Population Situation Analysis
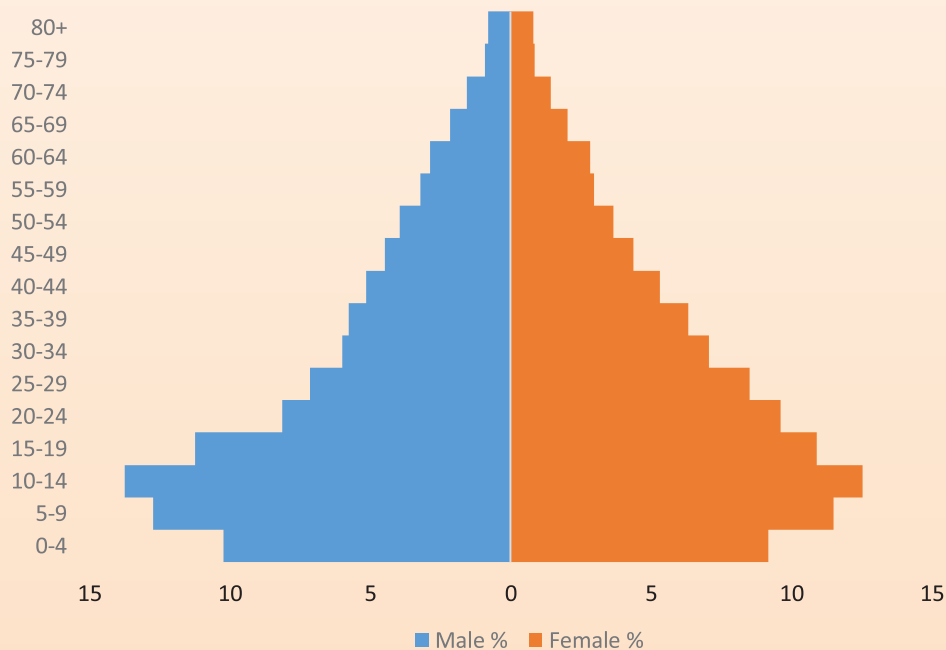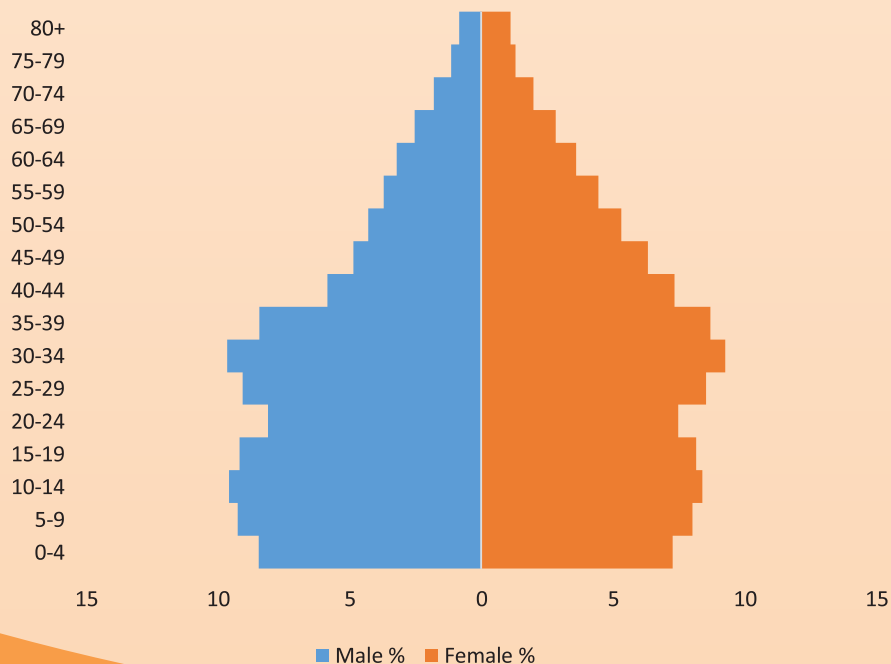# of Nepal

(With Respect to Sustainable Development)

Population Pyramid, 2011

Population Pyramid (Projection), 2031

Executive Summary

The year 2014 marked the end of the successful implementation of a 20-year Programme of Action (PoA) endorsed by the International Conference on Population and Development (ICPD) held in Cairo, Egypt in 1994. In September 2014, in its resolution 65/234 on the review of the implementation of the PoA of the ICPD and its follow-up beyond 2014, the General Assembly underscored the need for a systematic, integrated and comprehensive approach to population and development, one that would respond to new challenges relevant to population and development and to the changing development environment, as well as reinforce the integration of the population and development agenda in global processes related to development[1]. The findings and conclusions of the operational review suggest a new framework for population and development beyond 2014 built on five thematic pillars: (i) health; (ii) dignity and human rights; (iii) place and mobility; (iv) governance and accountability; and (v) sustainability.

At the United Nations Sustainable Development Summit on 25 September 2015, world leaders adopted the 2030 Agenda for Sustainable Development, which includes a set of 17 Sustainable Development Goals (SDGs) to tackle pressing global issues by 2030. The Government of Nepal, National Planning Commission (NPC) produced a national preliminary report in 2015 on the SDGs and is currently refining the targets and integrating them in national plans. This is expected to guide Nepal in translating SDGs into actions at all levels, national, regional and local. It contains indicators by goals and their quantitative benchmark data and targets. In addition, the United Nations Country Team (UNCT) Nepal has completed a Common Country Assessment (CCA) as part of the formulation of its new United Nations Development Assistance Framework (UNDAF) for 2018-2022.

Nepal is also aspiring to graduate from the least developed country (LDC) to a middle-income country by 2030, the SDG indicators set by the government of Nepal will help in achieving these goals. The NPC has also endorsed a new three year Development Plan, the 14th Plan (2016/17-2018/19), which aims to incorporate SDG priorities for Nepal.

Against this backdrop, this report on Population Situation Analysis (PSA) of Nepal has been prepared to provide a sound basis for evidence-based policy dialogue for integrating core population dynamics issues in the new sustainable development plan of the Government of Nepal to ensure that '*no one is left behind*'. This report draws on Nepal's demographic transition and resulting population momentum using key demographic variables for the next 15 years (2016-2030) in the context of the new federal structure of the country. Evidence is generated using the five thematic pillars of population and development to inform integration of key population dynamics issues in national development priorities to harness the demographic dividend and realize national SDGs.

