887	1334630	469971

CHAPTER 2

Fertility and its Proximate Determinants

2.1 Fertility

Three demographic processes that determine the structure, distribution and growth of any population are: fertility, mortality and net migration. Among these factors, fertility is one of the main factors in determining the age structure of a population. Compared to other demographic processes, the study of fertility is complex because it is affected by host of factors including biological as well as behavioral. Countries' fertility rate has many short -term and long term political, social and economic effects. For example, the demand for social services and medical care, political views and voting patterns, the financing of pay -as - you- go social security systems are all determined by the present and past fertility rates of the population.

Fertility refers to the number of live births, and is more easily measured for women because they actually give birth to babies. Marital fertility is the term which covers the number of live births to married women. Natural fertility refers to populations where women make no effort to limit the number of their children using birth control. One simple measure of fertility is to take the average of mean live births to women a particular age.

The most common measurement of fertility is the Total Fertility Rate (TFR). The TFR is the average number of children that would be born alive to a woman during her lifetime, if she was to bear children at each stage according to the prevailing age-specific fertility rates. The TFR is obtained by summing the age-specific rates in a particular calendar year across all childbearing ages. Therefore the TFR shows cross sectional (that is at births occurring in a specific period of time, normally one year) picture of fertility and consists of values from many generations of women who are at different childbearing stages in any given year. An alternative measure of fertility is the Generational Fertility Rate (GFR) (also referred to as the longitudinal Fertility Rate). The GFR is the sum of the age-specific fertility rates lifetime of any birth cohort. Therefore it represents the actual number of births that a particular cohort of women experienced over their reproductive lifetime.

It can be concluded that 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.

It is important that need to understand what causes of movements in fertility, so as to produce accurate predictions for the future. 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, 2011 has indicated that the CBR is around 24.3 per thousand in Nepal. Although, this means a decrease of around 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 - 2011

Sources	Years	Crude birth rates (per 1000 population)
United Nations, ESCAP	1952-54	45.0
Vaidhyanathan 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 Nepal Demographic and Health Survey, 2011	2003-2005 2008-2010	28 24.3

Source: CBS 1995, MOH, 1997, 2002a and 2006, 2012

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 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 2008-2011.

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, 1971-2010

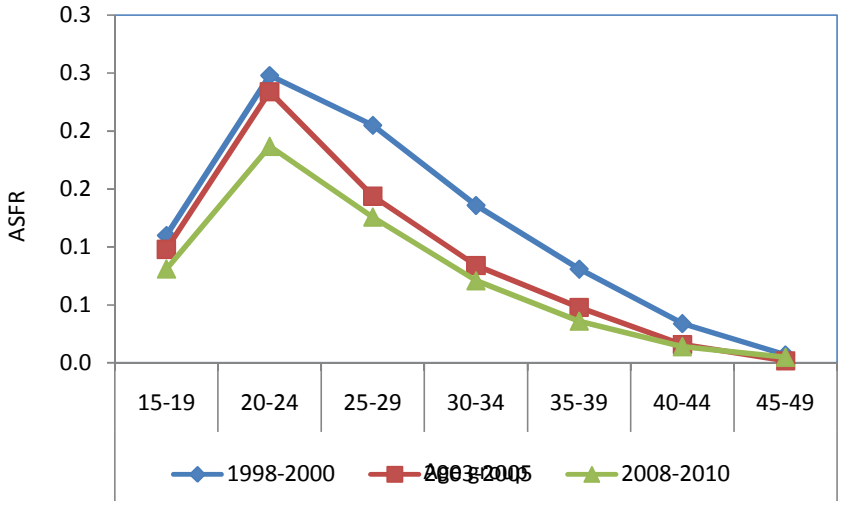
Age group	1971	1976	1981	1984-86*	1989-91*	1994-96*	1998-2000*	2003-05	2008-10
15-19	0.074	0.145	0.066	0.099	0.101	0.127	0.110	0.098	0.081
20-24	0.267	0.290	0.230	0.261	0.263	0.266	0.248	0.234	0.187
25-29	0.310	0.295	0.266	0.230	0.230	0.229	0.205	0.144	0.126
30-34	0.261	0.269	0.245	0.200	0.169	0.160	0.136	0.084	0.071
35-39	0.196	0.169	0.206	0.114	0.117	0.094	0.081	0.048	0.036
40-44	0.109	0.075	0.142	0.068	0.055	0.037	0.034	0.016	0.014
45-49	0.043	0.023	0.099	0.049	0.026	0.015	0.007	0.002	0.005

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

Source : CBS 1995; MOH 1997; MOH 2002, 2012.

The figure 2.1 presented below provides the comparison of ASFR for the period 1998-2000, 2003-2005 and 2008-2010.

Figure 2. 1 :Age Specific Fertility Rates Nepal, 1998-2000, 2003-2005 and 2008-2010



The three 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 fifteen 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 is also used to compare fertility levels between different places. 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. 2: Total Fertility Rate Nepal, 1971-2011

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
Nepal Demographic and Health Survey, 2011	2008-10	2.6

**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, 2012.

Table 2.3 shows that the estimate of TFR for Nepal was more or less constant till eighties and thereafter it started to decline. The level of TFR till mid eighties was around 5.1. A substantial reduction in fertility can be seen during the period 2001 to 2006 when a decline of one child was observed. The Nepal Demographic and Health Survey 2011 provided an estimate of TFR for Nepal to be 2.6. 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.

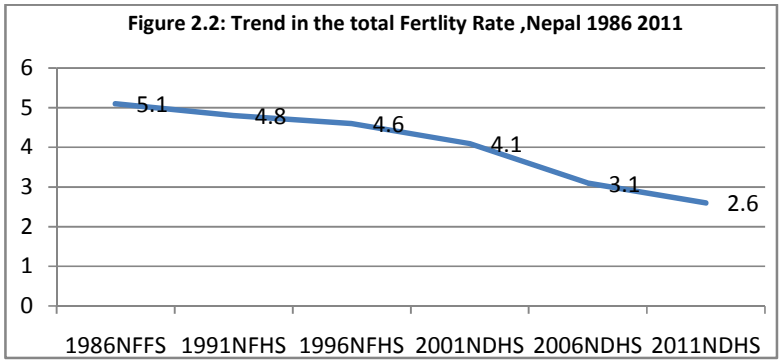
TFR is usually used to measure the levels of fertility in any place. If the TFR is 2, then the fertility level is said to be at replacement level of fertility, however the exact level replacement fertility can only be measured by the values of Gross Reproduction Rate (GRR) and Net Reproduction Rate (NRR).

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.

2.1.4 Fertility Trends

The total fertility rate (TFR) is a constructed measure of the number of children a women would have if she completed her reproductive years at the prevailing age -specific fertility rates. Figure 2.2 shows the trends in TFR in Nepal over the last 25 years , as measured in the three years prior to the survey from 1986 to 2006 , the TFR fell by 39 percent (from 5.1 to 3.1). However, the rate of decline slowed as fertility approached replacement level, from 3.1 in 2006 to 2.6 in 2011.



Many factors may have contributed to this precipitous decline in Nepal, including improved knowledge, communication and greater access to modern methods of contraception. Extended spousal separations due to migrants seeking works in foreign countries, especially the Gulf countries and other Southeast Asian countries, may be another reason for the fertility decline. A decline in the ideal number of children, increasing age at marriage, job opportunity for women, and increasing of safe abortion services are other factors that could potentially affect fertility.

2.2 Fertility Differentials

The change 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 eastern, central and western regions is similar (2.5) and mid western region has the highest TFR (3.2) and far western region has a TFR 2.8.
3. Women with SLC and above have a TFR of 1.7, which is less than half of the rate for women with no education (3.7).

4. Similarly, urban women have lower fertility (on an average by two births) than their rural counterparts. It should be noted that the urban TFR is under replacement level of fertility.

Table 2. 3 : Level of TFR and Mean Children Ever Born [Mean CEB] 40-49) by Background Characteristics Nepal, 1994-1996 and 20088-2010

Background Variables	TFR				Mean CEB 40-49			
	1994-1996	1998-2000	2003-2005	2008-2010	1994-1996	1998-2000	2003-2005	2008-2010
Place of Residence								
Urban	2.9	2.1	2.1	1.6	4.6	4.5	3.7	3.3
Rural	4.8	4.4	3.3	2.8	5.8	5.5	5.1	4.4
Ecological Region								
Mountain	5.6	4.8	4.1	3.4	6.2	6.1	5.4	4.8
Hill	4.5	4.0	3.0	2.6	5.6	5.4	4.6	4.2
Terai	4.6	4.1	3.1	2.5	5.7	5.3	5.0	4.2
Development Region								
Eastern	4.1	3.8	3.1	2.5	5.4	4.9	4.7	4.0
Central	4.6	4.3	3.0	2.5	5.6	5.4	4.7	4.2
Western	4.7	3.5	3.1	2.5	5.5	5.3	4.6	4.0
Midwestern	5.5	4.7	3.5	3.2	6.6	6.4	5.6	5.0
Far Western	5.2	4.7	3.5	2.8	6.2	6.0	5.6	4.9
Educational Status								
None	5.1	4.8	3.9	3.7	5.8	5.6	5.1	4.6
Primary	3.8	3.2	2.8	2.7	5.3	4.5	4.0	4.0
Secondary	2.5*	2.3	2.3	2.1	3.7*	3.7	3.3	2.9
SLC and above	-	2.1	1.8	1.7	-	2.6	2.6	2.2
Total	4.6	4.1	3.1	2.6	5.7	5.4	4.9	4.3

Source: MOH, 1997, 2002.2006,2011

Comparison of TFR differentials for the period 1998-2000 and 20038-2005 and 2008-2010 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

The description of fertility analysis is the outgrowth of pioneering work of Davis and Blake (1956) on social structure and fertility and Henry (cf.1972) and (cf Sheps and Menken, (1973) on mathematical modeling of reproduction. Their work has been expanded and extended by, among others, Easterlin (1975), Bongaarts (1982, 1983); Bongaarts and Menken (1983); Bongaarts and Potter (1983) and Bulatao and Lee (1983). In the general accepted framework , fertility is governed by two types proximate determinants or intermediate variables , those affect exposure to the risk of child bearing and those affect the rate of fertility during the period of exposure, equivalently, interval births in that period.

Davis and Blake (1956) produced a classification of 11 intermediate variables which have a direct effect on fertility and socio-economic bio-social and other factors can have only an indirect effect in fertility. The intermediate variables fit into three categories: the intercourse variables, the conception variables; and the gestation variables. Each intermediate variable may have a negative (minus) or positive (plus) effect on fertility. For example, if contraception used in a society, this has a minus effect. If contraception is not used, this has plus effects.

Bongaarts (1978, 1982) and Bongaarts and Potter (1983) refined Davis and Blake's framework into 7 important factors, which were termed as the proximate determinants of fertility, to understand variations in level of fertility between populations. The 7 proximate determinants are:

- proportion of married women among all women of reproductive age
- contraceptive use and effectiveness
- duration of postpartum infecundability (or postpartum insusceptibility)
- induced abortion
- fecund ability (including frequency and timing of intercourse)
- prevalence of permanent sterility
- spontaneous intrauterine mortality

Out of the 7 proximate determinants of fertility, Bongaarts (1982) showed that 4 determinants are most important in terms of explaining variations in fertility levels of populations.

- Proportion of women married or sexual union (as proxy of % of women exposed to sexual intercourse.
- Contraceptive use and effectiveness
- duration of postpartum infecundability (or postpartum insusceptibility)
- Induced abortion.

These 4 proximate determinants are of most importance both because they differ greatly between populations and because fertility is highly sensitive to changes in them. In certain situations, one or more of the other proximate determinants may play an important role, e.g. high levels of primary and secondary sterility in parts of Africa. Also sexual activities are often not confined only within marriage.

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. 4 : Percentage of Women Never Married by Age, Nepal, 1961-2011

Age group	1961	1971	1981	1991	2001	2006	2011
15-19	25.7	39.3	49.2	52.7	66.1	67.7	71.0
20-24	5.3	7.9	13.1	12.8	21.0	17.9	22.6
25-29	1.9	2.6	5.4	3.7	5.6	4.4	7.0
30-35	1.0	1.4	3.1	1.9	2.6	1.6	2.0
35-39	0.8	1.1	2.6	1.3	1.8	1.4	1.4
40-44	0.7	0.9	2.5	1.1	1.5	1.3	1.2
45-49	0.6	0.8	2.9	0.9	1.2	1.2	1.3

1961-91 data are from censuses and 2001-2011 data are based on NDHS..

Source: CBS 1995, 2002; MOH 2002 and 2006, 2011

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 2011 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 1.3 by 2001. Among women in 1961, percentage widowed was 14.3, which decreased to 3.7 percent by 1991. The census of 2011 indicated that of the total male population 10 years or older only 1.6 percent are widowers while this figure is 4.6 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. 5 : Percentage of widow/widower, 10 years and above, Nepal, 1961 - 2011

Sex	Census Years					
	1961	1971	1981	1991	2001	2011
Male	4.8	3.7	2.4	3.0	1.3	1.6
Female	14.3	10.1	5.5	7.2	3.7	4.6

Source: CBS 1995, 2002. 2012

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

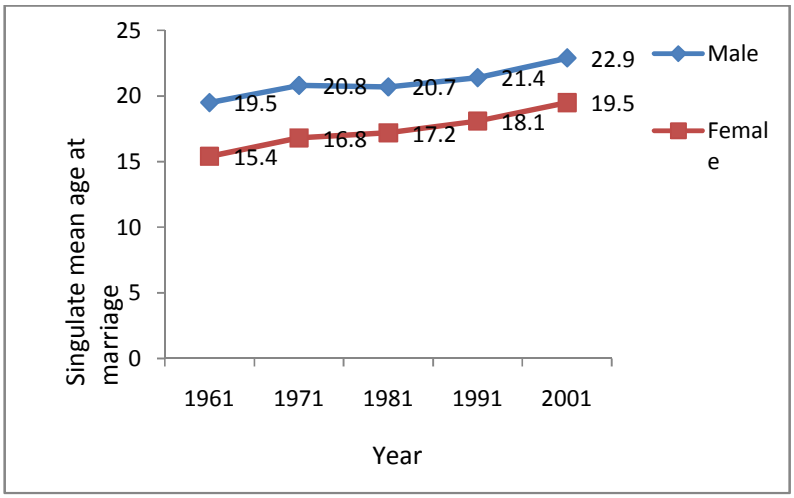
In Nepal, with parental consent, legal minimum age at marriage for both girl and boy has been set at 18 years. If the boys and girls want to marry on their own then the minimum legal age at marriage for both girls and boys is 20 years. In many ethnic groups, this was hardly followed in the beginning 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 to 2001 is provided in the figure 2.3.. 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. The data on singulate mean age at marriage in the population census 2011 has not yet come out. So the following table shows the trend upto 2001 census.

Figure 2.3 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, 2011 has shown that education and urban residence are the key variables associated with higher ages at marriage among Nepalese men and women.

Figure 2. 3:Singulate Mean age at Marriage male and female



Source: CBS 1995, 2003

2.5 Effect of Changes in Marital Status on Fertility:

The above discussions have shown that, among women the singulate mean age at marriage is increasing (15 in 1961 to 20 years in 2001) and the proportion of widowed is decreasing (14.3percent in 1961 to 4.6 percent in 2011) .Similarly singulate mean age at marriage has been increasing and widower has been decreasing among men in Nepal over years.

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

affect 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

Family planning emerged as one of the major components of Nepal's planned development activities in 1968 with the implementation of the Third Development Plan (1965-1970) and launching of the Nepal Family Planning and Maternal and Child Health Project (FP/MCH) under the Ministry of Health. Unit then, family planning activities were undertaken by the family Planning Association of Nepal (FPAN) , a nongovernmental organization ,established in 1959 to create awareness among the people about the need for and importance of family planning.

In fact, Nepal was one of the first countries of South Asia, where information about family planning was available through a non-governmental programme. 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.

The objectives of the National Family Planning Program includes gradually reducing the population growth rate through the promotion of a small family norm to the population in general and the rural population more specifically , working towards satisfying the demand for family Planning services providing high -quality of services, and reducing unmet need. Moreover, 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) centers, 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.

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 Stops etc.

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 Targets

Nepal's Family Planning programmes have the target of reducing the TFR from 3.1 per women in 2006 to 2.75 per women by the end of 12th Interim Plan (2013) and to 2.1 in 2021. Millennium Development Goals (MDG) has targeted to reduce TFR to 2.5 per women by the year 2015. The achievements on fertility targets of 12th plan have already been met and Nepal is in track to achieve MDG target since its' TFR has reduced to 2.6 per women in 2011 (NDHS, 2011)

In order to meet the fertility targets mentioned earlier, the contraceptive prevalence rate (CPR) has been envisaged to increase to 57 percent of currently married women of reproductive age (MWRA) by the end of 12th plan, however Nepal is quite behind in achieving this target since it has reached to only 50 percent by the year 2011 (NDHS, 2011). However, 62 percent of women living with their husbands are using contraceptive methods and only 20 percent of women have used contraception whose husbands are outside for more than 1 year (Khanal, M.N. et al., 2013). This data on contraception indicates that the contraceptive prevalence rate is quite below of 12th plan target is due to spousal separation. The long-term target is to increase the CPR to 65 percent by 2017.

2.6.2 Summary of findings in family planning

Below we discuss the summary of findings in family planning obtained from the NDHS 2011 survey.

2.6.2.1 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 2011 which is known as Nepal Demographic Health Survey (NDHS 2011).

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 30 years (from 21 percent in 1976 to nearly 100 percent in 2006 and in 2011). 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

2.6.2.2 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 all rounds of NDHS (2001, 2006 and 2011) provide data on met and unmet need of contraception. These data have been summarized in Table 2.7. 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 demand increased for contraceptive methods and has again increased to 77 percent demand in 2011. Because of the increase in CPR over the years the proportion of unmet need has decreased during the period 1996 and 2001. However, NDHS 2011 shows that it is still around 27 percent indicating that the family planning programmes should target these groups to make their family planning demand met.

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Table 2. 6 : Demand for contraceptives among currently married women aged 15-49, Nepal, 1991-2011.

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
2011	27	49.7	76.7

Source: MOH, 1993,1997,2002,2007, 2012

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. Out of the total demand, the demand for spacing is estimated to be 15.3 percent (5.4 percent use family planning to space, plus 9.6 have unmet need for spacing).

2.6.2.3 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 2.8 and Figure 2.4. The current use of contraceptives has gone up from 3 percent in 1976 to 49.7 percent in 2011. Of this, percent sterilization accounts for 23 percent points and the users of temporary methods of contraception account for about 26.7 percent points. Among methods, female sterilization has become most popular with 15.2 percent points, whereas male sterilization (7.8 percent) has not gained similar popularity.

Table 2. 7 : Current use of Contraception among non-pregnant women (percent) Nepal 1976 - 2011

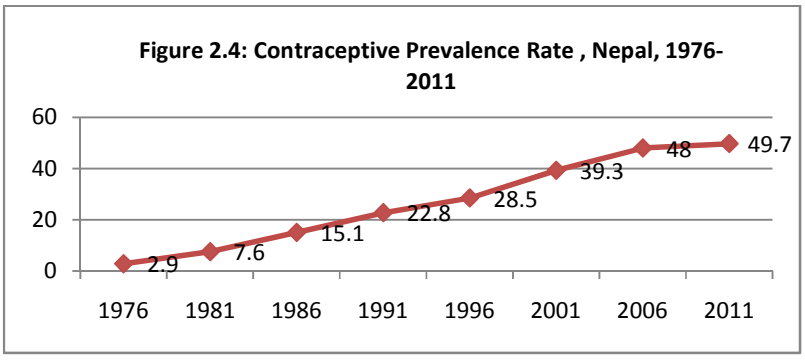
Method	1976 NFS	1981 NCPS	1986 NFFS	1991 NFFS	1996 NFHS	2001 NDHS	2006 NDHS	2011 NDHS
Any modern method	2.9	7.6	15.1	24.1	28.8	38.9	44.2	43.2
Female sterilization	0.1	2.6	6.8	12.1	13.3	16.5	18.0	15.2
Male sterilization	1.9	3.2	6.2	7.5	6.0	7.0	6.3	7.8
Pill	0.5	1.2	0.9	1.1	1.5	1.8	3.5	4.1
InjecTables	0.0	0.1	0.5	2.3	5.0	9.3	10.1	9.2
Condom	0.3	0.4	0.6	0.6	2.1	3.2	4.8	4.3
Norplant	-	-	-	0.3	0.5	0.7	0.8	1.2
IUD	0.1	0.1	0.1	0.2	0.3	0.4	0.7	1.3

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, 2012

Among the temporary methods of contraception, Depo-Provera accounts for 9 percent 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



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 determinant 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 2011 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.

According to NDHS, 2011, the median duration of any breastfeeding in Nepal is 33.6 months, which is similar to the figure from the 2006 NDHS. The mean duration of breastfeeding for all children is 28.8 months. The median duration of exclusive breastfeeding for all children is 4.2 months, and the mean duration is 5 months. These figures are higher than those reported in 2006, when the median duration of exclusive breastfeeding was 2.5 months and the mean duration was 4 months.

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

Nepal made abortion legal in September 2002. The government began providing comprehensive abortion care (CAC) services in March 2004. The abortion law allows women to terminate their pregnancy under the following conditions:

- Pregnancies of 12 weeks gestation or less for any woman on her own decision,
- Pregnancies of 18 weeks gestation if the pregnancy is a result of rape or incest, and
- Pregnancies of any duration with the recommendation of an authorized medical practitioner if the life of the mother is at risk, if her physical or mental health is at risk, or if the fetus is deformed.

The law prohibits abortions done without the consent of the woman, sex selective abortions, and abortions performed outside the legally permissible criteria. Abortion services are provided at service delivery points with surgical facilities and medicines located at district hospitals, some primary health care centers, health posts, and private hospitals. The Nepal Government has prioritized the national safe abortion program, and significant efforts have been made in the last ten years to expand services.

The 2011 NDHS shows that only 38 percent of women age 15-49 believe that abortion in Nepal is legal. Those who stated that abortion is legal in Nepal were further asked under what circumstances it is legal. Among women who believe that abortion is legal in Nepal, one-third stated that it is legal for pregnancies up to 12 weeks, and one-fifth stated that it is legal for pregnancies of 18 weeks duration if they were a result of rape or incest. Fewer than 10 percent of women each believed that abortion is legal if the mother's life is in danger, if the mother has a physical or mental condition that would make a pregnancy a health risk, or if there is a fetal abnormality. Nearly two-fifths of women did not know under what circumstances abortion in Nepal is legal. With the legalization of abortion, service providers in Nepal have been trained to conduct safe abortions. NDHS shows that 59 percent of women age 15-49 report knowing a place where a safe abortion can be obtained. Women who know places for safe abortion are more likely to mention the government sector (71 percent) than the private sector (58 percent) or the nongovernment sector (29 percent).

2.9 Ideal Family Size

One approach taken by survey researchers trying to identify attitudes and norms affecting ideal family size is to ask such basic questions as "what do you think is the best number of children to have? and try to find out way the respondent prefers a particular number. These sorts of questions have been described as meaningless and unreliable by some demographers. However, measuring the mean ideal family size does enable a distinction to be drawn between societies and groups which have "small and "large "family norms.

The 2011 NDHS asked women and men age 15-49 about the total number of children they would like to have in their lifetime if they could choose the exact number to have the time they had no children. Even though this question is hypothetical situation, it provides two measures. First for women and men who have not yet started family, the data provide an idea of future fertility. Second, for older and high -parity women the excess of past fertility over the ideal family size provides a measure of unwanted fertility.

Both women and men of Nepal prefer a small family size, with only marginal differences between them (2.1 children for women and 2.3 children for men) .Nearly two-thirds of women and men want to have two children, while 13 percent of women and 8 percent of men want to have only one child. Eighteen percent of women and 21 percent of men prefer a three -child family. The proportion of women and men who want four or more children is small (5 percent of women and 6 percent of men want to have four children)

There has been a decline in the mean ideal number of children among currently married women over the last five years, from 2.4 children in 2006 to 2.2 in 2011. This finding could also explain the declining total fertility rate in Nepal.

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.

To identify level and trends of mortality, to compare mortality between different populations, to identify patterns and trends in the causes of death in order to see their impact on the overall level of mortality, on the age pattern of mortality, and on differentials in mortality between populations, identify the social, economic, behavioral, and environmental factors which influence levels and trends in mortality are reasons to study Mortality.

Graunt's study was followed by other isolated studies of mortality based on church records in various parts of Europe but these studies remained fragmentary until the 19 the century. In 20th century, the standardization of registration procedures and classification of causes of death has been the responsibility of international agencies, formerly the International Statistical Institute and League of Nations and more recently the World Health Organizations (WHO).

It is now recommended internationally that statistical report of death at least include information on the age, sex, and usual place of residence of the deceased person as well as the cause, date and place of death and the date of registration. In addition, the United Nations recommends the collection of five characteristics like as marital status, industry and occupation, education, number of children before, and age.

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 Table 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 - 2012

Source	Estimated 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	-	-
16 PRB datasheet	2012	6.0	-	-

Source: CBS, 1995; CBS, 1998; MOPE, 1998, PRB datasheet, 2012

** Projected Mortality*

3.1.2 Childhood Mortality

Childhood mortality in general and infant mortality in particular is often used as broad indicators of social development or as specific indicators of health status. Childhood mortality rates are used for monitoring a country's progress toward Millennium Development Goal 4, which aims for a two-thirds reduction in child mortality by the year 2015. Results from the 2011 NDHS can be used in monitoring the impact of major national neonatal and child health interventions, strategies, and policies on achievement of this goal. Infant and child mortality rates are important indicators of a country's socioeconomic development and quality of life, as well as health status. Measures of childhood mortality also contribute to a better understanding of the progress of population and health programs and policies. Analyses of mortality measures are useful in identifying promising directions for health and nutrition programs and improving child survival efforts in Nepal.

3.1.2.1 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. Infant Mortality is further classified as Neonatal Mortality and Post Neonatal Mortality. Neonatal Mortality refers to the probability of dying within first month of life. In other words, it is the number of child deaths before one month of their life per 1000 live births during a year. Post neonatal mortality is the difference between infant and neonatal mortality. 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 fewer than 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 less number of children.

Table 3. 2: Infant Mortality Rate, Nepal, 1954 – 2011

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*
13 Nepal Demographic and Health Survey, 2011	2011	46	54*	52*

Source : CBS, 1995; MOH 1997, 2002a, NDHS, 2012

** 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 48 per 1000 live births and again reduced to 46 per 1000 live births during the period 2006-2010. The table also indicates that IMR for female babies are slightly lower than that for male babies based on the calculations of IMR based on births 10 years prior to the survey. 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 till 2011 NDHS. 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, 1996-2011. (For ten year Period Preceding the Survey)

Characteristics	**NFHS 1996**	**NDHS 2001**	**NDHS 2006**	**NDHS 2011**
Residence				
Urban	61.1	50.1	37	38
Rural	95.3	79.3	64	55
Ecological Region				
Mountain	136.5	112	99	73
Hill	87.4	66.2	47	50
Terai	90.9	80.8	65	53
Development Region				
Eastern	79.4	77.5	45	47
Central	86.3	77.4	52	52
Western	84.3	60.1	56	53
Mid-western	114.8	72.9	97	58
Far western	124.3	112.2	74	65
Education				
No education	97.5	84.6	69	62
Primary	80	61	58	53
Secondary	53.4	49.9	35	37
SLC and above -	-		13	31
Age of mother at birth**				
< 20	120.1	108.2	83	69
20-29	79.5	67.6	50	49
30-39	103.9	72.9	62	49
40-49	-	-	91	-
Previous birth interval**				
< 2 yrs	141.4	124.4	96	87
2-3 yrs	78.8	67.8*	57	50
3	-	45.2	38	38
4 +	44.7	38.9	28	26
Sex of Child**				
Male	101.9	79.2	60	54

Female	83.7	75.2	61	52

**Refers to two year birth interval. Source: MOH, 1997, NDHS 2001, 2006 and 2011.*

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

3.1.2.2 Child and Under 5 Mortality

Before we compare the data from NDHS 2001, NDHS 2006 and NDHS 2011, 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 5th 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 2011 has been summarized in Table 3.4.

Table 3. 4: Child and under 5 mortality rates for five year periods Preceding the Survey Nepal 2011

Years preceding the Survey	Child Mortality	Under 5 mortality
0-4	9	54
5-9	10	70
10-14	19	87

Source: NDHS 2011, MoHP

The Table 3.4 indicates that the child mortality 0-4 years preceding the survey is 47 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, however in case of under five mortality, the mortality 0-4 years preceding the survey is 62 percent of that was 10-14 years preceding the survey indicating that we need to focus on reducing infant mortality.

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		NDHS 2011	
	Child Mortality	Under 5 Mortality	Child Mortality	Under 5 Mortality	Child Mortality	Under 5 Mortality
Residence						
Urban	16.7	65.9	10	47	7	65
Rural	35.4	111.9	21	84	10	64
Ecological Regions						
Mountains	51.2	157.4	32	128	16	87
Hill	29.7	93.9	16	62	8	58
Terai	34.8	112.8	21	85	10	62
Development Regions						
Eastern	29.6	104.8	15	60	8	55
Central	36.4	110.9	17	68	8	60
Western	25.1	83.7	18	73	4	57

Mid Western	41.2	111.0	28	122	16	73
Far western	41.7	149.2	28	100	18	82
Education						
No education	39.5	120.7	25	93	12	73
Primary	13.4	73.5	10	67	9	62
Secondary	14.3	63.5	5	40	4	41
S.L.C.+	3.7	14.9	0	13	1	32
Age of the mother at birth of the child						
<20	28.5	133.6	20	102	9	78
20-29	32.6	98.0	18	67	8	57
30-39	42.5	112.3	23	84	13	62
40-49			42	103	-	-
Previous Birth Interval						
< 2 Years	54.8	172.4	37	130	16	102
2-3 Years	40.0*	105.1*	21	78	13	62
3 Years	22.4	66.6	14	52	6	43
4 or more years	20.1	58.2	9	37	7	32
Sex of the Child						
Male	27.8	104.8	21	80	9	63
Female	40.2	112.4	18	78	10	62

*Source MOH 1997, 2002a, NDHS 2006 and 2011. *Figures refer to a 2 year birth interval. ** Includes secondary plus SLC or higher level of education.*

The current (2011) estimate of child mortality in Nepal is 9 indicating that of the 1000 babies surviving to age one, 9 die before they reach the age of five. Similarly, under-five mortality is 54 indicating that of the 1000 children born today 54 will die before they reach the age of five.

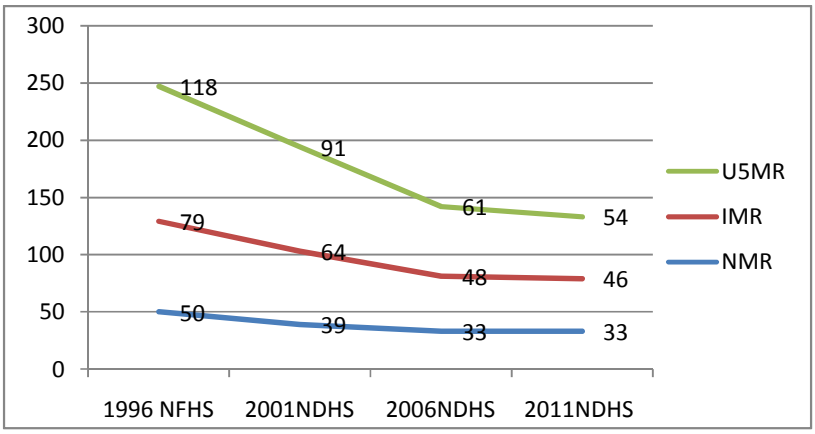
Table 3.5 provides the trends and differentials in child and under-five mortality for Nepal obtained from NDHS 2001 through NDHS 2011 surveys. It should be noted that for the differentials in infant child mortality, births that occurred during the last ten-year period have been taken into account. The 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 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.

Figure 3.1 shows the trend of childhood mortality rates i.e. Neonatal, Infant and Under-five mortality rates in Nepal during 1996 to 2011. Neonatal mortality in the most recent period (2006-2010) is 33 deaths per 1,000 live births. This rate is two and a half times the post neonatal rate (13 deaths per 1,000 live births) during the same period. Therefore, the risk of dying for any Nepalese child who survived the first month of life is reduced by two-fifths (i.e., 39 percent) in the remaining 11 months of the first year of life. The infant mortality rate in the five years preceding the survey is 46 deaths per 1,000 live births, and the under-five mortality rate for the same period is 54 deaths per 1,000 live births. This means that one in every 22

Nepalese children dies before reaching age 1, while one in every 19 does not survive to her or his fifth birthday. Mortality trends can be examined in two ways: by comparing mortality rates for three five-year periods preceding a single survey and by comparing mortality estimates obtained from various surveys. However, comparisons between surveys should be interpreted with caution because of variations in quality of data, time references, and sample coverage. In particular, sampling errors associated with mortality estimates are large and should be taken into account when examining trends between surveys. Data from the 2011 NDHS show that neonatal mortality has declined by 27 percent over the 15-year period preceding the survey, from 45 to 33 deaths per 1,000 live births. The corresponding declines in post neonatal, infant and under-five mortality over the 15-year period are 48 percent, 34 percent, and 38 percent.

Figure 3.1 Trends in Childhood Mortality (deaths per 1,000 live births for the 5 years period before the Survey) NDHS, 1996-2011



3.1.3 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 have 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 indicting 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. 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.

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
12 PRB,2013	2013	66	69	68

** Estimates are based on projection.*

Source: CBS, 1995; MOPE, 1999. CBS 2002 2006, 2010,PRB,2013,

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 3.2 provided below.

Figure 3. 2: Life Expectancy at Birth

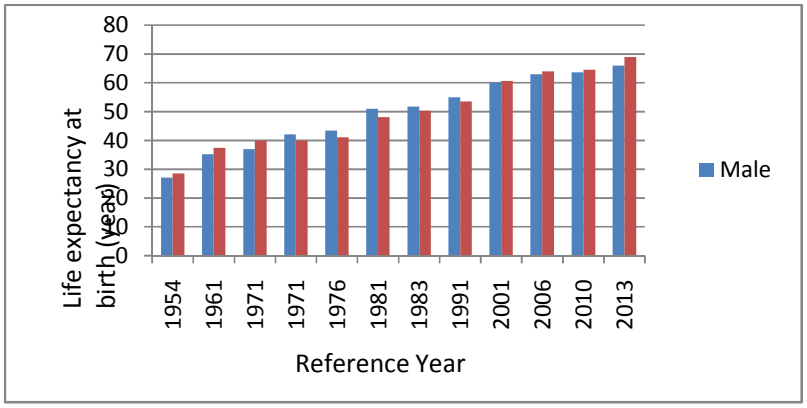


Table no that the female's life expectancy at birth was less than that of males in previous years; however it is higher than that of males since 2001. It indicates that the maternal health has been improved in this decade.

CHAPTER 4

Migration

4.1 Introduction

Migration and development are interlinkage with another. Migration can contribute to human development, especially if the rights of movers are improved (UNDP, 2009). Migration is a much talked, poorly understood and loosely handled issue in Nepal (Subedi, B. 2013). It is an influenced by various social, economic and cultural factors owes a lot to the internal and international migration of various caste/ethnic groups in the country at various time scales. To what extent migration is good or bad can be debated but migration has been established as livelihood option of Nepalese household from past to the present. Considering the importance of migration, this chapter describes the concept of migration, conceptual model for migration management, trends of migration from past to present and some presented summary of some policy in related with migration.

Migration is the third basic factor affecting change in population of an area along with fertility and mortality; various scholars define migration various ways

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".

Mejo Kristina(2010) It is a process of moving, either across an international boarder or within a state. It is population movement, encompassing any kind of movement of people, whatever its lengths, composition and causes. It includes migration of refugees, displaced persons, uprooted people and economic migrants.
It can be defined as the movement of people from one clearly defined place to another. Migration may be temporary or permanent depending on the duration of absence from the place of origin and the duration of stay in the place of destination.

Terms used in Migration

Migration-defining area : In identifying the migration status of a person, a migration-defining area is required. In a migration study, civil or geographic units are generally taken as migration-defining areas. The Nepalese censuses have commonly considered districts (there are 75 districts in Nepal) as migration-defining areas. According to this, a person is classified as a migrant if his/her district of enumeration (current residence) is different from their district of birth. When the total population of the country is classified by place of birth and place of enumeration for 75 districts in matrix form (75 x 75 matrix), then these data can be aggregated atany larger civil or geographical units such as regions, zones, etc. which provides inter-regional or inter-zonal migration volumes. It should be noted that none of the Nepalese censuses considered smaller geographical areas than districts as migration-defining area. Therefore, classification of internal migrants by smaller geographical areas than districts is not possible. It should also be noted that in general the larger the migration-defining area,the smaller the volume of migration and vice versa. If there is no migration-defining area within a country, for instance, the country is a single civil or geographical unit, and the number of internal migrants is zero.

Native born :The total population of a country according to country of birth can be classified into two categories: native born and foreign born. Those born in countries other than Nepal are considered as foreign born, even

though some of them hold Nepali citizenship. A person who is born in any part of Nepal is considered as native born even though some of them may also be foreign citizens. Internal migration analysis is primarily confined to the native born population only.

Lifetime migrants and non-migrants :According to the migration status, the total population of a country can be classified into two categories: lifetime migrants (migrant) and non-migrants. A person is a lifetime migrant whose current area of residence2 is different from his area of birth, regardless of intervening migrations (Shrock, Seiegel and Associates, 1976). Non-migrants are those who have not moved from one migration defining area to another. Lifetime migration data are generally analysed in terms of volume of migration (number of migrants) and percentage of lifetime migrants in native-born population.

Current migrants :Current migrants are those migrants who migrated during the last one-year period preceding the census. They are a part of lifetime migrants. Current migrants are also called as “most recent” migrants because it presents most recent movements of the population. Current migration data are generally analyzed in terms of in-migration rate, out-migration rate, and net migration rate.

In-migration rate: In-migration rate is defined as the number of persons “who enters the migration-defining areas crossing its boundary from some point outside the area but within the country3” for the one year period preceding the census per 1,000 population of the area. Data on in-migration rate can be interpreted as annual number of in migrants per 1,000 populations.

Out-migration rate: Out-migration rate is defined as the number of persons “who departs from a migration defining area by crossing its boundary to a point outside it, but within the same country” during the last one year period preceding the census per 1,000 population of the same area. Data on out-migration rate can be interpreted

as an annual number of out-migrants per 1,000 population. Net migration rate: Net migration rate is defined as a balance between the in-migration rate and the out-migration rate. The balance may be positive or negative. A positive balance is known as net in-migration rate implying an annual number of net gain in population experienced by a migration-defining area through the migration process. On the other hand, a negative balance is known as net out-migration rate. This is a measure of the annual number of net loss of population experienced by a migration-defining area.

Period migration: Data on period migration is collected through a question on “place of residence at a specified (fixed) prior date” as mentioned above. According to this approach, a person is classified as a migrant if his/ her residence at a specified prior date is different from the current place of residence. Place of residence at a specified date in the past is the major or smaller division, or the foreign country, in which the individual residedat a specified date preceding the census (UN, 2008, para 2.69). The data on period

migration is useful to assess previous migration patterns. The reference date (one year or five years) may differ from one census to another.

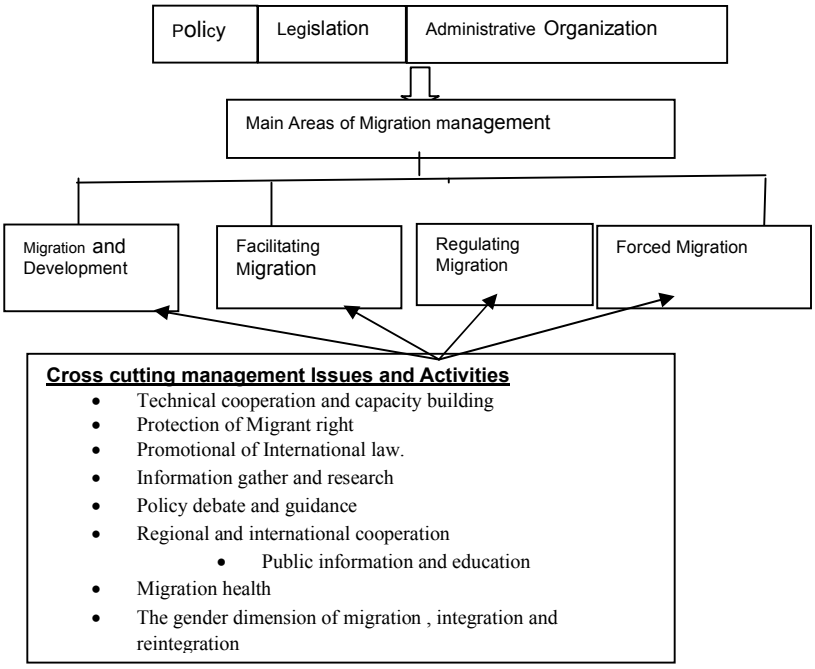
Migration stream: Migration stream refers to a group of migrants having common origin and destination in a given migration period (Shrock, Seiegel and Associates, 1976). Based on the type of migration-defining areas, migration streams can be identified as district-to-district stream, rural to urban stream and so on. Likewise, migration streams can also be identified based on ecological zones and development regions.