The major sources of data used in the analysis include: population and housing censuses, demographic and health surveys, multiple indicator cluster surveys, living standards surveys and relevant management information systems data. Besides, a wide range of published research and study reports have been reviewed. Where appropriate the quantitative data and indicators that have been presented are accompanied by meta-data underpinning the interpretation of the levels and trends implied by the data.

Nepal, like many of the South Asian countries, has been undergoing rapid demographic changes during the last few decades. In recent years, in Nepal, fertility and mortality have been declining fast. Between 1961 and 2001, the average annual population growth rate was 2.25 percent. Since then, the population rate has declined. Between 2001 and 2011, the average annual growth rate was 1.35 percent. The low growth during

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1 Framework of Actions for the follow-up to the Programme of Action of the International Conference on Population and Development Beyond 2014, Report of the Secretary-General, United Nations – Accessed at: https://www.unfpa.org/sites/default/files/pub-pdf/ICPD_beyond2014_EN.pdf

this period is attributable to a large number of the absentee population (estimated at around 1.92 million as of 2011). It can be expected that many members of the absentee population will return to Nepal when they retire or otherwise leave the countries where they currently reside. Nepal's population, estimated at 26.5 million as of 2011, is projected to grow to 30.4 million by 2021 and 33.6 million by 2031 (CBS, 2014).

Nepal's population is in transition. It is currently in *Stage II* (death rate and birth rate are low, but death rate remains slightly higher than birth rate), but fast approaching *Stage III* (death rate and birth rate are low). While both the birth and death rates in Nepal are low, the birth rate is still higher than the death rate. According to data from 2011, the crude birth rate (CBR) is around 24 per 1,000 population but the crude death rate (CDR) is only around 7 per 1,000 population.

The working age population (between 15 and 64 years of age) has been increasing in Nepal, while the proportion of the young age population has been declining. In 1991, the working age population was 52.9 percent of the total male population and 55.3 percent of the female population. In 2011, the male working age population had increased to 57.9 percent and the female working age population had increased to 61.6 percent. The relatively lower proportion of working age men to women is likely attributable to the fact that many men leave the country for work.

Due to these factors, in Nepal, a demographic dividend has begun. The demographic dividend is the accelerated economic growth that may result from a decline in a country's mortality and fertility and the subsequent change in the age structure of the population. With fewer births each year, a country's young dependent population grows smaller in relation to the working-age population. With fewer people in need of support, a country has a *'window of opportunity'* for rapid economic growth if the right social and economic policies developed and investments made[2]. There is, therefore, a window of opportunity for Nepal to take advantage of the demographic dividend for economic growth and investment in the youth of the country.

Nepal currently has a historically high young working age population. Therefore, investments in human development targeting adolescents and youth are critical to ensuring that they have the capabilities and opportunities to define their futures and to spur the innovations needed for a sustainable future. It is also necessary to protect their human rights, develop their capabilities, secure their sexual and reproductive health and reproductive rights, and prepare them for productive and creative activities to boost the potential economic growth. In addition, Nepal needs to cater for increasing ageing population and pay special attention to persons with disabilities and indigenous population groups approaching extinction.

Spatial distribution of the population shows an ever declining share of the mountain and hill population compared to the Terai population. In 1971, the proportion of the total population living in the mountain and hill regions combined was 62 percent, this declined to 50 percent by 2011. It is projected that by 2031 this proportion will shrink to 47 percent although the land mass in the mountain and hill regions is 77 percent. Among the seven federal States, State Three's share of total population is 21 percent followed by State Two with 20 percent, States One and Five have 17 percent each, State Seven 10 percent, and State Four nine percent. The ranking of the projected populations for the seven States remains the same, even until 2031 (CBS, 2014).

The total population of Nepal comprises of over 125 caste/ethnic groups. These can be broadly categorized into five groups: Chhetri/Bahun, Janajati, Terai castes, Dalit, and Muslim. The largest group is Janajati (36%), followed by Chhetri/Bahun (31%), Terai castes and Dalit both (14%) and the minority Muslim (4%). In four out of seven States the largest group is Janajati, in two States it is Chhetri/Bahun and in one State it is Terai castes.

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2   Source: James Gribble and Jason Bremner. 2012. The Challenges of attaining the demographic dividend. Policy Brief. (Washington, DC: Population Reference Bureau, September).

The circumstances in which the average Nepali lives is still far removed from the targets the SDGs seek to achieve. Overall, poverty has declined but it has worsened in the high mountain region and in urban centres. School enrolment for girls has improved substantially but the dropout rate is high, they are victims of early marriage and a structurally patriarchal system. Discrimination toward women and girls is rampant, son preference is high and employment opportunities for females is low. They are often victims of physical and sexual violence. This is high among women and girls in the Terai, among Dalit and women with no education. The sex-selective abortion practice appears to be increasingly evident in some parts of Nepal as 12 of Nepal's 75 districts, which comprise over 25 percent of the total population, show sex ratio at birth over 110 (per 100 females).

The changes in population health over the past three decades are striking and yet aggregate improvements mask inequalities between sexes, among geographic regions, sociocultural groups and wealth quintiles. The persistence of under achieving sexual and reproductive health outcomes among hard to reach population groups underscores the near impossibility of further progress in the realization of health for all persons without sustained attention to strengthening the reach, right, and equity-based, comprehensiveness and quality of health services and systems. In the area of sexual and reproductive health and reproductive rights, Nepal has passed an abortion law and has several policies and programmes in place. However, when it comes to implementing these policies and programmes little is done to ensure the measures are in place and not abused, with the aforementioned sex-selective abortion becoming increasingly evident in some parts of the country.

In Nepal, human rights violations against women and girls, including gender-based violence, harmful practices, such as child, early and forced marriage, women's and girl's unequal access to education, and women's unequal access to employment, leadership, and decision-making, constitute major threats to their dignity and well-being. This has a knock on effect to their families and communities, as well as creating barriers to the achievement of inclusive sustainable development. The full realization of gender equality and women's empowerment is, therefore, imperative. Furthermore, the evidence reviewed herein highlights a growing body of social research demonstrating that stigma, discrimination and violence, and thereby the exclusion of persons from full participation in society, have negative costs that manifest in their physical and mental health and in their potential productivity and achievements. In order to secure the benefits to the development of human creativity, innovation and productivity, greater investment, now and in the future, is required to create more just, non-discriminatory, non-violent societies.