4.1.1 Conceptual Frame Work

The conceptual frame work noticed that higher level policy makers should determine the approach on migration policy and legislation should gives concrete definition of migration policy clear cut responsibility and accountability. The main areas of migration management are managing migration and development, facilitating migration, regulating migration, and managing forced migration

Looking in the next part of migration, many young people which are considered to be the demographic bonus to the country or society has been migrating towards cities and even developed countries causing labour shortage in their home villages. As results, many productive lands have remained unfertile. Due to this fact, the domestic product of the country has been affected. On the other hand, Nepal's demographic bonus has been utilized in foreign companies as unskilled or low pay workers. If this trend of migration continues, it may be labour problem in Nepal which may impact on fertility as well in the future. So policymakers need to think this side too and take necessary action considering the facts and cross cutting issues and activities included in the conceptual model figure 4.1.

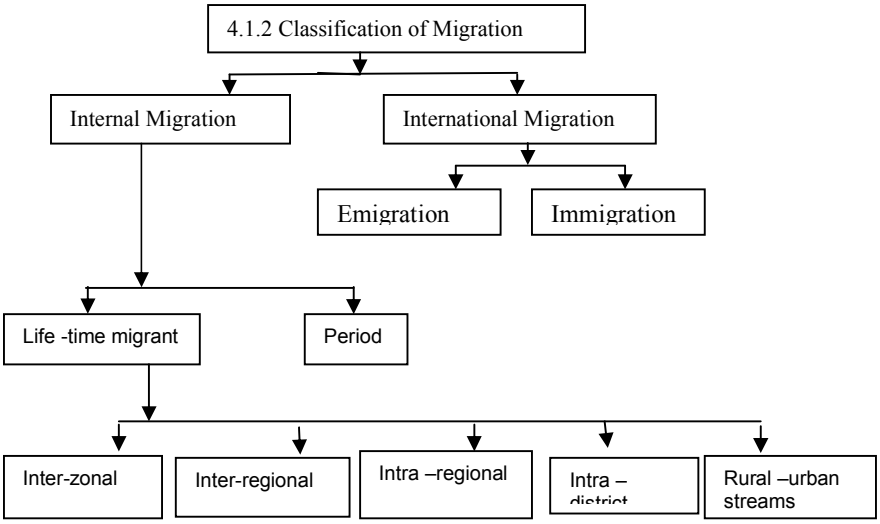
Figure 4.1: A Conceptual Model for Migration Management



Source: Handout presented by Mejo Kristina (2010) Terminology and Conceptual Model for Migration Management, IOM, and Dulikhel, Nepal.

4.1.2 .Classification of Migration

Migration can be observed classifying into two terms. International and international. The later part can be subdivided into Emigration and Immigration. Internal migration can be subdivided into life time migrant, inter-zonal; inter-regional, intra-zonal, inter-district, rural –urban stream and periodic migration.



4.2 Internal Migration in Nepal

Internal migration is defined as movement of population within a country with change in address. This refers to a change of residence within national boundaries, such as between states, provinces, cities, or municipalities. An internal migrant is someone who moves to a different administrative territory. The temporary or permanent relocation of population inside the boundaries of a state.

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.

4.3 Trends in life-time migration: Nepal

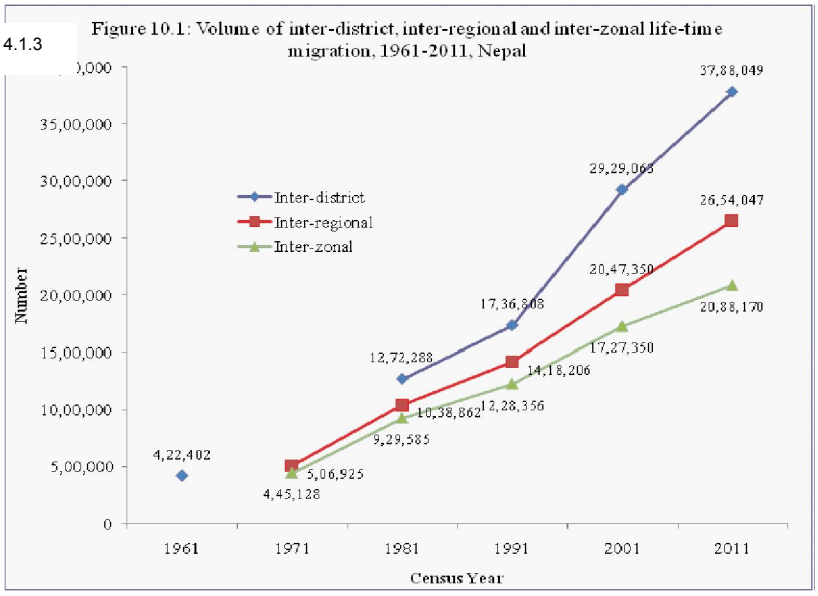
In Nepal, the 1961 census collected data on internal migration for the first time. Figure 4.1 presents trends in the volume of lifetime migrants in Nepal for the last 50 year period from 1961-20114 by districts, 15 eco

development regions and 3 ecological zones. The figure presents that there were 422,402 inter-district lifetime

Migrants in 1961, which increased to 3,788,049 in 2011. This shows nearly a nine-fold increase in the number of inter-district migrants during 1961-2011 in Nepal. The 19715 census counted a total of 506,925 inter-regional migrants, which, with an increase of 5.2 fold reached 2,654,047 in 2011. During the same period, the number of

inter-zonal life-time migrants increased by 4.7% from 445,128 in 1971 to 2,088,170 in 2011. Figure 10.1 shows that the inter-district lifetime migration line rises slowly until 1991 and then gets stepper thereafter, implying a more rapid increase in the number of lifetime migrants after 1991.

Figure 4.1.3



Note. There were 55 districts in 1961, 10 districts in 1961 and 1971.

KC, 2003; Population and Housing Census -2011, Database. CBS, 2014, Population Monograph 2014, Volume 1, page 246

Table 4.3.2 reveals that the number of inter-district lifetime migrants in Nepal constituted less than 5% of the total native born population in 1961. This increased to 8.6% in 1981. It further increased to 13% in 2001 and nearly 15 % in 2011. By eco-development region, the volume of lifetime migrants constituted 4.5% of the total native-born population in 1961, which increased to 10% in 2011. The volume of inter-zonal migration increased from 4% in 1961 to 8% in 2011.

Table 10. 1 Life time migrants as percent of native born population

Year	Total Native Born	Migrants as a Percent of native born		
		Inter-district	Inter-regional	Inter-zonal
1961	9,075,376	4.7	-	-
1971	11,218,535	-	4.5	4.0
1981	14,788,800	8.6	7.0	6.3

1991	18,046,302	9.6	7.8	6.8
2001	22,128,842	13.2	9.3	7.8
2011	25,524,611	14.8	10.4	8.2

Source : KC ; Population and Housing Census -2011 , Database . CBS, 2014, Population Monograph 2014, Volume 1,page 246

Table: Distribution of inter-district life-time migrants by rural- urban streams, 2011

Region	Number	Rural-Urban	Urban-Urban	Rural- Rural	Urban-Rural	Total
Nepal	**3,230,039**	**33.5**	**4.5**	**59.2**	**2.9**	**100.0**
Mountain						
Eastern	141,160	28.7	1.0	69.2	1.0	100.0
Central	119,358	48.5	1.8	48.6	1.2	100.0
Western	6,376	64.2	NA	35.8	NA	100.0
Mid-Western	35,545	22.8	NA	77.2	NA	100.0
Far- Western	54,972	31.3	NA	68.7	NA	100.0
Total	357,411	35.8	1.0	62.4	0.8	100.0
Hill						
Eastern	512,577	31.0	1.0	66.9	1.1	100.0
Central	541,086	35.6	9.4	49.2	5.7	100.0
Western	689,852	36.4	2.4	59.5	1.6	100.0
Mid- western	225, 626	20.0	0.8	78.3	1.0	100.0
Far-western	188,280	25.4	2.1	70.9	1.7	100.0
Total	2,157,420	32.3	3.6	61.6	2.5	100.0
Terai						
Eastern	268,506	38.6	10.2	45.8	5.4	100.0
Central	261,654	37.0	7.9	50.6	4.5	100.0
Western	71,496	36.1	7.5	51.6	4.7	100.0
Mid- Western	77,380	27.8	6.5	61.2	4.5	100.0
Far-western	37,071	27.9	13.3	49.5	9.3	100.0
Total	**716,109**	**36.0**	**8.8**	**50.0**	**5.1**	**100.0**

Background characteristics	Number	Reasons for migration :inter-district migrants									
		Total	Agricul-ture	Busi-ness	Service	Study	Marri-age	Depen-dent	Conflict	Others	Reasons not stated
Nepal	3,788,070	100.0	14.9	5.9	10.9	13.4	23.6	20.4	0.6	4.7	5.8
Sex											
Males	1,612,927	100.0	19.6	9.6	20.5	18.9	0.9	19.0	0.7	5.9	5.0
Females	2,175,143	100.0	11.4	3.2	3.7	9.3	40.4	21.4	0.5	3.8	6.3
Foreign Born											
Both Sexes	479,625	100.0	5.6	7.3	6.3	4.4	45.8	17.0	0.4	3.0	10.2
Males	141,165	100.0	10.0	19.8	18.2	7.8	2.5	25.8	0.7	6.4	8.8
Females	338,460	100.0	3.8	2.0	1.4	2.9	63.8	13.4	0.3	1.6	10.7
Rural/urban residence											
Rural	2,358,421	100.0	21.1	4.3	7.0	8.1	28.5	20.1	0.6	4.2	6.1
Male	904,682	100.0	30.8	7.4	14.7	11.8	1.2	22.2	0.8	6.0	5.2
Female	1,453,739	100.0	15.0	2.4	2.3	5.8	45.5	18.9	0.4	3.1	6.7
Urban	1,429,649	100.0	4.8	8.6	17.2	22.1	15.5	20.7	0.5	5.4	5.2
Male	708,245	100.0	5.4	12.4	28.0	27.9	0.5	14.9	0.6	5.7	4.6
Female	721,404	100.0	4.1	4.8	6.6	16.4	30.2	26.4	0.5	5.1	5.7

Table: Distribution of inter-district migrants aged five years and above according to the place of residence (rural, urban, and foreign country) five years prior to census

Region of origin	Non- migrants as % of native born	Total	Rural	Urban	Non Stated	Foreign Country				Place Not Stated
						Total	India	Other Coun-tries	Country not stated	
Total	**93.6**	**10,95,359**	**73.0**	**11.0**	**16.0**	**110,237**	**84.7**	**12.7**	**2.6**	**301,637**
Mountain										
Eastern	98.0	4,881	69.9	14.8	15.6	819	45.4	51.6	2.9	1,254
Central	97.8	6,722	60.5	22.0	17.5	501	66.9	32.9	0.2	3,034
Western	90.5	1,490	77.2	11.5	11.2	35	28.6	71.4	0.0	13
Mid-western	97.9	4,762	76.0	12.9	11.2	314	91.1	3.8	5.1	1,823
Far- Western	98.0	3,901	62.0	10.9	27.2	676	96.3	2.5	1.2	3,454

Hill										
Eastern	96.5	38,376	78.2	10.4	11.4	2,691	64.5	30.6	4.8	9,018
Central	87.2	437,801	67.4	15.3	17.3	21,010	68.7	28.4	2.8	56,781
Western	94.7	97,723	73.9	10.0	16.1	10,885	77.3	19.9	2.7	25,149
Mid-western	97.0	25,591	77.9	6.5	15.6	2,813	91.1	6.6	2.3	15,010
Far-western	97.9	10,252	74.4	11.6	14.0	951	90.2	6.1	3.7	4,668
Terai										
Eastern	94.1	146,370	80.3	9.4	10.3	19, 480	89.1	8.6	2.3	35,909
Central	95.0	97,337	70.5	8.0	21.5	21, 812	91.4	6.1	2.5	90,615
Western	92.7	92,442	76.8	5.3	17.9	16, 613	92.6	5.1	2.3	29,251
Mid-Western	93.5	65,460	80.7	5.6	13.7	6,291	93.8	3.8	2.5	14,284
Far- western	92.8	62,252	81.5	4.9	13.6	5,346	95.8	1.5	2.7	11,374
% of total		**90.9**				**9.1**				

4.4 Trend of Internal Migration

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	
(1971) 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
(1981)					
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
(1991)					
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
(2001)					
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 as cited in Nepal Population Report, 2013

Note: NS cases excluded, NA+ not applicable because there is no urban center in western, mid-western, and far-western regions.

Source: population and housing census 2011 database, CBS, 2014

4.3 International Migration

International migration occurs when peoples cross state boundaries and stay in the host state for some minimum length of time. 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)

Absent Population.

Data on the absent population are available only after the 1942 census, which recorded 87,722 people as absent which is 1.4% of the total population. This number increased to 328,470 in 1961, 3.4% of the total population. Emigration data for the 1971 census are not available. The 1981 census recorded an absent population of 402,977, 2.6% of the total population, which increased to 762,181 in 2001, and 3.2% of the total population. In 2011, the total number of absent population was reported to be 1,921,494, 7.3% of the total population. This analysis shows that the absent population in Nepal is growing rapidly.

Table 4.1 Absent Population, Nepal 1991- 2011

year	Total	absent	%	Male	%	Female	%
1911	56,38, 749	NA	-	NA	-	NA	-
1920	55,73, 788	NA	-	NA	-	NA	-
1930	55,32,574	NA	-	NA	-	NA	-
1942	62,83,649	87, 722	1.4	NA	-	NA	-
1952/54	82, 56, 625	1, 98, 120	2.3	1,73,619	87.6	23,501	12.4
1961	94,12,996	3,28,470	3.4	NA	-	NA	-
1971	1,15,55,983	NA	-	NA	-	NA	-
1981	1,50,22,839	4,02,977	2.6	3,28,448	81.5	74,529	18.5
1991	1,84,91,097	6,58,290	3.4	5,48,002	83.2	1,18,288	16.8
2001	2,31,51,423	7,62,181	3.2	6,79,484	89.2	82,712	10.8
2011	2,64,94,504	1,9,21,494	7.3	16.840	87.6	2,37,400	12.4

Source CBS 2003, KC 2008, table 16, district report, CBS, 2014

According to every census record, male absentees are predominantly higher (87.6% in the census of 2011) than females (12.4%), in the same census. However, the trend of female absentees has also begun to increase, from 11% in 2001 to 12% in 2011. The 2011 census also recorded households with absent populations. The data revealed that, one in every four households (25.42%; 1.38 million households) reported that at least one member of their household was absenter living out of the country.

Reasons for absence

Nearly three quarters (71%) of the total absentees were found leaving their respective places of origin in search of employment; private jobs followed by one in every ten absentees leaving for institutional jobs. While more males (75.4%) were destined for private jobs, almost one third (32.2%) of female absentees were found to be dependents. Proportionately more females (14.2%) were found to go abroad to study than males (5.8%).

Although the role of armed conflict, which challenged the overall personal security of youths for various reasons in villages, was a major factor especially for migration, this was expressed as a factor by a nominal number of the absentees' families (0.1%). Those going abroad for business purposes were also nominal (0.6%) with a marginal variation between males (0.6%) and females (0.8%).

Table 4.2 Distribution of population absent from household by sex, age at departure and reason for absence, 2011.

Reasons	Both sexes		Male		Female	
	No.	%	No	%	No	%
Business	11,685	0.6	9,773	0.3	1911	0.8
Private job	13,64,602	71.0	12,70,568	75.04	93,993	39.6
Institutional job	1,92,484	10.0	1,81,952	10.8	10,529	4.4
Study	1,10, 564	5.8	76,886	4.6	33, 678	14.2
Conflict	2, 643	0	2,249	0	394	0.2
Dependent	1,31,109	6.8	54, 764	3.3	76,341	32.2
Others	26,681	1.4	20, 230	1.2	6451	2.7
Not stated	81,726	4.3	67, 607	4	14, 103	5.9

Source: National population census 2011, district report CBS, 2011

Migration occurs for many reasons. Many people leave their home countries in order to look for economic opportunities in another country. Others migrate to be with family members who have migrated or because of political conditions in their countries. Education is another reason for international migration, as students pursue their studies abroad. While there are several different potential systems for categorizing international migrants, one system organizes them into nine groups: temporary labour migrants; irregular, illegal, or undocumented migrants; highly skilled and business migrants; refugees; asylum seekers; forced migration; family members; return migrants; and long-term, low-skilled migrants. These migrants can also be divided into two large groups, permanent and temporary. Permanent migrants intend to establish their permanent residence in a new country and possibly obtain that country's citizenship. Temporary migrants intend only to stay for a limited periods of time; perhaps until the end of a particular program of study or for the duration of their work contract or a certain work season. Both types of migrants have a significant effect on the economies and societies of the chosen destination country and the country of origin.

Sources of Area

Districts including Gulmi, Arghakhanchi, and Pyuthan reported the highest proportion of their population being absent (staying abroad) (CBS, 2012). Whereas Gulmi had the highest proportion of households with an absent member (54.1%), Kathmandu district had the largest number of absentees, that is, 99,805. However, Gulmi again had the highest proportion (20.9%) of absent population followed by Syangja (17.5%) and Kaski (11.6%). Remaining districts with the top 10 absent populations are Nawalparasi (10.2%), Jhapa (9.9%), Kailali (8.1%), Dhanusa (8%), Morang (7.3%), and Rupandehi (7.1%).

Table 4.3 : Major areas of origin of absent population

10 districts having most absentee households	No. of total households	Households having migrants	% of total household	10 districts having most absentee population	total population	migrant population	% of total population
Gulmi	64,887	35,131	54	Gulmi	2,80,160	58,561	20.4
Arghakhachi	46,826	25,266	54	syangja	2, 89, 148	50,476	17.5
Pyuthan	47, 716	24,124	50.6	Kaski	4,92,098	57,305	11.6
Syangja	68,856	34,207	49.7	Nawalparasi	643508	65,335	10.2
Baglung	61,482	29,133	47.4	Jhapa	812650	80,625	9.9
Palpa	59,260	27, 010	45.6	Kailali	775,709	62,644	8.1
Tanahu	78,286	34,119	43.6	Dhanusa	754777	60,400	8
Parbat	35, 698	15, 422	41.2	Morang	965370	70,402	7.3
Myagdi	27, 727	11, 439	41.3	Rupandehi	880196	62,404	7.1
Rolpa	43, 735	17, 047	39.0	Kathmandu	17, 44,240	99,805	5.7

source CBS 2003, KC 2008, table 16, district report, CBS, 2014

Population absent from household at departure by country of distribution.

A larger percentage of absentees (58.3%) went to to ASEAN Member State Countries and the Middle East, only41.7% went to India. An overwhelming majority of migrant children under 15 years of age (86.7%) went to India. Apart from India, more men, 673,104 (35%) of males go to the Middle East. A similar pattern is observed for females as well, 48,656 (20.5%) went to the Middle East compared to 19,967 (8.4%) who went to European Union countries.

Table 4.4 Population absent from household at departure by country of distribution.

Countries	**Total population (%)**	**Male (%)**	**Female (%)**
India	7,22,255 (37.6)	6, 05,869 (36%)	1, 16,364 (49%)
Other countries	11,99,239 (62.4)	10,78,160 (64%)	1,21,036
The SAARC countries(except) India	12,068	11, 009	1,059
ASEAN countries	2,49,889	2,44,429	5,452
Middle east countries	7,21,791	6,73,104	48,656

Other ASEAN countries	44, 566	33,232	11, 342
European union Countries	58,882	38, 912	19,967
Other European countries	3,691	3,016	675
North American countries USA/ Canada	48,077	30,519	17, 558
South American Caribbean countries	2,315	1,889	426
African countries	5,124	4,307	817
Pacific ocean region countries	27,366	17, 768	9,598
other	5158	4,537	621
not stated	20,312	15,447	4,865
Total population	1, 94, 494	1, 684, 029	2, 37, 400

Source: National population census- 2011, District Report CBS, 2012)

International Migration

International migration is the movement of persons from their countries of origin to countries of destination with the intent to remain for an extended stay.

4.3.1 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 in 2001 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.

Similarly 2011 population census revealed that total of 1921494 persons are residing outside of the country which is 152 percent more than that emigrated population in 2001. This figure of emigrated population in 2011 accounts 7.25 percent of total population. It should be noted that in 2011, one in every four households (25.42%) reported that at least one member of their household is absent or is living out of country and 44.81 percent of absent population is from the age group 15 to 24 years. This indicates the popularity (or force) of foreign residence among young population in Nepal. Among absentee population, 87.6 percent are male and only 12.4 percent are females.

4.3.2 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, 1961-2011

Census year	Foreign born population	Foreign born as % of total	Foreign citizens in Nepal	Foreign citizen 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
2011	479625	1.8	138910	0.6	26,494,504

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.

4.4 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
Males			
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
Females			
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

Positive and Negative effects of Migration

Due to the job opportunities (push factors) at home and high pay (pull factor) Nepali especially adolescents and youth have been emigrating oversees for employment for decades. There are some positive and negative effects of migration both destination and origin countries.

Positive effects

Flow of adolescent and youths is high from less developed to more developed countries and there are some positive effects and the exit of job seekers may ease domestic pressures linked to excess labour supply. Secondly, migration may empower young women and reinforce equitable gender norms along with provide both education and job opportunity for young girls and contribute delaying in marriage and ultimately reduce fertility rate of a nations. Moreover, the inflow of remittances may contribute to economic growth and poverty reduction in countries of origin and may also stimulate investment in human capital and as result, is more likely to have higher quality of next generation. In addition, Diasporas can be a source of

technology transfer, investments and venture capital for countries of origin. Finally, the physical or 'virtual' return of skilled workers translates into increases in local human capital, skills transfer and foreign network connections.

Importance of Migration from Development Perspective

- Migration across borders has accelerated in response to rapid movements of capital and goods and services, accompanied by unprecedented growth in communication and transportation technologies across the world.
- International migration can have important benefits for home country development and contribute to the welfare of host societies, developed livelihood of the community, reduced poverty at the individual level, investments fund can be provided and structures, ideologies, and support networks can be reinforced for development activities.
- Moreover, it can reduce income disparities across countries through an equalizing effect on the income of the countries of origin.
- The possibility of remittance reduced vulnerability of families, greater empowerment for women, and impact of social institution.
- Furthermore it can increase the supply of entrepreneurship and small business, accelerate the growth per capita income, increase saving, investment and human capital formulation, increase creativity and diversity, accelerate the pace of innovation the international mobility of labour, if managed properly, could perhaps help in reducing poverty and inequality.
- Remittances are an important resource for the reduction of poverty which is the largest share of migrants financial transfers is sent back to support family members and relatives.
- Apart from sending remittances, migrants also save some money while abroad, which they bring with them on return and benefits are gained from the temporary presence of highly skilled professionals (brain circulation).

Negative effects

This is true that there are some positive effects of adolescents and youth migration but on the other hand there is some risk for the origin countries from adolescents and youth migration. First of all, origin countries loss highly skilled workers and a reduction in the quality of essential services and economic growth and productivity decline with educations in the stock of high-skilled labour. Secondly, in places of origin, returns on public investments in education are lower. The absence of parents may increase the vulnerability of youth left behind, and adolescents commonly experience difficulties in their social relations and will isolate themselves in a small peer groups who are in a like situation. The absence of parents may increase the vulnerability of youth left behind, and adolescent's community experience difficulties in their social relations. Youth left behind by their parents commonly experience increased demands as they must assume responsibilities previously assumed by their parents. This can lead to declines in academic performance and exit from school altogether. Remittances coupled with limited parental supervision may be linked to a higher probability of risky behavior among youth left behind Migration may expose youth-especially young women-to higher risks of abuse, discrimination and exploitation.

However, host countries will be sufferer by losing the young manpower and brain drain. It can increased foreign direct investment (FDI), for more developed countries which are usually countries of destination, the interaction between migration and development could increase efficiency in the use of global resources.

Considering the both positive and negative effects of migration, government of Nepal set up various policies and strategy during the period of periodical plans and has been shown in the following tables

Table 4.4: Migration Policies in the Periodic Plans of Nepal since 1956

Plan Period	Policies/Strategies	Remarks
First Plan(1956-1961)	• No explicit migration policies	• First modern resettlement program with US assistance to settle victims of 1955 flood and natural disaster
Second Plan(1962-1965)	• Focus on resettlement in Inner Terai	• Establishment of Resettlement Company under Ministry of Food and Agriculture (1963) • Planned resettlement in a few Terai districts e.g. Jhapa, Nawalparasi, Banke
Third Plan(1965-1970)	• Introduction of family planning as population policy • No explicit policies on migration	• Establishment of Resettlement Department under Ministry of Food and Agriculture (1968) • Resettlement on designated forest land with Regional Offices in Terai • Project induced internal migration
Fourth Plan(1970-1975)	• Control immigration • Population policy as public policies having impact on population growth and distribution • Continuation of family planning related policies	• Formation of Taskforce on population policy • Transfer of Resettlement Company and Resettlement Department to the Ministry of Forest
Fifth Plan (1975-1980)	• Control immigration • Planned management of migration to Terai and urban areas • Planned migration to resource rich low density areas e.g., Western Terai • Urban development in backward regions • Fertility reduction policies	• Initiation of Vital Registration System • Formation of Population policy Coordination Board (1975) and National Commission on Population (1978)
Sixth Plan (1980-1985)	• Regulate migration from the Hills to Terai • Promote resettlement in the Hills • Control immigration • Reduction of growth rate	• No program details on migration policies • Reorganization of National Commission on Population in 1982 • Formulation of National Population Strategy 1983
Seventh Plan(1985-1990)	• Pursual of National Population Strategy, 1983	• Integration of population in rural development, cooperative and resettlement programs
Eighth Plan (1992-1997)	• Regulation of internal migration • Fertility reduction related policies (through integration with other activities	• No program details on migration policies • Dissolution of National Commission on Population • Creation of Ministry of population and Environment and Ministry of Women and Social

		Welfare
Ninth Plan(1997-2002)	• Regulation of international migration	• Formulation of Population Perspective Plan (proposed)
Tenth Plan (2002-2007)	• Management of migration along with adoption of partnership approach on population management	• Formulation of Population Perspective Plan • Integration of population in developmental activities
The Three Year Interim Plan (2007/08-2009/10)	• To manage migration Coordination, research are and development of small town have been emphasis.	• Updating of Population Perspective Plan • Integration of population in development
The three Interim Plan 20010/2013	•	•

Sources: Population Perspective Plan, 2010

New Policy Direction for Migration

- By looking at positive and negative effects of migration and the foresaid conceptual framework of migration management it can be concluded that it is desirable that policy makers have recognized and appreciate the contribution migration for sustainable development and poverty reduction. Moreover, adolescent and youth migration is being *necessary evil* for less developed countries and thus it is being urgent need to formulate migration policy and remittance policy to balance between less developed countries and more developed countries.
- Migration management should be given an important place in any strategy for achieving international development frameworks. Countries of origin and countries of destination respectively should be treated as the labour mobility in kind resources for development and that can narrow existing inequalities between and among states. Therefore, it is needed to be incorporated circular migration, virtual migrant and temporary migration in policy planning.
- The country must maximize the use of remittances especially in productive sectors rather than consumption sectors and need to recognized skilled emigrants as the potential asset of a nation and thus, it should be desirable to integrate migration management approaches more explicitly and coherently within a broader context of economic and social development frameworks.
- The international community is focusing on benefits for home country development as the most significant link between migration and development and thus need to take into consideration in major conferences and institutions both in regional and international level.
- Many middle income countries are currently developing migration management structures that encourage and support their migrants throughout the entire migration process and thus a cooperative approach to migration management could help developing countries to limit and reverse unsustainable forms of migration and receive the support of countries of destination for the sustainable development of their human resources

The summary of positive (benefit) and negative (cost) impact of the remittances could be shown as the following tables:

Positive impact (Benefit)	Negative impact (Cost)
Are net addition to resources; raise the immediate standard of living of recipients	Are unpredictable and always rises various direct and indirect costs. Moreover, Intangible cost like fear, anxiety also rises from the migration.
Poverty Reduction	Measuring the remittances is complex
Are potential source of savings and investment	Are spent on consumer goods, which increases demand, increases

capital formation for development	inflation, and pushes up wage levels
Permit imports of capital goods and raw materials for industrial development	Result in little or no investment in capital-generating activities. Most of the amount spent on consumption areas.
Ease foreign exchange constraints and improve balance of payments	High import content of consumption demand increases dependency on imports and exacerbates balance of payments problem
Improve income distribution	Replace other sources of income, thereby increasing dependency, eroding good work habits, and heightening potential negative effects of return migration
	Spent on "unproductive" or "personal" investment (e.g., real estate, housing,)
	Create envy and resentment and induce consumption spending among non-migrants
	Possibly to transfer various types of diseases like as HIV aids and so on

Economic disparities and demographic changes are powerful push and pull factors affecting the movement of people. There are numerous factors behind a decision to migrate like as employment and opportunities, economic disparities, family reunification, poverty, environmental degradation, armed conflict, demographic pressures, natural disasters. On the other side, globalization has played the catalytic roles for international migration in the present world. In order to encourage the return of highly skilled migrants, governments might offer certain incentive schemes to attract and retain professionals and skilled manpower.

CHAPTER 5

Urbanization

5.1 Introduction

Urbanization or the growth in the proportion of persons living in urban areas. 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 and also south Asia.

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.

Urbanization is the physical growth of urban areas as a result of rural migration and even suburban concentration into cities, particularly the very large ones. Urbanization is closely linked to modernisation, industrialisation, and the sociological process of rationalisation. Urbanisation can describe a specific condition at a set time, i.e. the proportion of total population or area in cities or towns, or the term can describe the increase of this proportion over time. So the term urbanisation can represent the level of urban relative to overall population, or it can represent the rate at which the urban proportion is increasing.

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.

5.2 Criteria for Urbanization in Nepal

The total population of a country is commonly grouped into rural and urban population based on the place of residence. 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. Municipalities according to the Local Self Governance Act are classified into three categories: Nagarpalika (Municipality), Upa Mahanagarpalika (Sub- Metropolitan) and Mahanagarpalika (Metropolitan) are the common Nepali terms used to denote urban places. These nomenclatures are variously used in the population censuses carried out at various times. Criteria to identify different urban places in different census conducted in Nepal are as follows.

Source and year	Criteria adopted		Observation
	Population Size	Other Criteria	
Population Census 1952/54	More than 5,000	"Prominent settlements"	No formal definition
Population Census 1961	More than 5,000	Urban facilities such as high school, college, judicial, administrative office, bazaar, mills, factories, communication facilities	
Nagar Panchayat Ain 1962	No less than 10,000	*Nagar Panchayat*	Some *Nagar Panchayats* had less than 10,000 population *Nagar panchayats* were conceived as unit of local self government
Amendment 1976	9,000 or more	*Nagar Panchayat*	All regional development centers were considered as urban even if some discrepancies were observed.
Municipality Act 1992: Local Self-governance Act 1999	Regionalism in designating urban area e.g., In the Hills: more than 10,000 In the Terai: more than 20,000	Stature as municipality Annual revenue Hills: NRs.500, 000 or more Terai: NRs 5 million or more Minimum urban facilities electricity, road, drinking water, communication and other similar facilities	Categorization of designated urban areas e.g., Nagarpalika *having minimum criteria* *Upa-mahanagarpalika* With a population of more than 100,000; annual revenue at least NRs.100 million and infrastructure for national/international sport events, city hall, etc. Mahanagarpalika with a population of more than 300,000; annual revenue at least NRs. 400 million and infrastructure for international sport events, university, specialized services etc.

Adopted from Pandey J.P et. a.l (2013)

5.3 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. Similarly in the year 2011, the urban population in Nepal reached 17 percent. However, there are 99 municipalities in Nepal including 41 new municipalities declared by the government of Nepal in July 2011, population census 2011 has estimated the urban population based on only 58 municipalities since at the time of data collection in 2011 population and housing census, there were only 58 municipalities. 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 2011, the urban population size has increased to 17 percent whereas in terms of urban population as percent of total population it increased by nearly fivefold.

5.4 Urbanization Trends in Nepal

Table 5.1 the distribution of Urban (Municipalities) by size of Population, Nepal,1971- 2011. The figure shows that there is only one municipality with population more than 3, 00, 000. In 1971 municipalities with less than 20,000 were only 9. 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 and 99 in 2011.

Table: 5.1 Distribution of Urban (Municipalities) by size of Population, Nepal, 1971- 2011

Size of Population	Number of Municipalities					Population				
	1971	1981	1991	2001	2011	1971	1981	1991	2001	2011
Less than 20,000	9	7	8	8	4	102638	90573	217901	136390	71763
20,000-49,999	5	13	14	34	27	149849	457569	293888	1032245	831127
50,000-99,999	1	2	8	11	17	59049	173419	517419	788937	1182522
1,00,000-299,000	1	1	3	5	9	150402	235160	666511	1270307	1435123
3,00,000 or more	-	-	-	-	1	-		-	-	1003285
Total	16	23	33	58	58	461938	956721	1695719	3227879	4523820

Source: Central Bureau of Statistics (Population census 1971,1981,1991,2001 and 2011

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.

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 which has slowed down to 40 percent in the decade 2001-2011. During 2001-2011, the urban population has increased by 3.1 percent of total population and has reached 17 percent of the total population. It should be noted that this data of urban population is based on 58 municipal areas and the urban population becomes even more percentage if we consider all areas that the government of Nepal has recently declared municipal areas.

Growth of urban population is attributable 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: Population of Nepal by rural-urban residence, 1952/54 – 2011

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
2011*	4523820	26494504	17.0	20.59

**Population based on 58 municipalities at the time of data collection in 2011 census*

Source: Population censuses

5.5 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- 2011

Municipality	District	Census Year			Popn Difference 1991-2001	Popn Difference 2001-2011	Av. growth rate 2001-2011
		1991	2001	2011			
Ilam	Ilam	13,197	16237	19427	3,040	3190	1.79
Bhadrapur	Jhapa	15,210	18145	18646	2,935	501	0.27
Damak	Jhapa	41,321	35009	75743	-6,312	40734	7.72
Mechinagar	Jhapa	37,108	49060	57909	11,952	8849	1.66
Biratnagar	Morang	1,29,388	166674	204949	37,286	38275	2.07
Dharan	Sunsari	66,457	95332	119915	28,875	24583	2.29
Inarwa	Sunsari	18,547	23200	28923	4,653	5723	2.20
Itahari	Sunsari	26,824	41210	76869	14,386	35659	6.23
Dhankuta	Dhankuta	17,073	20668	28364	3,595	7696	3.17
Khandbari	Sankhuwasabha	18,756	21789	26658	3,033	4869	2.02
Triyuga	Udaypur	37,512	55291	71405	17,779	16114	2.56
Rajbiraj	Saptari	24,227	30353	38241	6,126	7888	2.31
Lahan	Siraha	19,018	27654	33927	8,636	6273	2.04
Siraha	Siraha	21,866	23988	28831	2,122	4843	1.84
Janakpur	Dhanusha	54,710	74192	98446	19,482	24254	2.83
Jaleshwor	Mahottari	18,088	22046	24765	3,958	2719	1.16
Malangwa	Sarlahi	14,142	18484	25143	4,342	6659	3.08
Kamala Mai	Sindhuli	19,266	32838	41117	13,572	8279	2.25
Bhimeswor	Dolakha	19,266	21916	23337	2,650	1421	0.63
Banepa	Kavre palanchok	12,537	15822	24894	3,285	9072	4.53
Dhulikhel	Kavre palanchok	9,812	11521	16263	1,709	4742	3.45
Panauti	Kavrepalanchok	20,104	25563	28312	5,459	2749	1.02
Lalitpur	Lalitpur	1,15,865	162991	226728	47,126	63737	3.30
Bhaktapur	Bhaktapur	61,405	72543	83658	11,138	11115	1.43

Madhyapur-Thimi	Bhaktapur	31,970	47751	84142	15,781	36391	5.67
Kathmandu	Kathmandu	4,21,258	671846	1003285	250,588	331439	4.01
Kirtipur	Kathmandu	31,338	40835	67171	9,497	26336	4.98
Bidur	Nuwakot	18,694	21193	27953	2,499	6760	2.77
Hetauda	Makwanpur	53,836	68482	85653	14,646	17171	2.24
Gaur	Rautahat	20,434	25383	35370	4,949	9987	3.32
Kalaiya	Bara	18,498	32260	43137	13,762	10877	2.91
Birgunj	Parsa	69,005	112484	139068	43,479	26584	2.12
Bharatpur	Chitwan	54,670	89323	147777	34,653	58454	5.03
Ratnanagar	Chitwan	25,118	37791	46607	12,673	8816	2.10
Gorkha	Gorkha	20,633	25783	33865	5,150	8082	2.73
Byas	Tanahu	20,124	28245	43615	8,121	15370	4.34
Putalibazar	Syangja	25,870	29667	31338	3,797	1671	0.55
Waling	Syangja	16,712	20414	24199	3,702	3785	1.70
Lekhnath	Kaski	30,107	41369	59498	11,262	18129	3.63
Pokhara	Kaski	95,286	156312	264991	61,026	108679	5.28
Baglung	Baglung	15,219	20852	30763	5,633	9911	3.89
Tansen	Palpa	13,599	20431	31161	6,832	10730	4.22
Ramgram	Nawalparasi	18,911	22630	28973	3,719	6343	2.47
Butwal	Rupandehi	44,272	75384	120982	31,112	45598	4.73
Siddhartha Nagar	Rupandehi	39,473	52569	64566	13,096	11997	2.06
Kapilvastu	Kapilvastu	17,126	27170	30890	10,044	3720	1.28
Ghorahi	Dang	29,050	43126	65107	14,076	21981	4.12
Tulsipur	Dang	22,654	33876	52224	11,222	18348	4.33
Nepalgunj	Banke	47,819	57535	73779	9,716	16244	2.49
Gularia	Bardiya	30,631	46011	57232	15,380	11221	2.18
Birendra Nagar	Surkhet	22,973	31381	52137	8,408	20756	5.08
Narayan	Dailekh	15,758	19446	21996	3,688	2550	1.23
Dipayal Silgadhi	Doti	12,360	22061	26508	9,701	4447	1.84
Dhangadhi	Kailali	44,753	67447	104047	22,694	36600	4.34
Tikapur	Kailali	25,639	38722	56983	13,083	18261	3.86
Bhimdatta	Kanchanpur	62,050	80839	106666	18,789	25827	2.77
Amargadhi	Dandeldhura	16,454	18390	22241	1,936	3851	1.90
Dasarath Chand	Darchula	18,054	18345	17427	291	-918	-0.51
Total Urban Population		*2287487*	*3227879*	*4523820*	*940392*	*1295941*	*3.38*

Source: CBS 1998,2002 and 2012.

5.6 Newly added Municipalities

Nepal government announced additional 72 municipalities, including previously-proposed 37 municipalities in line with the Local Self-governance Act 1999. With this the number of municipalities has reached 130. So far there are 58 municipalities, one metropolis and four sub-metropolises in the country. The new municipalities would incorporate 283 VDCS, decreasing the numbers VDCs to 3,633 across the country, down from 3,915 VDCs.

The newly added municipalities fall just under 19 out of 75 districts of the country. Thirteen districts -- Manang, Mustang, Rukum, Rolpa, Jajarkot, Humla, Kalikot, Mugu, Ramechhap, Dolpa, Solukumbu, Rasuwa and Bajura - are still devoid of municipality. Table 5.4 presents the name of municipalities with their population.

Table 5.4: New municipalities and their population:

Districts	Name of Municipality	Population		
		Total	Male	Female
Taplejung	Taplejung	19085	9048	10037
Pachthar	Phidim	24768	11764	13004
Morang	Urlabari	35166	16285	18881
	Koshi haraicha	47723	22284	25439
	Rangeli	28516	14055	14461
	Belbari	31647	14556	17091
	Pathari Sanischare	49808	22546	27262
	Sundar dulari	32795	15410	17385
Terathum	Manglung	19659	9109	10550
Bhojpur	Bhojpur	16102	7522	8580
Khotang	Diktel	17793	8414	9379
Udayapur	Katari	28123	13242	14881
	Belter basaha	23918	10767	13151
Saptari	Shambhunath	30207	14334	15873
	Kanchanrup	48691	23638	25053
Sarlahi	Hariban	42783	20821	21962
	Lalbandi	30785	14782	16003
	Isworpur	40511	19810	20701
Rautahat	Chandrapur	72059	35858	36201
Bara	Gadimai	83367	41797	41570

	Nijhgada	35335	17026	18309
Sindhupalchowk	Chautara	15606	7314	8292
Kabhrepalanchowk	Pachkhal	33847	16092	17755
Dhading	Nilakantha	39478	18011	21467
Tanahun	Suklagandaki	38307	16911	21396
	Bandipur	15591	7068	8523
Parbat	Kushma	32419	14738	17681
Nabalparasi	Sunbal	39843	18325	21518
	Gaidakot	55205	26550	28655
	Kawasoti	56788	26091	30697
	Devchuli	31484	14495	16989
	Bardaghat	34417	15724	18693
Gulmi	Resungha	28736	12812	15924
Arghakhachi	Sandhikharka	40422	17985	22437
Banke	Kohalpur	62177	29923	32254
Salyan	Sarada	33730	15661	18069
Aacham	Mangalsen	23150	10663	12487
	Safebagar	18239	8291	9948
Siraha	Mirchaiya	45716	22513	23203
Dhanusa	Dhanusadham	45008	21824	23184
	Chireswornath	43745	22397	21348
Mahotari	Gausala	32108	16207	15901
Lamjung	Besisahar	26640	11921	14719
Bardiya	Rajapur	52438	25432	27006
Bajhang	Jaya pritivi	20280	9738	10542
Jumla	Chandannath	19047	9369	9678
Llam	Suryadaya	27040	13291	13749
Pyuthan	Pyuthan	38536	16803	21733
Jhapa	Sani arjun	45174	21414	23760
	Kankai	40141	18536	21605

	Birtamod	60174	29390	30784
Sangkhuwasabha	Chainpur	24735	11496	13239
Sunsari	Duhabi bhaluwa	25545	12797	12748
Okhaldhunga	Siddhicharan	16696	7595	9101
Makwanpur	Thaha	21717	10315	11402
Chitwan	Khairahani	46398	21665	24733
	Chitraban	26579	12016	14563
Syangja	Chapakot	12742	5396	7346
Palpa	Rampur	35396	15438	19958
Rupandhehi	Sainamaina	45178	20691	24487
	Lumbini sanskriti	61157	30356	30801
	Devdaha	42953	19683	23270
	Tilotamma	93183	43755	49428
Kapilwastu	Krishna nagar	20395	10657	9738
	Shivaraj	49988	24948	25040
Dailekh	Dullu	30457	14819	15638
Kailali	Lamki chuha	61352	28738	32614
	Ataria	72521	34630	37891
Darchula	Api	20797	10023	10774
Maygdyi	Beni	28511	12892	15619
Kanchanpur	Punarbas	43996	20386	23610
	Bellauri	53544	25457	28087
All total		**2,688,167**	**1,272,310**	**1,415,857**

Source: Computed based on CBS Data, 2012

SN	District	Municipality	Total Population	Male	Female	Households
1	Taplejung	Taplejung Municipality	19305	9195	10110	4484
2	Panchthar	Phidim Municipality	25645	12591	13054	5867
3	Ilam	Ilam Municipality	19427	9674	9753	4740

3	Ilam	Deumai Municipality	10964	5237	5727	2414
3	Ilam	Suryodaya Municipality	27201	13432	13769	6321
4	Jhapa	Bhadrapur Municipality	51335	25157	26178	11640
4	Jhapa	Damak Municipality	75743	35824	39919	18123
4	Jhapa	Mechinagar Municipality	57909	27856	30053	13196
4	Jhapa	Shivasatakshi Municipality	39731	18324	21407	9105
4	Jhapa	Birtamod Municipality	60862	29934	30928	14420
4	Jhapa	Shaniarjun Municipality	45310	21550	23760	10174
4	Jhapa	Kankai Municipality	40294	18629	21665	9451
4	Jhapa	Gauradaha Municipality	47409	22309	25100	10821
5	Morang	Biratnagar Sub-Metropolitan City	204949	104935	100014	45228
5	Morang	Urlabari Municipality	35166	16285	18881	8165
5	Morang	Letang Bhogateni Municipality	24636	11414	13222	5478
5	Morang	Belbari Municipality	31675	14582	17093	7516
5	Morang	Pathari Sanischare Municipality	49808	22546	27262	11426
5	Morang	Sunder Dulari Municipality	32839	15446	17393	7509
5	Morang	Koshi - Haricha Municipality	47782	22338	25444	11105
5	Morang	Rangeli Municipality	28546	14085	14461	6120
6	Sunsari	Dharan Sub Municipality	141439	67634	73805	32739
6	Sunsari	Inaruwa Municipality	28923	14638	14285	6199
6	Sunsari	Ithari Sub-Metropolitan City	143786	69454	74332	33837
6	Sunsari	Ramdhuni bhasi Municipality	29155	13817	15338	6349
6	Sunsari	Duhabi bhaluwa Municipality	25690	12941	12749	5330
7	Dhankuta	Dhankuta Municipality	38629	19032	19597	9479
7	Dhankuta	Pakhribas Municipality	17949	8160	9789	4019
8	Terhathum	Myaglung Municipality	20337	9765	10572	4604
8	Terhathum	Laligurans Municipality	17000	7771	9229	3678
9	Sankhuwasabha	Khandbari Municipality	26658	12826	13832	6295
9	Sankhuwasabha	Madi Municipality	14473	6625	7848	3218
9	Sankhuwasabha	Chainpur Municipality	24889	11650	13239	5386

10	Bhojpur	Bhojpur Municipality	16998	8378	8620	4102
10	Bhojpur	Sadananda Municipality	13272	6292	6980	2849
11	Solukhumbu	Dudhakunda Municipality	11825	5864	5961	2807
12	Okhaldhunga	Siddhicharan Municipality	17524	8386	9138	4390
13	Khotang	Diktel Municipality	18748	9316	9432	3866
14	Udayapur	Triyuga Municipality	71405	34284	37121	15938
14	Udayapur	Katari Municipality	28508	13553	14955	6045
14	Udayapur	Beltar Basaha Municipality	24044	10866	13178	5374
15	Saptari	Rajbiraj Municipality	38241	20044	18197	7751
15	Saptari	Shambhunath Municipality	30216	14343	15873	5818
15	Saptari	Kanchanrup Municipality	48723	23669	25054	9431
15	Saptari	Saptakoshi Municipality	21237	10121	11116	4542
15	Saptari	Hanumannagar Yoginimai Municipal	20915	10357	10558	3484
16	Siraha	Lahan Municipality	79963	39809	40154	14988
16	Siraha	Siraha Municipality	59426	28566	30860	11227
16	Siraha	Mirchaiya Municipality	45936	22717	23219	8745
16	Siraha	Golbazar Municipality	47763	23353	24410	9231
16	Siraha	Sukhipur Municipality	37027	18011	19016	6737
16	Siraha	Dhangadhimai Municipality	47449	23430	24019	8757
17	Dhanusa	Janakpur sub metro	169287	88052	81235	31777
17	Dhanusa	Dhanushadham Municipality	45008	21824	23184	8603
17	Dhanusa	Chhireshwornath Municipality	44107	22759	21348	7929
17	Dhanusa	Ganeshman-charnath Municipality	34770	16965	17805	6710
17	Dhanusa	Sabaila Municipality	24896	12051	12845	4830
17	Dhanusa	Mithila Municipality	31638	16179	15459	5775
18	Mahottari	Jaleshwor Municipality	43653	22735	20918	7247
18	Mahottari	Gaushala Municipality	32111	16210	15901	5718
18	Mahottari	Bardibas Municipality	37344	18243	19101	7871
19	Sarlahi	Malangawa Municipality	30333	15600	14733	5297
19	Sarlahi	Hariwon Municipality	42783	20821	21962	8369

19	Sarlahi	Lalbandi Municipality	30785	14782	16003	6619
19	Sarlahi	Ishworpur Municipality	40525	19824	20701	7626
19	Sarlahi	Barahathawa Municipality	50424	25380	25044	8548
20	Sindhuli	Kamalamai Municipality	41117	20360	20757	9320
20	Sindhuli	Dudhauli Municipality	25286	12073	13213	5243
21	Ramechhap	Manthali Municipality	28837	13564	15273	6444
21	Ramechhap	Ramechhap Municipality	13114	6499	6615	2654
22	Dolakha	Bhimeshwor Municipality	23337	11238	12099	6092
22	Dolakha	Jiri Municipality	13970	6501	7469	3420
23	Sindhupalchok	Chautara Municipality	16179	7868	8311	3888
23	Sindhupalchok	Melamchi Municipality	29073	14065	15008	6357
24	Kavrepalanchok	Banepa Municipality	24894	12446	12448	5546
24	Kavrepalanchok	Dhulikhel Municipality	21190	10674	10516	4333
24	Kavrepalanchok	Panauti Municipality	28312	13768	14544	5956
24	Kavrepalanchok	Panchkhal Municipality	35638	17836	17802	7465
24	Kavrepalanchok	Dapcha Kashikhanda Municipality	21600	10054	11546	4834
25	Lalitpur	Lalitpur Sub-metropolitan city	261789	135734	126055	63089
25	Lalitpur	Mahalaxmi Municipality	62624	31383	31241	14948
25	Lalitpur	Karyabinayak Municipality	38481	19177	19304	9013
25	Lalitpur	Godawari Municipality	29977	14873	15104	6776
25	Lalitpur	Bajrabarahi Municipality	40089	19796	20293	8834
26	Bhaktapur	Bhaktapur Municipality	83658	42678	40980	17655
26	Bhaktapur	Madhyapur Thimi Municipality	84142	43510	40632	20337
26	Bhaktapur	Anantalingeshwor Municipality	37989	18878	19111	8977
26	Bhaktapur	Suryabinayak Municipality	40856	20359	20497	9475
26	Bhaktapur	Changunarayan Municipality	34062	17527	16535	7245
26	Bhaktapur	Nagarkot Municipality	23944	11932	12012	4947
27	Kathmandu	Kathmandu Metropolitan City	1003285	533127	470158	254764
27	Kathmandu	Kirtipur Municipality	67171	37485	29686	19464
27	Kathmandu	Shankharapur Municipality	25558	12473	13085	5413

27	Kathmandu	Kageshwori-manahara Municipality	60553	30392	30161	14343
27	Kathmandu	Gokarneshwor Municipality	110452	55666	54786	27199
27	Kathmandu	Budhanilkantha Municipality	112281	57222	55059	26543
27	Kathmandu	Tokha Municipality	100780	51678	49102	25600
27	Kathmandu	Tarakeshwor Municipality	82060	41860	40200	20176
27	Kathmandu	Nagarjun Municipality	68863	35369	33494	16766
27	Kathmandu	Chandragiri Municipality	87553	44835	42718	20564
27	Kathmandu	Dakshinkali Municipality	25684	12894	12790	5512
28	Nuwakot	Bidur Municipality	27953	13608	14345	6279
30	Dhading	Nilkhantha Municipality	39939	18452	21487	9704
31	Makwanpur	Hetauda Sub Metro	154660	76511	78149	34322
31	Makwanpur	Thaha Municipality	22216	10802	11414	4787
32	Rautahat	Gaur Municipality	35370	18697	16673	5639
32	Rautahat	Chandrapur Municipality	72085	35884	36201	13448
32	Rautahat	Garuda Municipality	39662	20514	19148	5799
33	Bara	Kalaiya Municipality	86654	45117	41537	13211
33	Bara	Nijgadh Municipality	35403	17092	18311	7164
33	Bara	Gadhimai Municipality	84179	42537	41642	15972
33	Bara	Mahagadhimai Municipality	38811	19927	18884	5814
33	Bara	Simraudadh Municipality	24615	12635	11980	3707
33	Bara	Kolhabi Municipality	23812	11510	12302	4530
34	Parsa	Birgunj Sub Metro	205404	110091	95313	33778
34	Parsa	Pokhariya Municipality	30248	15615	14633	4376
35	Chitawan	Bharatpur Sub Metro	204069	100432	103637	50552
35	Chitawan	Ratnanagar Municipality	70226	33579	36647	16090
35	Chitawan	Madhi Municipality	37764	16938	20826	8963
35	Chitawan	Narayani Municipality	40277	18406	21871	9202
35	Chitawan	Khairahani Municipality	56925	26748	30177	12340
35	Chitawan	Chitraban Municipality	35002	15851	19151	8177
35	Chitawan	Kalika Municipality	41071	20440	20631	8475

35	Chitawan	Rapti Municipality	48340	23594	24746	10140
36	Gorkha	Gorkha Municipality	40654	18767	21887	10602
36	Gorkha	Palungtar Municipality	23531	10143	13388	6044
37	Lamjung	Beshisahar Municipality	30837	14380	16457	7992
37	Lamjung	Sunderbazar Municipality	20630	9165	11465	5516
37	Lamjung	Rainas Municipality	18527	8099	10428	4751
37	Lamjung	Karaputar Municipality	10925	4949	5976	2727
37	Lamjung	Madhyanepal Municipality	10852	4882	5970	2750
38	Tanahu	Anbukhaireni Municipality	16454	7626	8828	4036
38	Tanahu	Bhanu Municipality	18636	8295	10341	4843
38	Tanahu	Byas Municipaliy Municipality	47593	21820	25773	12305
38	Tanahu	Suklagandaki Municipality	39462	18044	21418	9682
38	Tanahu	Bandipur Municipality	15655	7110	8545	3783
39	Syangja	Putalibazar Municipality	31338	14122	17216	8190
39	Syangja	Waling Municipality	24199	10987	13212	5959
39	Syangja	Chapakot Municipality	12742	5396	7346	2902
39	Syangja	Bhirkot Municipality	18135	7806	10329	4421
40	Kaski	Lekhanath Municipality	69304	31747	37557	17426
40	Kaski	Pokhara sub metro	324083	160237	163846	83046
43	Myagdi	Beni Municipality	29891	14105	15786	7478
44	Parbat	Kushma Municipality	33187	15463	17724	8391
45	Baglung	Baglung Municipality	30763	14710	16053	7859
46	Gulmi	Resunga Municipality	29413	13417	15996	7458
47	Palpa	Tansen Municipality	31161	15332	15829	8433
47	Palpa	Rampur Municipality	35504	15536	19968	8135
48	Nawalparasi	Ramgram Municipality	28973	15505	13468	4982
48	Nawalparasi	Sunwal Municipality	39889	18358	21531	8641
48	Nawalparasi	Kawashoti Municipality	56950	26207	30743	12872
48	Nawalparasi	Devchuli Municipality	31544	14555	16989	6831
48	Nawalparasi	Gaidakot Municipality	55254	26580	28674	13027

48	Nawalparasi	Bardaghat Municipality	34620	15919	18701	7796
48	Nawalparasi	Madhyabindu Municipality	28508	12861	15647	6356
49	Rupandehi	Butwal Sub metro	141262	70350	70912	34122
49	Rupandehi	Siddharthanagar Municipality	64566	32671	31895	12513
49	Rupandehi	Sainamaina Municipality	45501	20974	24527	10074
49	Rupandehi	Lumbini Sanskritik Municipality	72647	36286	36361	9950
49	Rupandehi	Devdaha Municipality	43066	19719	23347	9569
49	Rupandehi	Tilottama Municipality	100438	47372	53066	21969
50	Kapilbastu	Kapilbastu Municipality	43971	22232	21739	7137
50	Kapilbastu	Banganga Municipality	75354	35025	40329	15970
50	Kapilbastu	Buddhabatika Municipality	20632	9894	10738	4184
50	Kapilbastu	Krishnanagar Municipality	20439	10700	9739	2923
50	Kapilbastu	Shivraj Municipality	50361	25258	25103	8449
50	Kapilbastu	Bhrikuti Municipality	26317	12749	13568	4648
51	Arghakhanchi	Sandhikharka Municipality	41115	18659	22456	10428
52	Pyuthan	Pyuthan Municipality	39547	17761	21786	9267
53	Rolpa	Liwang Municipality	15065	7640	7425	3266
54	Rukum	Musikot Municipality	19374	9663	9711	4377
54	Rukum	Chaurjahari Municipality	14615	6921	7694	2983
55	Salyan	Sarada Municipality	34242	16162	18080	7396
55	Salyan	Bagchaur Municipality	30064	14624	15440	5268
56	Dang	Ghorahi Municipality	65107	32149	32958	15517
56	Dang	Tulsipur Municipality	86454	41350	45104	19324
56	Dang	Lamahi Municipality	34396	16445	17951	6932
56	Dang	Tripur Municipality	41183	18617	22566	8951
57	Banke	Nepaljung sub metro	148714	76643	72071	29360
57	Banke	Kohalpur Municipality	64211	31402	32809	13851
58	Bardiya	Gulariya Municipality	57232	29399	27833	11230
58	Bardiya	Rajapur Municipality	52703	25677	27026	9733
58	Bardiya	Sanoshree-Taratal Municipality	26478	11970	14508	5911

58	Bardiya	Bansgadhi Municipality	55875	26302	29573	11210
58	Bardiya	Babai Municipality	27838	13192	14646	5452
59	Surkhet	Birendranagar Municipality	98367	49732	48635	22298
59	Surkhet	Bheriganga Municipality	32969	15128	17841	7178
59	Surkhet	Subhaghat Gangamala Municipality	24933	11262	13671	5587
60	Dailekh	Narayan Municipality	21995	10733	11262	4681
60	Dailekh	Dullu Municipality	30457	14819	15638	5861
61	Jajarkot	Bherimalika Municipality	34713	17631	17082	6594
63	Jumla	Chandanath Municipality	20371	10605	9766	4005
67	Bajura	Badimalika Municipality	18648	9774	8874	3717
68	Bajhang	Jayaprithvi Municipality	20642	10091	10551	3680
69	Achham	Mangelsen Municipality	23834	11329	12505	4756
69	Achham	Safebagar Municipality	18568	8609	9959	3836
69	Achham	Kamalbazar Municipality	15772	7348	8424	2992
70	Doti	Dipayal Silgadhi Municipality	26508	13686	12822	5509
71	Kailali	Dhangadhi Municipality	139743	70220	69523	27436
71	Kailali	Tikapur Municipality	56983	27640	29343	11639
71	Kailali	Bhajani-Trishakti Municipality	38432	19238	19194	6369
71	Kailali	Ghodaghodi Municipality	60910	29833	31077	10589
71	Kailali	Lamki chuha Municipality	61934	29170	32764	12229
71	Kailali	Attaria Municipality	74189	36153	38036	13751
72	Kanchanpur	Krishnapur Municipality	36706	17552	19154	6723
72	Kanchanpur	Bhimdatta Municipality	106666	53098	53568	20695
72	Kanchanpur	Dodhara-Chandani Municipality	39290	18167	21123	7393
72	Kanchanpur	Jhalari-Pipaladi Municipality	42552	20124	22428	8026
72	Kanchanpur	Punarbas Municipality	44027	20416	23611	8136
72	Kanchanpur	Belauri Municipality	53609	25501	28108	8659
72	Kanchanpur	Beldandi Municipality	21949	10240	11709	3760
72	Kanchanpur	Bedkot Municipality	49490	23501	25989	9220
73	Dadeldhura	Amargadhi Municipality	22241	10963	11278	4786

73	Dadeldhura	Parasuram Municipality	35030	16830	18200	6001
74	Baitadi	Dasharathchanda Municipality	17427	8295	9132	3795
74	Baitadi	Patan Municipality	19932	9011	10921	3934
75	Darchula	Api Municipality	21447	10635	10812	4423

5.7 Challenges of Urbanization

Although urbanization is the driving force for modernization, economic growth and development, the country need to care of impacts on human health, livelihoods and the environment due to urbanization. The implications of rapid urbanization and demographic trends for employment, food security, water supply, shelter and sanitation. Reducing the urban poverty, access to basic services and attaining sustainable development by preserving environment and planning for it are major challenges of fast growing urbanization in Nepal (Basnet, 2011). Some of the challenges resulted from urbanization are

Environment Protection:

As a result of population growth and urbanization, the environmental pollution due to increasing number of vehicles, deforestation and wastes generated from households has become a concern and management of such problems protecting economic activities in urban areas has become a challenge.

Housing and settlement:

In developing countries, one-quarter of urban housing units are temporary structures and many of them has been built building regulations. The Slum and squatters settlements of the poor are in the concerned category in terms of urban management. On the other hand, most of the urban areas in Nepal have been symbolizing unplanned and unmanaged settlements. As a result, more and more sufferings of a divergent nature among the urban dwellers of our country. Extreme pressure on housing, growth of slums and the pressure on and urban services social consequences, resulting in increased violence and crime, social degradation; cultural consequences: entry of alien culture, loss of national cultural identity; political consequences such as criminalization of politics etc are negative consequences of urbanization.

Health Services

The health of urban dwellers is assumed to be better than that of rural dwellers, because urban areas usually have better health care facilities results in lower level of fertility, mortality and high rates of in-migration. But in large cities, child mortality may be higher among children who live in low quality and slum housings relating to poverty and access to quality health services because authorities do not reach to informal settlements for political and administrative reasons and thus these areas are not eligible for services. The range of disorders and deviancies associated with urbanization is enormous and includes psychoses, depression, sociopathy, substance abuse, alcoholism, crime, delinquency, vandalism, family disintegration, and alienation (Basnet, 2011). Therefore, the urban poor usually suffer most from a lack of basic services and need to be addressed in policies.

Poverty

Poverty has been linked with rapid urbanization in Nepal as more and more people move to cities and urban areas. They are unable to cope with the combined pressure of rising populations and limited resources thereby trying to find affordable solutions, which often are inadequate, temporary and insecure .The general understanding is that a poor is person, who is in isolation and handicapped, incapacitated and unable to meet daily needs or depended on the others to fulfill his or his family's requirements, feels unsecure future.

In developing countries, at least one urban resident in every five lives below the poverty line and 30 percent of poor people live in urban areas worldwide.

In Nepal, about 15 percent urban people live under poverty line. Urban poverty is a substantial problem due to the high urbanization rate of poor. The situation of poor inhabitants of slums is often worse than in rural areas. Despite these findings, the rural areas gain more attention and resources. Economic consequences leading to income inequality and poverty, ill effects of globalization, gender inequality and isolation from opportunities are associated with poverty including both rural and urban, however the prevalence is even more in urban slums. A critical feature of globalization is new lines and forms of stratification between places, people and groups. In particular, it is manifested in much greater income inequalities. In all the regions, where the absolute number of poor has increased, a majority of them are in urban areas that have been the key drivers of the global economy.

Education and Employment:

The quality of education is not the same all over the country in Nepal. In big cities the quality of education provided from private schools and colleges is assumed to be better than that provided from public schools and colleges. Employment opportunities are also assumed to be available in the cities and the cities are being the potential markets to buy labour force. Therefore in search of good education and earnings, including in private and service sectors, many people are in the pace of migration to urban areas. The migration stream is in big cities like Kathmandu, Pokhara, Biratnagar, Bharatpur, Dharan, Nepalgunj, Dhangadhi etc. which seems to be higher in Terai cities due to high productivity Terai as well. In this scenario of migration stream in big cities and Terai based cities, the management of urbanization with sophisticated settlements and opportunities of education, employment, infrastructure development has been challenging and seem to be more exigent in the future.

Conclusion

It can be concluded that urbanization in Nepal is increasing trends, through there is the problems of drinking water, pollution, environmental degradation and other problems. One of the main reasons for growing the urban population may be the increasing number of municipalities and development of road, transportation and so on but development pattern of urbanization is not sustainable and thus need special package program for sustainable management for urbanization. Moreover, status of newly added municipalities is not same and thus proper attention also needs to bridge the gap among these municipalities.

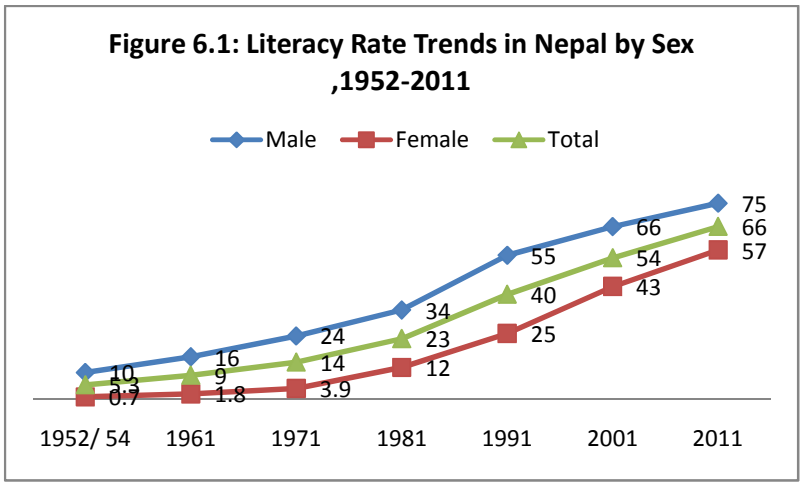
CHAPTER 6

Education, Language, Religion and Ethnicity

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 data on literacy was asked to persons who were 5 years and above in 2001. It was used to ask for those who were 6 years and above in previous censuses. The trend of literacy has been shown in figure 6.1.

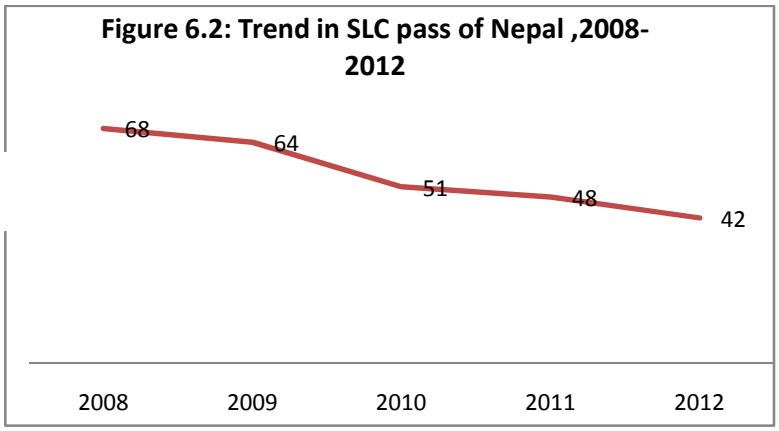


** Source: CBS, 1995; MOE 2000, CBS2002. 2011*

From a very low level of literacy in 1950s, Over all literacy rate (for population) aged (5 years and above) has increased from 5.3 percent in 1952/54 to 65.9 percent in 2011. This indicates that Nepal has made a substantial progress in increasing literacy over the years. Male literacy is 75.1 percent compared to female literacy rate of 57.4 %. The highest literacy rate is reported in Kathmandu district (86.3%) and lowest in Humla (47.8%) and indicating geographical disparity in education.

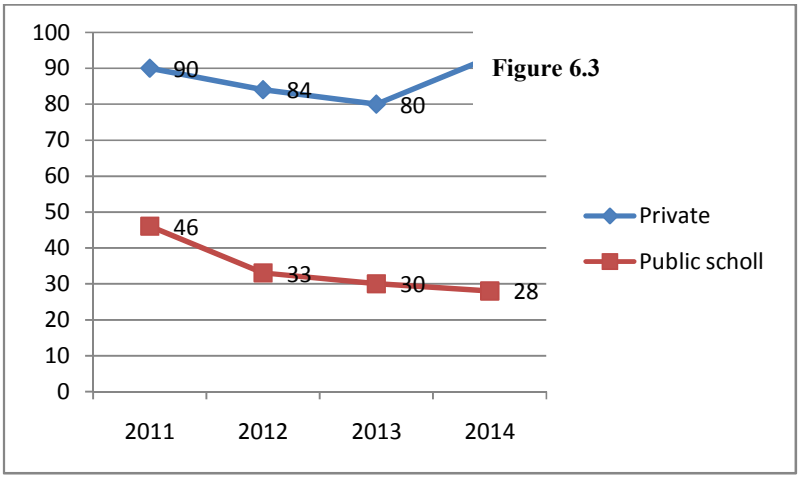
School Education

Although progress in literacy rate is seen, there is a huge gap (18 Percent point) between male (75.1 %) and female (57.4 %) in 2011 population census. This needs to be addressed. There is a huge disparity among boys and girls in the dropout rates from school education. Among different causes of drop outs, marriage is a main cause of drop out from school education among girls Nepal and among boys; the main cause of drop out from school education is economic problem. Nepal Adolescents and Youth Survey 2011 has indicated that among boys drop outs, 34% leave their schools due to economic problems followed by 25% due to family problems and among girls drop outs, 35% leave schools due to marriage followed by 23% due to family problems. On the other hand, the quality of education has been decreasing since few years. The following figure shows the trend of SLC results from 2008 to 2012.



** Source Economic Survey, 2012 In the SLC result, there is a large gap between public and private schools. The following figure shows the trend of gaps between private and public schools during 2011-2014.*

Figure 6.3: SLC Result of Public and Private school from 2011-2014



** Source: OCE, Nepal 2014*

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.

Table 6.2 provides data on mother tongue obtained from the 2001 and 2011 censuses. The 2001 census records 92 different languages spoken in Nepal with a 93rd 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.

The 2011 population census has recorded 123 languages spoken as mother tongue. Nepali is spoken as mother tongue by 44.6 percent (11826953 persons) of the total population followed by Maithili (11.7%; 3092530 persons), Bhojpuri (6.0%; 1584958 persons), Tharu (5.8%; 1529875 persons), Tamang (5.1%; 1353311 persons), Newar (3.2%; 846557 persons), Bajjika (3.0%; 793418 persons), Magar (3.0%; 788530 persons), Doteli (3.0%; 787827 persons) and Urdu (2.6%; 691546 persons).

Table 6. 1: Population Distribution by Mother Tongue, Nepal 2001 and 2011

Mother Tongue	Census 2001		Census 2011	
	Number	Percent	Number	Percent
Nepali	11053255	48.61	11826953	44.64
Maithali	2797582	12.3	3092530	11.67
Bhojpuri	1712536	7.53	1584958	5.98
Tharu(Dagaura/Rana)	1331546	5.86	1529875	5.77
Tamang	1179145	5.19	1353311	5.11
Newar	825458	3.63	846557	3.20
Magar	770116	3.39	788530	2.98
Awadhi	560744	2.47	501752	1.89
Bantawa	371056	1.63	132583	0.50
Gurung	338925	1.49	325622	1.23
Limbu	333633	1.47	343603	1.30
Bajjika	237947	1.05	793416	2.99
Urdu	174840	0.77	691546	2.61
Rajbanshi	129883	0.57	122214	0.46
Sherpa	129771	0.57	114830	0.43
Hindi	105765	0.47	77569	0.29
Chamling	44093	0.20	76800	0.29
Santhali	40193	0.18	49858	0.19
Chepang	36807	0.16	48476	0.18
Danuwar	31849	0.14	45821	0.17
Dhangar/Jhangar	28615	0.13		0.00
Uranw/Urau*			33651	0.13
Sunuwar	26611	0.12	37898	0.14
Bangla	23602	0.10	21061	0.08
Marwari/Rajasthani	22637	0.10	25394	0.10

Majhi	21841	0.10	24422	0.09
Thami	18991	0.08	23151	0.09
Kulung	18686	0.08	33170	0.13
Dhimal	17308	0.08	19300	0.07
Angika	15892	0.07	18555	0.07
Yakkha	14648	0.06	19558	0.07
Thulung	14034	0.05	20659	0.08
Sangpang	10810	0.05	18270	0.07
Bhujel/Khabas	10733	0.05	21715	0.08
Darai	10210	0.04	11677	0.04
Khaling	9288	0.03	14467	0.05
Kumal	6533	0.03	12222	0.05
Thakali	6441	0.03	5242	0.02
Chhanttyal	5912	0.03	4283	0.02
Sanketic(Nepali Symbolic sign)	5743	0.03	4476	0.02
Tibetan	5277	0.02	4445	0.02
Dumi	5271	0.02	7638	0.03
Jirel	4919	0.02	4829	0.02
Wambule/umbule	4471	0.02	13470	0.05
Puma	4310	0.02	6686	0.03
Yholomo	3986	0.02	10176	0.04
Nachhiring	3553	0.02	10041	0.04
Dura	3397	0.02	2156	0.01
Meche	3301	0.01	4375	0.02
Pahari	2995	0.01	3458	0.01
Lepcha/Lapche	2826	0.01	7499	0.03
Bote	2823	0.01	8766	0.03
Bahing	2765	0.01	11658	0.04
Koi/Koyu	2641	0.01	1271	0.00
Raji	2413	0.01	3758	0.01
Hayu	1743	0.01	1520	0.01
Byangshi	1734	0.01	480	0.00

Yamphu/Yamphe	1722	0.01	9208	0.03
Ghale	1649	0.01	8092	0.03
Khadiya	1575	0.01	238	0.00
Chhiling	1314	0.01	2046	0.01
Lohorung	1207	0.01	3716	0.01
Punjabi	1165	0.01	808	0.00
Chinese	1101	0.00	242	0.00
English	1037	0.00	2032	0.01
Mewahang	904	0.00	4650	0.02
Sanskrit	823	0.00	1669	0.01
Kaike	794	0.00	50	0.00
Raute (Khamchi)	518	0.00	461	0.00
Kisan	489	0.00	1178	0.00
Churauti (Musalman)	408	0.00	1075	0.00
Baram/Maramu	342	0.00	155	0.00
Tilung	310	0.00	1424	0.01
Jero/Jerung	271	0.00	1763	0.01
Dungmali	221	0.00	6260	0.02
Criya	159	0.00	584	0.00
Lingkhim	97	0.00	129	0.00
Kusunda	87	0.00	28	0.00
Sindhi	72	0.00	518	0.00
Munda	67	0.00		0.00
Koche*			2080	0.01
Haryanwi	33	0.00	889	0.00
Magahi	30	0.00	35614	0.13
Sam	30	0.00	401	0.00
Kurmali	23	0.00	227	0.00
Kagate	13	0.00	99	0.00
Dzonkha	10	0.00	80	0.00
Kuki	9	0.00	29	0.00
Chhintang	8	0.00	3712	0.01

Mizo	8	0.00	32	0.00
Nagamise	6	0.00	10	0.00
Lhomi	4	0.00	808	0.00
Assamese	3	0.00	476	0.00
Sadhani	2	0.00	122	0.00
Rai*			159114	0.60
Tajpuriya*			18811	0.07
Khash*			1747	0.01
Athpariya*			5530	0.02
Ganagai*			3612	0.01
Achhami*			142787	0.54
Kham*			27113	0.10
Malpande*			247	0.00
Dhuleli*			347	0.00
Arabi*			8	0.00
Spanish*			16	0.00
Russian*			17	0.00
Doteli*			787827	2.97
Belhare*			599	0.00
Phangduwali*			290	0.00
Waling/Walung*			1169	0.00
Sure*l			287	0.00
Baitadeli*			272524	1.03
Bankariya*			69	0.00
Bhajhangi*			67581	0.26
French*			34	0.00
Lhopa*			3029	0.01
Dolpali*			1667	0.01
Jumli*			851	0.00
Dailekhi*			3102	0.01
Sonaha*			579	0.00
Dadeldhuri*			488	0.00

Bajureli*			10704	0.04
Darchuleli*			5928	0.02
Manange*			392	0.00
Gadhawali*			38	0.00
Unidentified languages	168340	0.75	68891	0.26
Total	22736934	100.00	26494504	100.00

Source:CBS 2002, 2012.

** New languages registered in 2011 census.*

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. 2: 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. 3: Population Distribution by Religion, Nepal, 1961 - 2011

Religion	**Census Year**					
	1961	**1971**	**1981**	**1991**	**2001**	**2011**
Hindu	87.69	89.39	89.50	86.51	80.62	81.34
Buddhist	9.25	7.50	5.32	7.78	10.74	9.04
Islam	2.98	3.04	2.66	3.53	4.20	4.38
Kirat	-	-	-	1.72	3.60	3.04

Christian	-	0.02	0.03	0.17	0.45	1.41
Jain	0.01	0.05	0.06	0.04	0.02	0.01
Prakriti*	-	-	-	-	-	0.46
Bon*	-	-	-	-	-	0.04
Others	-	-	2.43	0.14	0.39	0.007
Unspecified	0.06	-	-	0.10	-	0.23
Total	100.00	100.00	100.00	100.00	100.0	100.0

Source: CBS 1995, 2002, 2012

** New religions registered in 2011 census.*

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 2011 census has recorded 125 caste/ethnic groups in Nepal. 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)

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.Out of 125 caste/ethnic groups identified by the 2011 population and housing census, Chhetri constituted 16.6 percent followed by Hill Brahmans (12.18%), Magar (7.12%), Tharu (6.56%), Tamang (5.81%), Newar (5.03%), Kami (4.75%), Muslim (4.39%), Yadav (3.98%) and Rai (2.34%).

Table 6. 4: Population Distribution by Caste/Ethnicity, 2001 and 2011.

Caste /Ethnic Group	**Number 2001**	**Percent**	**Number 2011**	**Percent**
Chhettri	3593496	15.80	4398053	16.60
Brahman-Hill	2896477	12.74	3226903	12.18
Magar	1622421	7.14	1887733	7.12
Tharu	1533879	6.75	1737470	6.56
Tamang	1282304	5.64	1539830	5.81
Newar	1245232	5.48	1331933	5.03
Muslim	971056	4.27	1164255	4.39
Kami	895954	3.94	1258554	4.75
Yadav	895423	3.94	1054458	3.98
Rai	635151	2.79	620004	2.34

Gurung	543571	2.39	522641	1.97
Damai/Dhobi	390305	1.72	472862	1.78
Limbu	359379	1.58	387300	1.46
ThakurI	334120	1.47	425623	1.61
Sarki	318989	1.40	374816	1.41
Teli	304536	1.34	369688	1.40
Chamar, Harijan, Ram	269661	1.19	335893	1.27
Koiri	251274	1.11	306393	1.16
Kurmi	212842	0.94	231129	0.87
Sanyasi	199127	0.88	227822	0.86
Dhanuk	188150	0.83	219808	0.83
Musahar	172434	0.76	234490	0.89
Dusad/Paswan/Pasi	158525	0.70	208910	0.79
Sherpa	154622	0.68	112946	0.43
Sonar	145088	0.64	64335	0.24
Kewat	136953	0.60	153772	0.58
Brahman-Terai	134496	0.59	134106	0.51
Baniya	126971	0.56	138637	0.52
Gharti/Bhujel	117568	0.52	118650	0.45
Mallah	115986	0.51	173261	0.65
Kalwar	115606	0.51	128232	0.48
Kumal	99389	0.44	121196	0.46
Hajam/Thakur	98169	0.43	117758	0.44
Kanu	95826	0.42	125184	0.47
Rajbansi	95812	0.42	115242	0.43
Sunuwar	95254	0.42	55712	0.21
Sudhi	89846	0.40	93115	0.35
Lohar	82637	0.36	101421	0.38
Tatma	76512	0.34	104865	0.40
Khatwe	74972	0.33	100921	0.38
Dhobi	73413	0.32	109079	0.41
Majhi	72614	0.32	83727	0.32
Nuniya	66873	0.29	70540	0.27

Kumhar	54413	0.24	62399	0.24
Danuwar	53229	0.23	84115	0.32
Chepang(Praja)	52237	0.23	68399	0.26
Haluwai	50583	0.22	83869	0.32
Rajput	48454	0.21	41972	0.16
Kayastha	46071	0.20	44304	0.17
Budhaee	45975	0.20	28932	0.11
Marwadi	43971	0.19	51443	0.19
Santhal/satar	42698	0.19	51735	0.20
Dhagar/Jhagar	41764	0.18	37424	0.14
Bantar/Sardar	35839	0.16	55104	0.21
Barae	35434	0.16	80597	0.30
Kahar	34531	0.15	53159	0.20
Gangai	31318	0.14	36988	0.14
Lodha	24738	0.11	32837	0.12
Rajbhar	24263	0.11	9542	0.04
Thami	22999	0.10	28671	0.11
Dhimal	19537	0.09	26298	0.10
Bhote	19261	0.08	13397	0.05
Bing/Binda	18720	0.08	75195	0.28
Bhediyar/Gaderi	17729	0.08	26375	0.10
Nurang	17522	0.08	278	0.00
Yakkha	17003	0.07	24336	0.09
Darai	14859	0.07	16789	0.06
Tajpuriya	13250	0.06	19213	0.07
Thakali	12973	0.06	13215	0.05
Chidimar	12296	0.05	1254	0.00
Pahari	11505	0.05	13615	0.05
Mali	11390	0.05	14995	0.06
Bangali	9860	0.04	26582	0.10
Chhantel/Chhantyal	9814	0.04	11810	0.04
Dom	8931	0.04	13268	0.05
Kamar	8761	0.04	1787	0.01

Bote	7969	0.04	10397	0.04
Brahmu/Baramu	7383	0.03	8140	0.03
Gaine	5887	0.03	6791	0.03
Jirel	5316	0.02	5774	0.02
Adibasi/Janajati	5259	0.02		0.00
Dura	5169	0.02	5394	0.02
Churaute	4893	0.02		0.00
Badi	4442	0.02	38603	0.15
Meche	3763	0.02	4867	0.02
Lepcha	3660	0.02	3445	0.01
Halkhor	3621	0.02	4003	0.02
Punjabi/Sikh	3054	0.01	7176	0.03
Kisan	2876	0.01	1739	0.01
Raji	2399	0.01	4235	0.02
Byasi/Sauka	2103	0.01	3895	0.01
Hayu	1821	0.01	2925	0.01
Koche	1429	0.01	1635	0.01
Dhunia	1231	0.01	14846	0.06
Walung	1148	0.01	1249	0.00
Jaine	1015	0.00		0.00
Munda	660	0.00	2350	0.01
Raute	658	0.00	618	0.00
Yehlmo	579	0.00	10752	0.04
Patharkata/Kuswadiya	552	0.00	3182	0.01
Kusunda	164	0.00	273	0.00
Lhomi*			1614	0.01
Kalar*			1077	0.00
Natuwa*			3062	0.01
Dhandi*			1982	0.01
Dhankar/Dharikar*			2681	0.01
Kulung*			28613	0.11
Ghale*			22881	0.09
Khawas*			18513	0.07

Rajdhob*			13422	0.05
Kori*			12276	0.05
Nachiring*			7154	0.03
Yamphu*			6933	0.03
Chamling*			6668	0.03
Aathpariya*			5977	0.02
Sarbaria*			4906	0.02
Bantaba*			4604	0.02
Dolpo*			4107	0.02
Amat*			3830	0.01
Thulung*			3535	0.01
Mewahang Bala*			3100	0.01
Bahing*			3096	0.01
Lhopa*			2624	0.01
Dev*			2147	0.01
Sangpang*			1681	0.01
Khaling*			1571	0.01
Topkegola*			1523	0.01
Loharung*			1153	0.00
Terai others*			103811	0.39
Dalit/Janajati Others	173401	0.76	156582	0.59
Unidentified Caste/Ethnicity	231641	1.02	15277	0.06
Foreigner*			6651	0.03
Total	22734934	100	26494504	100

CBS 2002, 2012.

**New caste/ethnicity registered in 2011 census.*

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CHAPTER 7

Economically Active Population

7. 1 Concept of Economically Active Population.

Labour Force or the Economically Active population is defined as that part of the population that supplies and willing to supply its labour for the production of economic goods and services during the time reference period chosen for investigation. The labour force differs from the concept of working age population. Working age population is the number of persons in the population in a specified age group eg. 15-64 years or 15 to 59 years

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.