For many in Nepal migration is more a necessity than a choice for family or individual survival. Sustainability through security of mobility and place means ending forced migration and supporting people who do want to move. For those who want to remain where they are, it means building better livelihood options and creating social conditions of dignity, equality, and opportunity, in order to decrease push factors.

The analysis presented in this report highlights some of the data gaps and measurement challenges for each of the goals of the 2030 Agenda. Given the enormous data need required by the SDGs, Nepal is not currently in a position to produce the data and statistics required for monitoring progress in the attainment of all 17 goals and 169 targets of the 2030 Agenda. Concerted efforts to strengthen the capacity of national statistical systems will be critical to the measurement of progress towards achieving the SDGs, informed decision-making and strong accountability. At the same time, the statistical community will need to develop new methodologies, as currently there are no internationally agreed statistical definitions and guidelines for some indicators. Nepal, therefore, needs to strengthen data collection, analysis, and use.

Data is available from population censuses, vital registration systems, routine administrative systems and periodic sample surveys, but importantly, their overall quality must improve. Sample survey data is of comparable standard but it does not capture all types of data the country needs. Vital registration systems

have to be developed and strengthened to allow it to be an alternative source of data for development planning and monitoring.

The report concludes with a set of broad policy implications for Government of Nepal and relevant stakeholders of Nepal's sustainable development.

1. Prepare for a growing population

Until 2001, the fertility rate in Nepal was high, but the mortality rate was declining, resulting in a moderate rate of population growth. Despite declining fertility and mortality in recent years, Nepal's population, which was 26.5 million as of 2011, is projected to grow to 30.4 million by 2021, and 33.6 million by 2031. In order to maintain social and economic developments that have so far been achieved, and to make greater progress in the years to come, Nepal needs to make preparations to meet the challenges arising from this dual situation.

2. Plan for potential returnee migrants

Between 1961 and 2001, the average annual population growth rate was above 2 percent. Since then, the population rate has declined. Between 2001 and 2011, the growth rate was 1.35 percent. The low growth during this period is attributable to the large number of the absentee population; estimated at around 1.92 million. It can be expected that many members of the absentee population will return to Nepal when they retire or otherwise leave the countries where they currently reside. Nepal, therefore, needs to plan for these potential returnee migrants in order to sustain the increased population size.

3. Make the most of demographic dividend

Since the demographic dividend has begun in Nepal, with the growth of the working age population becoming higher than the growth of total population, Nepal must prioritize investment in education, work skills, empowerment, and employment for young people to reap the benefit of the demographic dividend.

4. Introduce policy interventions to retain population in their place of origin

The analysis of migration data demonstrates that the volume of internal migration to the Terai increased in terms of absolute number in every subsequent census. The Terai as a safety valve for the rapidly growing population of the highland zone cannot be a long-term solution. The Terai itself is increasingly under pressure to accommodate a large number of internal migrants, the growth resulting from its own natural increase and apparently increasing immigration. Given the declining job opportunities in foreign countries for the Hill emigrants, it has now become necessary to think of plans and programmes that can sustain the Mountain and Hill population in their place of birth.

5. Streamline urbanization

In 2011 there were 58 municipalities, with the proportion of urban population to the total population at 17 percent. However, by 2015 this number increased to 217[3], resulting in the proportion of the population living in municipalities increasing to 42 percent. In order to determine what constitutes a municipality and manage expectations, it will be important to have clear criteria in place and apply these consistently. The Government of Nepal should continue to promote inclusive and sustainable urbanization, including access for all people to adequate, safe and affordable housing, and basic services.

6. Eradicate poverty uniformly

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3   Total number of municipalities and metropolitan cities has increased to 246, as per the latest report of the Government of Nepal

Poverty levels have decreased over the years in Nepal. However, there are zones, areas, and social groups where this reduction has not had a significant impact. The poverty reduction programme should focus on the areas and groups that have not made much progress so far. The initiatives in the areas of population and development, which began with the ICPD in 1994, should continue. This will contribute to achieving SDG 1, ending poverty in all its forms everywhere.

7. Provide schooling and a skill learning environment for young girls to avoid early marriage

Despite the Government law of banning early marriage, a sizeable proportion of girls are married early. This can be reduced by creating a conducive environment to give these girls agency over their own future and thereby hopefully avoiding early marriage.

8. Empower girls and women to lead a decent life

Provide ample opportunities and freedom to girls and women to live a life of dignity and freedom. Enact policies and laws to punish any acts that reinforce harmful practices that help to continue or strengthen harmful practices such as early marriage, dowry, Chhaupadi (isolation of females from their family, during menstruation), and any other practices that subjugate females.

9. End gender-based violence

Research shows that, in Nepal, about one in five women face physical violence and about one in eight women face sexual violence throughout their life. The perpetrators are often their intimate partners. There is therefore a need to ensure strong implementation of laws that penalise the perpetrators, provide services to support survivors and promote women and girls' empowerment at all levels.

10. Recognize and address harmful practice of gender-biased sex selection

In Nepal, sex selection and son preference are topics that need to be explored extensively. Some sources of data show an unnatural rise in SRB in certain areas of Nepal. Sex selection in favour of boys is a reflection of pervasive socio-cultural and economic injustice and discrimination against women and girls and may also have significant implications for future population dynamics in the country. Therefore, this calls for further trend analysis and research to generate evidence to substantiate the existing knowledge related to the skewed sex ratios at birth.

11. Reduce births to adolescent mothers

Births to adolescent mothers has decreased over the years, however, it remains high at 71 births per 1000 adolescent mothers[4]. On average, the number is higher (80 births) in rural areas than in urban areas (33 births), moreover, it varies considerably between regions. As adolescent girls face huge risks during this period, comprehensive sexuality education as well as sexual and reproductive health programmes must be geared to these adolescents to ensure that underage pregnancy is reduced.

12. Address the needs of elderly population

With gradually improving health conditions in the country, people are living longer. As of 2011, the number of people 60 years of age and over was approximately 2.5 million. Social protection programmes should be designed to address the needs of the increasingly large elderly population.