The economically active population is generally defined to "comprise all those persons who contribute to the supply of labour for the production of goods and services disregarding whether they actually employed at the time of enumeration or not (CBS, 1977:149 as cited in Shrestha, 2003).

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).

It is generally not easy to set up a scheme for determining who are economically active and who is not. This implied for standard for judging which activities constitute productive work. Some consistent criteria are required to as active. the developed to determine what degree of performance is sufficient to class a person

7.2 Measurement Approaches

Economically active population consists of all persons who during a specific period of time (a week, a month or even a year) were practicing some profession or occupation or seeking employment in labour force approach. There are three approaches for collecting information on the economically active population (EAP). These three approaches are: (a) gainful worker approach (GWA) (b) labour force approach (LFA), and (c) labour utilization approach (LUA)/labour utilization framework (LUF).

7.2.1 The Gainful Worker Approach (GWA): The GWA is based on the idea that each person has more or less a stable functional role either as a wage earner or as a housewife or student etc.The main purpose of this approach is to count the occupation of the person. Thus persons seeking work for the first time are left out of the labour force. In this approach unemployment and underemployment are of secondary consideration, and no reference period is considered in data collection. The only benefit of this approach is that the resulting data are not influenced by any seasonal variation, because there is no reference period or if there is one it is too long, such as a year. The weakness of this approach is that part of the labour force which should have been included (i.e., the 'new workers') is normally excluded from the labour supply in view of the fact that they had no 'occupation' to report.

7.2.2 **Labour force approach (LFA):** The labour force approach was developed to remedy the deficiencies of the gainful worker approach in the USA in 1930s. It is an economic concept to capture the labour supply for economic goods and services. It includes both the employed and the unemployed. It specifies a minimum age and a definite time reference period. Though the LFA attempts to correct some of the shortcomings of the GWA by introducing the concepts of activity and specific time reference, its main drawback is that the data are likely to be affected by temporary and seasonal conditions at the time when the census is taken.

7.2.3 Labour Utilization Approach (LUA) : Due to the large number of underemployed persons in the labour force in developing countries, this approach has been developed to measure the extent of underemployment. It uses the same approach as in labour force in terms of minimum age limits and the reference period but the classification of categories differ like as (1) adequately utilized (2) inadequately

utilized. The latter category, that is, category (2), includes utilized inadequately due to: (a) unemployment (b) inadequate hours of work (c) inadequate of income (d) inadequate mismatch between education/training and occupation. Persons falling to categories (b), (c) and (d) are the underemployed. They are included under employed in the labour force approach.

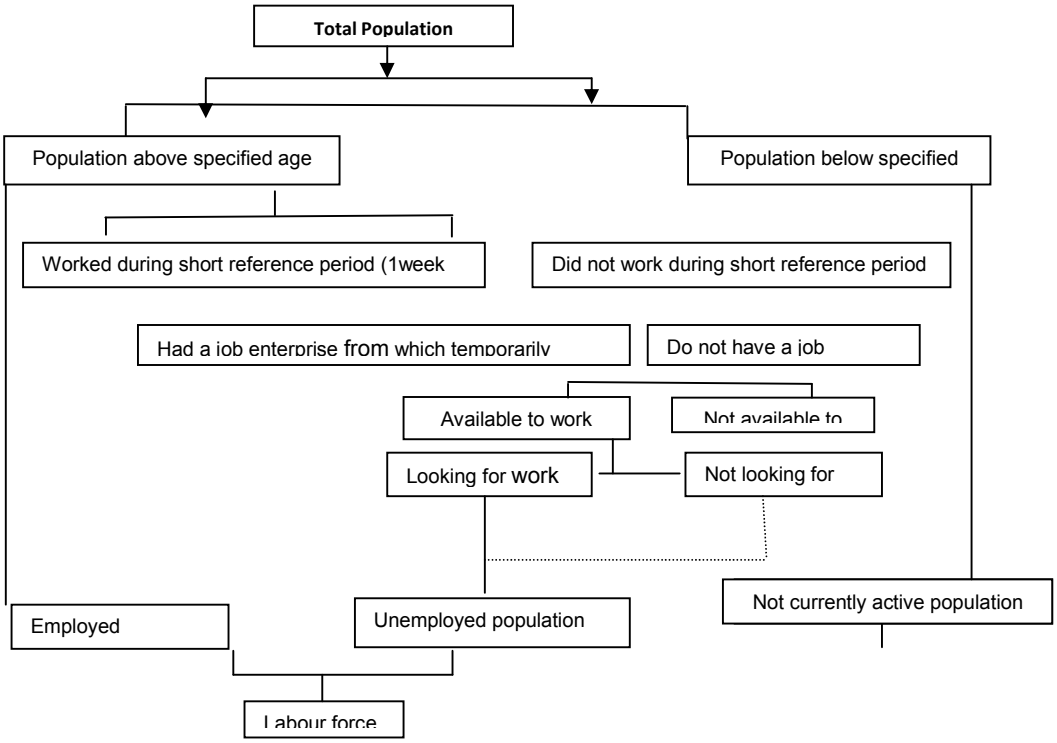
7.1 ILO Framework

Economically active population (EAP) is a concept often used to include those who are employed along with those who are not but are willing and able to work or those who are actively looking for jobs (Lauterbach, 1977). The international criterions and guidelines for the measure of the economically active population are set out in the International Labour Organization Convention (ILOC) and the International Conference of Labour Statisticians Resolution (ICLSR). As Hussmanns, Mehran and Verma (1992) say:

... the 'economically active population comprises all persons of either sex who furnish the supply of labour for the production of goods and services as defined by the United Nations systems of national accounts and balances, during a specified time reference period. According to these systems, the production of goods and services includes all production and processing of primary products, whether for the market, for barter or for own consumption, the production of all other goods and services for the market, in the case of households which produce such goods and services for the market, the corresponding production for own consumption (p. 11).

Obviously the economically active population (EAP) is made up of all people who, during a specified time, contribute to or are available to contribute to the production of economic goods and services as defined by the United Nations System of National Accounts (SNA). Production activities, "consists of processes or activities carried out under the control and responsibility of institutional units that use inputs of labour, capital, and goods and services to produce outputs of goods and services" (UN SNA, 1993, p.137). The EAP provides the supply of labour for economic production in an economy.

International standards, without denying other possibilities, identify two particularly useful measures of the term 'economically active population': the 'usually active population' measured in relation to a long reference period such as a year; and the 'currently active population' measured in relation to a short reference period such as one week or one day (Hussmanns, Mehran and Verma, 1992, p.11). The measurement of the EAP involves three basic issues, namely, the scope of the population to be covered; the dividing line between activities and non-economic activities; and a measurement framework for applying this dividing line to that population.. The International Labour Organization (ILO) has engineered a framework for measuring labour force (currently economically active population). The framework is outlined in Figure 1

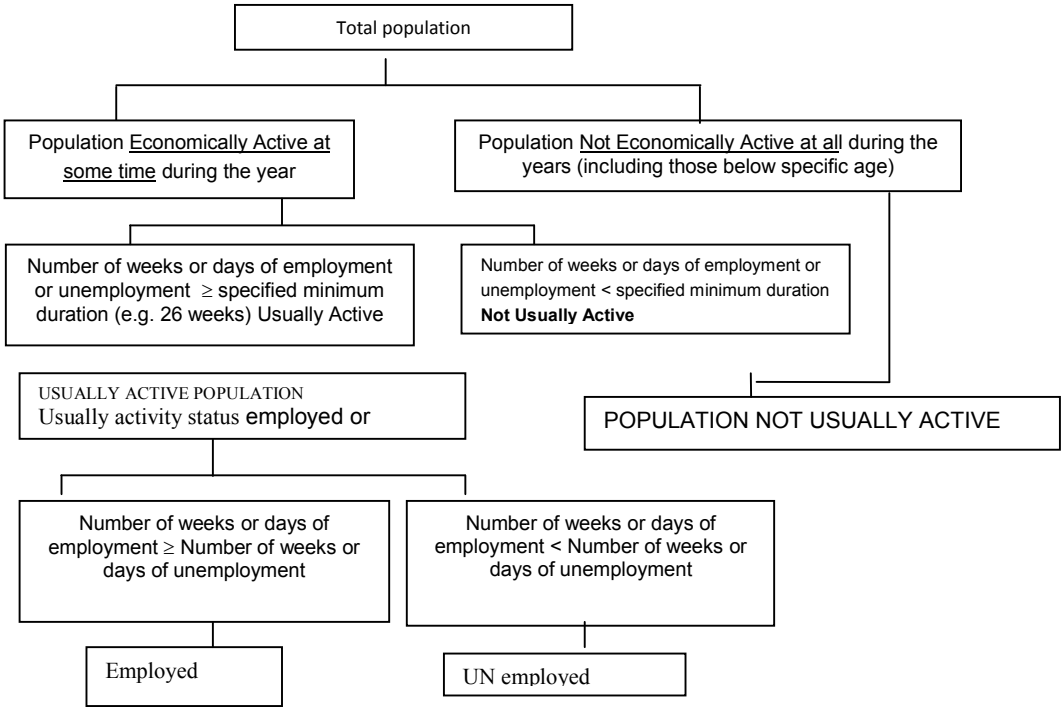


(Relaxed definition)

Labour force comprises all persons who, during the reference period, were either employed or unemployed. Figure 1 illustrates the relationship between the total census population, the labour force (currently economically active population), the employed population, the unemployed population, and the population not in the labour force. An employed member of the economically active population (EAP) is "a person who, during the referenced period, performs any activity to produce goods or services of the type that falls within the economic production boundary defined by the SNA, or who is temporarily absent from an activity of this type" (United Nations/International Labour Office, 2010, p.48).

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 7.1

Figure 7.2: ILO Framework for Measurement of the "Usually Active Population



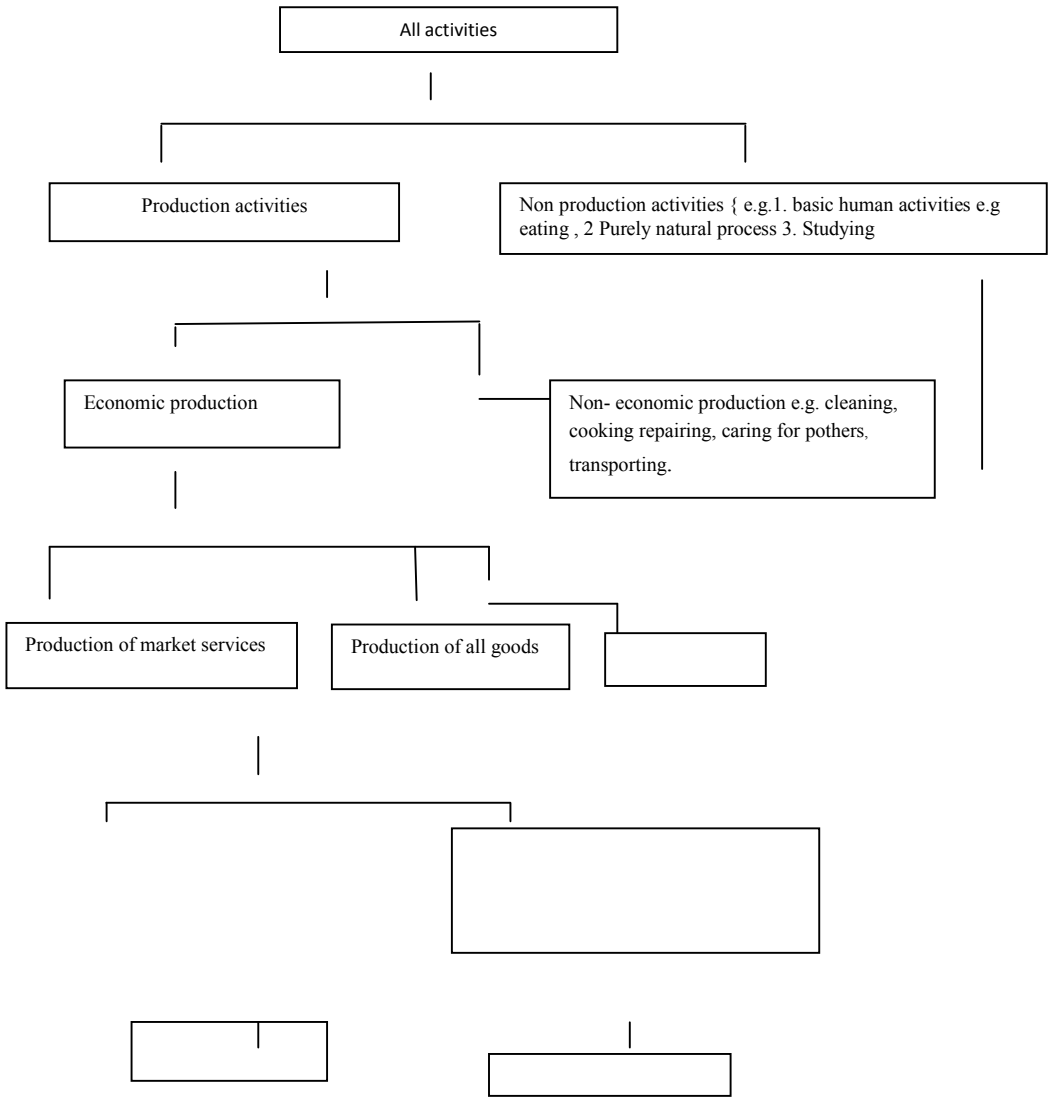
**(a) students (b) Homemakers (c) Income Recipients (pensioners rentiers; etc ; (d) others , recipients of public and or private support , children not attending school etc .)

Source: ILO, 1990. Nepal Population Report 2014

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.

Framework on economic activity

In order to correctly apply the definitions of employment, unemployment and economically active population in surveys of households or individuals, it is essential to have a clear understanding of the concept and boundary of economic activity. The concept of economic activity adopted by the 13th International Conference of Labour Statisticians (13th ICLS) for the measurement of the economically active population is defined in terms of production of goods and services as formulated by the United Nations System of National Accounts (SNA). Therefore only those persons who contribute or are available to contribute to the production of goods and services falling in the SNA production boundary should be counted as economically active (Hussmanns, Mehran and Verma, 1992). The framework of economic production as defined in the SNA is represented in thee figure XX



Definition

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. According to this census an economically active person was one who was either working or had a job from which he/she was temporarily absent. The censuses of 1961,1971and 1981 defined economically active person as those who had worked at least for eight months either at a single stretch or at the intervals, either for pay , profit or remuneration in cash or kind during the year preceding the day of census enumeration. 1991 census , if a person worked for any length of time 12 months during the twelve months preceding the census data , he /she was treated as economically active. His or her duration of work was recorded into one in the following four duration -groups: viz, (1) eight months and over, (20 six to seven months (3) three or five months and (4) less than three months. This type of information was collected for the first time in 1991 census.

The 2001 census has widened the definition considered by allowing anyone to count as economically active if they did any work at all during the last 12 months. For the sake of defining work activities the population census 2001 adopted the ILO standards, which in turn are based on the UN 1993 System of National Accounts. In the history of population census , it is for the first time in 2001 population census separate tables on *economically active* and usually *economically active* are presented .The census ,2011 followed the

definition of 2001 census defined the economic activity of people in accordance the system of national accounts (SNA). These questions were asked to the individuals who were 10 years of age and above at the time of enumeration and activity were asked in reference to 12 months prior to the enumeration.

The minimum age of a person to be considered for economic activity classification also differed from census to census. Data for economically active population were collected in 1952/54census for all persons, including those less than 15 years of age. The lower age limit in1952/ 54 censuses were not clear. But 1961 census, economically active data were collected for person aged 15 and above. However in the subsequent censuses -1971 and 1981and 1991, 2001, and 2011 data were collected for population age 10 and above.

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 -

7.3 Dimension of Nepal Economically active population.

There are several dimensions associated with the measurement of the economically active population (EAP) of Nepal. The general trends on the size, composition, and growth of the EAP, activity rate of the population by sex, age group, ecological and regional distribution, rural and urban distribution of the activity rate, and industrial and occupational distribution, are the major aspects that need to be analyzed. The description is preceded by a brief overview of the main conceptual coverage found in the measurement.

7.3.1 Apparent conceptual features

There are a number of key conceptual aspects inherent in the measurement of the EAP of Nepal. These aspects include structure of the question asked to collect the information on economic activity over the specified reference period, approaches followed to measure the EAP, etc.

7.3.1.1Census questions on economic activity and reference period

The Central Bureau of Statistics (CBS) framed questions in order to (a) measure the economic activity of the population, (b) classify them as economically active, not active, (c) to know the occupational and industrial involvement, and status of work, and (d) to identify reasons for not being usually active. The structure of question used in the National Population and Housing Census (NPHC) 2011 is outlined. These questions were asked to all persons 10 years of age and above of each household.

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 ones 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),

Conceptual elements gripped in the measurement of Nepal's EAP

A number of key features are associated with the measurement of the EAP of Nepal. A few of them are summarized in Table

Table XX Main features associated with the measurement of economically active population in different censuses

	census						
	1952/1954	1961	1971	1981	1991	2001	2011
Approach	Labour force and gainful work approach	Labour force and gainful work approach	Blending of labour force and gainful work approach	Gainful work approach and labour force approach	Gainful work approach and labour force approach	Blending of labour force and gainful work approach	Blending of labour force and gainful work approach
Definition	Economically active population was one who was either working or had job but temporarily absent or looking for work at the time of census	worked at least for 8 months either at a single stretch or at intervals, either for pay, profit or remuneration in cash or kind during the year preceding the day of census	same as in 1961	Same as in 1961	Worked for any length of time during the 12 month preceding the census date	worked for any length of time during the 12 months preceding the census date	same as in 2001
minimum age	15 years and above	15 years and above	10 years and above	10 years and above	10 years and above	10 years and above	10 years and above
Reference period	At the time of census enumeration	8 months in the course of the year preceding the census	8 months in the course of the year preceding the census	8 months in the course of the year preceding the census	During last 12 months	During last 12 months	During last 12 months

Inclusion and exclusion	Included all job seekers under EAP excluded-unpaid family worker	Excluded - out of work at the time of enumeration - Had worked less than and months included -unpaid family workers			Data on duration of work collected for the first time	Data on duration of work collected - Inclusion of extended economic activities	Data on duration of work collected - included information on extended economic activities.

7.4 General Trends of Economically active population

The following table 7.1 shows the increment in total population, population aged more than 10 years and economically active population by sex from the population census 1952/54 to2011.

Table 7.1 Growth of population and economically active population by sex, 1952/54-2011

	Total population		Total population		Economically active population	
Sex and year	Number	% increase	Number	%increase	Number	%increase
Bothe sexes						
1952/54	8235079		7225607		4153455	
1961*	9412996	14.3	5659931	-5.7	4306839	3.7
1971	11555983	22.8	8178620	44.5	4852524	12.7
1981	15022839	30	10517888	28.6	6850886	41.2
1991	18491097	23.1	1297712	23.4	7339586	7.1
2001	22736934	22.9	16770279	29.2	10637243	44.9
2011	26494504	16.5	20,495,515	22.2	11108915	4.4
Males						
1952/54	4050607		4153455		2460492	
1961*	4636033	14.4	2724757	-34.4	2563915	4.2
1971	5817203	25.5	4140624	52	3434288	33.9
1981	7659336	31.6	5351614	29.2	4479944	30.4
1991	9220974	20.4	6419484	20	4375583	-2.3
2001	11359378	23.2	8330576	29.8	5971024	36.5
2011	12849041	13.1	9898908	18.8	6064134	1.6
Females						

1952/54	4184472		3072152		1692963	
1961*	4776963	14.2	2935174	-4.5	1742924	3
1971	5738780	20.1	4037817	37.6	1418236	-18.6
1981	7327503	27.7	5130274	27.1	2370942	67.2
1991	9270123	26.5	6558128	27.8	2964003	25
2001	11377556	22.7	8439703	28.7	4666219	57.4
2011	13645463	19.9	10822774	28.2	5044781	8.1

7.5 Crude and Refined Activity Rate General

Population censuses of Nepal have been collecting economic activity data on Usual Activity basis (using reference period of one year). Table 7.2 clearly shows the percentage of economically active population from the year 1971-2001

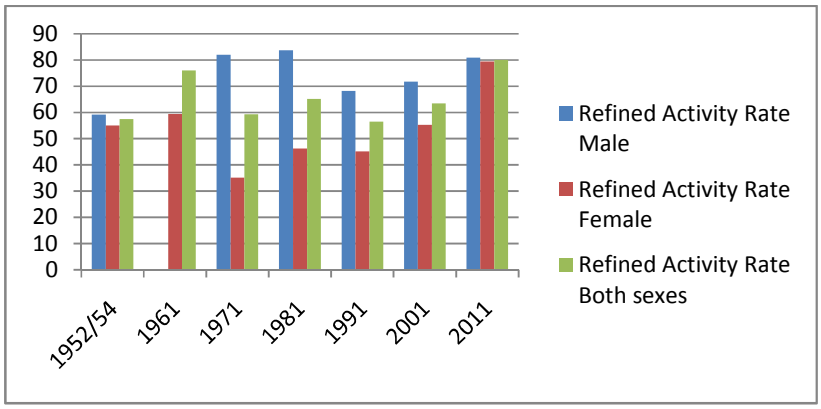
Table 7. 2: Economically Active Population 10+ Years of Age by Sex, Nepal, 1971-2011.

	Crude Activity Rate (CAR)			Refined Activity Rate (RAR)		
	Male	Female	Both sexes	Male	Female	Both sexes
1952/54	60.74	40.45	50.43	59.23	55.1	57.48
1961	55.3	36.48	45.75	94,00	59.38	76.09
1971	59.03	24.71	41.99	82.084	35.12	59.33
1981	58.48	32.36	45.60	83.71	46.21	65.14
1991	47.45	31.97	39.69.	68.16	45.2	56.56
2001	52.56	41.01	46.78	71.68	55.29	63.43
2011	-	-	-	80.9	79.4	80.1

* *Source: Population Monograph of Nepal 2003 National Report 2002, Nepal Living Standard Survey 2010/11, 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. In 2011, the economic activity of both male and females have been increased and the rates of females have been increased remarkably. It might be due to the participation of women in formal and informal sectors of employment after *Loktantra* and the nation has focused in social inclusion and women empowerment.**The population censuses and Nepal labor force surveys 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.**

Figure7.2: Sex wise Refined Activity Rate



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 led to under value or under utilizes economic activity data generated by censuses of Nepal.

7.6 Population and Housing Census 2011

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 2011 data in line with SNA 1993 and 2008 definitions.

To measure economic activity of population of Nepal age 10 years and above, census 2011 formulated and administered a question –

Table The response was structured in eight categories –

What work (Name) usually did during the last 12 months?		*What work (name) usually was done? (Occupation)*	*Where did (name) work? (Industry)*	*What was the status of employment of (name)?*	*What was the reason for usually not working during the last 12 months by (name)?*
Agriculture……	months			1.Employer	1.Student
Salary/wage……	months			2.Employee	2.Housework
Own economic enterprise….	months			3,Own account workers	3.Aged
Extended economic work ….	month			4.Unpaid family workers	4.Pension
Seeking work ……	months				5.Physically and mentally handicapped
Household work……	months				6.Sickness of chronic illness

Study (student)…….	months				7. Others
No work …..	Months.				
Total	**12 months**				

Total of eight 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.

From the above mentioned question, the economic activity of individuals aged 10 years and above. Persons who are seeking work, who are students and no work for whole of the year are considered as economically non active population and all other persons are considered to be economically active population as defined by SNA 1993 and 2008.Other questions related to economic activity asked in 2011 population census has been presented in the same table . The above mentioned table questions would be useful to track the economic activity and the data obtained from these questions would be useful for further analysis of economic activity.

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 three-fifth (55 %) of population are active and slightly less than half (45 %) 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 less than half of urban residents are found active against 56 per cent in rural area are economically active...

Gender disparity is obvious in employment situation; females in the Terai (62 %) are not economically active compared to their male counter parts and females of other areas. Nepal Labour Force Survey 1998/99 estimated overall 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 7. 3. Economically Active and Not Active Population Age 10 years and Over by Sex and Type of Residence, 2011,

Area of Residence	Sex	**Total Population**		Economically Active at Some time,2011					Not Economically Active at all
				Popul-action	Usually Active			Not Usually Active	
		Number	**%**	Total	Total	Emp-loyed	Unem-ployed		
Nepal	Both sex	20,495,515	100.0	54.19	49.05	48.25	0.80	5.14	45.81
	Male	9706199	100.0	62.47	59.22	57.98	1.24	3.24	37.5
	Female	10789316	100.0	46.75	39.9	39.51	0.39	6.84	53.26
Rural	Both sex	16840134	100.0	56.33	50.57	49.81	0.74	5.76	43.67
	Male	7891604	100.0	63.49	59.77	58.59	1.18	3.72	36.51
	Female	8948530	100.0	49.97	42.42	42.06	0.36	7.55	50.03
Urban	Both sex	3655382	100.0	44.42	42.15	41.11	1.04	2.27	55.58
	Male	1814596	100.0	57.96	56.8	55.29	1.51	1.16	42.04
	Female	1840786	100.0	31.07	27.7	27.13	0.57	3.37	68.93
Mountain	Both sex	1330157	100.0	67.46	58.49	58.15	0.34	8.97	32.54
	Male	629947	100.0	68.0	60.08	59.55	0.53	7.92	32.0
	Female	700210	100.0	66.97	57.05	56.89	0.16	9.92	33.03
Hill	Both sex	8919076	100.0	57.4	51.87	51.18	0.69	5.33	42.6
	Male	4131067	100.0	61.55	57.77	56.67	1.10	3.78	38.45
	Female	4788009	100.0	53.46	46.79	46.45	0.34	6.67	46.56
Terai	Both sex	10246284	100.0	49.82	45.37	44.42	0.95	4.45	50.18
	Male	4945187	100.0	62.52	60.32	58.87	1.45	2.20	37.48
	Female	5301097	100.0	38.01	31.42	30.95	0.47	6.59	61.99

Source: Population Census, 2011

CHAPTER 8

Adolescents and Youth

8.1 Introduction

The young people of today are the adults of tomorrow. Therefore investing on adolescent youths is investing for future. The adolescent and youth are change agents of society. The youth are dynamic and vibrant segment of the society not for their energy and enthusiasm but also considered as major source of nation's building .Therefore, a country need to be concerned with the development of every aspect such as education, health, wellbeing of all population from their birth to death based on life cycle approach. One of the aspects to be concerned is the distribution of population by their age group and among them a particular group needs to be focused who are in transition phase of childhood to adulthood and their every action and activities are concerned with the future of a country which groups are said to be adolescents and youths.

Around the world, the terms, youth, Adolescents, Young person and juvenile are interchanged, often meaning the same things. Definition of specific age range that constitutes youth varies. The most common International definition used by the United Nations is the youth are those populations between the age 15-24 years. Similarly from economic point of view, the World Bank defines the age of youth as between the ages of 15-24 years. Following, for world health organization the age of Youth is between 10-24 years. The Commonwealth Youth Program (CYP) defines youth as people over old to less than 30 years old. The definition of youth contrast in each sector, however, as national level , youth is defined in some countries from as 10 years to as old as 40 years.

Use and meanings of the terms 'young people', 'youth', and 'adolescents' vary in different societies around the world, depending on political, economic and socio-cultural context. UNFPA uses the following United Nations definitions to describe different groups of young people:

Adolescents: 10-19 year olds (early adolescence 10-14; late adolescence 15-19)

Youth: 15-24 year olds

Young People: 10-24 year olds

There is no uniform definition of the term "youth" The popular understanding "youth" is different

8.2 Characteristics of Adolescents and Youth

Adolescence is a transitional stage of human's physical and psychological development that occurs during the transitional period between childhood and maturity. This physical and psychological development involves biological (i.e. pubertal), social, and mental changes, though the biological or physiological ones are the easiest to measure objectively (MoHP).

In studying adolescent development, adolescence can be defined biologically, as the physical transition marked by the onset of puberty and the termination of physical growth; cognitively, as changes in the ability to think abstractly and multi-dimensionally; or socially, as a period of preparation for adult roles. Major pubertal and biological changes include changes to the sex organs height, weight, and muscle mask as well as major changes in brain structure and organization. Cognitive advances encompass both increases in knowledge and in the ability to think abstractly and to reason more effectively.

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 adolescence and adulthood. The ability of young people to safely and successfully navigate their transition to adulthood is diversified by age, sex, marital status, schooling levels, residence, living arrangements, migration, and socio-economic status. Although young people are all in transition, their experiences are by no means similar. Programming for the diversity of young people can yield better results in helping young people grasp opportunities and overcome challenges with positive results. Adolescents include the age range of 10 to 19 years. Youth includes the age range of 15 to 24 years. These are globally accepted definitions, although there may be regional and country specific variations. Young people refer to adolescents and youth ranging in age from 10 to 24 years (UNFPA).

8.3 International Effort for Adolescents and Youth

Out of 7.2 billion people, 1.8 billion are young people between 10 and 24 years old, 90 per cent of whom live in developing countries, and more than two-third in Asia region where they tend to make up a large proportion of the population. The global community, with the Cairo Program of Action at the International Conference on Population and Development (ICPD) and again at the Fourth International Conference of Women (ICW) in Beijing resolved to protect and promote the rights of adolescents/ youths to sexual and reproductive health information and services (UN, 1994, 1995). Realizing difficult to implement all activities of ICPD, United Nations decided MDGs with goals and targets related to adolescents' and youth aiming better schooling , health, or more productive employment ultimately to meet the goal 1 eradicating extreme poverty and hunger. The table shows the seven out of the eight Millennium Development Goals target youth outcomes.

Seven out of the eight Millennium Development Goals targets of youth outcomes.

Table 8.1: Millennium Development Goals targets of youth outcomes

	Millennium Development Goal	**Direct or indirect youth specific targets.**
Goal 1	Eradicate extreme poverty and hunger	Indirect
Goal 2	Achieve universal primary education	Target 8 literacy rates of 15 to 24 years.
Goal 3	Promote gender equality and empowerment	Target 9 ratio of girls to boys in primary , secondary, and tertiary education. Target 10 .Ratio of the literate women to men , ages 15-24
Goal 4	Reduce child mortality	Indirect
Goal 5	Improved maternal health	Indirect
Goal 6	Combat HIV/AIdS , malaria and other diseases.	Target 18 .HIV prevalence among pregnant women ages 15 -24 years. Target 19 Percentage of population ages 15-24 years with comprehensive and correct knowledge of HIV/AIDs Targets 20 Ratio of school attendance of orphans to school attendance of no orphans' ages 10-14 years.
Goal 8	Develop a global partnership for development	Targets 45. Unemployment rate young people ages 15-24 by sex.

Source: World Development Report, 2007; Development and the Next Generation, the World Bank

Various policies and programs have been done to protect the rights of young people. It envisions a world in which girls and boys have optimal opportunities to develop their full potential, to freely express themselves and have their views respected, and to live free of poverty, discrimination and violence.

Some policies and programs are :

- Empower adolescents and youth with skills to achieve their dreams, think critically, and express themselves freely.
- Promote health, including by giving them access to sexual and reproductive health information, education, commodities and services.
- Connect young people to livelihood and employment programmes.
- Uphold the rights of young people, especially girls and marginalized groups, to grow up healthy and safe to receive a fair share of social investments.
- Encourage young people's leadership and participation in decisions that affect them, including the development plans of their societies.

UNFPA is one of the agencies having holistic, multi-sectoral, collaborative approach reflects a vision that sees the lives of young people in totality rather than fragments. At the policy level, the Fund frames adolescent and youth issues within the larger development context of poverty reduction. At the programme level, it advocates for an essential package of social protection interventions for youth that includes education, sexual and reproductive health services and support for establishing livelihoods. At both levels, the Fund encourages intergenerational alliances that pair the energy, perspectives and motivation of young people with the experience and know-how of adult coaches and facilitators.

8.4 National Effort for Adolescents and Youth

In Nepal, the youth affairs seem to be more political than on social issues. During the time of Panchayat system, a separate youth organization at the national level was constituted. After the restoration of multi-party democracy 2046, most of the political parties have formed their youth wings, including students' front in order in order to mobilize them in their party affairs. In this backdrop, state machinery looks more or less reluctant in overall youth development because of inadequate thrust on this sector. Political leaders are mobilizing the youth mainly in the political activities, rather than in the social activities. We have had a separate ministry in the name of culture, youth and sports, which was short lived. Merger and of division ministries have become common political phenomena in Nepal. In 2064 Ministry of youth and sport has been established aiming to mobilize the youth especially for development activities in the context of Nepal.

The government has established youth information center and District Sports Development Committee. Besides Ministry is launching various programmes like as, youth partnership in each districts and international youth day program. Now the MOYS has been completed ongoing evaluation of Local level Youth Partnership Program and trying to formulate evidence based policy and program for the mobilization of youth in the development activities.

Table 8.2 Various policies and strategies developed by various ministries

Year	Description policies and strategic
Policies and strategies developed by Ministry of Youths and Sports	
2066	National Youth Policy
2067	National Sports Policy
Policies and strategies developed by Ministry of Health	
1998	National Reproductive Health (RH) Strategy: Identifies ARSH as one of the pillars
2000	National Adolescent Health and Development Strategy Empower adolescents with information and skills to protect themselves Targeted health services and counseling for adolescents Creating safe and supportive environments at various levels

2000	Essential Health Care Service (EHCS) Package: Adolescent reproductive health services are a sub-set of reproductive health services
2005	National Health Communication Strategy for FP and MCH (2005-2010): Adolescents are a target group
2006	National AIDS strategy 2006 - 2011: Youth are a target group
2010	National Health Sector Programme (NHSP) II (2010-2015): Target of introducting AFSs into 1000 public health facilities
2011	National ASRH communication Strategy (2011-2015)

Despite these activities, other line ministries like as Ministry of Health, Ministry of Education, Ministry of Agriculture and other line Ministries are launching various program for youth, though it is not integrated approach. Similarly many NGO and INGO along with civil societies are activated both in central level and local level.

8.5 Adolescents and Youth Growth Rate

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.

Table 8.2 shows the population trend among adolescents and youth in three consecutive censuses 1991-2011.

Age Group	Sex	2001		2011		Average annual growth rate 2001-2011
		Population	Percent of total population	Population	Percent of total population	
10-14	Male	1533806	13.26	1764630	13.73	1.40
	Female	1448126	12.50	1710794	12.53	1.67
	Total	2981932	12.88	3475424	13.12	1.53
15-19	Male	1185826	10.25	1443191	11.23	1.96
	Female	1203176	10.38	1488789	10.91	2.13
	Total	2389002	10.32	2931980	11.07	2.05
20-24	Male	946742	8.19	1043981	8.12	0.98
	Female	1070026	9.23	1314090	9.63	2.05
	Total	2016768	8.71	2358071	8.90	1.56
Total adolescents and youth (young) population	Male	3666374	31.71	4251802	33.09	1.48
	Female	3721328	32.12	4513673	33.07	1.93
	Total	7387702	31.91	8765475	33.08	1.71
Total population of the country	Male	11563921	100.00	12849041	100.00	1.05
	Female	11587502	100.00	13645463	100.00	1.63

	Total	23151423	100.00	26494504	100.00	1.35

Source: Central Bureau of Statistics Adopted from Pandey J.P et. a.l (2013)

Nepal's population reached 26,494,504 on 22 June 2011 with the slowest population growth rate at 1.35 per annum since 1961. The adolescents and youth population has reached 8,765,475 in 2011 with an average annual growth rate 1.71 percent in the decade 2001-2011. The average annual growth rate of adolescents is higher than the national average annual population growth almost in each category of age sex composition except in case of males in the age group 20-24 years. The annual growth in this category might be due to the fact that many of the youths who fall in this category have been migrated out of the country either for education or for seeking jobs in international markets. If one looks for the proportionate share of population in adolescents and youth, one would find that adolescents and youth population in Nepal covers 33.1 percent of the total population which is a slight increase in proportion from 2011 census.

8.6 Trend in setting patterns of Adolescent, Youth, and Young people in urban areas over the last 60 years.

Table 8.3 presents trend in setting patterns in urban areas over the last 60 years. There has been an increasing ratio of adolescents, youth and young people in the total population structure of Nepal over the last 60 years. The proportion has increased in every category. It is most significant in young people (10-24 years). In 1961, males living in urban area made up 21% of the total population, while 19%. of the total population were females. Over the last 5 decades, this proportion has increased by almost 4 percentage points. Similarly, male youth made up 17% of the total population in 1961, which has increased to 19.4% in 2011. The percentage of female youth has also increased from approximately 17% to 20.5% in 2011. A visible change is seen among both male and female young people. Male and female young people made up 28.8% and 27.6% respectively of the total population in 1961, which has increased to 33.1% for both sexes in 2011. This change has been gradual over the last 50 years.

Table 8.3 Trend in setting patterns in urban areas over the last 60 years.

Category	Sex	1961	1971	1981	1991	2001	2011
Adolescents	Male	20.96	21.5	20.9	22.6	23.9	25.0
	Female	18.76	19.1	19.4	22.6	23.3	23.5
Youth	Male	16.69	17.4	17.3	22.0	18.8	19.4
	Female	17.22	17.5	18.1	17.4	20.1	20.5
Young people	Male	28.85	29.5	29.1	19.2	32.3	33.1
	Female	27.61	27.9	28.9	30.5	32.7	33.1

Source : Population Monograph , vol 2 page 276

8.6.1 District having highest and lowest proportion of adolescents, youth and young people.

The highest number of adolescents, youth and young people (AYYP) live in Kathmandu district, the capital of Nepal (367,853, 435,968 and 601,647 respectively) representing 5.7%, 8.2% and 6.9% of the total adolescents, youth and young people (AYYP) in the country. The lowest number (smallest in terms of population) of adolescents, youth and young people (AYYP) live in Manang district of Nepal (1,129, 1,203 and 1,761 respectively) less than 0.01% of the total population of adolescents, youth and young people in Nepal. Further analysis was undertaken to see whether there is a similarity in the percentage of adolescents, youths and young people among the 75 districts. Table 7.9 lists the top five districts with the highest numbers of adolescents, youth and young people in Nepal.

Table8.4 five districts with the highest percentage of adolescents and youth and young population , Nepal

Adolescent		Youth		Young	
District	**%**	**District**	**%**	**District**	**%**
Ramechhap	27.40	Kathmandu	24.99	Kailali	35.91
Khotang	26.82	Bhaktapur	22.96	Kanchanpur	35.67
Salyan	26.78	Kaski	22.94	Bardiya	35.60
Sindhuli	26.67	Lalitpur	22.55	Salyan	35.51
Kanchanpur	26.40	Chitwan	22.05	Dang	34.91
National Average 24.18%		National Average 19.97%		National Average 33.08 %	
Districts with more than national Average: 48		Districts with more than national Average: 30		Districts with more than national Average: 35	

The national average of adolescent youth and young people of the total population is about 24%, 20% and 33%. Based on this figure, 48 districts have more than the national average of adolescents, 30 districts have more than the national average of youth and 35 districts have more than the national average of young people. The ratio of adolescents, youth and young people differs from the national average by 3.22 percentage points in Ramechhap, 5.02 percentage points in Kathmandu for youth and 3.83 percentage points in Kailali for young people. This diversity and fluctuation requires further analysis in future censuses. More than a third of districts (27) have fewer adolescents than the national average. Sixty per cent of districts (45) have less youth than the national average and more than half of the districts (40) have less young people than the national average. The difference compared to the national average is as high as 7.46 percentage points for adolescents (Mustang), 3.61 percentage points for youth (Mahottari) and 8.09 percentage points for Mustang.

8.6.2 Districts with the lowest percentage of adolescents, youth and young population in Nepal.

Table 8.5 Five districts with the lowest parentage of adolescents and youth and young population, Nepal

Adolescent		Youth		Young	
District	**%**	**District**	**%**	**District**	**%**
Mustang	16.72	Mahottari	16.36	Mustang	24.99
Manang	17.27	Mustang	16.45	Manang	26.93
Lalitpur	20.74	Rautahat	16.81	Humla	29.75
Kathmandu	21.09	Siraha	16.98	Mahottari	30.13
Bhaktapur	21.40	Bajura	17.04	Saptari	30.32

Source: Population Monograph, Vol 2nd page 279

8.7 Absent Population and International Migration:

The above population figure excludes 1,921,494 persons who were recorded as absentee population, a significant increase from 762,181 in 2001, the highest proportion (44.81 percent) of which represents youth of 15 to 24 years. This reflects increasing trend of labor migration from the country over the last decade.

While economic benefits from remittance inflows have been evident in terms of reduction in the national poverty incidence, income from remittance are spent mostly for consumption by recipient households and very little on capital formation. Use of remittance for sustained economic development, together with social implications and human rights of labor migration need to be explored further. On the other side, about 35 percent of population is under 14 years and youth aged 15 to 24 years constitutes about 20 percent of the total population, the largest young cohort in Nepal's census history.

The fact that the 57 percent of the population represents working age population (aged 15 to 59 years), Nepal enjoys unique opportunity to reap potential benefits of demographic dividend in the next few decades, a situation that represents more working age population versus less number of dependent populations. Nevertheless, an increase of 60 years and above population from 6.5 percent in 2001 to 8.1 percent in 2011 entails that ageing is gradually becoming an emerging population issue that deserves policy attention.

8.8 Education

Education plays significance role to reduce adolescent fertility rate, mortality rate and to rise living standards of the people, along with life expectancy of the population. Since 1951 , various effort has been adopted to increase the level of education and special attention has been paid after the restoration of democracy. However, many hundreds of adolescents and youth of Nepal have not completed a full course of quality primary education that would prepare them to participate in secondary education. This may be more challenging for females than males, young men are also at-risk of leaving school too early.

8.8.1 Literacy rate

In the context of Nepal, the number of adolescents, youths and young people of Nepal who are can read and write as recorded by the national census of 2011. There is a visible difference (to a figure of more than 100,000) between females who can read and write compared to their male counterparts. Nearly double the number of males can read and write compared to females (CBS, 2014)

Table 8.6 presents the number and percentage of adolescents having various level of education. The census data shows that there is no substantial difference in level of education male and female adolescents. Table 8.6 presents nearly forty percent (40 %) of male adolescents and 38 percent of female have completed primary level of education. Similarly, 42 percent of male and 41 percent have completed secondary level respectively. The percentages of adolescents both male and female who have competed graduate level are very low, less than 1 percent. The table below shows the literacy rates for males and females.

Table 8.6 : Number and percentage of adolescents having various levels of education

Level of education	**Male**		**Female**	
	N	%	N	%
Primary	1271010	39.62	1202783	37.59
Secondary	1362348	42.47	1315191	41.11
SLC + intermediate	333588	10.40	302625	9.46
Graduate + post graduate	8812	0.27	8474	0.26

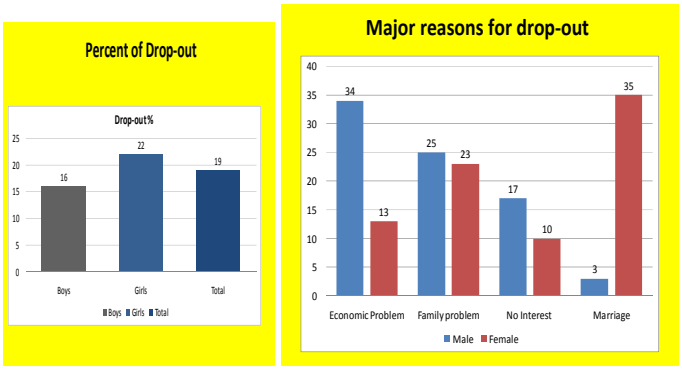
Source: Population monograph, Volume 2nd 2014

8.8.2 Level of education

The figure 8.1 and 2 shows the dropout in education and this is due to the economic problem, family problems, not interest and marriage**.** Among adolescents and youth, the rates of school attendances are high, only 5 percent of boys and 12 percent of girls never attend school. However, the rates of dropout rates are

high. Sixteen percent of boys and 22 percent of girls leave their schools without completing school education. The major cause of drop outs among boys is economic problems whereas among girls, it is due to marriage.

Figure 8.1 and ***Figure 8.2***

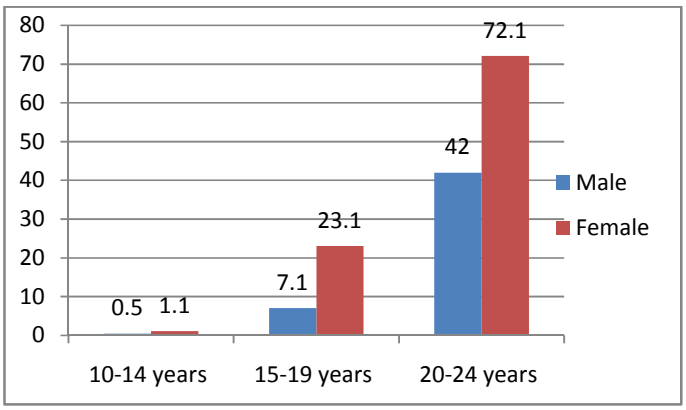


Source: Nepal Adolescents and Youth Survey 2010-11.

8.9 Marital Status

Nepal is a country with a tradition of high marriage rates. Marriage is considered almost universal in the Nepalese context. In the past, the tradition was marrying boys and girls off at an early age, so, it was rare to find any person who was not married after the age of 20 years. However, the law has restricted the marriage of children and legally allows marriage only after the age of 18 years for girls and 20 years for boys.

Figure 8.3 shows the percentage of married young population in different age groups 2011 The percentage of persons marrying after 20 years is significant. As a cumulative figure, by the age of 24 almost of males and 96% of females were married. The graph below shows the changes in married persons by different age groups.



Source: Population monograph, Volume 2nd 2014

8.10 Engagement in activities

Adolescents and youth are age groups that explore career possibilities and set out their path for the future. The demand for higher levels of education and advanced skills puts pressure on adolescents to pursue higher education on one hand. While there is also pressure to enter the job market at the earliest possibility

opportunity. The national census of Nepal 2011 looks into these aspects and the tables and graphs below detail the findings.

Table 8.7 Current status of engagement of young people by age bracket and major activities, Nepal 2011

Engaged in	10-14 years	15-19 years	20 -24 years
	%	%	%
Study	90	70	29
Earning salary wage	1	9	21
Seeking job	1	3	6

As seen in table 8.7 above, 90% of people in the age group 10-14 years are pursuing their studies. This ratio drops to 70% in the age group 15-19 years and sharply drops to 29% in the age group 20-24 years. In contrast, although very gradually, engagement in work (depicted as earning a salary or wage) increases from 1% to 9% and 21% for the three age groups respectively. Similarly, 1%, 3%and 6% respectively are looking for job.

8.10 1 Economic activity

As adolescents and youth have the potential for economic activity, it is natural that their engagement in economic activity is observed. The census of 2011 collected information on the economic activity for different age groups. Data on the economically active young people for each age group is presented in Table 8.8.

Table: 8.8 Percentage of economically active young people in various age groups.

Category	10-14 years	15-49 years	20-24 years
Percentage of economically active population	3.2	19.9	49.4

As seen from Table 8.8 economic activity seems to increase visibly with an increase in age. In the age group 10- 14 only 3.2% are economically active, in the age group 15-19 it is almost 20% and in the age group 20-24 years it reaches almost 50%. The percentage of young people engaged in economic activity as a cumulative figure reaches73% by 24 years.

8.11 Adolescent Health

8.11.1 Adolescent and Fertility

It should be noted that this group of the population is a potential population for reproduction since most of them begin consensual union in this period. Census 2011 report shows that 11.5 percent of the populations are married below the age of 14. Nearly half (48.9 percent) of the married population aged 10 years and above were married between 15 and 19 years (58.2 percent among females and 37 percent among males). Child and early marriages are high especially among girls, which has serious social and health ramifications that hinder women and child development. Therefore, there is a need for continued policy and program intervention to address this issue. If we are to control the rate of population growth through addressing fertility then these groups need to be targeted for the population related programs

The adolescent fertility rate measures the number of births per 1,000 women ages 15 to 19. Although the number of births among adolescent girls is declining around the world, adolescent childbearing remains common in many countries. Early childbearing poses serious consequences to the health and development of young girls. The risk of maternal death and disability is higher for adolescents than for women in their 20s. At the same time, early childbearing often limits girls' opportunities for education, training, and livelihood development. Adolescent childbearing is more common in developing countries.

8.11.2 Sexuality and HIV/AIDS

Despite a shift toward later marriage in many parts of the world, 82 million girls in developing countries who are now aged 10 to 17 will be married before their 18th birthday. In some countries, the majority of girls still marry before their 18th birthday. These include India (50 per cent), Nepal (60 per cent) and Niger (76 per cent). Worldwide, some 14 million women and girls between ages 15 and 19 — both married and unmarried — give birth each year. Pregnancy is a leading cause of death for young women aged 15 to 19 worldwide, with complications of childbirth and unsafe abortion being the major factors. For both physiological and social reasons, girls aged 15 to 19 are twice as likely to die in childbirth as those in their twenties. Girls under age 15 are five times as likely to die as those in their twenties.

Adolescence and youth (ages 15 to 24) is the time when the majority of people become sexually active. Comprehensive knowledge of HIV—being able to correctly identify two ways to prevent sexual transmission of HIV, reject the two most-common local misconceptions about HIV, and know that a healthy-looking person can transmit HIV—is increasing around the world. However, many young people do not have the information or means to protect themselves from HIV. In countries with high prevalence, like Kenya and Haiti, less than half of all females ages 15 to 24 have sufficient knowledge of HIV and in Mali, less than one-quarter of all young men and young women have comprehensive knowledge. While young women face a higher risk for becoming infected with HIV, males are more likely than females to have comprehensive knowledge of HIV.

Adolescents have been traditionally ignored by public sector programmes and budgets, which tend to focus on children (under 10), and then on adults. Investing in adolescents is an opportunity to ensure that the earlier investments made in childhood come to fruition for the benefit of national development. Otherwise, accomplishments in improved child educational and health status may be undermined. Since the 1990s, many international agreements and forums have brought more attention to the needs of adolescents and young people.

Because young people today are typically entering puberty at a younger age and getting married later than in the past, they face a longer period between sexual maturity and marriage. Many young people are raised in the age of global telecommunications and globalization of a 'youth culture' spread through the mass media. They often get information, including about sexuality and health, from sources outside of the family, whereas once the family was the traditional institution for imparting social norms about these issues.

This largest-ever generation of adolescents is approaching adulthood in a world their elders could not have imagined. Globalization, the AIDS pandemic, global warming, electronic communications and a changing climate have irrevocably altered the landscape. The scenario is mixed. As young people share ideas, values, music and symbols through mass media and electronic technology, a global youth culture has emerged. Many young people are organizing themselves and networking through formal and informal channels. But more than half of young people live in poverty, on less than $2 per day. Often they lack access to the technology and information. Many also face social inequality, poor schools, gender discrimination, unemployment and inadequate health systems. They deserve better. And investing in them is an investment in the future leaders of families, communities and nations.

Young people tend to have higher levels of educational attainment than in the past, but they also require better education and more skills to compete in today's world, and overcome social exclusion and poverty. Despite the historical progress in school enrolment, millions of adolescents are outside the school system, or forced to abandon their schooling due to poverty or HIV/AIDS, among other reasons.

Conclusion

Adolescence is difficult to define in precise terms, for several reasons. First, it is widely acknowledged that each individual experiences this period differently depending on her or his physical, emotional and cognitive maturation as well as other contingencies. Reference to the onset of puberty, which might be seen as a clear line of demarcation between childhood and adolescence, cannot resolve the difficulty of definition and Nepal adopted UN definition.

Nepal's population is still young and if this population is well managed and utilized Nepal can reap benefits from this population by utilizing this demographic bonus. The young populations (10-24 years) make up almost one third of the total population of Nepal and are a major contributor in various walks of life.

Adolescents make up almost a quarter (24%) of the total population of Nepal. There are rising aspirations and very little has been done in the area of youth development in Nepal. This proportion has been increasing in every inter-censal period. It can be said that this provides Nepal with a population bonus or economic dividend, if placed and used correctly. Therefore, Nepal need to prepare proper education, employment and health policies concerning on this young population.

CHAPTER 9 Ageing

9.1 Introduction

Once a person is born, three ages, namely chronicle, biological and mental play their roles in shaping the personality of a person .The time duration from birth is called the 'chronicle age,' of the person. The advancement in this age is accompanied by a steady growth in other ages. The growth of biological age (state) results in the development in the physique of the person in terms of height, weight, and subsequently in body mass. Mental age (state) grows with gradual advancement in intelligence levels of the person (Singh, M. L., 2014). However, at the end of middle age, physical and mental health depreciated and show symptoms of ageing, with a deterioration in their physical appearance, declining muscles and the appearance of wrinkles on their faces, becoming bald headed or their hair becoming completely white.

It is the inevitable consequence of attaining low levels of fertility and mortality and long life. However, this achievement requires vital social and economic adjustments to current and expected future demographic realities. In particular, population ageing raises critical issues for countries, states and cities in areas such as economic growth, employment and retirement, pensions, health care and social support services. Moreover, growths of ageing population are creating demographic imbalances and humanitarian, social and economic problems in many countries especially developed countries.

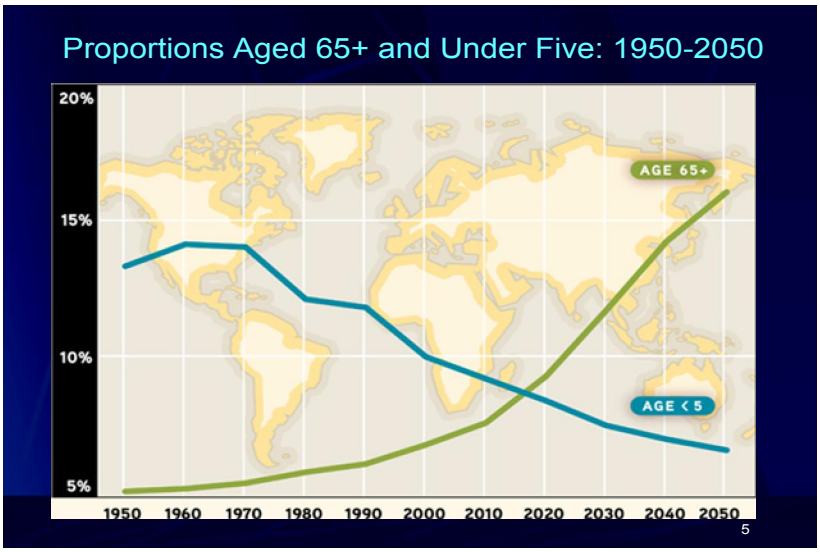
Ageing refers to the increasing inability of the body to maintain itself and to perform the functions it once did. As the body begins to decline, our abilities withstanding the stresses and strains of life are diminished by developing more ailments to heal and more time to recover.

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.

9.2 Why Population Aging Matters? Global perspective

In a few decades, the loss of health and life worldwide will be greater from non-communicable or chronic diseases (e.g., cardiovascular disease, dementia and Alzheimer's disease, cancer, arthritis, and diabetes) than from infectious diseases, childhood diseases, and accidents.

Figure 9. 1 Young children and older people as a percentage of global population.



Source Chamie ,J (2007) *.Why Population Aging Matters: A Global Perspective*

Center for Migration Studies . New York, NY

9.3 Doubling time of Older Population in the World

Every society has mechanisms to provide for its ageing population. But the rapidity with which the older segment (60+ years and above) is growing is unprecedented. It took France 115 years to increase the percentage of elderly from 7 % to 14% (1865-1980). In Japan this demographic transition occurred in just 26 years (1970-1996). Developing countries are still taking still shorter time to increase their share of the elderly. For example, Jamaica will take 18 years (2015-3033) to double its ageing population from 7% to 14%. In Tunisia it will be just 15 years (2020-2035). The number of older persons is 841 million in 2013, which is four times higher than the 202 million that lived in 1950. The older population will almost triple by 2050, when it is expected to surpass the two billion mark. The projection of older people has a higher degree of certainty than that of younger age groups, because all the individuals older than 60 years in 2050 were already born at the time the projection was made.

The trend in the number of older persons in the world is dominated by the fast growth of the older population in the less developed regions, where the size of the older population is 554 million in 2013, which is five times greater than in 1950 (108 million). The number of older people in these regions will further triple by 2050 to attain 1.6 billion. The speed of change in the more developed regions has been impressive too, but significantly slower than in the less developed regions. The older population of the more developed regions tripled between 1950 and2013, from 94 million to 287 million, and it will increase further in coming decades, reaching 417 million in 2050.

Recently, worldwide population ageing has been considered as one of the most important demographic phenomena. Population ageing will have a major impact on health -care expenditure, patterns of production and consumption, trends in labour market, social security measures and kinds of formal and informal care services. Most developing nations have not yet succeeded in putting appropriate economic, social and health -care systems in place to ensure quality of life older people which may be influenced by financial security, emotional security and health.

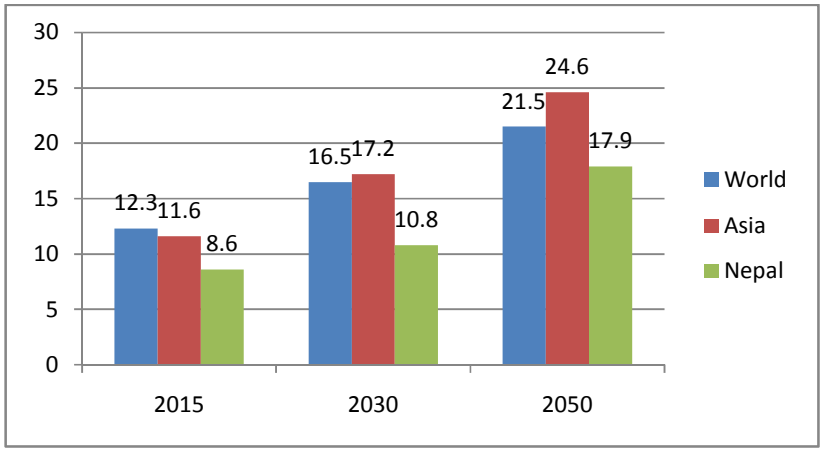
Ageing is a natural outcome of demographic transition from high fertility and mortality to low fertility and mortality. An increase in the longevity of the individuals or an increase in the average length of life pertaining to a population results from improvements in the quality of the environment and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

The 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. The characteristics of older people have been shown in the following.

9.4 Comparison of ageing population growth rate between world, Asia and Nepal

The figure 9.2 shows that the comparison of ageing population growth rate between world , Asia and Nepal. The figure shows that the growth rate of

Comparison of ageing population growth rate between world , Asia and Nepal



9.5 Why Population Aging Matters? National perspective

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 demand for working age is increasing and thus it is being important to understand the ageing issue for the proper utilization of resources in Nepal.

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 justices of the Supreme Court along with other constitutional bodies are 65 years in Nepal. There is no retirement to member of political parties, social workers, and consultant and thus many retired person has been practicing in consultant services along with teaching to maintain their capacity and healthy environment. 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.

Ageing population is 12.3 in the world slightly lower in Asia and lower in Nepal than Asia. If the percentage remains the same the ageing population will be increase nearly 18 percentage in Nepal which would be unbearable for Nepal due to the higher dependency and demand for health care services. In this situation , mnay care program need for the people with Parkinson, Alzimers, and depression.

9.5.1 Trend in Ageing Population of Nepal

9.4.1.1 Elderly population reported in different censuses of Nepal, 1981-2011

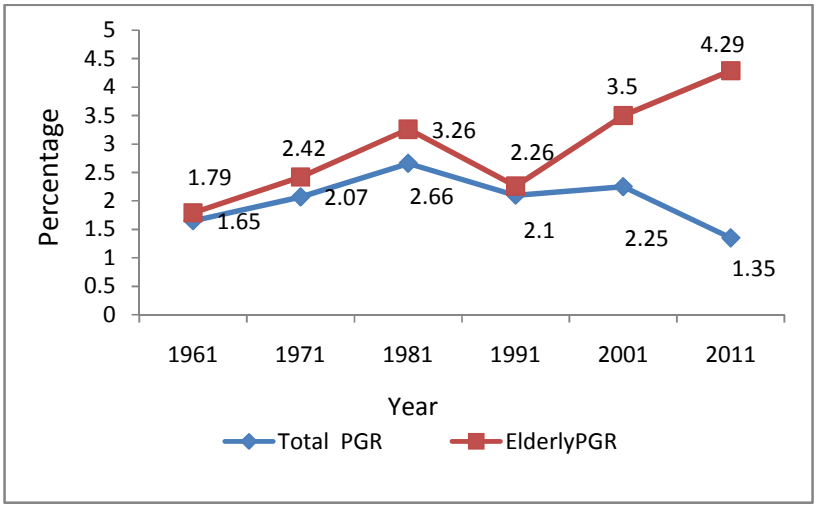
Aged	Census years				Growth in Times 1981 - 2011	Growth rate per year
	1981	1991	2001	2011		
60+	857061	1071234	1477379	2154410	2.51	3.07
65+	489566	639589	956471	1397583	2.85	3.50
75+	144197	185165	295459	447981	3.13	3.78

The table shows that the elderly population in Nepal has, on average, increased by 2.51 to 3.13 fold in 2011 from those reported in 1981, with an annual growth rate of 3.07 % for persons aged 60 years and above, 3.50 % for persons aged 65 years and above, and 3.78 % for persons aged 75 years and above. In absolute number, the volume of the elderly population aged 60 years and above is reported as 8, 57,061 in 1981 that has increased to 21, 54,410 by 2011. Similarly, the population of elderly persons aged 65 years and above increased from 4, 89,566 in 1981 to 13, and 97,583 by 2011. Likewise, the old population i.e. aged 75 years and above increased from 1, 44,197 to 4, 47,981 during the 30 year interval between 1981 and 2011.

9.6 Comparison between population growth rate and elderly population growth rate.

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 (Figure 9.1).

Figure 9.1: Growth rate of total population and the elderly population, 1952/54-2011

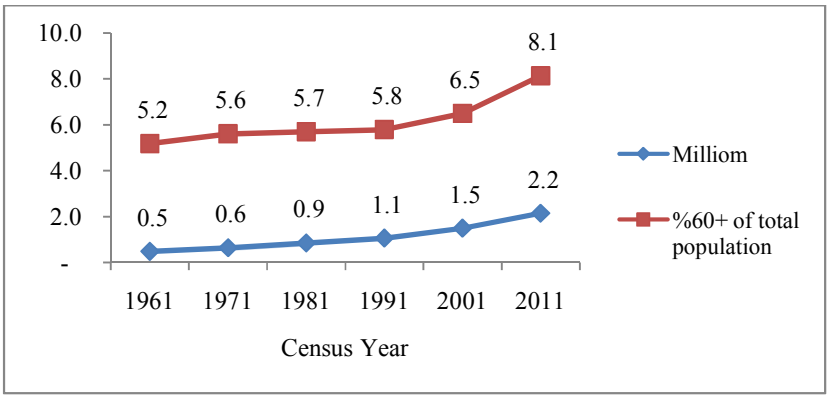


Source: CBS, 1952/54, 1961, 1971, 1981, 1991, 2001 and 2011.

In Nepal, ageing is an emerging recent social issue 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. It is important to understand the ageing issue in the proper demographic and national context. Growth of population 60 years of age and over is found accelerated in the last 20 years although it was increasing albeit slowly since earlier times such as since 1961.

According to the 2011 population census, the proportion of population 60 and above is 8.1% (2.2 million, CBS. 2012) which was only 6.5% (1.5 million) in 2001 (CBS and UNFPA, 2002), 5.8 million in 1991 (CBS. 1993), 5.7 million in 1981 (CBS. 1984), 5.6 million in 1971 (CBS. 1975), and 5.2 million in 1961 (CBS. 1968) (Figure 1).This rapid increase in the proportion and absolute number of aged people among the total population will impact on socio-economic, health and culture of the future society of Nepal.

Figure9.2 Population age 60 and over, Nepal, 1961-2011



Source: CBS, 2012; CBS and UNFPA, 2002; CBS, 1993; CBS, 1984; CBS, 1975 and CBS, 1968.

9.7 Distribution of the elderly population by sex for ecological zones, Nepal, 1991-2011 censuses

In Nepal, 2011 population census shows that the ageing population in Nepal is 2154410 which are 8.14% of total population. Table 9.2 presents the percent the percent distribution of elderly population by sex for

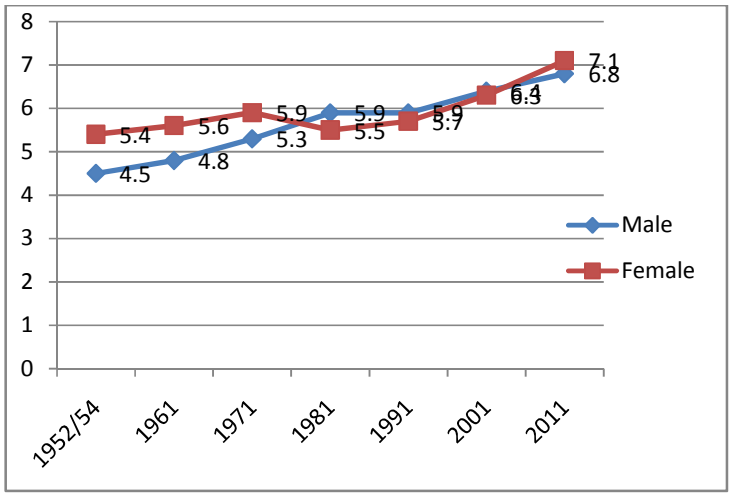
ecological zones from 1991 to 2011. The percentage distribution of elderly in 1991, 2001 and 2011 by sex makes it clear that elderly females outnumber the males in urban areas and vice versa in rural areas of Nepal (Table 9.1). Also it can be noted that the percentage of elderly population is higher in rural areas than in urban areas.

Table 9. 1: Percent distribution of the elderly population by sex for ecological zones, Nepal, 1991-2011 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
60+ in 2011	8.6	8.9	8.7	8.6	7.9	7.4

Source: Pantha and Sharma, 2003, Vol. 1, p. 73., CBS 2012.

Figure 9. 3 Ageing population of Nepal by sex 1952/54 - 2011 (in per cent



9.8 International conference on ageing

In 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. 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. The 1994 International Conference on Population and Development (ICPD) (UN. 1994) recognized that the economic and social impact of population ageing is both an opportunity and a challenge to all societies.

Its five-year review reiterated the need for all societies to address the significant consequences of population ageing in the coming decades. Along these lines, the Government of Nepal is committed to address this emerging population issue through evidence-based policy planning and programmes. Currently, there is a scarcity of national data for a comprehensive understanding of the ageing issues although there is some ad-hoc information produced by different organizations in the country. In 1998, Macau Plan of Action on Ageing was passed and the "International Day of Older Persons" was celebrated in 1999.

In 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. Similarly, in 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.

9.8 Current practices and their Implication for ageing in Nepal

In Nepal, King Rajendra Bir Bikram Shah Dev established as early as in 1881, shelter for older people named *Pancha debal* in Kathmandu which is now known as *Pashupati Briddhashram* (Dhakal, M. R. 2012). I could be the first institutional development program for ageing in the world but information for this are being rare and dare. In 1992 the National Planning Commission prepared a report on the old age problem in Nepal (NPC. 1992). Emerging issues of senior citizens was recognized by Second Long Term Health Plan (MOH. 1999) in Nepal. Government of Nepal has also given priority to elderly since the Ninth National Development Plan (NPC. 1998). The Directive Principles of the Interim Constitution of Nepal 2063 (2007) states that the state shall pursue policy of making special provision of education, health and social security for the protection and progress of the children, helpless, women, old, disabled and weak. The Senior Citizens Policy and Working policy-2058 (2002), health care implementation guidelines for older people, (2005), National Action Plan for Senior Citizens (2006), and Senior Citizens Act (2007) were formulated and act has been passed currently by constitutional assembly. The need for a holistic package including special geriatric package program for the welfare of the senior citizens has also been echoed (Dhakal, M. R. 2012). Recently *go*vernment of Nepal increase old age pension by double and this increase by 1000 and reach Rs 2000 thousand Nepali Rupees. The principle of old age pension could distribute by the following two principles:

9.9 Summary of the current practice for Ageing in Nepal.

Area	Date	Main theme
Mega Policy	2009	• Social security in direction policy
Policy and program for older population	2009	• Addressed by Nepal Health Sectors Reforms II
	2009	• knowledge of the elderly people
	2007 (2063)	• Senior Citizens Policy and working policy 2058/Jeshtha Nagrik Sambhadhi Ain. • Recognize the knowledge, skill and expertise of the senior citizens to utilize in development plans and programs. • 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. • 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).
	2006	Right of social security (women, child, old)
	2006	• Free of cost for senior citizens • 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
Economic support	2008	• Increase old age pension from Rs 100 to 500. • 10 Percent pension increase to the civil servants those who reach 75 years old

	2073	• Increase old age pension by double.
	1998	• Strong commitment to Madrid International plan, on aging
		• Regional macro plan of action on aging
Demographic point	2008	• Active life of aging population reduced from 75 to 70 years
Program	2009 2010/11	• Mobilization of civil society Awareness program in Local level population management • Geriatric Hospital in Patan Hospital as for pilot project for clinical treatment. • Free health services for the treatment of some diseases
Institutional arrangement	1881	• Established Pasupati Bidharasram (shelter for old people • Established Ashram for old people
Research and innovation activities	2009 2009	• Very few research and innovation activities has been conducted in clinical aspects • Research has been conducted on the collaboration of WHO
	2013	• National level survey on ageing is to be conducted

9.10 Characteristics of older Population

- The major causes of disability and health problems in old age are non-communicable diseases including the "four giants of geriatrics," namely: memory loss, urinary incontinence, depression and falls or immobility, as well as some communicable diseases and injuries.
- Increasing life expectancy raises the question of whether longer life spans result in more years of life in good health, or whether it is associated with increased morbidity and more years spent in prolonged disability and dependency
- As population age, health expenditures tend to grow rapidly since older persons usually require more health care in general and demand for more specialized services to deal with their more complex pathologies.
- The world's crude death rate, the ratio of annual total deaths to the total population, is increasing because population ageing shifts the age distribution towards the older ages, which are subject to higher risk of mortality.
- Deaths will increasingly be concentrated at older age.
- Non -communicable diseases are the main causes of disability and death among older persons. The disability-adjusted life years (DALY) measure the burden of disease, injury and death in a given population. DALYs are calculated as the sum of the years of life lost (YLL) due to premature death and the years lost due to disability (YLD) resulting from disease or injury.
- Population ageing could drive increase in health expenditure and many older persons in developing countries still need to work to finance their consumption.
- In most countries, older persons are net giver of familial support.
- Assets are a major source of old-age support in countries with limited public transfer system.

Sources: United Nations Department of Economic and Social Affairs | Population Division

9.11 Challenges of ageing people

Depreciated health of population: Health economists argue that as individuals grow older, the overall stock of health begins to depreciate and thus, there is a direct relationship between age and demand for medical care. However, this concept is not taken seriously by policy makers.

Bring efficiency in medical cost and make active life of retired people: It is good news that the improvement of health, technology contributed to increase the life expectancy of Nepalese people but on the other hand

increase financial burden to an individual as well as community due to the higher cost to treat for elderly people. Therefore, it is being new challenges how to bring efficiency in medical cost of ageing people. Moreover, as increase the age of the people functional capacity will be decrease due to Dementia the growth of the older segments of the population will lead to a reduction in the size of the work force and a simultaneous growth in the percentage of the population over retirement age. Thus it is being challenges how to make active for retired people.

Switch the mind of young people: Young people are much more interested to work in formal sectors rather than informal or agriculture sectors. The rural-urban migration, migration to big cities or foreign countries is increasing trends as the expectation of high remittance and better education. In such situations, the elderly are unable to manage their land and house activities. As a result, agriculture production is decreasing trends and always being the questions of food security and nutrition problems in Nepal. Various surveys shows that people with below poverty line is decreasing trend but characterized by greater spatial inequalities, poverty, stagnant economy, illiteracy and poor health status. Thus, some issues and challenges has been arises that how to switch them into the productive life?

Bridging the gap between senior citizens and young : 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?

Boost up morale support towards ageing people: 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.

Utilize their experience in productive sectors: 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 offspring sometimes 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.

Change junior citizens mind towards senior citizens: 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 f towards senior citizens.

Establishment of Geriatric ward: The periodical plan of Nepal has conceptualized to establishment of geriatric ward in Nepal. The term geriatric refers a medical specialty concerned with the physiology, psychology and pathologic change s of the individual in later maturity and includes study and treatment of health problems of his age group. In the absence of knowledge it is being challenging issue in Nepal.

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 (Cogso 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.

Conclusion

Population aging is an achievement of humanity. Population aging is unprecedented, profound and pervasive. Population aging presents enormous social, economic and political challenges for societies. 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. Finally, the sooner the necessary adjustments for population aging are made, the better because they will be easier and less costly.

CHAPTER 10

Poverty in Nepal

10.1 Introduction

The flood of development rhetoric on poverty, the primacy accorded by lenders and donors to the Millennium Development Goals, of which the reduction of extreme poverty is the first and usually considered the most important, and the frequency with which reducing, alleviating or eliminating poverty is seen as a prime goal and measure of development-these factors make it more than ever to know what poverty is. What it is taken to mean depends on who asks the questions, how it is understood, and who responds .From this perspective it has at least five clusters of meanings.

The first is **income -poverty** or its common proxy (because less unreliable to measure) consumption poverty. This needs no elaboration, when many, especially economists use the poverty they are referring to these measures. Poverty is what can be and has been measured, and measurement and comparisons provide endless scope for debate.

The second cluster of meaning is **materials lack or want**. Besides income, this includes lack of or little wealth and lack or low quality of other assets such as shelter, clothing furniture, and personal means of transport, radios or television, and so on. This also tends to include no or poor access to services.

Third cluster of meanings derives from Amertya Sen and is expressed as **capability deprivation**, referring to what we can or cannot do can or cannot be. This includes but goes beyond material lack or want to include human capabilities, for example skills and physical abilities, for example skills and physical abilities and also self-respect in society.

The understanding and relief poverty has been a major human preoccupation for many centuries. Since 1980s, three alternative conceptions of poverty have evolved as a basis for international and comparative work. They depend principally on the ideas of subsistence, **basic needs and relative deprivation.**

Fourth, cluster take a yet more broadly multi-dimensional view of **deprivatio**n, with material lack or want as only one of several mutually reinforcing dimensions.

Sociologists distinguish between relative and absolute poverty. Absolute poverty occurs when people fail to receive sufficient resources, to support a minimum of physical health, and efficiency often express in terms calories or nutritional levels. Relative poverty is defined by the general standards of living in different societies and what is culturally defined as poor rather than some absolute level of deprivation.

- The penguin Dictionary

These four clusters of the meaning of the poverty have been constructed by development professionals and indicate what development should be about.

The NDHS, 2011, NLSS and other survey like as base line survey of PAF have been followed directly indirectly the foresaid cluster of poverty concept.

*According to Pokharel, J.C (2012*In the broadest sense, the word poverty implies that something is lacking or inferior .When it is used in the policy realm, it can take on several different meanings and We can say *:*

- The poor are those who do not own resources.
- Poverty is a result of a set of complex deprivations where potentials are curbed by scarcity, hunger, disease, unemployment, suffering, voiceless and powerlessness.
- Poverty is unequally distributed between individuals, groups, of people and geographies.

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.

Nepal went through a dozen different governments in 12 years beginning in 1991. Diversity could be a contributing factor to civil wars, and Nepal is tremendously diverse-ethnically, economically, and geographically. Geographic diversity and poverty were the greatest predictors of violence in Nepal. The root cause of Nepal's civil war was economic, not social. Investments in poverty reduction strategies bring direct economic as well as political benefits to countries like Nepal.

10.2 Inter-linkage between Population and Poverty

Poverty is complex phenomenon and its incidence is determine by various factors like as the level of per capita income, distribution of assets and income, quality of governance , policies and institutions related to education , health , drinking water, environment and other aspects of development. High population pressure contribute to low per capita income, is considered one of the major cause of poverty in many developing countries. With a fixed amount of land and other limited resources, it becomes difficult to fulfill the trends basic needs along with unlimited wants of large growing population. Though, TFR and population growth rate are declining trends due to the higher proportionate of adolescent and youth; population growth momentum could be normal for additional years for less developing countries.

Improvements in education and health are closely linked to demographic modernization. Caldwell's (1986) analysis of low -mortality "outliers" among poor countries argues the mortality the mortality case; the fertility relationship is attested by numerous quantitative studies. Significantly, education and health care precisely the sectors where government action, properly designed, can also most readily serve redistributive ends. High technology in education and hospitals can consume large amount of resources but reach few in the population and rise rather than economic inequality. Thus need to focus to redistribution of resources among various castes/ethnicity and geographical regions.

10.3 Measurement of Poverty

The Nepal Living Standards Surveys (NLSSs) conducted in 1995/96, 2003/04 and 2010/11 by Central Bureu 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.

The Nepal Living Standard Survey-III (NLSS-III) conducted in FY 2009/10 had calculated the population living below the poverty line on the basis of household expenses. Factors like rise in literacy rate, rise in the wage rate in agriculture and non-agriculture sectors, development of commercial vegetable farming, growing urbanization, growth in number of economically active human resource, and inflow of remittance have been the major attributes in the decline of poverty level by 17 percent in a span of 14 years from FY 1996/97. 7.3 While estimating incidence of poverty by using interrelationship between the poverty and Gross National Disposable Income method in the period prior to conducting poverty survey, the poverty incidence stood at 24.4 percent in FY 2011/12 while it is estimated at 23.8 percent FY 2012/13.

Nepal Demography and Health Survey: Food security refers to the availability of food and one's access to it. A household is considered food secure when its occupants do not live in hunger or fear of starvation (Hunt, 2009). In 1996, the World Food Summit defined food security as "the situation when all people at all times have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (Food and Agriculture Organization of the United Nations, 2002). Common to most definitions of food security are the elements of availability, access (physical and economic),

utilization, and stability or sustainability. Food insecurity is rooted in poverty and leads to poor health, low productivity, low income, food shortage, and hunger (Khanal and Dahal, 2010 as cited NDHS, 2011).

The series of questions on food insecurity included in the 2011 NDHS was adopted from the Household Food Insecurity Access Scale indicators developed in USAID's Food and Nutrition Technical Assistance (FANTA) project. However, the questions were modified to be specific to Nepal, with seven of the nine generic questions included and the reference period for assessment extended to 12 months from one month to allow for seasonal variations. The food insecurity scale designed from this methodology provides information on a household's "access" to food, one of the three components of food insecurity—*Availability, Access* and *Utilization*.

Household were categorized food secure, mildly food insecure, moderately and severely food insecure households. The study found that 49 percent of households in Nepal are food secure and have access to food year round. Twelve percent of households are mildly food insecure, 23 percent are moderately food insecure, and 16 percent are severely food insecure.

National Planning Commission: Independent evaluator have been involved for impact evaluation under the supervision of National Planning Commission especially PAF program.

National Population Census usually asks about the house structure with wall, roof and other assets in the household such as television, radio, electricity, sources of drinking water etc. This information is collected to access the poverty structure of the household and living standards of households. The figure may be applicable to estimate poor people throughout the country.

10.4 Poverty Alleviation Activities

Poverty Alleviation Fund (PAF) is established under PAF Ordinance 2060 (2003) and now it is working under PAF Act 2063 (2006). The purpose and an overriding mission of PAF is to reduce extreme forms of poverty by working under the approaches of demand driven program, direct community funding, community cost sharing as per the guiding principles of targeted to pro-poor, social inclusion, demand drive, direct funding and transparency. The goal of PAF is to reduce the poverty at 10 percent up to FY 2016/17. PAF I was implemented from 2004 to 2009 in 25 districts (6+19). Similarly PAF II is an ongoing from 2008 to 2014, after revision of the project with coverage of a million households in 75 districts with estimated cost of US$109 million; US$100 million by WB and US$9 million by the Government of Nepal.

The fund, as per its 5 guiding principles: *Antodaya*; Social inclusiveness , transparency, demand based ;and direct fund flow to the community ;has been implementing community demand based program in active participation of ultra -poor and backward communities. program have been conducted by forming community based organizations and institutionalizing them involving targeted poor communities to plan and implement programs and projects on their own in their active participation. The fund has been working in collaboration with the local bodies ;NGO, Community organizations and private sector to provide facilities and cooperate in social mobilization works as required. .

Youth and Small Entrepreneur Self-Employment Fund, Employment, Foreign employment, Karnali Employment Program, Western Upland Alleviation Project , Connecting Local Initiatives with Local skills Program and Nepal Food Security Program are other activities of poverty.

10.5 How many are the poor?

Data from 1995-96, 2003-04 and 2010/11 Nepal Living Standards Surveys (NLSS-I, II and III) have provided estimates of poverty incidence in Nepal and their trends during 15 years between these three surveys. Headcount rates suggest that poverty has dramatically declined in Nepal between 1995-96 and 2010-11 (Table 10. 1). In 2010-11, 25 percent of population was poor in Nepal, compared to 42 percent in 1995-96 and 31 percent in 2003-04.

Thus, the incidence of poverty in Nepal declined by about 17 percentage points over the course of fifteen years. The incidence of poverty in urban areas was more than halved during 1995/96-2003/04 (it declined

from 22 to 10 percent) however it has been increased to 15 percent in the year 2010/11. While poverty in rural areas has been declined appreciably, from 43 percent in 1995/96 to 35 percent in 2003/04 and 27 percent in 2010/11.

Table 10. 1: Nepal 1995-96, 2003-04 and 2010-11, Poverty Measurement

	Headcount rate (P0)			**Poverty Gap Index (P1)**			**Squared Poverty Gap Index (P2)**		
	1995-96	2003-04	*2010-11*	1995-96	2003-04	*2010-11*	1995-96	2003-04	*2010-11*
Nepal	41.76	30.85	25.16	11.75	7.55	5.43	4.67	2.7	1.81
Urban	21.55	9.55	15.46	6.54	2.18	3.19	2.65	0.71	1.01
Rural	43.27	34.62	27.43	12.14	8.5	5.96	4.83	3.05	2.00

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**.** The incidence of poverty in 2010-11 varied considerably across different parts of the country, ranging from a low of 8.7 percent in urban hill to 42.2 percent in mountain region and 36.8 percent in rural mid and far western hills. Table 10.2 shows that urban Hill is the least poor region with a poverty incidence of 9 percent. The depth and severity is also the lowest for this region. Within urban areas, poverty ranges from 9 percent in urban Hills to 22 percent in urban Terai. Within rural hills, poverty ranges from 16 percent in Eastern region to 37 percent in mid and Far Western region. Within rural Terai, poverty ranges from 21 percent in Eastern region to 31 percent in mid and Far Western region. Within each of the development region except the Eastern, hills have higher poverty rates than Terai. The depth and severity of poverty is highest in rural hills of Western and Mid-Far-Western region.