13. Provide care and support to the disabled

The government has a number of programmes to take care of the disabled, but this is not sufficient. Over two percent of the total population are disabled; the scale of support needs to be raised.

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4   Key indicators from the 2016 DHS were released at the time of publishing of this report. They show an even higher number of births to adolescent mothers. Subsequent updates of the PSA will reflect the latest estimates.

14. Mainstream indigenous peoples

In Nepal, there are more than 62 indigenous groups; they should be given opportunities to sustain their own cultural heritage and be provided opportunities commensurate with full social, political and economic integration to allow them adequate and equitable access in the prevailing political system.

15. Strengthen social protection system

Specific aspects of social protection systems, relevant to the wellbeing of families and households, such as increasing efforts to ensure health, education and welfare services, and supporting and assisting vulnerable families (divorced/separated women), should be prioritized in policies and plans of the government.

16. Create an environment for all to attain the highest standard of health

Numerous UN and bilateral development agencies have defined a human rights-based approach to health as one that aims to realize the right to the highest attainable standard of health. The human rights based approach to health, based on seven key principles: availability, accessibility, acceptability, quality of facilities and services, participation, equality and non-discrimination, and accountability, should be adopted and implemented. Efforts must be made in making the provision of services and underlying social determinants affecting the sexual and reproductive health of women and girls, reflect the expansion and strengthening of a human rights-based approach to health.

17. Formulate policies and programmes to drastically reduce early age mortality

Despite good gains in early age mortality reductions in Nepal, more efforts are needed to reduce mortality in the first month of life and sustain healthy life until the child is five years old. Programmes must be selective in focusing in the areas or communities where early age mortalities are high.

18. Improve nutritional status of children and mothers

Nutritional status of pregnant mothers and new-born children such as height, weight of children, anaemia, and nutritious food during pregnancy, must be addressed. Special attention should be paid to young mothers as they are more susceptible to complications during and after pregnancy.

19. Ensure universal access to sexual and reproductive health and reproductive rights (SRH/RR)

Policies are in place to address reproductive health and rights of women, however these policies are poor in implementation. A strong and robust implementation mechanism must be designed to empower women to exercise their SRH/RR.

20. Strengthen family planning programme

Data shows that Contraceptive Prevalent Rate (CPR) for modern methods is stagnant. However, the practice of family planning can contribute to good health and wellbeing of women. Policies should be made to enable women and men to practice safe family planning methods, while at the same time unmet need for FP should be addressed.

21. Strengthen governance and accountability

Sustainable development cannot be achieved without evidence-based governance. Effective governance demands good statistics to monitor progress and to hold leaders accountable for their activities and achievements. Investing in statistical capacity in demography, public health, human rights, migration, economic growth, employment, and climate change makes it possible to understand their linkages and impact on sustainable development, and to shape the policy process.

22. Strengthen disaggregated data collection, analysis, and use, for evidenced based planning and monitoring at the national and sub-national level

In line with "*leaving no one behind*" and Nepal's federal structure, Nepal should ensure adequate evidence-based measures that allow monitoring of inequality and inequity in access to public services, in addition to accountability structures and access to information. This evidence gathering should include sampling that will enable stratification and comparisons by caste and ethnicity, gender, age (including youth and older persons), persons with disabilities, household wealth, and with greater attention to spatial circumstances. Especially important is evidence that reflects insecurity of place, such as slums or informal settlements, among recent migrants and internally displaced and conflict-affected persons.

Foreword

The youth of Nepal can find themselves both in a vulnerable and advantageous position. With support from family, government, and society, the youth of today can thrive and help build a prosperous and peaceful Nepal. When the youth of Nepal have the advantages of equality, good health, strong education and the ability to decide their own future, then the country as a whole, benefits.

This analytical study on Population Situation of Nepal suggests that the time to invest in the youth of Nepal is now. With the window of opportunity open investment must be made to ensure all girls and boys have the chance to develop their skills, find employment, and contribute to economic growth. To capture the demographic dividend, Nepal needs to ensure that the youth of today can secure their reproductive health rights, which they have access to family planning services, creating an environment for girls to have equal opportunities to boys in education, and that decent jobs are created for these skilled individuals to access. Only then can Nepal as a whole utilise the demographic dividend, capturing the window of opportunity promises to transform the failures of Nepal's youth and ensure no one is left behind.

The consequences not to seize upon this opportunity are too great. Therefore, developing policies and sincere investments to secure their future requires governments know the size, sex, location, and age structure of their present and future populations. Data collection, management, and analysis is key in ensuring that the most marginalized members of Nepali society are reached, that their voices are heard.

In promulgating the new Federal Constitution and committing to the realization of the 2030 Agenda for Sustainable Development, Nepal recognized that the dignity of the individual is fundamental and that the Agenda's Goals and targets should be met for all people and for all segments of society. Ensuring that these commitments are translated into effective action requires a precise understanding of target populations. However, the disaggregated data needed to address all vulnerable groups— including children, youth, persons with disabilities, people living with HIV, older persons, indigenous peoples, refugees, internally displaced persons and migrants—as specified in the 2030 Agenda, are sparse. The analysis of some socio-demographic variables included in this study shows how data disaggregated by age, sex, states, and caste/ethnic groups can highlight significant variations.

We hope that this study can contribute to generating some of the evidence required to inform policies and plans, especially at the sub-national level, as the country moves towards a federal structure where local investments and localized strategies and investments will be crucial.

Finally, I would like to extend my appreciation to the study team including Dr. Yagya Bahadur Karki the lead author (former member of the National Planning Commission), and UNFPA Country Office colleagues Bijay Kumar Thapa, Tirtha Man Tamang, and Johnnie Auld, for the preparation of this report. I also acknowledge the contributions from our colleagues Sabrina Juran, Population and Development Branch/UNFPA Headquarters, and Christophe Lefranc, UNFPA Asia and Pacific Regional Office, for their valuable feedback on the draft report.

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Disclaimer:

This report has been prepared by Dr. Yagya Bahadur Karki, a senior demographer and former member of the National Planning Commission, Government of Nepal with support from technical staff of the UNFPA Country Office, Nepal. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of UNFPA. The analysis is based on the available published datasets as of end 2016, including population and housing census, national household surveys and other administrative data. The report will be updated as and when new data becomes available.

Contents

Acronyms and abbreviations

ADB	Asian Development Bank
ANC	Antenatal Care
ASRH	Adolescent Sexual and Reproductive Health
BMI	Body Mass Index
CBS	Central Bureau of Statistics
CBR	Crude Birth Rate
CCA	Common Country Analysis
CDR	Crude Death Rate
CPR	Contraceptive Prevalence Rate
DD	Demographic Dividend
DDI	Demographic Dividend Index
DoCR	Department of Civil Registration
FP	Family Planning
FPAN	Family Planning Association of Nepal
FWLD	Forum for Women, Law and Development
GBSS	Gender-Biased Sex Selection
GBV	Gender-Based Violence
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
INSEC	Informal Sector Service Centre
IUD	Intra-Uterine Device
LDC	Least Developed Country
MIS	Management Information System
MMR	Maternal Mortality Ratio
MoFALD	Ministry of Federal Affairs and Local Development
MoH	Ministry of Health
NCASC	National Centre for AIDS and STD Control
NCDs	Non-Communicable Diseases

NDHS	Nepal Demographic and Health Survey
NEET	Not in Education, Employment and Training
NFS	Nepal Fertility Survey
NLFS	Nepal Labour Force Survey
NLSS	Nepal Living Standards Survey
NMICS	Nepal Multiple Indicator Cluster Survey
NPC	National Planning Commission
NPCS	National Planning Commission Secretariat
NPHC	National Population and Housing Census
OEWGA	Open-Ended Working Group on Ageing
PoA	Programme of Action
PSA	Population Situation Analysis
SDGs	Sustainable Development Goals
SLC	School Leaving Certificate
SRHRR	Sexual and Reproductive Health and Reproductive Rights
SMAM	Singulate Mean Age at Marriage
SR	Sex Ratio
SRB	Sex Ratio at Birth
TFR	Total Fertility Rate
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNPD	United Nations Population Division
VDC	Village Development Committee
WFS	World Fertility Survey
WHO	World Health Organization

1. Introduction

1.1 Background and rationale

The United Nations Population Fund's (UNFPA) activities call for an increased strategic focus, based on the needs, priorities, and national development strategies of individual countries. The Population Situation Analysis (PSA), a conceptual and methodological guide developed in 2010 by the Technical Division of UNFPA Headquarters, expresses the commitment of the Fund to mainstream population dynamics, reproductive health, and gender issues into National Development Strategies, explicitly adopting a human rights, cultural and gender perspectives. It responds to the demand by countries that international cooperation should promote national capacity-building and recognize national ownership and leadership as prerequisites for development, in accordance with the principles agreed at the International Conference on Population and Development (ICPD) and the Millennium Declaration[5].

The PSA is a process that should help UNFPA to be a partner for national actors and the UN system in strategic decision making on public policies, especially in the elaboration of national development strategies based on the Sustainable Development Goals (SDGs) and human rights commitments, while mainstreaming the agenda of the ICPD. Therefore, this PSA, serving as an analytical contribution from the population perspective, could constitute a key resource in the process of Common Country Analysis (CCA) for United Nations Development Assistance Framework (UNDAF) to better harmonize the support provided to the country by UNFPA and the UN system at large in relation to the effective implementation of national SDGs over the next 15 years. This analysis is expected to provide a sound basis for evidence-based policy dialogue for integrating core population dynamics issues in the new sustainable development plan of the Government of Nepal to ensure that 'no one is left behind'.

This PSA draws on Nepal's demographic transition and resulting population momentum using key demographic variables for the next 15 years (2016-2030) in the context of the new federal structure of the country. Evidence is generated using the five thematic pillars of population and development to inform integration of key population dynamics issues in national development priorities to harness the demographic dividend and realize national SDGs.

1.2 Data sources

The PSA has taken a comprehensive approach in terms of the use of the data and information production and analysis at macro level, at the level of key individual sectors, including both productive and social sectors as well as at the household or individual level as far as possible. The analysis used both primary and secondary sources available from the national statistical system as appropriate. The primary sources include those to be the national data, whereas the secondary include the data that have already undergone some processing and that are being used for inter-country comparisons by international agencies. The use of national data was felt essential in order to have a comprehensive analysis of key indicators at the disaggregated levels-particularly by geographical areas (such as new States), caste/ethnicity and other important socio-economic and demographic characteristics. However, we have also used data from international organizations such as the United Nations Population Division particularly for the estimation of the length of Nepal's demographic window of opportunity as the national statistical system does not have population projections longer than 20 years from a specific baseline year.

More specifically, the major sources of data used in the analysis include: population and housing censuses, demographic and health surveys, multiple indicator cluster surveys, living standards surveys and relevant

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5   Population Situation Analysis: A Conceptual and Methodological Guide (UNFPA, 2010)

management information systems data available as of end 2016. Besides, a wide range of published research and study reports have been reviewed. Where appropriate the quantitative data and indicators that have been presented are accompanied by meta-data underpinning the interpretation of the levels and trends implied by the data.

It is also important to note that while conducting the analysis of the data effort has been made to assess their quality of data in terms of their consistency, coverage and reliability of estimates particularly of disaggregated figures. Also recognizing that the quality of data may vary by source and over time, this PSA report has documented, by using footnotes, any deviations from and between different sources.

2. Population Dynamics

This chapter deals with the population dynamics of Nepal. Population dynamics is the study of human population, including its size, distribution, composition, and the factors that determine changes in these variables. Population change is driven by birth, death rates, immigration and emigration. While presenting the data on population dynamics of Nepal, an attempt has been made to reflect on the seven federal states (referred to as States) of Nepal as illustrated in the Map 1 below.