Table 10.2 Poverty by analytical domains

	Incidence			**Distribution**	
Region	**Head count rate**	**Poverty gap**	***Poverty gap squared***	***Of the poor***	***Of the population***
Place of Residence*					
Urban	15.46	3.19	1.01	11.7	19.0
Rural	27.43	5.96	2.00	88.3	81.0
NLSS regions					
Mountains	42.27	10.14	3.54	11.8	7.0
Kathmandu	11.47	2.77	1.00	2.6	5.7
Urban hill	8.72	1.75	0.54	1.5	4.4
Urban Terai	22.04	4.31	1.29	7.5	8.6
Rural hills-Eastern	15.93	2.91	0.82	4.0	6.3
Rural hills-Central	29.37	8.52	3.70	10.8	9.3
Rural hills-Western	28.01	5.31	1.75	10.5	9.5

Rural hills-Mid and Far Western	36.83	8.89	3.13	13.3	9.1
Rural Terai-Eastern	20.97	3.67	0.91	9.6	11.6
Rural Terai-Central	23.13	4.14	1.08	13.9	15.1
Rural Terai-Western	22.31	4.40	1.35	5.9	6.6
Rural Terai-Mid and Far Western	31.09	7.17	2.47	8.5	6.9
Development regions					
Eastern	21.44	3.81	1.01	19.8	23.3
Central	21.69	4.96	1.76	30.8	35.7
Western	22.25	4.27	1.38	16.9	19.2
Mid-western	31.68	7.74	2.69	16.4	13.0
Far-western	45.61	10.74	3.77	16.0	8.8
Ecological belts					
Mountain	42.27	10.14	3.57	11.8	7.0
Hill	24.32	5.69	2.09	42.8	44.2
Terai	23.44	4.52	1.31	45.4	48.7
Nepal	**25.16**	**5.43**	**2.47**	**8.5**	**6.9**

Table10.3 also shows that poverty rates declined across all development regions. At around 21-22 percent, the Eastern, Central and Western regions continued to have a poverty incidence below the national average in 2010-11, while the Mid- and Far-Western regions continued to be above the average (32 and 46 percent, respectively). In terms of poverty incidence across the belts of Nepal, the Terai belt has the lowest poverty rate at 23 percent, compared with 42 percent in the Mountains and 24 percent in the Hills.

Table 10. 3: Poverty head count rate by regions

	Poverty Head count Rate		
	1995-96	**2003-04**	***2010-11***
Place of Residence			
Urban	21.6	9.6	15.46
Rural	43.3	34.6	27.43
Development regions			
Eastern	38.9	29.3	21.44
Central	32.5	27.1	21.69

Western	38.6	27.1	22.25
Mid-western	59.9	44.8	31.68
Far-western	63.9	41.0	45.61
Ecological belts			
Mountain	57.0	32.6	42.27
Hill	40.7	34.5	24.32
Terai	40.3	27.6	23.44
Nepal	**41.8**	**30.8**	**25.16**

10.6. 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 10. 4: Employment Sector of the Household Head

	Poverty Head count Rate			**Distribution of the Poor**			**Distribution of Population**		
	1995-96	**2003-04**	***2010-11***	**1995-96**	**2003-04**	***2010-11***	**1995-96**	**2003-04**	***2010-11***
	(A)			**(B)**			**(C)**		
Self-employed in									
Agriculture	43.1	32.9	*27.23*	60.7	66.9	*55.2*	58.8	62.7	*51.0*
Manufacturing	41.4	31.2	*22.44*	3.4	4.5	*3.8*	3.4	4.4	*4.2*
Trade	32.2	11.1	*13.21*	4.3	1.6	*4.1*	5.6	4.5	*7.9*
Services	25.3	14.4	*19.63*	1	1.5	*2.0*	1.6	3.2	*2.6*
Wage earner in									
Agriculture	55.9	53.8	*47.03*	15.7	10.9	*6.3*	11.7	6.2	*3.4*
Professional	8.3	2.1	*5.55*	0.4	0.2	*0.7*	2.2	2.9	*3.3*
Other	39.7	28.8	*28.25*	10.6	10	*16.2*	11.1	10.7	*14.5*
Extended economic activity			*31.55*			*5.9*			*4.7*
Unemployed	9.5	2.9	*26.65*	0.1	0	*0.4*	0.3	0.2	*0.4*

Non-active	30.5	26.9	*16.63*	3.9	4.4	*5.3*	5.3	5.1	*8.0*
Total	41.8	30.8	*25.16*	100	100	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 and 47 percent in 2010-11. 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 and in 2010-11, this group comprises 3 percent of the population and 6 percent of the 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 27 percent between 1995-96 and 2010-11. This is the most populated employment sector category with 67 percent of all poor in 2003-04 and 55 percent of all poor in 2010-11 falling to this category. This group holds 51 percent of the population in 2010-11.

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. However in 2010-11, the poverty in these sectors of employment has slightly increased in comparison to 2003-04. Households headed by professional wage earners comprise categories with the lowest poverty incidence (5.5 in 2010-11). 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.

10.7. 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 and 33 percent in 2010-11, which are the highest rates 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 27 percent; having attended secondary school brings it down to 12 percent; and having attended higher secondary school brings it down to 7.1 percent in 2010-11.

Table 10. 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**	***2010-11***	**1995-96**	**2003-04**	***2010-11***	**1995-96**	**2003-04**	***2010-11***
	(A)			**(B)**			**(C)**		
Illiterate	50.9	42	33.48	72.9	70.9	64.9	59.8	52.1	48.8
5 or less years of schooling	35.7	28.2	26.97	15.1	16.8	15.8	17.7	18.4	14.7
6-7 years	28.5	23.3	19.53	6.7	8.1	10.2	9.8	10.7	13.1
8 -10 years	19.8	8.4	12.86	4.5	3.9	5.6	9.6	14.5	11.0
11+ years	11.4	1.6	7.11	0.9	0.2	3.5	3.2	4.3	12.4
Total	41.8	30.8	25.16	100	100	100	100	100	100

Table 10.5 shows the poverty rates by education level of the household head. Poverty is substantially lower for higher levels of head's education. Households with an illiterate head are more than 4.5 times more likely to be poor than households with a head that has completed 11 or higher. 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 and to 49 percent in 2010-11.

10.8. 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). Similarly, in 2010-11, the population living in female headed household increased to 27 percent and poverty rate among these households decreased to 23.7 percent points. (Table 10.6). 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. Here an important point to be noted is that from 2003-04 to 2010-11 survey, even though the percent of female headed households had been doubled, there was not improvement in reduction of poverty in this period.

Table 10.6 Poverty Measurement by Household Head's Age and Sex

	Poverty Head count Rate			Distribution of the Poor			Distribution of Population		
	1995-96	2003-04	*2010-11*	1995-96	2003-04	*2010-11*	1995-96	2003-04	*2010-11*
	(A)			(B)			(C)		
Male 25 year or younger	40.5	32.5	*24.49*	5	3.5	*1.9*	5.1	3.3	*1.9*
Male 26-45 years old	43.8	32.5	*27.30*	41.5	37.9	*35.7*	39.6	35.9	*32.9*
Male 46 years and older	40.2	31.6	*24.29*	45	47.6	*42.6*	46.7	46.4	*44.2*
Female-headed	41.6	23.8	*23.69*	8.5	11.1	*19.8*	8.5	14.4	*21.0*
Total	41.8	30.8	*25.16*	100	100	*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 10.7). 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 in 1995-96 to 37 percent in 2010-11 (Table 10.7). Given that these households have the highest incidence of poverty of all households both in 1995-96 and 2010-11; this development may have contributed to the overall poverty decline.

Table 10. 7: Poverty Measurement by Demographic Composition

	Poverty Head count Rate			Distribution of the Poor			Distribution of Population		
	1995-96	2003-04	*2010-11*	1995-96	2003-04	*2010-11*	1995-96	2003-04	*2010-11*
	(A)			(B)			(C)		
Number of children 0-6 year old									
0	23.5	13.7	*12.31*	14.9	14.8	*20.4*	26.5	33.3	*41.8*
1	39.9	29.3	*25.21*	23.8	26.2	*29.1*	24.9	27.7	*29.0*
2	49.4	41.6	*41.48*	32.6	31.6	*29.8*	27.5	23.4	*18.1*
3 or more	56.9	54	*46.64*	28.8	27.4	*20.07*	21.1	15.6	*11.2*
Total				100	100	*100*	100	100	*100*
Household size									
1	7.7	7.2	*3.28*	0.1	0.1	*0.1*	0.5	0.6	*0.7*
2	14.5	11	*7.40*	0.8	1.1	*1.3*	2.3	3	*4.4*
3	22.9	11.7	*7.48*	3	2.6	*2.8*	5.6	6.9	*9.4*
4	28.1	19.3	*12.76*	7.1	8.5	*8.4*	10.5	13.7	*16.5*
5	35.9	24.9	*21.10*	13.5	14.5	*15.6*	15.7	18	*18.6*
6	43.8	33.5	*32.39*	17.6	19.6	*22.5*	16.8	18	*17.5*
7 or more	49.7	41.4	*37.59*	57.9	53.6	*49.4*	48.6	39.9	*33.0*
Total	41.8	30.8	*25.16*	100	100	*100*	100	100	*100*

10.9. Caste and Ethnicity

Poverty rates in 2010-11- were highest among Hill and Terai Dalits (44 and 38 percent respectively) followed by Middle Terai Castes (29 percent) and Hill Janjatis (28 percent), Table 10.8. The 2010-11 NLSS analyzed poverty rates with disaggregation of Hill and Terai Upper Castes and Dalits which is presented in table 10.8. While the poverty rate among the Terai Janajati was comparable with that of these two groups in 1995-96, it declined to 26 percent in 2010-11- from 53 percent in 1995-96. The poverty rate among the Muslim population declined only slightly, from 44 to 41 percent between 1995-96 and 2003-04 however it is decreased to 20 percent in 2010-11 with remarkable progress in reduction of poverty.

In terms of the distribution of the poor, the Hill Janajati represents a single group with the highest concentration of the poor in 2010-11.Upper Caste (Hill-Terai) households had the third lowest incidence of poverty in 1995-96.. After experiencing the most substantial decline in poverty of all considered groups they became the group with the second lowest poverty rate in 2003-04 and in 2010-11 as well. Overall, 3 caste and ethnic groups – Upper Caste, Muslims, and Newars – have poverty rates below the average in 2010-11.

Table 10. 8: 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**	***2010-11***	**1995-96**	**2003-04**	***2010-11***	**1995-96**	**2003-04**	***2010-11***
	(A)			**(B)**			**(C)**		
Upper Caste (Hill-Terai)	34.1	18.4	-	26.7	15.7	*22.2*	32.7	26.3	*31*
Hill Brahman			*10.34*			*5.2*			*12.7*
Hill chhetri			*23.40*			*16.6*			*17.8*
Terai Brahman			*18.61*			*0.4*			*0.5*
Middle C. Terai	28.7	21.3	*28.69*	2.9	1.9	*17.6*	4.2	2.8	*15.4*
Dalits (Hill-Terai)	57.8	45.5		10.6	10.9	*22.1*	7.7	7.4	*13.3*
Hill Dalit			*43.63*			*15.2*			*8.7*
Terai Dalit			*38.16*			*6.9*			*4.6*
Newar	19.3	14	*10.25*	2.5	3.4	*2.5*	5.5	7.5	*6.2*
Hill Janajati	48.7	44	*28.25*	19.7	27.8	*24.4*	16.9	19.5	*21.8*
Terai Janajati	53.4	35.4	*25.93*	10.4	9.2	*7.3*	8.2	8.1	*7.1*
Muslims	43.7	41.3	*20.18*	5.7	8.7	*3.5*	5.4	6.5	*4.3*
Other	46.1	31.3	*12.34*	21.4	22.3	*0.5*	19.4	21.9	*0.9*
Total	41.8	30.8	*25.16*	100	100	*100*	100	100	*100*

Note: The trends in poverty rates across caste-ethnic groups should be treated with caution.

10.10 Land ownership

Land ownership reduces the probability of being poor, a pattern constant across years. Incidence of poverty among households who own no land or own 0.2 ha. Or less of land is high and is roughly similar to that of households who own 0.2 to 1 ha in 2010-11. . 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 percent in 1995-96 to 5 percent in 2010-11 of all households, Table 10.9).

Table 10.9: Poverty Measurement, by Land Ownership (rural areas only)

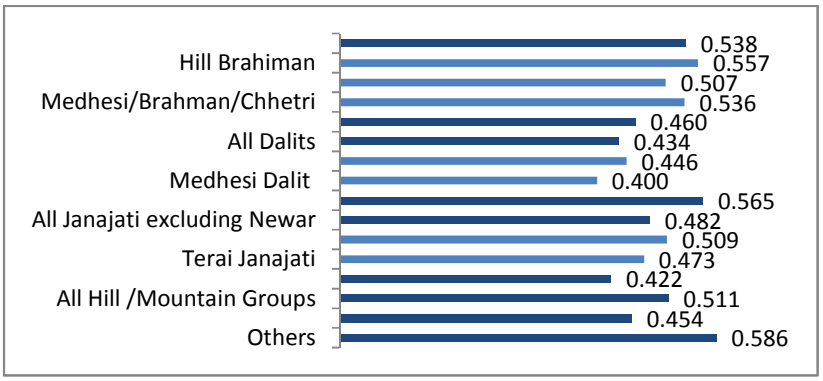
	Poverty Head count Rate			Distribution of the Poor			Distribution of Population		
	1995-96	**2003-04**	***2010-11***	**1995-96**	**2003-04**	***2010-11***	**1995-96**	**2003-04**	***2010-11***
	(A)			**(B)**			**(C)**		
No land			*22.7*			*18.9*			*21*
Less than 0.2 ha. of land	47.7	39.3	*29.9*	22.9	25.2	*20.7*	20.8	22.2	*17*
0.2 – 1 ha. of land	45.0	38.1	*28.2*	43.7	51.2	*49.4*	42.0	46.5	*44*
1 - 2 ha. of land	38.8	27.3	*19.1*	18.7	16.0	*9.8*	20.9	20.3	*13*
More than 2 ha. of land	38.9	23.8	*6.5*	14.6	7.6	*1.2*	16.3	11.0	*5*
Total	41.8	30.8	*25.2*	100	100	*100*	100	100	*100*

10.11 Access to Facilities

Table 10.10 shows that access to services is also an important correlate of poverty. Households that are closer to facilities are less likely to be poor than the national average. Having good access to higher secondary school, public hospital, paved roads, market centers, agricultural center, cooperative and banks have large effects on poverty. _

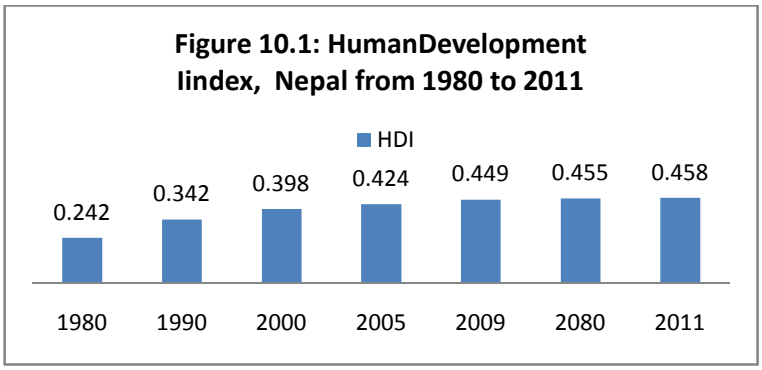
Table 10.10 Poverty Measurement by Access to Facilities.

Households within 30 minutes of	**Incidence Head count rate**	***Distribution of the poor***	***Distribution of the population***
Primary School	24.35	91.5	94.5
Secondary School	20.83	58.2	70.3
Higher Secondary School	17.92	*39.1*	*54.9*
Health post/Sub health post	22.00	42.9	49.0
Public hospital	15.59	20.1	32.4
Bus stop	19.03	49.1	64.9
Paved road	17.11	33.6	49.4
Vehicle passable dirt road	24.41	62.3	64.2
Haat bazaar	21.04	33.2	39.6
Market Centre	16.29	28.2	43.6
Agriculture centre	15.34	25.4	41.6
Cooperative	16.99	34.5	51.0
Bank	14.71	22.6	38.6
Nepal	**25.16**		



10.12 Human Development Index Trends

The Human Development Index, of Nepal is increasing trends. In 1980 it was 0.241 and sharply increased and reached to 0.340 in 1990. Then after it increased gradually and reached 0.458. This is because increase the literacy rate, life expectancy and infant mortality. This is a good indication of development but on the other hand the HDR, 2009. Similarly the below poverty line is declined falls 25 % and inequality increased by doubled and reached 47.3



Source: HDR, 2011

10.13 Income Inequality

A very convenient shorthand summary measure of the relative degree of income inequality in a country can be obtained by calculating the ratio of the "area" between the diagonal and the Lorenz curve divided by the total area of the half -square in which curves lies.

Table 10.14 Gini Coefficient

	NLSS 1 1994/95	NLSS11 2003/04	NLSS111 2009/10
Nepal	0.34	.41	.33
Urban areas	-43	-44	.35
Rural Areas	.31	.35	.31

Source: Economic Survey 2011/2012

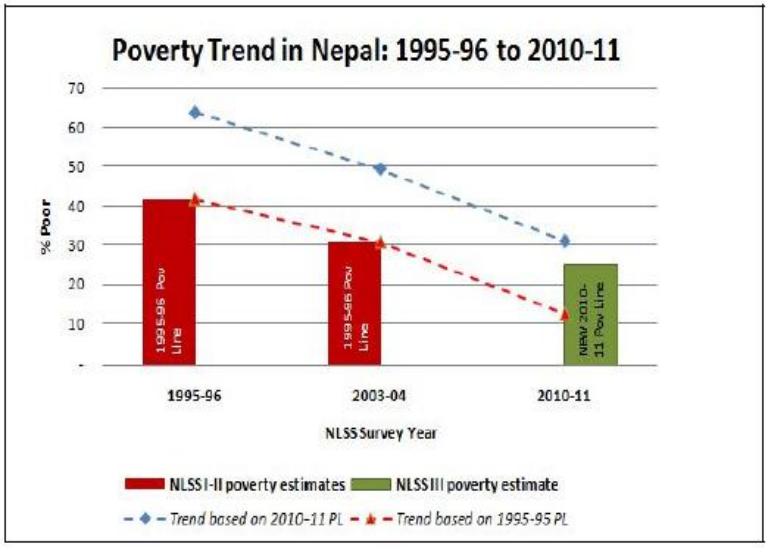
This ratio is known as the "Gini-Concentration Ratio or more simply , the Gini Coefficient after the Italian statistician C. Ginin , who formulated it in 1912, Gini -Coefficient in NLSS-I 1994/95 was 0.34 which was rose to 0.41 in second survey 2003.04. Through FY 2003/04 witnessed some decline in poverty survey

2003/04. Though FY witnessed some decline in poverty, inequality was found to have increased further. However, in third survey 2009/10, has dropped to 0.32, Gini -coefficient in urban area which was measured at 0.43 during first survey increased to 0.44in second survey and fell to 0.33 in third survey. Likewise, Gini Coefficient 0.31 in the first survey rural areas, which was 0.31 in the first survey, rose to 0.35 in the second survey dropping back to 0.31 in the third survey, which can be clearly understood from the following table

10.14 Unambiguous trend decline in poverty over time

A simple comparison of poverty in 2010-11 (25.2 percent) with the estimate in the past for 1995-96 (41.8 percent) and 2003-04 (30.8 percent) shows that Nepal's poverty is in declining trend. The decline is greater if one were to use unchanged poverty lines over the entire period close to 30 percent point decline in the last fifteen years. The progress in poverty reduction is about the same and significant measured in terms of the old and or new (higher) poverty line.

Figure 10.2 shows the trend in poverty over the time using the old 1995-96 poverty line approach (lower line in graph) and new 2010-11 poverty line approach (upper line in graph). It should be old and new poverty line approaches are different approaches of poverty measurement. To make valid comparison of poverty over time requires comparable consumption aggregates similarly constructed that are converted to constant prices using price deflator relevant for the poor. The dotted lines in the figure represent the alternative estimates based on such valid comparisons. As clear from the shape of the lines in graph, the trend of poverty over time does not depend on the method used for the analysis. Under either the old or the new poverty line, the poverty headcount ration declined by approximately 30 percent during 15 years.



** Source: CBS, 2012*

Conclusion

In fact poverty is declining trends but educational attainment, distribution of income, access to services, by geographical and ethical/ caste point of view; poverty is increasing trends and this need to balance in resources distribution within the country. Nepal's poverty is still high and if special programs of economic development are not done, it will be very difficult to reduce the poverty as planned. Remittance has strong impact to reduce poverty, however Nepal's labor force has gone out causing domestic agriculture production down and this scenario indicates that we may be based on imports for our daily meals which may be the obstacle in our goal to reduce poverty.

CHAPTER 11

Women empowerment

11.1 Introduction

Women empowerment is the women's capacity to participate as equal partners as men in all walks of life in the society. To achieve the economic and social transformation of women, several laws, rules and action plans have been promulgated are and programs are being implemented in all 75 districts to promote gender equality and women's empowerment. Some improvements have been observed through initiatives such as equal rights to paternal property, social security and social justice. The GDI increases from 0.312 to 0.512 in the 1990s and female /male disparities have also been reduced.

According to Malhotra ,Anju (2003) various terminology like as "women empowerment"," gender equality" " female autonomy" or women status are referring to similar or different concepts have been used to understand the concept and meaning of women empowerment. Despite the similar concepts underlying many of these terms, the concept of women's empowerment can be distinguished from others by two essential elements.

A definition proposed by Kabeer serves as good reference point for conceptualizing and measuring women's empowerment. It contains both the process and agency elements, and also implicitly distinguishes 'empowerment' from the general concept of 'power,' as exercised by dominant individuals or groups. Kabeer (2001) defines empowerment as 'The expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them.' This definition fits well within the referral to empowerment as "the expansion of freedom of choice and action to shape one's life" in the World Bank's Empowerment Sourcebook.

Women's empowerment has been defined to encompass women having a sense of self-worth, access to opportunities and resources, choices and the ability to exercise them, control over their own lives, and influence over the direction of social change (United Nations Population Information Network, 1995).

The ICPD (1994) declared that "advancing gender equality and equity 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 stone of population and development related programs" (United Nations, 1994). In order to implement the commitments made by the state at the international level, laws, relating to the control of human trafficking and gender violence. However, there are some outstanding problems to deal with, such as the inability to spread women empowerment campaign to the community level, the fact that women are not represented in all organs of the state and gap between targeted program and outputs and outcomes. Moreover, the female member of every household have to work at least twelve to fourteen hours in an average day , seven days a week even when the male members of the same household lounge around or spend their days in gambling (Bista ,D.B, 1994). Educational and health gains have been distributed very unevenly among various castes and ethnic groups, ecological and development regions, and between urban and rural areas. Particularly, Dalit men and women are at the lowest end of all access indicators, while Bahun/Chhetri and Newar figure at the top. The decade-long armed conflict has aggravated the access problem in both education and health. Some of our social norms and values could be barratries 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.

Although various surveys shows that decision making power and other women status in increasing trend but still not developed as the expectation of policy makers and planners. Women's access to fixed assets, property, and credit is still very limited. Discriminatory wage structures and unequal access to earned income have not been reduced, but have actually increased over the last ten years both in agricultural and non-agricultural sectors. Women are concentrated in agriculture. In the non-agricultural sector in general and in the manufacturing sector in particular, women are concentrated at the lower end of the pay scale. Businesses avoid many labour regulations by employing women at piece rates. Traditional discriminatory social structures are transferred to work place, and poor rural women from Dalit and disadvantaged ethnic groups are at the lowest level of the wage ladder

11.2 Effort for Women Empowerment

Women continue to face legal discrimination regarding the most fundamental rights, such as citizenship and inheritance. Women's representation in political or administrative decision-making bodies has not improved much either, except at the grassroots level in locally elected VDC assemblies and in the national parliament. A number of laws and acts have been passed and enacted to improve the status of women in Nepal which are:

Date	Law/Act
May 30, 2006	The House of Representatives resolution in favor of proportionate representation of women in all parts of the State structure calling for guaranteeing at least 33 per cent participation of women for the time being with the aim of achieving proportionate representation ultimately.
Nov 26, 2006	'The Citizenship Act 2006' allows equal rights to women to acquire citizenship
Dec 18, 2006	The House ratified the Optional Protocol to the Convention on the Elimination of All Forms of Discrimination Against Women 1999
Dec 28, 2006	'The National Women's Commission Act 2006' established with the mandate to ensure women's rights
no date	Gender-responsive budgeting and audit systems introduced in the government mechanism
2006	The Government initiative to adopt the Zero Tolerance policy at work places
2007	The Civil Service Act 2007 has been amended whereby 45 percent of seats of open competition are reserved for quota representation, 33 percent of which are for women. Amendments of the Police Regulation 2007 and Armed Police Regulation 2007 reserve 20 percent of seats for women. The Gender Equality Bill of 2006 granted equal inheritance rights to ancestral property to both sons and daughters
no date	The Ministry of Local Development decision to require all Village Development Committees to earmark at least 15% (out of the yearly block grant) for funding projects designed to empower women, children and other disadvantaged groups
no date	CEDAW plan of action to 'guarantee women's RH rights' and BPFA plan of action on 'women and health' guide the concerned ministries to work for ensuring women's rights
no date	The Ministry of Women, Children and Social Welfare conducts regular meetings with Gender Focal Points of sectoral ministries to share new polices, dimensions, legislation and sectoral initiatives in line with gender-responsiveness
no date	A National Coalition Committee representing 34 different GOs, I/NGOs and donor agencies formed to work together on violence against women (including violence during pregnancy)
no date	A Caucus of women Parliamentarians formed
2008	The Parliament passed the Domestic Violence (Crime and Punishment) Act
1985	women's empowerment and gender equality have been integrated since the Sixth Five-Year Plan (1985-1981) of the Government of Nepal
2009	The National Development Strategy paper (2009) and The 'rights-based' approach was introduced in the Tenth Plan (2002-2007).
2010 -2013	The Three-year Development Plan (2010–2013) also has specific recognition of gender equality. The Government of Nepal also developed the National Gender-Based Violence Plan of Action in 2010 and declared 2010 as the Year to combat gender-based violence (GBV).
2013	An approach paper to the thirteen plans (2013-2016) set up objectives, strategies, operating policies, with some expected outcomes. .

Socially, marriage and children continue to determine a woman's life options. Traditional practices such as dowry (*tilak*) have been reinforced by new consumerism, son preference, social acceptance of domestic and public violence against women, polygamy, early widowhood and associated exclusion; practices like keeping mother and infant in a cowshed during delivery and for sometime after delivery (*Chhaupadi)*, knee burning, offering a girl child to temple (*Deuki)* and practice of prostitution by women as per the tradition (*Badi)* continue to plague women.

Many efforts have been made to strengthen the capacity of the government machinery to understand and deal with gender mainstreaming, particularly in MWCSW, MOAC, education, police forces, etc. Gender focal points have been appointed in all ministries and major departments. Notable institutional reforms in the education and health sectors have been the decentralization of management functions to the DDC, VDC, and community levels. Other important institutional reforms include integration of gender issues into the formal and non-formal education system and integration of reproductive health services throughout the public-sector health system.

Most programmes/projects have gender sensitization components, providing gender training to personnel at all levels and to local women leaders. Health policies and programmes have now been made much more gender sensitive by taking a life cycle and rights approach to women's health and integrating reproductive health services into the regular health system, emphasizing quality of care, local participation and outreach, and broadening the scope of family planning and health programmes to include safe motherhood and adolescent health. Notable initiatives have been RHIYA, PARHI, the start of integration of RH into non-formal education, and population and environment and lately ASRH issues in school education.

According to the 2011 NDHS, only 10 percent of women own land, either alone or jointly, compared with 25 percent of men. Among all civil service employees of Nepal in 2011, only 13 percent were women, which in itself are an improvement from only 8 percent in 2005 (Ministry of General Administration, 2011). According to the 2011 NDHS, only 10 percent of women own land, either alone or jointly, compared with 25 percent of men.

11. 3 Potential Indicators developed by various authors on women empowerment

Various authors developed various indicators to measure the status of women empowerment. For example, Anju Malhotra (2003) has been presented various indicators in table 11.1 developed by various authors. These indicators are associated with Economic, socio-cultural, familial, legal, political, and Psychological aspects.

Table11.1 Indicators developed by various authors on women empowerment

Dimension	Household	Community	Broader Arenas
Economic	Women's control over income; relative contribution to family support; access to and control of family resources	Women's access to employment; ownership of assets and land; access to credit; involvement /or representation in local trade associations; access to markets	Women's representation in high paying jobs; women CEO's; representation of women's economic interests in macro-economic policies, state and federal budgets
Socio -Cultural	Women's freedom of movement; lack of discrimination against daughters; commitment	Women's visibility in and access to social spaces; access to modern transportation; participation	Women's literacy and access to a broad range of educational options; Positive media images of

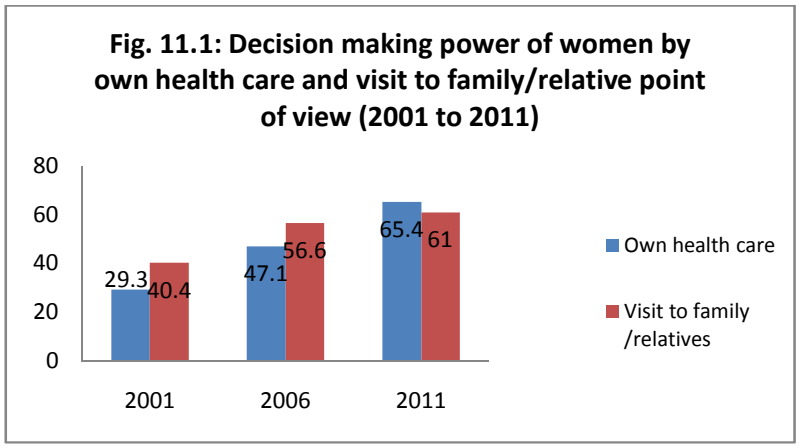
	to educating daughters	in extra-familial groups and social networks; shift in patriarchal norms (such as son preference); representation of the female in myth and ritual	women, their roles and contributions
Familial/ Interpersonal	Participation in domestic decision-making; control over sexual relations; ability to make childbearing decisions, use contraception, obtain abortion; control over spouse selection and marriage timing; freedom from violence	Shifts in marriage and kinship systems indicating greater value and autonomy for women (e.g. later marriages, self selection of spouses, reduction in the practice of dowry; acceptability of divorce); local campaigns against domestic violence	Regional/national trends in timing of marriage, options for divorce; political, legal, religious support for (or lack of active opposition to) such shifts; systems providing easy access to contraception, safe abortion, reproductive health services
Legal	Knowledge of legal rights; domestic support for exercising rights	Community mobilization for rights; campaigns for rights awareness; effective local enforcement of legal rights	Laws supporting women's rights, access to resources and options; Advocacy for rights and legislation; use of judicial system to redress rights violations
Political	Knowledge of political system and means of access to it; domestic support for political engagement; exercising right to vote	Women's involvement or mobilization in the local political system/campaigns; support for specific candidates or legislation; representation in local government	Women's representation in regional and national government; strength as a voting bloc; representation of women's interests in effective lobbies and interest groups
Psychological	Self-esteem; self efficacy; psychological well-being	Collective awareness of injustice, potential of mobilization	Women's sense of inclusion and entitlement; systemic acceptance of women's entitlement and inclusion

Source: Anju Malhotra (2003) .*Conceptualizing and Measuring women's Empowerment as a Variable in International Development* Measuring Empowerment: Cross-Discipliner Perspectives" held at the World Bank in Washington, DC

By using factor analysis Dhakal, M.R. (2010) constructed five indicators like as, initiating power of the pregnant women, job sharing in Kitchen by male people, shopping power of the women, decision making power of the women, supremacy power adopted by male. The NDHS, 2011 use five indicators like as, women involvement in household decision, women membership in community group, women's cash earnings, women ownership household and land and women education to assess the women empowerment indicators but not enough.

11.3.1 Women's' Decision Making Status

First time women decision making status was observed by NDHS, 2001 by considering the indicators decision making own health care, large household purchase , daily household purchase , visit to family and relatives and what food to cook each day were considered the indicators for women empowerment. In 2006, what food to cook each day and daily household purchased was dropped in 2011. Because of this the figure (1) compared by considering only two variables. Since parameters for women empowerment status were varies.



Source: NDHS, 2001, 2006, 2011

11.3.2 Women's Education status

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 around five times, from 12.0 percent in 1981 to 57.4 percent in 2011(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 11.2: **Percent Literate by Residence, Age 6 Years and Above**

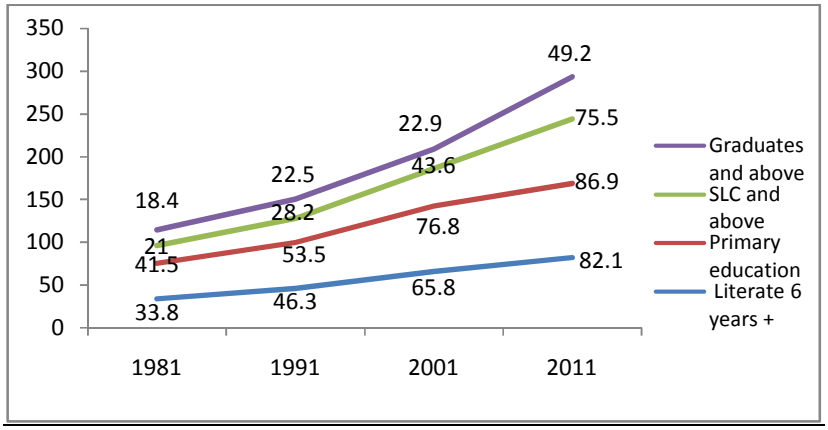
	1981		1991		2001		2011*	
Indicators	Male	Female	Male	Female	Male	Female	Male	Female
Urban	61.1	38.2	80.0	51.2	81.2	61.9	89.0	75.2
Rural	32.0	10.3	54.2	20.4	62.6	39.6	72.0	53.8
Nepal	34.0	12.0	54.1	24.7	65.5	42.8	75.1	57.4

**Five years and above*

Sources: CBS, 2001and 1995, 2012

Moreover, as education levels increase, the number of women with comparable educational degrees decreases. While 87 women had primary education per hundred men with similar level of education in 2001, about three-fourth had SLC or higher degrees and only about half had graduate or higher degrees (Table 8.2). The latter ratio had remained virtually unchanged since 1991 to 2001 but vast change has been observed in 2011. Women and girls constituted only 43 percent of all full-time students in 2001.

Figure (11.2) Educational Achievement- Number of Females per 100 Males, 1981-2011*



**Data for 2011 is considered Five years and above,*

Sources: CBS, 2001and 1995, 2012

The Gender Parity Index (GPI) explains the ratio of female to male values (or male to female, in certain cases) of a given indicator. A GPI of 1 indicates parity between sexes; a GPI above or below 1 indicates a disparity in favor of one sex over the other. For gender parity to exist, the GPI value should be within the range of 0.97 and 1.03.

Following sections explain the ratio of female to male enrolment and measure progress towards gender equity in enrolment in the education system by grade and level. It also assesses the learning opportunities available to girls compared to those available to boys. The shares of enrolment of total, girls is 50.4% at primary level, whereas they are 50.5% at lower secondary, and 50.4% at basic levels. It clearly demonstrates that the gender parity has been achieved in basic education, including primary and lower secondary education (1.02 at primary level, 1.02 at lower secondary level and 1.02 at basic level).

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.

11.3.3 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. NDHS 2011 reveals that about three-fifth of women receive antenatal care from a skilled provider in their period of pregnancy but only half of the women receive ANC four or more times as recommended by World Health Organization (WHO). On the other hand only 35% women go to the health institution for safe delivery and 36% receive assistance from skilled birth attendant (SBA) at the time of delivery. This indicates that most of the women are still at risk of pregnancy complications and this may result in women's reproductive health and morbidity. For more than 81 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.

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 2011 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.

11.3. 4 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, thirty 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 11.3: Activity Rates by Sex, Nepal 1971-2010/11

(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
2010/11*	80.9	79.4	80.1

**NLSS III,CBS*

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

11.3.5 Female owned household and fixed assets

Table 11.4 presents households having fixed assets in female's ownership and female headed households having fixed assets. The Census data 2011shows that the female headed households have increased by 11 point percent from 14.87 % in 2001 to 25.73 % in 2011. However, all female household heads do not have fixed assets. Altogether 19.71 percent of households reported the ownership of land or house or both in the name of the female member of the household irrespective to household head or not. The female household heads having fixed assets, both house and land are 580757 and having land only are 488314. Altogether fixed assets ownership goes to 1069017 number household heads which is just 19.71 percent of the total number of households (5423297). Out of the total households 43666 households did not state about the property in female household owner's name. The fixed assets ownership of female headed household in urban area is 279917 which is 5.16 percent of total and remaining 14.54 percent goes to the rural area family headed households (Pokherel,B 2014) . In the Table 11.4, households having neither house nor land in women's name are 4310560 and not stated is 43666.

Table 11.4 Households having fixed assets in female's ownership and Female headed households having fixed assets

Households having fixed assets in female's ownership							Female headed households having fixed assets
Area		Total	Both household and land	Land only	Neither house nor land	Not stated	Total
Nepal		54,23,297	5,80,757	4,88,317	43,10,560	43,666	10,69,071 (100)
Place of	Urban	10,45,,575	1,73,984	1,05,933	7,56,303	9,355	279917 (26.18)

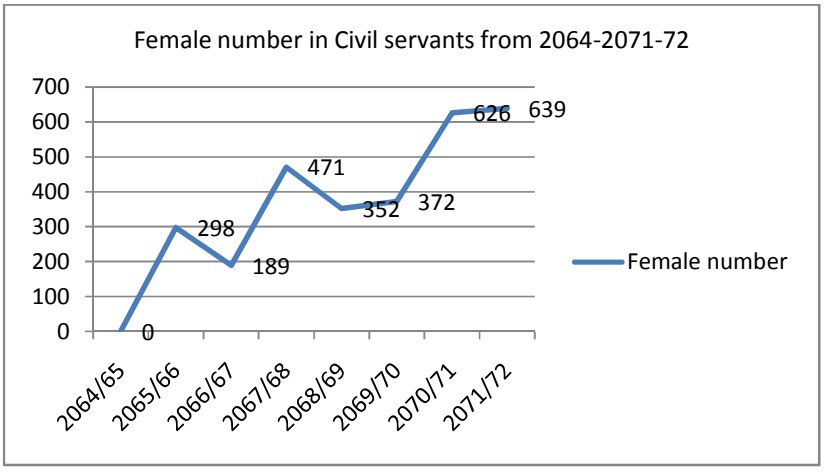
Residence	Rural	43,77,722	4,06,773	3,82,381	35,54,257	34,311	7,89154 (73.82)

Source: CBS, (2014) Population Monograph vol. 3rd

11.3.5 Female Recommended Female participant by Public service commission for civil service

The figure 11.2 shows the female number in civil servants from 2064 /65-2071/72. The female number is 298 in fiscal years 2065/ 2066 and reach 639 in fiscal year 2071/72. However, the number was decrease in 2066/67 and reach 189 from 298. Similar trend was seems in the fiscal years 2068/69. This is because the lower wanted by Public Service Commission.

Figure 11.2 Female number in Civil servants from 2064-2071-72



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.

Women empowerment and Health outcomes:

Empowering women and addressing gender-based discrimination against women have been on the development agenda of the Nepal government and are key to achieving the Millennium Development Goals (MDGs). Women empowerment has important implications for demographic and health outcomes, including, women's use of family planning and maternal health care services. Regarding women empowerment, NDHS, 2011 highlight the key findings.

a) More than half of currently married employed women who earn cash make independent decisions about how to spend their earnings.
b) Only 46 percent of currently married women participate in decisions pertaining to their own health care, major household purchases, and visits to their family or relatives.
c) Contraceptive use increases with women's empowerment.
d) Unmet need for family planning decreases with improvements in women's empowerment.
e) Access to antenatal care, delivery assistance from a skilled provider, and postnatal care within the first two days of delivery increase with increasing women's empowerment.
f) Infant, child, and under-five mortality rates decline with improvements in women's empowerment.