Map 1: Federated States of Nepal based on the Constitution of Nepal 2015
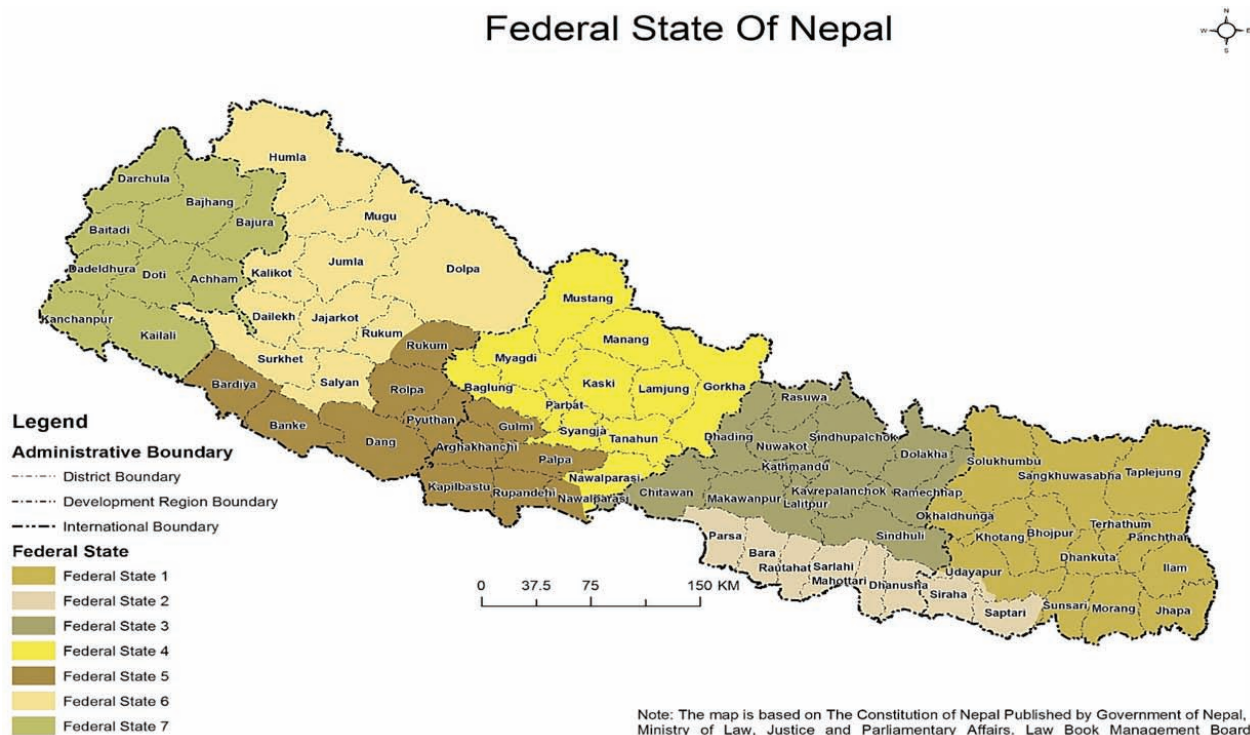

2.1 Population size and growth: national level

Nepal exemplifies a developing country where fertility has been high and mortality has declined steadily resulting in a population momentum. From the first population count in 1911, the population had doubled by the time the 1971 census was conducted, rising from 5.6 million to 11.6 million. The last census of 2011 showed a population of 26.5 million, presenting an average annual growth rate of 1.35 percent during the intercensal period 2001-2011 (Figure 1, see Appendix 1 for data).

The annual growth rates of Nepal's population were low until 1941, this is attributed to incomplete census taking

Figure 1: Growth of total population and average annual growth rate, Nepal 1911–2031
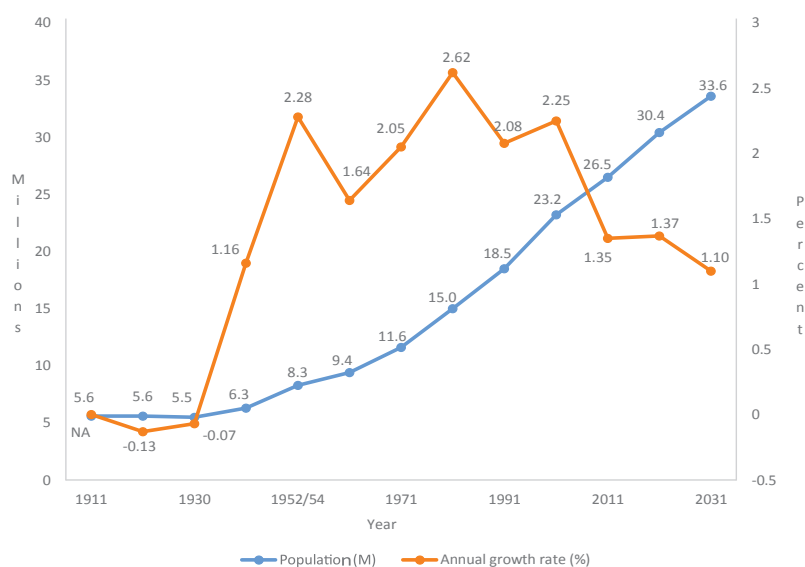
Source: Pathak, R. S. and K. Lamichhane. 2014. and CBS. 2014. Population projection 2011-2031

and mainly counting the male population (Singh, 1983). The average annual growth rate during 1941-1952/54 period was above 2 percent which is attributed to two reasons; the low coverage of the 1941 census and the improved census taking in the 1952/54 (Banister and Thapa, 1981). The population growth rate dipped to 1.6 percent per annum during the 1952/54-1961 period. Again, attributed to two reasons, an undercount of the total population, especially of children under five, and as the census enumeration was done at two points in time in 1952 and in 1954, there were several complications when the data was combined into one count (Krotki and Thakur, 1971). For 40 years from 1961 to 2001 the average annual population growth rate was above 2 percent, this is reported to be primarily due to a fast declining mortality without a corresponding decline in fertility. Between 2001 and 2011 the average annual growth rate suddenly declined to less than 2 percent per annum (Figure 1). According to the Central Bureau of Statistics (CBS), the low growth rate was largely due to the high volume of the absentee population, counted at 1.92 million (2012). The average annual growth rate for females during the intercensal period was 1.63 percent while for males it was 1.05 percent. It must be noted, however, that many of the absentees not included in the census count will be returnees who were working overseas and would return home once they retire or leave their current place of work outside the country.

Figure 1 also shows population sizes and growth rates for 2021 and 2031 based on population projection (medium variant) made by the CBS (CBS, 2014). The total population of Nepal is projected to grow to 30.4 million by 2021 and further to 33.6 million by 2031 and the corresponding average annual growth rates are estimated to be 1.37 percent and 1.10 percent respectively (CBS, 2014).

2.2 Population size and growth: State level

The 2015 Constitution of Nepal (Ministry of Law, Justice, Constitutional Assembly and Constitutional Affairs, September 2015) federated Nepal into 7 States (see Appendix II for distribution of districts by States), however, the existing population distribution is uneven. In terms of population size State Three is the largest, therefore its population provides the State with a large labour force, followed by State Two (Table 1).

Table 1: Population distribution of federal States based on 2011 population census

States	Population	Percent of population	Number of districts	Number of districts with negative population growth
One	4,534,943	17.1	14	9
Two	5,404,145	20.4	8	0
Three	5,529,452	20.9	13	7
Four [(a)]	2,460,756	9.3	10	8
Five [(b)]	4,485,128	16.9	11	3
Six[(c)]	1,527,563	5.8	10	0
Seven	2,552,517	9.6	9	0
Nepal	26,494,504	100.0	75	27
[(a)]East of Bardghat of Nawalparasi has been annexed to State Four				
[(b)] Rukum east is part of State Five and				
[(c)] Rukum west is part of State Six				

Source: Karki, Y. B. 2016. Population First. Republica. February 1. Kathmandu.

State Six is the smallest followed by State Four. During the 2001-2011 decade, 27 districts of the country had negative population growth rate and in States Four, 80 percent of districts experienced negative population growth. In this respect, State Four is in the most disadvantageous position. Among the 14 districts of State One, nine districts are experiencing negative population growth. States Two, Six, and Seven do not have any district with negative population growth.

Between 2001 and 2011 (Figure 2), the total population of Nepal increased by 14.4 percent while in States Three and Six, the percentage increase was about the same, 21 percent (Figure 2). The second highest increase (17%) is seen in State Two, followed by State Seven (16%), State Five (14%), State One (8%) and the lowest increase (4%) is seen in State Four (Figure 2). A similar pattern is found with respect to average annual growth rates of population in the seven States during the period 2001-2011.

Figure 2: Population size and % change, by State, 2001-2011
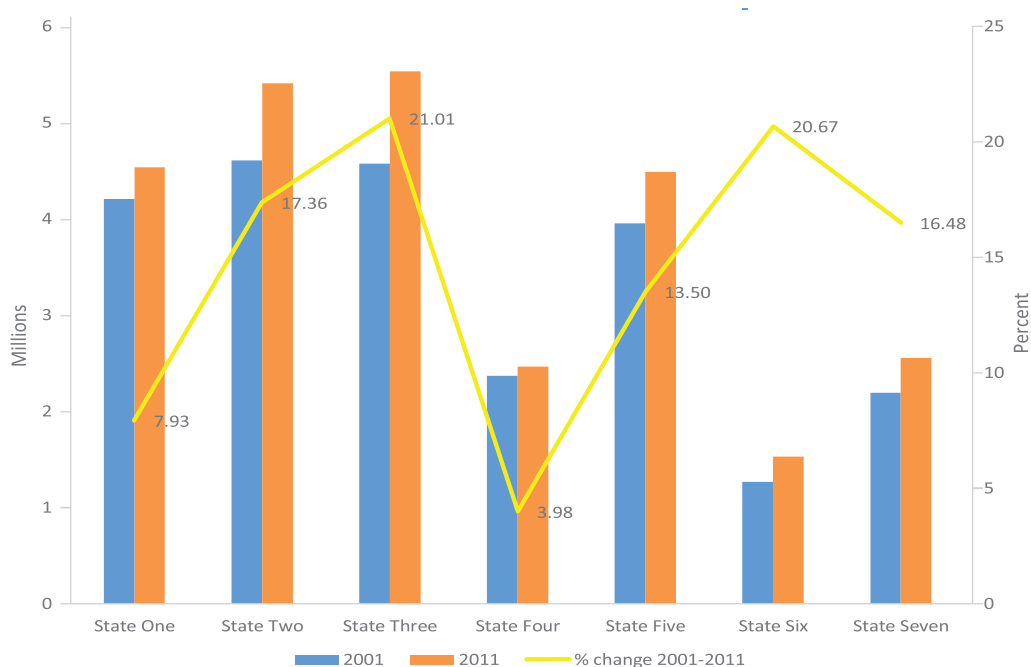
Among the seven States (Figure 3), State Three tops the list in population size right through to 2031, State Two coming second. In 2011 State One was the third largest but State Five will take this position in the future. State Six comprising mainly of Karnali zone (a mountainous region) is ranked as the smallest in population size through to 2031.

Figure 3: Population size and % change, by State, 2021-2031
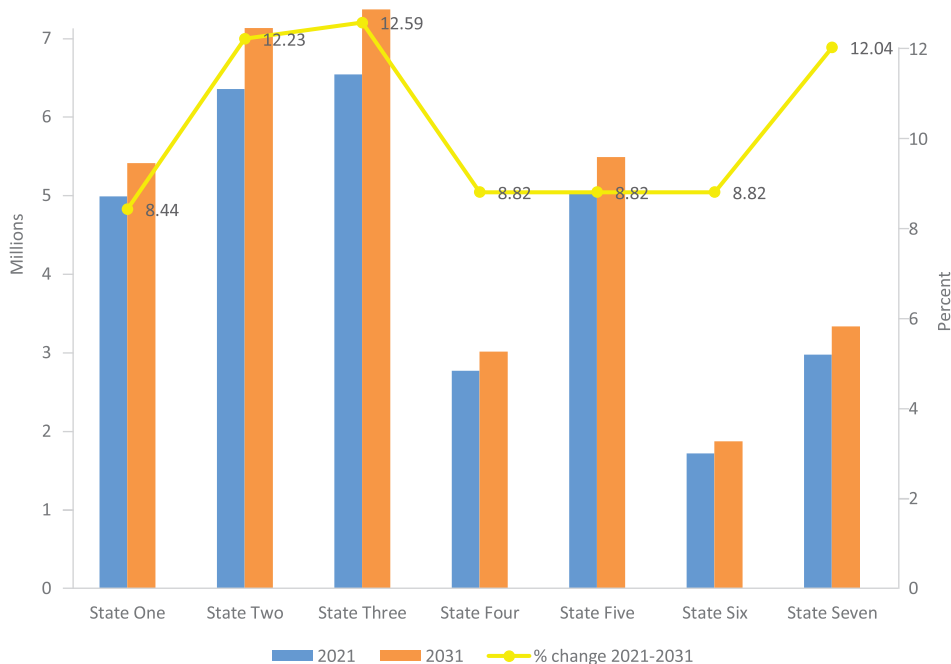
2.3 Population growth: District level

The 2011 census showed a negative growth rate in 27 of the 75 districts of Nepal for the 2001-2011 intercensal period. Previous censuses showed no district with negative growth rate. Of the 27 districts, eight are Mountain and 19 are Hill districts (see Map 2 below and Appendix III for data).