T

able 11. 4: Some of the Indicators revealing the Status of Women Empowerment in Nepal

Female Indicators		**Status**
Female Population		51.5 %
Sex Ratio		94.2
Child Woman Ratio (per 1000 women)		701
Female Head of the Household		25.73
Female Literacy		57.4
Female School Enrollment		71.4
Female in Higher Education (SLC & Above)		30.2
Female Ownership on House		7.5
Female Ownership on Land		10.4
TFR		2.6
GFR		117
CBR		28.0
MMR		170
Life Expectation at Birth		69 years
Never Married		31.12
Female Age at Marriage		19.5 years
Currently using any modern FP Method		43.1
Desire for no more children for those who have 2 children		88
Those taking iron Tablets during pregnancy		79.5
Taking antenatal care from health professionals		58.3
Last birth protected against Neo-natal TT		81.5
Delivery by health professionals & in health facility		35
Vaccinations of children		
	Fully immunized	87
	BCG & DPT1	96
	Polio1	97
	Measles	88
	None	3
Employed women in		
	White collared job	19.1

	Other job	63.1
	Agriculture	17.8

Source: CBS, 2001, 2012; NDHS, 2011, NPC 2013

Conclusion

Based on the above information, it can be concluded that there is significance progress in women empowerment since periodical plan and this is because of the positive impact of formal, informal/non-formal education conflict, and health outcomes. However, there are so many underlying factors that are hindering for women empowerment and need to address by implanting special package program for women empowerment. Special focus need to be given in women education, health and adolescent girls issues since these factors are directly linked to women development which in fact related to empowerment. Social inclusion programs also need to be strengthened so that women and even socially excluded women can be benefitted by social and economic inclusion with an attention on elite capture on

CHAPTER 12

Health Policies and Program

12.1 Concept of Health Policy

Health Policy can be Understood as the:

....course of action (and inaction) that affect the sets of institutions, organizations, services and funding arrangements of the health system .It includes policy made in the public sector (by government) as well as policies in the private sector. But because health is influenced by many determinants outside the health system, health policy analysis are also interested in the actions and intended actions of organizations extended to the health system which has an impact on health (for example , the food, tobacco, or pharmaceutical industries (Buse,Mays, Walt,2005)

Commonly, health policies are understood as the formal written documents, rules, guidelines, that present policy-makers,' decision about what actions are deemed legitimate and necessary to strengthen the health system and improve health. However, these formal documents are translated through the decision -making of policy actors (such as middle manager, health workers, patients and citizens) into their daily practices (for example management , interactions with others) .Ultimately , these daily practices become health policy as it is experienced , which may differ from the intentions of the formal documents (Lipsky,1980) .Therefore , policy can be seen not only as the formal statements of intent but also as the formal statements of intent but also as the informal, unwritten practices (*Buse, Mays, Walt,2005).*

12.2 Policy actors:

Within national settings, policy actors include those who,

- Have specific responsibility for developing formal policies in the public or private sectors, including those outside the health sector working on health influencing policies and international agencies and organizations.
- Influence how policies are translated into practice (such as middle manager, health workers, patients and citizens).
- Seek to influence the formal policy process (such as civil society groups or interest groups at national and international levels).

At global level, policy actors include the range of multilateral and bilateral organizations engaged in activities that are likely to influence health, as well as the newly powerful global public-private initiatives (such as the Gate foundation) transnational civil society movements (Gilson, Led (2012). List of Health Policy and relevant documents.

Policies

1 National Health Policy ,1991
2 National Blood Policy, 1993 (revised 2005)
3 National Drug Policy, 1995
4 National AIDS Policy, 1995 (updated 2011)
5 National Mental Health Policy, 1995
6 National Ayurveda Health Policy, 1996
7 National Safe Motherhood Policy, 1998
8 National Health Research Policy, 2003
9 National Oral Health Policy and Strategies, 2004
10 National Nutritional Policy and Strategies, 2004
11 National Safe Abortion Policy, 2006
12 National Skilled Birth Attendants (SBA) Policy, 2006
13 Health Care Technology Policy, 2006
14 Policy on Quality Health Services, 2007
15 Free Essential Health Care Policy, 2008

16 Free Delivery Policy, 2009
17 National Health Policy,2014

Strategies

1 National Reproductive Health Strategy, 1998
2 National Adolescent Health and Development Strategy, 2000
3 Health Sector Strategy: An Agenda for Reform, 2003
4 National Neonatal Health Strategy, 2004

Health plans

1 Second Long Term Health Plan, 1997–2017
2 Nepal Health Sector Programme, 2004–2010
3 Second Nepal Health Sector Programme, 2010-15

Government periodic plans

1 Eighth Five Year Plan, 1992-191997
2 Ninth Five Year Plan, 1997–2002
3 Tenth Five Year Plan, 2002—2007
3 First Three Year Interim Plan, 2007/8–2009/10
4 Second Three Year Interim Plan, 2009/10–2011/12
5 An Approach Paper to the Thirteen Plan (2013- 2016).

12.3 National Health Policy, 1991, New Health related Policies, Strategies and Plans

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 is 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**.** Soon after, in 1991, the government developed a National Health Policy (NHP 1991) with the following vision, objectives, approaches and components:

Vision- the government committed to creating a socio-economic environment to allow all Nepalese citizens to lead a healthy life.

Objective- The policy called for upgrading the health standards of the majority of the rural population by extending basic primary health services and making modern medical facilities available at the village level for rural people.

Approaches- The highest priority was given to upgrading the health standard of people living in rural areas using a primary health care approach (in line with the Alma Ata declaration, 1978 for primary health care to which Nepal was a signatory). Priority was given to preventive, promotive and curative health services to reduce infant and child mortality.

Preventive health services, promotive health services, curative health services, basic primary health services, community participation in health services, organizational and management reforms, development and management of human resources for health, private, non government health services and inter sectoral coordination, ayurvedic and other traditional health services, drug supply, resources mobilization in health services, health research, regionalization and decentralization, blood transfusion services, miscellaneous are the 15 components of the health policy.

12.4 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 anemia 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.

12.5 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.

12.6 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, *AdibasiJanajati*, 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, AdibasiJanajati, 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 Aurvedic 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, AdibasiJanajati, 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 ROGRAMME

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 15th Jan 2008 for its preparations to manage.

After the evolution of 1st republic budget of Nepal in 19th 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 16th 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 than25 bedded and making free essential drugs to all citizens since 14th 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.

12.7 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.

12.8 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 intersect oral 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.

12.8.1 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:

- Reduce TFR from 4.1 children per women to 3.5, by the end of the 10th Five Year Plan.
- 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 services include vasectomy, minilab, and laparoscopy. At least one type of VSC service was made available in all districts through hospitals and/or mobile camps.
- 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.
- 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 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.

12.8.2 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.

12.8.3 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* r*esearch on safe motherhood to contribute to improved planning, higher quality services, and more cost-effective interventions.*

12.8.3.1 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, antihelmenthics to all pregnant women and malaria prophylaxis where necessary.*

12.8.3.2 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.

12.8.3.3 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.

12.8.3.4 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.

12.8.3.5 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.

12.8.3.6 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 as needed.

In March 2002, Nepal's parliament approved the 11th 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.

12.8.4 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.

12.8.4.1 Control of Diarrheal diseases:

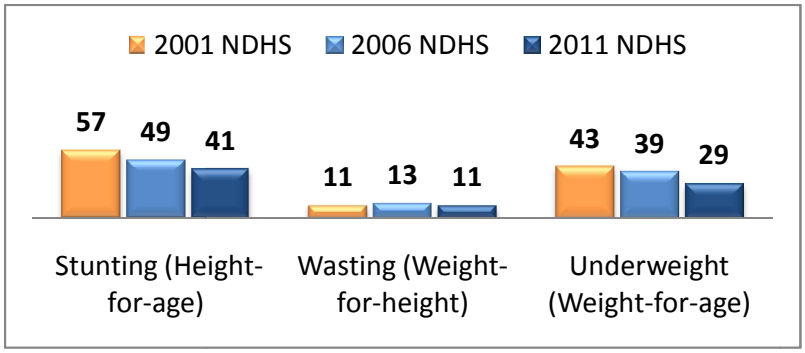
A diarrheal disease is one of the major public health problems among children less than five years of age in Nepal. The National Control of Diarrheal Diseases Programme (NCDDP) has been in priority status by the government of Nepal.

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.

12.8.4.2 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.

Fig 12.1 Trends of nutritional status of children under five years



Source NDHS 2011

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.

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 anemia. The prevalence of anemia 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.

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 Anemia

To reduce the prevalence of anemia (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.

12.6.4 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 12.1: Important milestone in the response to HIV/AIDS

1988	Launched the first National AIDS prevention and control Program
1990-92	First medium term plan
193-97	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 2010 is given in the Table below.

Table 12.2 :Estimation of HIV infections by risk groups, 2010

Population Groups	Adults living with HIV	Percentage Share
IDU	2534	4.2
MSM	3699	6.2
Female sex workers	605	1.0
Clients of sex workers	2996	5.0
Seasonal labour migrants	17653	29.4
Remaining low risk males	15697	26.2
Remaining low risk females	16800	28.0
Total	**59984**	**100**

**Source-National Centre for AIDS and STD Control*

Non-Communicable Diseases

Non-communicable diseases (NCDs) refer to diseases or conditions that occur in, or are known to affect individuals over an extensive period of time and for which there are no known causative agents that are transmitted from one affected individual to another. The risk factors for many of the NCDs are associated with lifestyle related choices, environmental and genetic factors. Tobacco use, harmful use of alcohol, unhealthy diets (high in salt, sugar and fat and low in fruits and vegetables) and physical inactivity are some of the established behavioral risk factors of NCDs. The prevalence of NCDs is still unknown in Nepal

Climate Change and Health

Nepal's national economy and people's livelihoods largely depend on natural resources and ecosystems services. These are increasingly negatively influenced by climate change effects, including increased variability and extreme events. Extreme weather is having a devastating toll, with hundreds of thousands of deaths and injuries from heat events, storms, fires, and floods, and subsequent displacement, hunger and disease. The National Adaptation Programme of Action (NAPA) and other national strategies and action plans have recognized that immediate actions are needed to minimize climate risks to society, economy and ecosystems. The Ecosystem based Adaptation Nepal (EbA-N) project aims to enhance capacity of local communities, demonstrate EbA measures for continued provision of ecosystem services, and support in strengthening the institutional capacity of key national Nepalese actors to build and better integrate ecosystem resilience options in national, sub-national and local level plans. This will promote EbA options as part of overall adaptation strategies in Nepal and reduce the vulnerability of communities, with particular emphasis on mountain ecosystems. The project also aims to develop ecosystem-focused decision-making tools, demonstrating EbA results at the local level, building the economic case for EbA and using knowledge and learning derived from the project to influence formulation of national and local policies and strategies.

Though a plethora of approaches are been used to address various health issues. FCHVs have been internationally acclaimed for their work. Various countries like India and African countries are eager to include FCHV in their National Health System. However, singular problem of management and upgrading has seen to plague system wide. Various training centers and health facility buildings are in need of proper maintenance. Recruited manpower are often mismatched to their competencies and unavailability of health

staffs during working hours, ill-equipped health facilities, to unavailability of drugs have all jointly led to unsatisfied consumers of health system of Nepal.

Chapter 13

Population, Environment, Sustainable Development and Disaster Management

13.1 Introduction

Between 1960 and 1999, Earth's population doubled from three billion to six billion people. Developed countries developed science and technology and used limited resources to fulfill unlimited wants of the growing population. This is good news for humanity: child mortality rates have reduced, life expectancy has increased, technology and growth in research and innovative activities, and people were on an average healthier and better nourished than at any time in history. However, during the same period, changes in the global environment began to accelerate: pollution heightened, resource depletion continued, and the threat of rising sea levels has increased.

The rapid rise in population causes Nepal's already delicate ecosystem much degradation in the form of soil erosion, deforestation, air and water pollution, desertification and depletion of water supplies. This resource decline is leading to agricultural problems; indeed to a growing incapacity of natural environments to support present human numbers. Yet the country's natural resource base is central to the national economy with agriculture the largest single development sector.

Technological, institutional, policy and cultural forces are mediating factors that influence the relationship between population dynamics and environment. Two specific aspects of environment change affected by population dynamics: changes in land use and the climatic change. In this context, this chapter has attempted to interlink between population dynamics and environmental issues in context of Nepal.

Environment can be defined as the physical surroundings of people of which they are a part and on which they are dependent for their activities like physiological functioning, production and consumption. The physical environment extends from air, water and land to natural resources like energy carriers, soil and plants, animals and ecosystem.

Source: CBS (2014) Environmental statistics.

13.2 Theoretical concept

The past fifty years has witnessed two simultaneous and accelerating trends: an explosive growth in population and a steep increase in resource depletion and environmental degradation.These trends have fueled the debate on link between population and environment that begun150 year earlier, when Malthus voiced his concern about the ability of the earth and its finite resources to feed an exponentially growing population. The relationship between population and environment has a long history, although in different times it may have been expressed in somewhat different contexts, such as the relationship of population growth to governance (Plato and Aristotle), to food production (Malthus), to agricultural growth (Boserup), to resource availability (Neoclassical economists, Simon), to pollution (Meadows), and to land degradation (Blaikie and Moore).

The following table presents main themes of various scholars about the relationship between population and environment.

13.3 Relationship between Population and Environment

There is relationship between population and environment. The table13.1 descriptions shows theorists and their main statements in regards the relationship between population and environment.

Table 13.1 Theorists and their main statements in regards the relationship between population and environment.

Theorists	Main Statement
The Utopians	The utopians have their roots in ancient Greece where the need to balance Population with resources was taken for granted and pursued through a policy of progressive colonization of new areas. The utopian view of zero population growth was recommended by Plato in his Republic; Aristotle viewed a populous city as too hard to govern.
Robert Wallace	Wallace's argument was that an egalitarian society and wrote that self-destruct through overpopulation.
Malthus	Malthus argued that population grows geometrically, while food production can only grow arithmetically. and there would gap between population growth and food increase and lead poverty trap .thus he suggest positive check up population ,otherwise nature control itself through conflict , war, landslides , famine and so on. Suggested to balance between population growth and environmental degradation.
Karl Marx	He argued that "overpopulation" was the outcome of the laws of capitalism, not the laws of nature. It was not a true overpopulation, but a surplus of unemployed laborers created by capitalism's investment in machinery.
Henry George	He saw population growth as a source of wealth and overpopulation not as a cause but a consequence of poverty.
The Boserup Thesis of Induced Innovation	Boserup (1965, 1976, 1980) discussed how, in response to greater population density and lower yields, farmers, who began as shifting cultivators, reduced their fallow periods and began to use the plow, manure, crop-rotation, irrigation, and multiple cropping to maintain and increase crop yields.
Neoclassical economists	Neoclassical economists (like the classical economists) are concerned with whether economy can sustain a rising (or even steady) standard of living, given finite resources and a growing population. As land resources become increasingly scarce, land prices will rise and incentives will thus, increase for people to (a) substitute more abundant resources such as labor, fertilizer and irrigation for land; and (b) to develop new technologies (such as high yield crop varieties) to increase yields from existing land (intensification), as well as to farm previously unused land (extensification).
The neo-Malthusians	argued that over-population as the biggest threat to terrestrial life that the planet faces, short of a thermo-nuclear war, and predicted vast famines sometime between 1970 and 1985; he supported compulsory measures to control population and opposed food aid to poor and populous countries such as India where "the unbalance between food and population is hopeless."
The Theory of Optimum Population	Optimum population is a dynamic, not a static concept, constantly being shifted by technology. They used the concepts of over-population and under population and argued that economic growth must be greater than population growth of a nation. . They argued that optimal size of the population is in the sense that it maximizes well-being or minimizes environmental problem.

We have attempted to review the relationship between population and environment

in context of Nepal.

13.4 Population Growth and Environmental Problem

Right now, the world population reach over 7 billion and because of this driving over 50 species of plants and animals to extinction per day, destroying rain forests many times faster than they can regenerate, consuming stored solar energy (fossil fuels) at rates thousands of times faster than it is regenerating, consuming fresh water at least 10 times faster than it is being replenished in regions of northern Africa, the Middle East, India, Pakistan, China, and the U.S.; causing soil Stalinization and erosion several-fold faster than rates of restoration, over-fishing in oceans, radically changing the species balance in many places. For several years population has been increasing faster than many vital non-renewable and renewable resources. This means the amount of these resources per person is declining, in spite of modern technology.

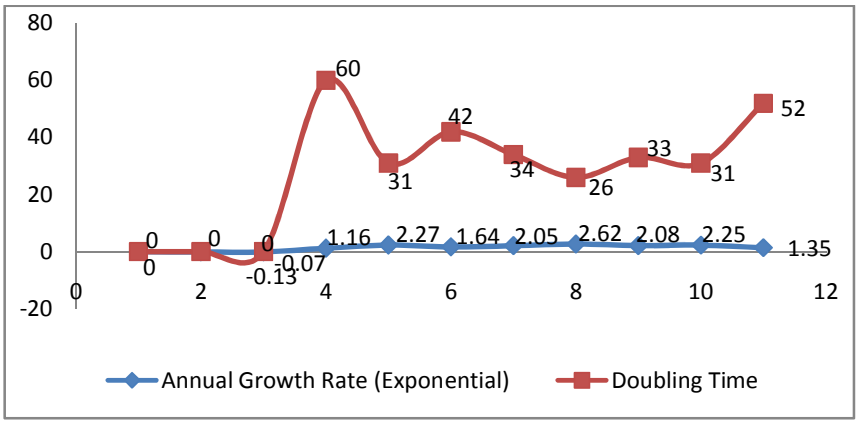
Other massive social and environmental problems like as political instability, loss of freedoms, vanishing species, rain forest destruction, desertification, garbage, urban sprawl, water shortages, traffic jams, toxic waste, oil spills, air and water pollution, increasing violence and crime. Solving these problems will be much less difficult unless stopping the increases number of people affected to them (*www.worldpopulationbanalce.org/globalpopulation*) The global contract to improve lives, especially for the 1 in 7 living in extreme poverty, coupled with a burgeoning global population, will result in mounting environmental pressures. (UNFPA, 2013)

In many developing countries, couples are still averaging 4 to 6 children. Nearly half of them would like to have fewer children, but they lack access to family planning (not including abortion). 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. (*www.worldpopulationbanalce.org/globalpopulation*) .Some demographic indicators of the world have been presented in Table 1.1.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.

13.6 Population Growth rate and density of the Population

Figure 13.1 and 13.2 shows the population growth is increasing trends from 1920 to 2001 increased by 0.13 to 2.25 though the country have made substantial progress in the attainment of literacy rate and use of contraception. Our population growth rate has hit all time low in past five years. This positively affects the distribution of fruit of development for all Nepalese.

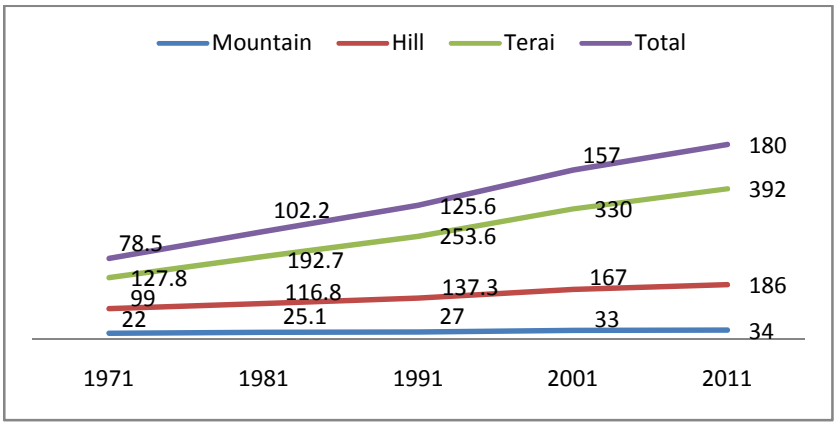
Figure 13.1 Population Growth Rate and Doubling Time



Source: CBS, 2012

The figure 13.2 shows the density of population per square kilometer by ecological belt from 1971 to 2011. The density of population has increased in all ecological regions of Nepal. The rate of population growth in Terai is more than combined total of population density in both Mountain and Hill. It is notable to see that the population of mountain is more or less stable but population of hill and Terai has significantly increased from the year 1991 onwards. This can have direct impact in reduction of forest area.

Fig. 13.2 Density of Population from 1971to 2011 per sq km



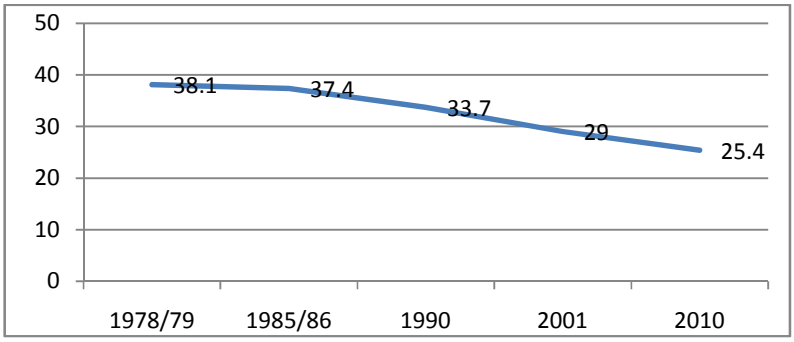
Source: CBS 1991, 2001 and 2012

13.6 Population Growth rate and Land use Pattern in Nepal.

13.6.1 Population and Deforestation in Nepal

The figure 13.3 shows that the area of forest in Nepal, which is in declining trend .The figure shows that the covered area of forest was 38 % in 1978 and gradually declined and falls in 25 percent in 2010.The possible reasons are that the deforestations has been done for the purpose of cultivation, housing, and other infrastructure development. It is also associated with soil erosion which leads to lessen the ability of soil to hold water, thereby increasing the frequency and severity of floods and eventually destroy cultivable land. Environmental, problems such as externality, heavy traffic jam and noise, air, water and land pollution adversely affects the health of people.

Figure 13.3 Forest Area of Nepal, 1990-2010



Source: CBS, 2013 and FRS

13.6.2. Pressure on Land and change in forest coverage

Table 13.6.2 presents the total land area and total agriculture land per capita. Population growth is creating an increasing pressure on the natural resources of Nepal, as illustrated by the shrinking size of land per capita with the increase in population. The land area per capita has changed from 2.6 ha. in 1911 to 0.56 ha. per capita in 2011.

Table 13.2 : Total land area and total agriculture land per capita

Census	Population	Total land area (ha)	Land area (ha) per capita	*Agriculture land (*000ha)	*Agriculture land (*000ha
1911	5,638,479	14,718,100	2,610	-	
1920	5,573,788		2,641	-	
1930	5,532,774		2,660	-	
1941	6,283,649		2,342	-	
1952-54	8,256,625		1,783	-	
1961/62	9,412,996		1,564	1,626,400	0.173
1971/72	11,555,983		1,274	1,592.390	0.138
1981/82	15,022,839		0.980	2,359,200	0.157
1991/92	18,491,097		0.796	2,392,900	0.129
2001/02	23,151,423		0.636	2,497,700	0.108
2011/2012	26,494,504		0.556	2,363,100	0.089

Source : MOAD, 2011 , CBS, 2014Population Monograph , VOL 111

The ecological footprint of the people of Nepal is increasing but on the contrary there is a decrease in the land footprint. Similarly, agricultural land per capita also seems to be decreasing over the years. During 1961, agriculture land per capita was 0.173 ha but gradually decreased over the census years. During 2011, the value of agriculture land per capita was 0.089 ha (Table 13.2).

13.6.3: Land Use Pattern by Type of Land, Nepal,

Table 13.1: presents the land use pattern by type of land, Nepal, from 1978/79 to 2001. Cultivated and Non cultivated land's area has been increasing steadily over time which can translate into more land for housing and other population activities. The effect of this has direct relationship with decreasing forest land over the same time period.

Table 13.1: Land Use pattern by type of land, Nepal, 1978/79-20011

Types of Land	1978/79*		1985/86*		2001**	
	Area	Percent	Area	Percent	Area	Percent
Cultivated land	2969400	20.1	3052000	20.7	3090780	21.0
No cultivated land	986900	6.7	998000	6.8	1030390	7.0
Forest	5612400	38.1	5518000	37.4	4268200	29.0
Shrub land	694000	4.7	706000	4.8	1560110	10.6
Grass land	1755900	11.9	1745000	11.8	1766160	12.0
Other land	2729800	18.5	2729000	18.5	2619800	17.8
Water/Lake		0.0		0.0	382660	2.6
	14748400	100.0	14748000	100.0	14718100	100.0

** Department of Forest Research and Survey, 2001

While it is notable to see that cultivable land's area is increasing it is interesting to note that those land are not been used for agricultural uses (see 1991/92 and 2011/12). This can be seemed as people are less interested in agricultural activities despite of increasing cultivable land areas.

Table 13.2: Land use, Nepal, 1961/62 – 2011/12

Land Use	Census year					
	1961/62	1971/72	1981/82	1991/92	2001/02	2011/12
('000 hectares)						
Agricultural land	1626.40	1592.30	2359.2	2392.9	2497.7	2363.09
Arable land	1591.90	1567.00	2287.5	2324.3	2357	2162.14
Land under temporary crops	1550.50	1537.10	2250.2	2284.7	2326.1	2123.17
Other arable land	41.40	29.90	37.3	39.7	30.9	38.97
Land under permanent crops	12.20	15.00	29.2	29.4	117.5	168.45
Land under permanent pastures crops	22.30	10.30	42.5	36.9	19.8	29.3
Ponds	n.a.	n.a.	n.a.	3.9	3.5	3.2
Non-agricultural land	59.00	61.80	104.5	205	156.4	161.91
Woodland and forest	13.80	4.70	15	108.8	37.2	54.89
Other land	45.20	57.10	89.5	96.2	119.2	107.02
Total area of holding	1685.40	1654.00	2463.7	2597.4	2654	2522.52
Percentage distribution						
Agricultural land	96.5	96.3	95.8	92.1	94.1	93.7
Arable land	94.5	94.7	92.8	89.5	88.8	85.7

Land under temporary crops	92	92.9	91.3	88	87.6	84.2
Other arable land	2.5	1.8	1.5	1.5	1.2	1.5
Land under permanent crops	0.7	0.9	1.2	1.1	4.4	6.7
Land under permanent pastures crops	1.3	0.6	1.7	1.4	0.7	1.2
Ponds	n.a.	n.a.	n.a.	0.2	0.1	0.1
Non-agricultural land	3.5	3.7	4.2	7.9	5.9	6.4
Woodland and forest	0.8	0.3	0.6	4.2	1.4	2.2
Other land	2.7	3.5	3.6	3.7	4.5	4.2
Total area of holding	100	100	100	100	100	100

Source: CBS, National Sample Census of Agriculture 2011/12

13.7. Population Growth and Climate Change

There are growing concerns about the impacts of climate change in Nepal. The country is highly vulnerable to the potential negative impacts of climate change due to a weak economy, the fact it is landlocked, tectonically active and has difficult geographical terrain. Nepal is experiencing serious impacts of climate change in area slinked to livelihood such as agriculture, water resources, forest and biodiversity, and human health. Sharply rising energy and food prices have once again raised the specter of the human population outstripping the planet's natural resources.

Ever since Malthus, pessimists have believed that mankind is doomed due to overpopulation and overconsumption, while optimists have argued that technological innovation will improve standards of living and that population growth is at most a minor issue (Bongaarts and Sinding S .W 2009). Substantial changes in population size, age structure, and urbanization are expected in many parts of the world this century. Although such changes can affect energy use and greenhouse gas emissions, emissions scenario analyses have either left them out or treated them in a fragmentary or overly simplified manner (Brian C. O'N.et. al, 2010).

Demographic changes effects on in urbanization, aging, and changes in household size and can also affect energy use and emissions. There are so many potential adverse effects include poor health among women and children, slow economic growth and poverty, overcrowded schools and clinics and an overburdened infrastructure, as well as the depletion of environmental resources. In addition; high unemployment and inequality among rapidly growing young populations may contribute to the spread of political violence and civil strife.

Therefore, much attention has been focused on the impact of population size and growth on environmental change.

13.7.1 Population and Emissions Growth

Table 13.6.1 shows changes in global population, economy, energy and CO2 Emissions. Historical statistics reveal that population growth parallels increases in economic growth, energy consumption and greenhouse gas emissions. During the 200 years between 1800 and 2000, energy use increased 35 fold, carbon emissions increased 20 fold, and the world's population grew by a factor of 6.

Table 13.3 Changes in Global Population, Economy, Energy and CO2 Emissions.

	1800	2000	Factor
Population (billion)	1	6	x6
GDP (PPP trillion 1990 US$)	0.5	36	x70
Primary Energy (EJ)	12	440	x35
CO2 Emission (GtC)	0.3	6.4	x20

Source: Nakicenovic´ et al. 2007 and Jiang, L. and Hardee K. (2009). How Do Recent Population Trends Matter to Climate Change?

Meanwhile, global income (Gross Domestic Product) increased 70 times (Naki´cenovi´c et al. 2007). While it is clear that technological changes have substantially improved energy efficiency and reduced carbon intensity during the past 200 years, there continues to be debate about whether population growth or increasing consumption levels have contributed relatively more to greenhouse gas emissions (Dietz, 2007; Ehrlich, 1971; Meyerson, 1998; Parikh, 1994 as cited in Jiang, L. and Hardee K. (2009).

13.7.2 Net Impact of Population growth on Carbon Emissions

Making a clear and direct linkage between population change and climate change is complex because the effects of human activity on emissions are the product of range of driving forces including economic growth, technological changes and population growth.

Table 13.4.shows the net impact of population growth on Carbon Emissions. Based on the assumption that economic development, technological change and population growth jointly determine energy consumption and carbon emissions, a number of statistical analyses have been conducted to explore the net effect of population growth. For example a study carried out by O'Neill (2009 as cited in Jiang, L. & Hardee K.2009) reveal that, a one percent increase in population is generally associated with a one percent increase in carbon emissions after controlling for other variables (mainly economic growth and technology related to energy efficiency and carbon intensity).

Table: 13.4 Net Impact of Population growth on Carbon Emissions

Study	% increase in carbon emissions per 1% increase in population
Dietz and Rosa ,1997	1.15
Shi ,2003	1.43
York ,Ross and Dietz, 2003	0.98
Rosa, York , and Dietz,2004	1.02
Cole and Neumayer ,2004	0.98

Source: Nakicenovic´ et al. 2007 and Jiang, L. and Hardee K. (2009). How Do Recent Population Trends Matter to Climate Change?

13. 9 Population Growth and Disaster.

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Conclusion

There is causal link between population and environment. It is notable that Population density is rapidly increasing in Terai and Forest has been steadily declining both contributes adversely to the health of environment and human alike. Interestingly, Population growth rate has also hit all-time low in past five years which now makes government easier to distribute development programs and packages. Therefore, projections of the future population/household changes also suggest that total population size, aging, urbanization and declining average household size will be important demographic trends in the coming decades.

भूकम्पवाट भएको क्षतिको विवरण एक झलक

क्र.स.	विवरण	संख्या/परिणाम	क्र.स	विवरण	संख्या/परिणाम
१	अति प्रभावित जिल्ला	१४	८	सरकारी कार्यालय पूर्ण क्षति	२६८७
२	मानवीय क्षति भएका थप जिल्ला	२७	९	सरकारी कार्यालय आंशिक क्षति	३७७६
३	मृतकको संख्या	८९५९	१०	कक्षा कोठा आंशिक क्षति	५०१०
४	बेपत्ता संख्या	३२७	११	स्वास्थ्य संस्था पूर्ण क्षति	३७५
५	घाइते संख्या	२२३०२	१२	स्वास्थ्य संस्था आंशिक क्षति	६४८
६	घर क्षति पूर्ण	७७६८९५	१३	खाद्यान्न क्षति मेट्रिक टन	१३५१८
७	घर क्षति आंशिक	२९८९९८	१४	पशुपक्षी क्षति संख्या	५१२१४७
	(		१५	बेवारिसे शव	३३

Chapter 14

Population Policies and Programmes

14.1 Concept of Population Policy

Population policy plays significance role to change the future prospects of a country, specifically: to enhance economic development, social welfare and individual welfare. Moreover, it plays significance role to reduce fertility, and mortality increase life expectancy of the people and appropriate management in migration and other concerned issues but in the context up to now there is no integrated population policy and thus always occurred duplication of program not conceptualized population governance in Nepal. Recently, Nepal government is on process to formulate national population policy keeping in mind the concept of population governance. The characteristic of population governance is capacity of decision making along with choice, voice, power to decision, information, fertility regulation, migration management, and other concerned issues. Therefore, it is being important to notice the concept of population policy to concerned stakeholder.

Various scholars define population policy various ways and few definitions have been present as follows: 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). Measures formulated by a range of social institutions including Government which may influence the size, distribution or composition of human population (Driver, 1972). *A deliberate effort by a national government to influence the demographic variables like fertility, mortality and migration (Organski & Organski, 1961). A set of Coordinated laws aimed at reaching some demographic goal (Biurgeois-Pichat, 1974).Population policies to influence population growth and distribution involve a wide range of decisions and actions by governments, both direct and indirect, which influence individual and family decisions regarding marriage and childbearing*, *working arrangements, place of residence, etc. Mosley .W. Henry (2006*).

Source : Mathur S.C.(2001) Population Policy at national and state Level (A case of India and Rajasthan)

Policies are designed keeping in view the future perspectives in mind. Population policy should have some characteristics for example it should be based on the philosophy of respect to human life and it should embody the concept of family planning which is concerned not only with the growth population but also with the quality of life. Moreover, it should be an integral part of the countries development plan, solicit the use and expertise of practitioners in the field of education, social welfare, demography, mass, communication, and other related ideas and should involve the support of both the government and voluntary agencies.

Population policy can be classified into direct or explicit and indirect or implicit. Direct policies are – government actions taken for the purpose of affecting a demographic outcome, e.g., migration laws is an example of direct policy. Indirect or implicit policies are – government actions that only indirectly have some demographic effects, e.g., promoting female education is an example of indirect population policy. Explicit Policies versus Implicit Policies has been shown in the following table.

Explicit Policies	Implicit Policies
• Provide free family • Planning services. • Increase taxes for each additional child • Restrict immigration. • Raise the age of marriage	• Compulsory secondary • Education • Restrict child labor • Limit size of houses • Raise status of women • Provide old age security

Source: Mosley .W. Henry (2006). The Johns Hopkins University.

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 and thus various philosophers and scholars summons directly or indirectly about population policies and thrust of the policy has been presented in the following tables.

14.2 Review of Population Policies

14.2.1 International Level

Period	**Main Ideas**
Traditional societies	Encourage marriage, value for children, children are expected from married couple.
Between the world war	Pro-natalist policy, financial rewards and services for larger families with children
Between 1945-1970	Introduce new types of contraceptives e.g. oral contraceptives, pill and IUD.
Between 1970 –1980	It advised to deal policy, plan, priorities and possible strategies by linking between population problems and other social, economic and environmental activities for sustainable development of developed and less developed countries.
1980- 1990	Family planning programmes and the provision of modern contraception were now strongly advocated as the right of all couples and individuals
1990- 2000	The advised on the integration of population and development. Focus on empowerment of women, gender equality and equity, education for girls, the pressure of women's' time, gender based disparities, income and the safety of women in abusive relationship.
In 21st century	Debate in population policy some of the countries focused on replacement level, someone focus on equilibrium in population balancing between demand and supply of children. Most countries in Africa have revised their population policies and have incorporated reproductive health programs and strategies and priorities on information and education campaigns including behavior change for reproductive health and HIV/AIDS.

14.2.2 National Level

In the context of Nepal, 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. 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 Eighth Plan** had objectives to bring about a balance between population growth and socio-economic development and the environment. This would assumed to 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 were as follows. Most of the target was met at this plan period.

- To reduce TFR to 4.2, which was achieved as targeted and reached to 4.1 in 2001.
- To increase CPR to 37.0.
- To reduce Infant Mortality Rate (IMR) to 61.5 and under five Mortality (U5MR) to 102.3 per thousand live births. IMR was reduced to 64.4 and U5MR was reached to 91.2 per thousand live births in this period.

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 Achievements

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

Table 14. 1 Target of the Tenth Plan and Progress Status 2006

S. N.	Description	Status of the Ninth Plan	Targets of the Tenth Plan		Status in 2006*
			At expected growth rate	At Normal growth rate	
1.	Total Fertility Rate	4.1	3.5	3.6	3.1
2.	Contraceptive Prevalence Rate (%)	39.3	47	46	48
3.	Infant Mortality Rate (per 1000 live births)	64.4	45	47	51
4.	Child Mortality Rate under 5 years (per 1000 live births)	91.2	72		65

* *Nepal Demographic and Health Survey, 2006*

Source: Ministry of Health and Population, National Planning Commission

Table 14.1 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

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 till high.

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.

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

Long Term Vision

The long term vision was 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 would 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 (2010/11-2012/13)

The policy and practice of incorporating population management as integral part of planned development had been initiated in the Eighth Plan. 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

a. 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.

2. Population growth will be managed by promoting the use of contraceptives as well as through education and awareness.
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.
4. Appropriate population policy will be formulated keeping in view with internal as well as international migration.
    a. 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.
    b. 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.
    c. 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.
    d. Appropriate programs will be carried out to reverse the trend of brain drain.
    e. Awareness will be raised among communities and all stakeholders about inter-linkages between population, environment, resource consumption, poverty reduction and sustainable development.
    f. Immigration trends will regulate, stemmed or managed based on the number and characteristics of immigrants.
    g. Population education will be launched as campaign.
5. 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.
6. Emphasis will be given on capacity building of all institutions working in population management and human resource development at all levels.
    a. 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.
    b. Special programs will be carried out to address the nutritional needs of children, pregnant women, *and mothers of new born babies*, senior citizens and vulnerable people.
    c. Government, nongovernment, private and cooperative sectors will be mobilized in a coordinated way for population management and human resource development.
    d. Institutional strengthening of national statistical systems will be done to carry out study and research, collect and process data and develop effective information system.
    e. 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.

Quantitative Targets and Achievements

The quantitative targets set for the three year interim plan (2010/11-2012/13) period and achievements are presented in the following table 14.2.

Table 14. 2 Targets of the Tenth Plan and Progress Status 2012/13

Description	Status of the year 2009/10	Targets of the interim Plan	Status in 2012/13*
Total Fertility Rate	3.1	2.75	2.6
Contraceptive Prevalence Rate (%)	48	57	50
Infant Mortality Rate (per 1000 live births)	51	38	46
Child Mortality Rate under 5 years (per 1000 live births)	65	47	54
Maternal Mortality Ratio (per 100000 live births)	229	192	170

** Source: National Planning Commission*

M. Thirteenth Plan 2013/14-2015/16 (Approach Paper):

The population and housing census 2011 has shown that Nepal's population has reached to 26494504 in the year 2011 with an annual growth rate of 1.35 percent. Other population related indicators are also in decreasing trend for some years. For example, fertility, mortality has been decreasing and health indicators are also in improving pace. On the other hand, international as well as internal migration is noticeably increased and seems to be continuing for some years. Still there are diversified problems in the population sector. The ageing population is increasing, labour force is being migrated as a brain drain, spousal separation and female population has been increased and management of adolescents and youth population is of big concern which may result various socio-economic consequences, in this scenario, the government of Nepal has brought an approach paper for an interim plan 2013/14-2015/16 which have following objectives and strategies.

Objectives

- To help in sustainable and balanced social and economic development of the country by effective population management.
- To achieve replacement level of fertility by the year 2022 by equal access to population management programs for all sectors and all age and areas of citizens.

Strategies

- Population composition including Spatial and age-sex distribution will be kept in balance by regulating internal and international migration through the means of population management and analysis.

- Population Management Program will be strengthened to all areas and sectors of development and create environment to ease demographic transition.
- Reproductive right will be established as a basic human right by multilateral co-working and co-ordination and public awareness programs.
- Population centric development programs will be implemented and different services and opportunities will make available in community and household level of the people.
- Gender equality and social inclusion will be incorporated in population management programs and focused on identified targeted communities and special programs will be implemented in these targeted communities.

14.4 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.

14.5 Institutional Mechanism

14.5.1 Central level

Ministry of Health and Population especially population division is responsible to for the formulation of policy, program innovation activities, research and innovation activities, monitoring and evaluation of population program . Family health division under the umbrella department of Health services for implementation population program, Population section under the Central Bureau of Statistics for data collection and survey, and Vital Registration Section under the Ministry of Federal Affairs and Local Development are working as the line ministries for population program . Besides Ministry of Education, Ministry of Youth and Sports, Ministry of Women, Children and Social Welfare, Ministry of Agriculture Development and other concerned public agencies are also implementing the program of population. A part from these institution , Tribhuvan University ,especially Central Department of Population Studies, Kathmandu University , Pokhara Uiversity and Purbhanchal University are producing the manpower for population studies. Additionally UNFPA, UNICEF, USAID and WHO are being the responsible agencies for the logistic support in the population management program. Nepal Demographic Health Survey, 2006, 2011 along with further analysis (2006, 2011), Nepal Adolescent and Youth Survey (2010) were conducted under the leadership of Population Division and now Ageing Survey and National Level Integrated Policy for Population are on pipeline. Previously various agencies were involved to implement population policy in Nepal

Institution of Population

1974	Formed Task Force on Population Policy
1975	Population Policy Coordination Board
1982	National Commission on Population
1995	Ministry of Population and Environment
2005	MOPE dissolved and its Population Division relocated in Ministry of Health which was renamed Ministry of Health and Population
2010	National Committee on Population reformulated

14.5.2 Local Level Population Management Program

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. LLPM was extended to 50 districts in the fiscal year 2067/68 BS) and currently it is implemented in 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.

Population Policy 2071

Followings are the objectives, strategies and the goal in the context of demographic status in Nepal

a) To establish the sustainable relationship between the population, environment and development to provide well-organized and productive services for the individuals
b) For the overall development of the country, existing means and resources should maximum used to improve the quality of lives of people.
c) To implement and to protect the fundamental rights for the maternity care, to improve significantly the social and economic status of vulnerable groups along with promoting gender equality and social inclusion, there should be launched different programmes by integrating and internalizing the queries related to the population with development activities of the country.

Nepal has made objectives to achieve the following policies within 20years (2090 B.S, 2034 A.D) by internalizing the millions of goals for the population elements in the sectoral development process at all levels for the sustainable development.

Indicators related with population policies within 20 years (2090 B.S, 2034A.D)

S.N	Indicators	Result
1	Total fertility rate (TFR) per woman	2.1
2	Percentage of total increment of population in a year (%)	1.1
3	Crude death rate	5.0
4	Infant mortality rate per 1000	25

5	Life expectancy (both)	Male	74.0
		Female	76.0
6	Average living family		4.1
7	Absent population		5
8	Literacy rate (above 10 years aged population)		95
9	Access of using contraceptive methods (%)		90
10	Urban population (%)		60
11	Rural population (%0		60

Policies and strategies of 20 years population goals in Nepal

Plans:

a) To make development as the major indicator for the establishment of correlation between development and population.
b) Access to sexual and reproductive health services should be ensured to all in general and women, youth and adolescents living in rural and remote areas in particular
c) Existing means and resources should be used to increase the quality of lives of people.
d) An effective population redistribution policy should be implemented addressing the internal and external migration problem along with managing urban population.
e) Gender equality and social inclusion should me properly address the needs of socially marginalized backward communities.
f) Population elements such as status, study research and evaluation should be properly and effectively managed
g) Programmes should be held to increase the national income.

Policies

a) Integration and internalization of population elements will be held in the sectoral development process at all levels.
b) Reproductive health and sexual health services and abortion will be made more effective and manageable.
c) For balanced economic and social development of the country, there will be held a balance between population elements and the development process.
d) To address the challenges and issues of unemployment, other related sectoral issues and to develop inclusive programme for addressing the needs of socially marginalized, backward communities and helpless people.
e) To make an integrated and comprehensive institutional framework for effective implementation of population policies, strategies and programmes.
f) Different programmes should be launched to increase employment for the people which can give the outcome of population dividend.

g) Population policies and programmes will be held in a coordinated and effective manner.

Strategies

Effective development related programmes, monitoring and evaluation mechanisms should be implemented for the establishment the co-relation between population and development.

a) Programmes should be developed to balance the equation between population dynamics, consumption and production both at the national and local level to improve the institutional and management aspect by revising the existing the plan, policies and programmes from the point of population
b) Skill development opportunities should be provided to those who want to go abroad for employment which will help to remove the problem of brain- drain by increasing the human man power both in financing and non-financial aspects which will help to rank Nepal as a developing country in 2022 A.D
c) Different elements of the population should be integrated in social, economic and geo-political development aspects of the country.
d) Programmes should be developed to contribute to poverty reduction activities through effective population management.
e) The quality of lives of people will be improved by using the maximum the existing means and resources.
f) The health of old aged people should be improved to make them more active and the knowledge and the skill of retired people should be needed.
g) Population size should be created focusing on sustainable environment and climate change with available means and resources.
h) To implement population policies and programmes in a coordinated and effective manner, existing scattered population management should be strengthened by adopting national policies, legislation and administrative structures and adequate resources both in governmental and non- governmental agencies
i) An emphasis should be given placed on establishing an agro-based industry either in municipality or districts headquarter to increase employment in own country.

Reproductive health, family planning and abortion should be made more effective and manageable

a) Access to sexual and reproductive health services should be ensured to all general, women, youth and adolescents both in rural and urban areas.
b) Information about the means of contraceptives should be given to the couples to encourage using family planning.
c) The Access of safe abortion should be ensured ad these services should be provided to poor and marginalized groups at no costs and in a free manner.
d) Effective health services should be ensured to improve the health of both mother and baby to reduce maternal mortality in remote and backwards areas.
e) The quality of temporary methods of family planning should be increased to space births resulting in reducing infant mortality rates and maternal mortality ratio.
f) Special programmes should be implemented to protect minority groups such as Raute, Kusunda and Praja etc
g) Maternal, infant and child mortality rates demand and supply of means of contraceptives should be promoted by conducting different programmes through the means of communication.

h) Teenage and youth counseling centers in reproductive health should be established.
i) Targeted programmes should be developed for the adolescents and youth to marry after 20 years and they should given emphasis to give birth after when they have build themselves from the point of their psychology, economic and social aspects.
j) To improve late marriage and to discourage the early child birth, information, education as well as behavioural change programmes should be promoted through communication.
k) Different programmes should be attempted to keep far away from the behavior of drinking addiction and to control the sexual exploitation.

Appropriate life style and environment should be developed for healthy life style of the individuals.

a) Life expectancy should be increased by reducing mortality in the country.
b) Effective policies should be implemented for supervising for the negative impact of the distribution and production of smoking, alcohol which affect the health of people.
c) Effective plan and policies should be implemented for controlling the production and the distribution of smoking, alcohol that have negative effect on the individuals.

Management of both internal and international migration process as well as protecting the problem of urbanization.

a) An emphasis should be placed for the establishment of industrial activities to provide employment and economic opportunities in order to reduce internal migration.
b) Labour diplomacy should be enhanced and promoted to protect the rights of the labour migrants.
c) The national capacity for migration (overseas employment) should be strengthened by adopting national policies, legislation and administrative structures and adequate resources.
d) Memorandum of understanding should be established between the countries those who provided the employment for the labour.
e) An environment should be created to develop different programmes to conduct different activities from the internal migration without making any obstacles from the point of economic, social, cultural aspects of the society.
f) A planned urbanization policy should be implemented to reduce the danger of unplanned urbanization.
g) Those areas which have sufficient development of infrastructures such as water supply, electricity, communication, education and health care facilities should also be promoted in rural areas by co-coordinating with related agencies.
h) Policies should be formulated to develop small towns to integrate scattered settlements.
i) A conductive environment should be created and programmes should be developed to use remittances in the productive sector.
j) Appropriate opportunities should be created to use the existing demographic dividend.
k) The protection of the rights of migrants should be enchanced without discrimination with destination countries.
l) An effective population redistribution policy in the country should be implemented by transferring people from highly areas of population density to lower area of population density.
m) The relationship between climate change and population in the Nepali context should be identified and different programmes should be held to protect the risky area.
n) The data should be kept about the internal and international migration.

o) Steps should be taken to ensure that migration policies and processes are transparent, accountable, safe, and right-based and gender sensitive.
p) Strategies for decent and productive work of youth should be developed and implemented

Include population and development programmes in gender equality, social inclusion and sustainable development.

a) The information, education about population status should be given to the individuals through the means of communication in their local language.
b) An environment for 100% of employment of adolescents in primary and secondary level should be created to fulfill the objectives and the knowledge of maternity and sexual education.
c) Existing formal and informal education curriculum should be revisited, reproductive and age appropriate sex education should be made compulsory.
d) Marginalised groups should be mainstreamed by providing them with food, shelter, education and economic security.
e) Gender budgets should be managed to empower women to decide how many children they want.
f) Inclusive programmes should be developed to address the needs of socially marginalized, backward and helpless people.
g) Special plan, policies and programmes should be implemented to control the discrimination related to gender, age sexual choice and other misbehavior in the society.
h) Family life related education and information should be made widely available via formal and informal media.
i) Re-establishment centre should be developed to care the people who have suffered from HIV/AIDS victim of people who suffered from gender bias.
j) Access of women to all social, economic and cultural resources and their control over them including the ownership of property and business should be amended.
k) Appropriate strategies should b developed to improve the working, ability of adolescents and youth to increase their productivity.
l) Free health care facilities should be provided to those who are poor, disable and old- age people.

Integrated and comprehensive institutional framework should be made for effective implementation of population policies, strategies and programmes.

a) Data should be made as a basic requisite in formulating policy and strageties for keeping the records of population.
b) Each agency should have at least one-trained database manager to maintain up-to date statistics on their programmes.
c) The central Bureau of statistics should be strengthened with capacity and skill man power so that it is more efficient.
d) The responsibility of the CBS should be specific to coordinating data producing activities and providing feedback on research outputs and policy recommendations in the emerging and burning issues of population and social justice.
e) An advice on population related projects and programmes proposed by different agencies and determine demographic indicators, project or estimate as needed.
f) The department should support concerned ministries in effectively expanding the coverage of the vital registration system and under-take other activities related to population as required.

Legal aspects should be established to determine the existing scattered population related laws and rules to be revisited and refined as per needed.

a) The policy should be amended every three years.
b) Since, monitoring and evaluation is one of the most important components of ensuring implementation of formulated policies and programmes, it should be made effective and implementable.
c) The system of research audit should be held.
d) The impact of remittance on economic development should be monitored and programmes should be developed accordingly.
e) Population treasury should be established with plan and policies to provide fiscal help for the population management.
f) Nepal should follow the rules and regulation which are recommended by the international conference related with the plan and policies for the population management.
g) Civil registration and vital statistics should be made compulsory accordingly legal aspects.
h) Population issues will be reorganized and owned as crosscutting issues by all related stakeholders.
i) Collaboration among government, non- governmental organizations and private sector will be ensured.

Summary of the population Policy

Period	Themes
Traditional societies	Encourage marriage and people commonly think that children are old age pensions and preferred children by married couple.
Between the world war	Followed pro-natalist policy and financial rewards and services for larger families.
1945 -1970	Introduced new types of contraceptives eg oral contraceptives pills and IUD.
1970 -1980	It advised to deal policy, plan, priorities, and possible strategies by linking between population problems and other social , economic and environmental activities for sustainable development of developed and less developed countries.
First & Second 1956-61 1962-65	• Recognition of the link between population growth and consumption of resources; • Stressed to reclaim the Terai forests to absorb the increasing population • NGO initiated FP clinic (1959)
Third 1965-70	Government FP/MCH Program (1968)
Fourth to Seventh (1970-75,1975-80,1980-85, 1985-90)	• Family planning • Small family norm • Women empowerment; girl child education • Infant and child health programs (immunization, nutrition, etc) • Multi sectoral coordination of activities in population and FP
Eighth 1992-97	• Democratically elected government's plan • Balance between population growth, socio-economic development & environment. • 2-child family norm • Integrated approach for population program. • Emphasis on RH programs after ICPD 1994

Ninth, 1997-2002	• Reflected more on the outcome of ICPD 1994 . The Plan conceived a 20-year perspective plan and set targets related to demographic and social indicators.
Tenth 2002-2007	• Renewed the commitment of ninth plan • Small and qualitative family life • Addressed linkages between population and poverty
Interim plan ,2007-2010	• Adopted action plans in the Nepalese context endorsed by international conferences • Linked population dynamics with poverty and hunger • Expansion of health and population services to districts and beyond linking with other sectoral programs • Gender based violence • Geriatric program introduced
PPP	• Approved Population perspective Plan
An approach paper to the thirteen plan (2013-2016)	• To use population management efforts to create an environment in which people can lead productive and good quality lives. • Focus on population management program • Equal participation of men and women in population management program.
Population 2071	The main objectives of this policy is to establish the sustainable relationship between the population, environment and development to provide well-organized and productive services for the individuals. Moreover, for the overall development of the country, existing means and resources should maximum used to improve the quality of lives of people. and to implement and to protect the fundamental rights for the maternity care, to improve significantly the social and economic status of vulnerable groups along with promoting gender equality and social inclusion, there should be launched different programmes by integrating and internalizing the queries related to the population with development activities of the country

Conclusion

It can be concluded that various polices and program have been formulated for the implementation of population policy (sectoral), but still we have to walk a long corridor as keeping the concept of federalism in the context of Nepal. Therefore, it is being urgent need to aware the issues of population to the member of constitutional *assembly* and other concerned agencies. Additionally, need to reengineer the institutional mechanism of population division both in central and local level.

समय	मुख्य सोच
पुरातन समाजमा	बिवाहालाई प्रेात्सहन गरिन्थ्यो मानिसहरु केटकेटीलाई बुढेसकालको पेन्सिन वा सहारा मानिन्थ्यो ।
बिश्वयुद्धका बिचमा	एचय(लबतबष्किन उयष्अिथ अपनाईएको थियो । ठूलो परिवार हुनु आर्थिर्क लाभ मानिन्थे ।
१९४५ (१९७०	एर्षीक बलम क्ष्म नया प्रकारका साधनको पहिचान भयो ।
१९७० -१९८०	विकसित तथा अविकसित दुवै देशहरुको दिगो विकासका लागि जनसंख्या सम्बन्धी योजना, नीति, प्राथमिकता, रणनीति र अरु आर्थिक, सामाजिक, बातावरणका कियाकलापबीच समन्वय गर्ने सल्लाह दिईयो ।
१९८० -१९९०	परिवार नियोजन कार्यक्रम र साधन बारे सवै दम्पत्ति र व्यक्तिको अधिकारको रुपमा सवल रुपले बहस गरिएन ।
१९९० -२०००	जनसंख्या र विकास बिच समन्वय गर्ने सल्लाहा दिईयो । महिलाको शशक्तिकरण, लैङ्गिक समनता, समता, महिलालाई शिक्षा, पहिलाको समयको चाप, लिगमा आधारित भेदभाव को अन्त्य, आय र महिलाको सुरक्षमा जोड ।
एक्काईसौं शताव्दी	जनसंख्याका नीति बारेमा छलफल कसैले च्भउबिअभ्कभलत'ाभखर्भा मा जोड, कसैले केटाकेटीको मग र आपूर्तिमा जोड दिए । अफ्रिकी देशहरुले भने जनसंख्याका नीतिमा प्रजनन स्वास्थ्य कार्यक्रम, रणनीति ,सूचना तथा संचार र प्रजनन स्वास्थ्य र ज्ष्खरब्क्म्ब, विरुद्वमा आचरण परिवर्तनमा जोड दिए ।

CHAPTER 15

Sources of Demographic Data and Population Projection

15.1 Introduction

Among various types of data base, population database which provides information about the people and their welfare is of major concern for all policy makers, planners, and decision -makers of the country. Whatever the plan is made, policy is formulated and decision is taken are for the benefit of the people. Therefore, population database of the world, country, region, district, VDC/metropolitans along with settlement should be able to provide reliable, timely and relevant demographic data of the people living in respective administrative units aiming to formulate policy, plan, and program for the benefit of the people. For this purpose true information is needed and such information could be collected from various sources which have been shown as followings:

1. Population Censuses
2. Demographic Sample Surveys
3. Registration system and administrative statistics

    - Vital Registration (vital events such as births, deaths, marriage and migration)
    - Population Registers
    - Service Statistics/Official records (from health or family planning

4. Qualitative Data (ethnographic studies, participant observation, focus group discussions, life histories and genealogies, case studies and interview of key informants)

15.2 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. Other reasons for census -taking were military service and food supply. The Ancient Greeks counted the adult males in time of war and the general population when food was in short supply. Evidences of censuses have been available in earlier times i.e. in 17th 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.

In the past some countries practiced census by assembly (gathering together all the residents of an area for enumeration) and only collected group data from households. This means that the analysis of the data was simple but limited. The modern practice is individual enumeration; each house is visited an information is recorded for each individual separately.

Because a census covers everyone in a population, it is expensive and only a few basic questions (such as age, sex, marital status, birthplace, education and occupation) are asked. This is particular true in places where many people cannot read or write and the census from have to be completed by an enumerator.

Most European countries began to hold modern-type census in the 19th century. In Asia, the Indian sub - continent was covered by a census in 1872 .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^{th} century. However, there are some countries where census is also conducted every 5 years such as Japan.

Statistical standards have been steadily improving throughout the world. Better census data are essential to planner in economics, education, health, and other fields. Also newly independent countries, accurate details of the distribution were necessary before electoral areas could be determined.

In the context of Nepal, 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 2011 which is the eleventh census in the history of Nepalese census and with this census, with this 2011 census the census history has completed one century.

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. In 2011 census, the census was conducted from 3-12 Asadh, 2068 and Asadh 8 was considered as the census day. The results obtained from census are supposed to be in reference to the census day.

15.3 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 15. 1: Major Demographic and Population Surveys conducted in Nepal:

S.N	Name of the Survey	Yea Of Survey	Organi zation
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)	1996,2003,2010/11	CBS
11	Birth, Death and Migration Study	1998	CDPS
12	Nepal Labour Force Survey (NLFS)	1998, 2008	CBS
13	Between Census Household information for monitoring and Evaluation system (BCHIMES)	2000	CBS
14	Nepal Demographic and Health Survey (NDHS)	2001, 2006, 2011	MOHP
15	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 15.1 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. The latest one in this series is the Nepal Demographic Health Survey 2011. These surveys have provided reliable estimates of fertility, family planning, mortality and health indicators for Nepal which are being very useful in population and health policies formulation for years.

Census and survey are two words that we commonly hear only to confuse between these two techniques of collecting information about basically everything under the sun. Survey could be an attempt by an organization to find out the level of satisfaction among its customers about its services to a much bigger survey carried out by a government to decide on major welfare policies for different sections of the society. Survey is actually a technique that takes out a sample from a population scientifically to arrive at a decision for the entire population. The following table attempts to clarify differences between census and survey to have a better understanding of these two sampling techniques.

Table 15.2: Difference between Survey and Census

Area	Survey	Census
Define	A **survey** is a data collection activity involving a sample of the population	A **census** collects information about every member of the population.
Involvement	Census involves asking questions from the entire population while survey involves taking out a sample from the population that represent the population best from the point of view of the goal of the survey	Survey is quick and gives results quickly too while census is time consuming and takes a long time to generate results.
Cost	Survey is rather inexpensive	Census is a mammoth exercise requiring lots of money and a high number of personnel.
Time	Survey is quick and gives results quickly too	Census is time consuming and takes a long time to generate results.
Accuracy	Survey where accuracy is somewhat less.	Census is obviously more accurate

15.4 Vital Registration

A Vital registration (statistics) as defined by the United Nations, is the" continuous, permanent, compulsory, and universal recording of the occurrence and characteristics of vital events (live births, deaths, fetal deaths, marriages, and divorces) and other civil status events pertaining to the population as provided by decree, law or regulation, in accordance with the legal requirements in each country (UN, 2001). Such data are important for legal purpose along with school enrollment. Vital statistics are a major source of data for the study of population change because they are collected on a continuous basis. The origin of vital statistics begins as early as 1869 and death by social class was recorded in England beginning in 1921.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 1st Baishakh 2035 (14th April 1978) and was successfully administered in 2047 B.S in all 75 districts of the country in all VDC and Metropolitan cities. 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 five events: (a) birth (b) deaths (c) marriage (d) migration and (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 nobody 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.

15.5 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.

15.6 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 HMIS in 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.

15.7 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.

Qualitative methods consist of three kinds of data collection: (1) In-depth, open ended interviews (2) direct observation and (3) written documents. The data from interviews consists of direct quotations from people about their experiences, opinions, feelings and knowledge. The data from observations consists of detailed descriptions of people's activities, behaviors, actions, and the full range of interpersonal interactions and organizational process that are part of observable human experience. Document analysis in qualitative inquiry yields excerpts, quotations or entire passages from organizational, clinical or programs records; memoranda and correspondence official publications and reports, personal diaries and open- ended written response to questionnaires and surveys.

The data for qualitative analysis typically come from fieldwork. During field work the researchers spends time in the setting under study -a program , an organization, a community , or wherever situations of importance to a study can be observed and people interviewed.

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 and sociology since then.

Advantages

- 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.
- Useful for studying a limited number of cases in depth and describing complex phenomena
- Can conduct cross-case comparisons and analysis
- The researcher can use the primarily qualitative method of grounded theory to inductively
- Data are usually collected in naturalistic settings and are especially responsive to local situations, conditions, and stakeholders' needs
- Qualitative researchers are especially responsive to changes that occur during the conduct of a study (especially during extended fieldwork) and may shift the focus of their studies
- Determine idiographic causation (i.e., determination of causes of a particular event)

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.
- Knowledge produced might not generalize to other people or other settings (i.e., findings might be unique to the relatively few people included in the research study.
- It is difficult to make quantitative predictions and to test hypotheses and theories with large participant pools.

- It generally takes more time to collect the data when compared to quantitative research.
- Data analysis is often time consuming.
- The results are more easily influenced by the researcher's personal biases and idiosyncrasies

15.8 Population Projection:

Population projection is an exercise at calculating the future values of given population. To arrive at the future values, it may be necessary to use several techniques and interrelationship that will be discussed in this paper. As we proceed with the discussion of the methods to be adopted and type of data that would be required to project populations, it will become clear that more than the choice of techniques. It is the skill in using them and the demographic insight the researcher has of the population he/she is dealing with that are important to arrive at reliable results. Thus the crucial stage in the process of projection is at the formulation of a set of realistic assumptions regarding the future trajectory of a population as well as of the rates that would determine its growth and change. The reliability of the projected values will depend upon the validity of these assumptions and the accuracy with which these assumptions are translated into quantitative terms. The credibility of the projected values can always be questioned because of the subjectivity involved in the selection of assumptions regarding the future course.

At the outset, it must be understood that for projecting, one would require data of the current period and of the past. Projection is extrapolation from these available data. The methods of projection can be classified broadly as Mathematical and Component.

15.8.1 Importance of Population projection

One of the important functions of the demographers is to provide information on the future population, which is essential to plan for several aspects of human activities. Population projections and estimates constitute a core focus of demographic techniques. Both activities calculate the size and often the demographic characteristics of a given population in the absence of complete data such as might be available from a population census. Population projections and estimates play an important role in analysis of societal trends and in planning and policy decisions. Population projections and estimates are sometimes distinguished from each other by the statement that population estimates refer to current or past dates while population projections refer to future dates. A better distinction would be based on the time period of the input data relative to the output data. Population projections take the data on trends in population size and/or in the components of population change (births, deaths, and migration) and use mathematical models to extrapolate these trends into a time period not covered by the data. Usually, but not always, projections are done for some point in the future that is not only beyond the last date of the input data but also beyond the date that the projection is actually prepared. Population estimates relate to a past time period for which population counts are not available (such as the years after the most recent population census.

15.8.2 Methods of Population Projection

There are two types of population projection methods: Mathematical methods and Component methods.

a. Mathematical Methods

Linear Method: The simplest method of extrapolation is to compute the average annual number by which the population has increased from one to another, and to add an equal number for every year which has elapsed since the last census. Thus the formula is

Arithmetic growth rate (r) = $\left(\frac{P_n - P_0}{n} \right) \div P_0$

Or, $Pn = P_0 (1 + nr)$

where P_0 = initial population, Pn = Population at end of period, n = years, and r = annual rate of change

Exponential Method: Exponential extrapolation corresponds to the assumption that population increases from a constant rate of growth. In this situation the size of population will increase without limit, if the growth rate is positive and decrease if it is negative. The formula to calculate the population at time n is,

$$P_n = P_o\, e^{rn}$$

where P_0 = initial population, r = annual rate of change, P_n = population at end of period, n = number of years, log = natural logarithm and e = 2.71828.

Geometric Method: Geometric extrapolation corresponds to the assumption that a population increases constantly by numbers proportionate to its changing size. In this case the population change takes place at the same rate even each unit of time to each year. The formula to calculate population in the nth year is,

$$P_n = P_0(1+r)^n$$

where P_0 = initial population, r = annual rate of change, P_n = population at end of period, n= number of years

Logistic Curve Growth Function: Logistic curve function is one of the most commonly used mathematical methods to project future population when a series of data on population is available for the number of observations which is division of 3 and the time intervals between the population counts is same.

- Logistic curve depicts that population can not grow at constant rate for indefinite time.
- After completing certain stage of constant growth rate, population growth rate declines and gradually remain at stable size of population or further declines in size.

The curve (S-shaped) shows the slow growth of population at initial followed by a stage of rapid growth and finally achieving stable size of population or further decline in number.

The equation of a logistic curve that is used to project population is given by

$$P_t = \frac{K}{1 + e^{a+b\cdot t}}$$

where 'a', 'b' and 'K' are some constants and the values of these are to be determined, and ‘t’ is the time of corresponding year in the series starting from '0' for the initial year in the series.

Summary of Concepts of Population Growth

Type of growth	Description of trend	Growth rates	Absolute increment	Ratio of adjacent population
Arithmetic	growth thought constant increment at constant interval	constant	constant	changing
Geometric	Growth compounding at constant intervals	constant	changing	constant
Exponential	Growth compounding continuously	constant	changing	constant
Logistic	Growth rate changing in relation to population size	changing	changing	changing

b. Component Method

Component method is supposed to be a reliable technique to estimate the future population since it is based on the past as well as likely future trends in fertility, mortality and migration. Thus, it is the most widely used method in projecting future population.

- Population can be projected by sex and 5-year age groups separately.
- Population is projected for intervals of 5-year period.

Component method requires

- Adjusted age-sex distribution of population in the base year from which projection begins
- Selection of an appropriate model life table with expected age pattern of mortality.
- A set of three assumptions with high, medium and low variants (i.e. declining mortality and rapid decline in fertility; same level of declining mortality but medium decline in fertility; and same level of declining mortality but low decline in fertility).
- Adjustment of net-migration during the projection period, if there is any, and
- Sex ratio at birth during the projection period (1.05 can be assumed)

CHAPTER 16

International Conferences

16.1 Introduction

Analysis of the international conference plays significant role to formulate policy, plan and program design and thus, this chapter presents International Conference on Population Development (ICPD), Beijing Conference and Millennium Development Goals(MDGs).

16.2 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.*

16.2.1 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 0ther 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:

16.2.1.1 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, 2011 is around 50 percent. This survey also indicated that although the unmet need has not declined and this is still quite high i.e. around 27 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.

16.2.1.2 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 country. 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 programs 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 46 per 1000 live births and under 5 mortality is around 54 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 programs such as immunization, vitamin A supplementation and CDD, ARI, programs. However to attain a target of IMR of 35 per 1000 live births, preventive programs 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 69 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.

16.2.1.3 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. The literacy rate and school enrollment rates have been increased. The current literacy rate of Nepal is 65.9% with male literacy of 75.1% and that of females is 57.4% and school enrollment rate is 95% in primary level whereas the enrollment rate in secondary level is only 52%.

16.3 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 18 years since the conference was held in Beijing. It is of important to know what has been achieved in Nepal, since then. The following achievements have been gained on the areas of concern.

A. Women and Poverty:

Since the Beijing conference, Nepal has implemented the special plans 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. The interim plan 2067-2070 has targeted to reduce absolute poverty level to 22 percent. The poverty level has now reached to 25 percent in the year 2011 (NLSS, 2011). According to the interim plan 2013-2016 approach paper, the poverty level will be reduced to 15% by the year 2016. 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. After the restoration of Loktantra in Nepal, women suffered from armed conflict have been reduced, however women are being victims in different conflicts and the country has been implemented various programs to save women from different conflicts.

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 programs 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 step taken by the government of Nepal in these twelve points plan of action; however, their effectiveness is limited because of their weak implementation.

16.4 Millennium Development Goals

"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 economic 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 formalized the goals and targets and put forth a set of indicators to monitors progress.

Table 16.1: The Goals, Targets and Achievements of MDGs

MDGs	Indicators	progress 2010	progress till date	target 2015
Goal I Eradicate extreme poverty and hunger	population ratio having income less than 1 dollar a day	19.7	-	17
	population below daily national poverty line	25.4	23.8	21
	employed population having income less than 1 dollar a day	22	-	17
	population having food less than the minimum requirement	36.1	15.7	25
	underweight children of age group (6-59 months)	36.4	28.8	29
	children of age group (6-59 months) with stunted growth	46.8	40.5	30
Goal II Achieve universal primary education	net enrolment rate at primary level	93.7	95.3	100
	ratio of students enrolled in grade 1 and continuing to grade 5	77.9	84.2	100
	literacy rate of women and men of age group (15-24 years)	86.5	88.6	100
Goal III Promote gender equality and empower women	ratio of primary level boy and girl student	1	1.02	1
	ratio of secondary level boy and girl student	0.93	0.99	1

	ratio of boy and girl students at higher education	0.63	0.59	1
	literacy rate of women and men of age group (15-24 years)			
Goal IV Reduce child mortality	children below the age of one year vaccinated against measles	85.6	87.7	90
	child mortality rate below the age of 5 years (per 1000 live births)	50	54	54(38)
	infant mortality rate (per 1000 population live births)	41	46	34(32)
Goal V Improve maternal health	maternal mortality ratio (per 1,00,000 population live births)	229	-	213(134)
	women using skilled health worker for maternity (percent)	29	36	60
Goal VI Combat HIV/AIDs , malaria and other diseases	age group between 15-49 with HIV/AIDS infection	0.49	-	0.35
	infected with malaria (in per 1000 population)	5.7	0.19	3.8
	tuberculosis prevalence rate (per 100 thousand)	244	244	210
	mortality rate from TB (per 1,00,000 population)	22	22	20
Goal VII Ensure environment sustainability	Forest covered area (%)	39.6	-	40
	Population with access to sustainable water source (%)	80.4	83	73
	population with sustainable access to improved sanitation	43	62	53
	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.	-	-	-
Goal VIII	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.	-	-	-

Source: Economic survey, 2013

The Millennium Declaration has set 18 targets and 48 indicators for eight goals, which are to be achieved for most goals over a 25-year period between 1990 and 2015. 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.

16.4.1 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 three year interim plan (2010-2013). 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. After the establishment of Loktantra, the government of Nepal has focused on women empowerment and a positive discrimination system has been implemented. Thirty three percent seats have been secured for women in every level of decision making including in the Member of Parliament and in every sectors of employment irrespective of civil service. This reservation of posts for women have made them empowered and has created environment of social inclusion. 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.

From the Ninth Plan (1997-2002), the five year and three year plans of Nepal has focused on poverty alleviation, The three year plan 2010-2013 has the sole objective of reducing absolute poverty level to 22 percent from the poverty level 31% in 2003/4.The current level of absolute poverty has been reduced to 25% in the year 2011 (NLSS, 2011). yet The Plans from the ninth plan has been 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 programs 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.

The government of Nepal has focused for universal primary level of education for both boys and girls and various programs to increase school enrollment to 100% in primary level such as campaigns, free education, school feeding programs and with these programs, the enrollment rate has been increased and the current level of primary level enrollment has reached to 95% and it is in track of achieving MDG goal. Similarly, the government of Nepal has implemented programs for women empowerment and gender equality. These programs include the participation of women in country's socio-economic opportunities and decision making. The reservation of quota in important positions in political and administrative posts is one of the program implemented for women empowerment and gender mainstreaming. Besides social inclusion and positive discrimination programs has been the milestone in gender equality. In health sector, to save women, children and those who are in risks of HIV transmission and malaria, various awareness and service delivery programs have been implemented. Child immunization, women and child nutrition programs including CBNCP program and safe delivery incentive program *(Ama Surakchha Program*), Family Planning Programs and HIV/AIDS and Malaria eradication programs are the important programs implemented to achieve MDG goals. As a result, the infant mortality of Nepal is reduced to 46 per 1000 live births and under and five mortality rates has been decreased to 54 per 1000 live births (NDHS, 2011) and maternal mortality has decreased to 170 per 100000 live births. The awareness about HIV/AIDS has been increased (NDHS, 2011). The government of Nepal has focused on environmental protection as well. The Ministry of environment has been working in a collaborative way with other stakeholders of government and non-governmental sectors.

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 17

Population and Conflict

17.1 Introduction:

Almost one third of the world's population lives in conflict-affected low-income countries. Yet little is known about the effects of conflict on household welfare, behaviour and poverty. By 2030, 60% of people will live in cities. What's more, 32% of the world's urban population currently lives in slums. These residents rely increasingly on non-state channels to access services including security and the provision of justice. In both low and middle income countries, poverty itself is also taking on an urban character, and cities are becoming sites of extreme and chronic vulnerability to poverty, crime and violence. There are various types of conflict like as colonial conflict, domestic conflict and managerial conflict collected data based on NDHS, 2011 and available data from INSEC, 2006.

Lewis Coser (1913-2003), defined conflict as "a struggle over values and claims to scarce status, power and resources in which the aims of the opponents are to neutralize, injure, or eliminate their rivals. Conflicts between intergroup and intra-groups are part of social life. Conflict is part of relationships and is not necessarily a sign of instability. Conflict serves several functions like as leads to social change, stimulate innovation new things in the society. Gender base violence can be considered as part of domestic conflict.

Gender-based violence is defined as any act that results in, or is likely to result in, physical, sexual, or psychological harm or suffering among women, including threats of such acts and coercion or arbitrary deprivations of liberty, whether occurring in public or in private life (United Nations, 1993; United Nations, 1995).
Domestic violence, one form of gender-based violence, is defined in Nepal as any form of physical, mental, sexual, or economic harm perpetrated by one person on another with whom he or she has a family relationship, including acts of reprimand or emotional harm
Source: (Ministry of Law and Justice, Nepal, 2009).

The International conference on Population and Development, 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.

Influential factors of household level conflict could be socio economic factors, income inequality, and discrepancy between male and female child, husband and wives, sexual relationship and so on. However, little information has been collected in regards this issues.

Dimension of Conflict

17.2 Spousal violence

Kohrt et al. reported that women were at higher risk due to the experience of domestic violence and other stressful events related to their intimate partners. Spousal and among family could be consider household level conflict. Wife beating is the most common form spousal violence. In many developing countries there is widespread acceptance of wife beating, both men and women because of the community held norms about gender roles. The subordinate roles of women in the family, as well as cultural and social factors

contribute to spousal violence against women. In this context first time, considering the importance of these types of information the NDHS, 2011 has been collected information limiting gender base violence and highlighted the key findings.

- Twenty-two percent of women age 15-49 have experienced physical violence at least once since age 15, and 9 percent experienced physical violence within the 12 months prior to the survey
- Twelve percent of women age 15-49 report having experienced sexual violence at least once in their lifetime.
- Overall, one-third of ever-married women age 15-49 report ever having experienced emotional, physical, or sexual violence from their spouse and 17 percent report having experienced one or more of these forms of violence in the past 12 months.
- Among ever-married women who had experienced spousal violence (physical or sexual) in the past 12 months, more than two in five reported experiencing physical injuries.
- It is not common for women in Nepal to seek assistance from any source for violence they have experienced. Nearly two in three women have never told anyone about the violence they have experienced.

17.3 Armed conflict

Civil wars have been the dominant form of conflict around the world since World War II, resulting in approximately 20 million deaths. But it's not just sociologists who are diving into the roots of conflict. Increasingly, economists are examining these events to learn more about civil wars and how to prevent them. Quy-Toyan Do and Iyer Lakshmi (2014) documented that; Unified Communist Party of Nepal (Maoist) announced 'people's war against the government of Nepal in 1996. The chief objectives of the activist movement were to establish a people's republic and set up a constituent assembly to draft a new constitution. After the 10 years of conflict, it was formally ended in November 2006 with a comprehensive peace agreement between an alliance of political parties and Maoists, which stipulated the participation of the CPN-M in government and the monitoring of weapons by a United Nations Mission in Nepal.

Table 17.1 shows that the highest numbers of people killed by state were political workers while as police personnel were killed by Maoist side. During this period more than thirteen thousands people lost their life, out of these more than 8, 000 people were killed by state and nearly 5 thousand people were killed by Maoist.

Table: 17 .1 Number of People by State and Maoist by Occupation

Occupation	By state	By Maoist	Total
Agricultural workers*	1448	933	2381
Teachers	59	86	145
Political workers	5264	453	5717
Police personnel	16	1348	1364
Students	204	140	344
Civil/private service	53	583	639
Social workers	6	7	13
Business person	57	127	184
Workers	157	84	241
Health workers	2	3	5

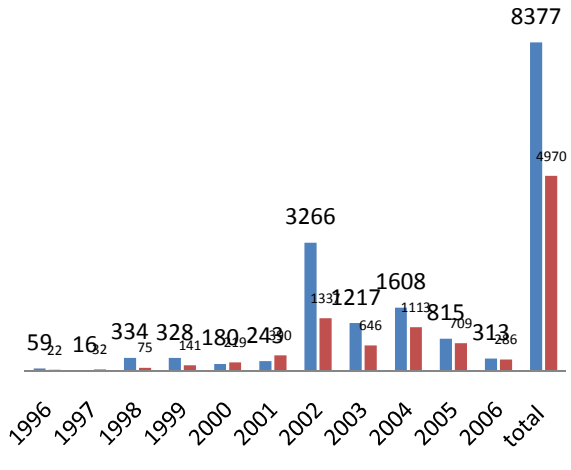
Army personnel	23	666	689
Security Personnel	3	136	139
Photographers	2	3	5
Journalists	9	4	13
Law professionals	0	2	2
Prisoners	1	3	4
Dacoits	4	4	8
Engineer	0	1	1
Refugee	0	0	0
Unidentified person	1069	387	1456
Total	8377	4979	13347

Source: Informal Service Sector (INSFC) 2006 www.inseconline.org

*Workers denote wage workers, industrial workers and transportation workers

The figure 17.1 shows that year wise no of victims by state and Maoists in connection with people war. Approximately 13,000 people *directly* lost their lives due to conflict and countless others *indirectly*. Development processes slowed down, law and order deteriorated, basic infrastructure and services were crippled, and the economy gradually collapsed The figure shows that in 1996, 59 people were killed by state while as this number was lower (22) than that figure. The highest number of political leader were killed in 2002this number was fluctuates than the latter years.

Figure 17.1: No. of Victims Killed by State & Maoists in Connection with"People War" 13 Feb. 1996 - 8 Oct. 2006



Source: Informal Service Sector (INSFC) 2006 www.inseconline.org

The conflict officially ended in 2006, with the signing of the Comprehensive Peace Accord (CPA). In 2007, the Interim Constitution of Nepal was adopted, replacing the 1990 Constitution of the Kingdom of Nepal. It created an interim Legislature-Parliament, a transitional government reflecting the goals of the 2006 People's Movement - the mandate of which was for peace, change, stability, establishment of the competitive multiparty democratic system of governance, rule of law, promotion and protection of human rights, full press freedom and independence of judiciary based on democratic values and norms.

17.4 Impact of Armed Conflict in Nepal

There are some positive and Negative impacts of conflict. Collier and Hoeffler (1998) conducted an empirical analysis of the geographic, economic, and social factors that contributed to the spread of civil war in Nepal over the period 1996-2006. The study revealed that Conflict-related deaths are significantly higher in poorer districts and in geographical locations that favor insurgents, such as mountains and forests; a 10 percentage point increase in poverty is associated with 25-27 additional conflict-related deaths.

In addition, the relationship with poverty and geography is similar for deaths caused by the insurgents and deaths caused by the state. Furthermore, poorer districts are likely to be drawn into the insurgency earlier, consistent with the theory that a lower cost of recruiting rebels is an important factor in starting conflict. On the other hand, geographic factors are not significantly associated with such onset, suggesting that they instead contribute to the intensity of violence only after conflict has started. Finally, in contrast to some cross-country analyses, ethnic and caste polarization, land inequality, and political participation are not significantly associated with violence.

Shakya Anjana (2009) carried out a study about Social impact of armed conflict in Nepal: cause and impact and she concluded that the conflict has had both positive and negative impacts. There has been an increase in awareness of rights and people are now able to fight against social, cultural and political discrimination. However, the society across the nation has been uprooted and people of all ages, sex and caste have had to bear with untold violence, torture, death and trauma. Further, she concluded that Nepalese people across the country have become more violent. According to her the positive and negative impact are as following

17.4.1 Positive Impact

Some of the people get opportunity to joined Army , some of the people received a large amount of money and involved in their business , housewives became active in public spheres to protect their children, husbands, brothers and relatives or were forced to join Maoist insurgency; many in leading positions at district level. Another impact of conflict is the radical increase in the representation of the women in the Constitution Assembly.

The traditional assumptions that girls and women should be coy, docile, shy and fearful in rural women seem to have faded away; their self-confidence and vocal expressions give the impression that the 'culture of silence' has been broken to a large extent. Women have started to realize the importance of political participation and representation. Another aspect of positive transformation is the status of widows. They have started wearing colorful cloths, tika, glass bangles rather than wrapping themselves with white saris. This protects them from male prey as a single woman with no male protection. They have succeeded in breaching the traditional patriarchal value system.

The sanctions of Maoists on alcohol and gambling positively contributed in social norms and values. Social ills like domestic violence, polygamy, gambling decreased significantly in the communities during that time. The women are not the timid, "karma" acceptors any longer but have transformed into those who can defend themselves from their oppressors including their husbands. Women have started to fight back i.e. violence; they have started fight back their husbands.

17.4.2 Negative Impacts

Many infrastructures like as drinking water systems, telecommunication towers, barracks, suspension bridges, government offices including Village Development Committee Offices and health posts adjacent to it and police post were destroyed during the period of war because of this rural people were deprived from access to basic needs. Remaining Mines and IEDs (Improvised Explosive Devices) used during the war are

being problematic now because women and children became victims while collecting fuel and fodder from the jungle and while fetching water from taps and injured .

Women's social and political awareness has changed radically. Women have also realized the need to be part a group to ensure their rights. On the other hand men migrated internally or externally during the conflict and women had filled the vacuum they left at home and community. Women have taken public leadership roles and are aware of their rights however, men's attitude and behavior has not changed which has a created a volatile situation because of this gender gap is widening.

Armed conflicts create enormous upheaval at the personal, family, societal, national level. Conflict caused immense pain, both physical and emotional but at the same time it created opportunities, space for leadership and empowerment of women, men, and marginalized communities, which never existed before.

People seem to grasp these opportunities for their own growth, as well as for social justice. At the same time, the concept of home as safe refuge Due to armed conflict, trust level amongst people within and beyond community has been shattered and suspicious of every new face.

Many joined Maoist force to avenge for the torture, disappearances, and deaths of family members and friends by the State forces. Thousands of people have been killed, disappeared and imprisoned. Many are waiting to take revenge for previous atrocities from both sides. Many innocent people who had nothing to do with the armed conflict got entangled and trapped in the vicious cycle of violence.

During the conflict many people were displaced. Some of the groups who were displaced were VDC secretaries, teachers, political cadres, and youths. People left their homes and communities for their security. The first targets of Maoist were the feudal landlords. Many of them either were killed, tortured or displaced. However, their displacement, on the contrary had negative impact on poor people as the local people could not get jobs. Children, youth and ageing people were sufferer from armed conflict. Dropout, absenteeism, and youth migration was high due to the armed conflict and domestic violence, divorce, crises of confidence in the society has been increased due to the feeling of revenge immature political concept.

Conclusion

It can be concluded that conflict occurred in the society due to the social, economics, and political factors. Armed conflict has both positive and negative effect in Nepalese society. In the positive side increase awareness in the women, *dalit* and schedule types people and many people have opportunity for the development of the leadership. In the negative side many infrastructure like as water system, electricity, people life and other so many things were destroyed and many people like children, women and old people, police personnel and other people lost their life and ultimately contributing poverty.

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