Map 2: Intercensal annual population growth rate 2001-2011 by district

- ■ -3.83 – 0.00
- ■ 0.01 – 1.35
- ■ 1.36 – 4.78
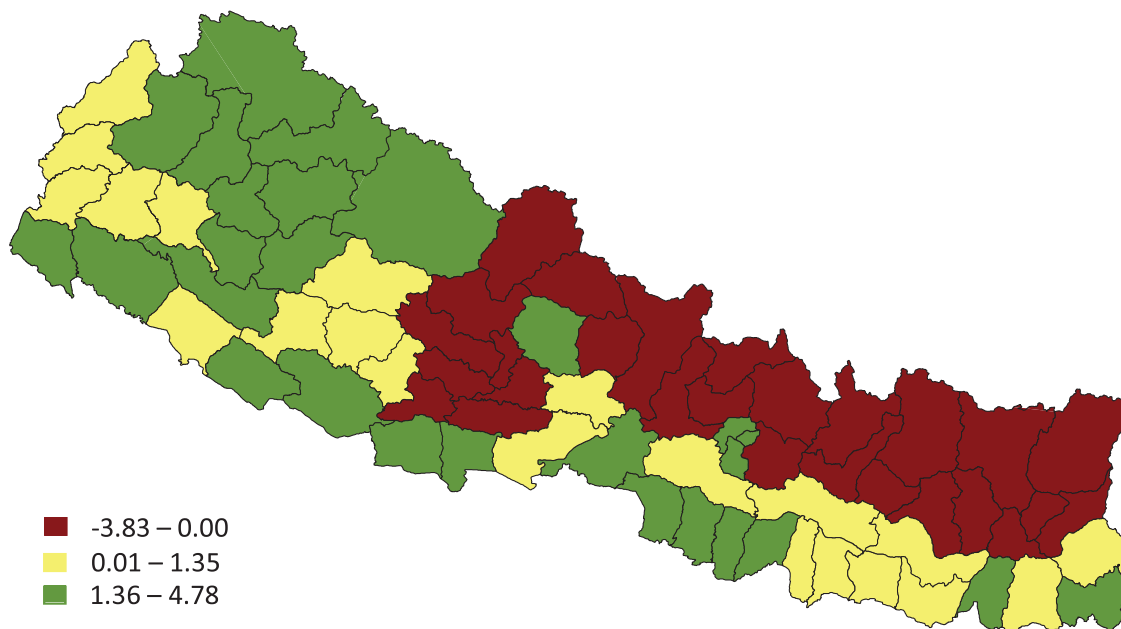
Source: CBS and UNFPA, 2003 and CBS, 2012

2.4 Demographic transition

The population of a country generally passes through a series of stages during which it transitions from a situation where both mortality and fertility are high, to a position where both mortality and fertility are low. Both before and after the transition population growth tends to be very slow. During the transition, population growth is very rapid, especially because the decline in mortality tends to occur before the decline in fertility.

The population of Nepal is approaching 'Stage III' of a demographic transition. This is characterised by low fertility and low mortality. However, currently it is in the lower end of 'Stage II' where death rate and birth rate are low, but birth rate remains slightly higher than the death rate. Recent data, available as of 2011, indicates that the CBR is about 24 per 1,000 population but the CDR is only about 7 per 1,000 population (Figure 4).

Figure 4: Demographic transition in Nepal, 1961-2031
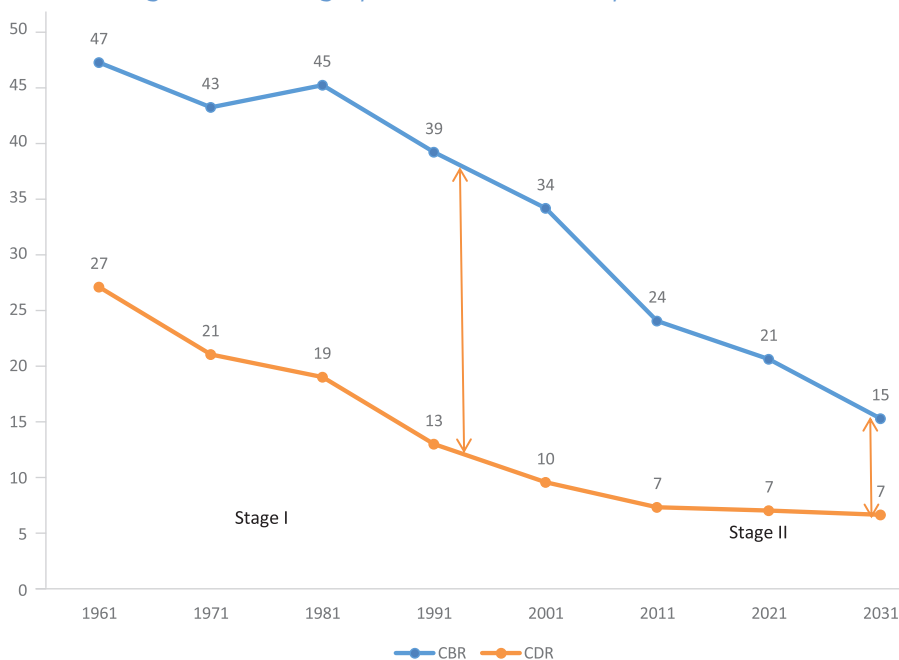
Source: Krotki, K. J. And Thakur, H. N. 1971; Karki, Y. B. 1984; Karki, Y. B. 1992; MOH, New ERA and ORC Macro 2002; MOH, New ERA and ICF Intl 2012; CBS. 2014; CBS, 1977; NPC, 1985; CBS, 2003; Joshi, P. L. 2014

Projected CBRs and CDRs up to 2031 also show that Nepal's population will still be in late Stage II of a demographic transition as birth and death rates, as indicated by the medium variant projection[6], will by 2031 not be very low. As mentioned, Nepal is going through a demographic transition and there are different ways of calculating the 'window of opportunity' (S. Zhang, E. Loaiza and R. Snow, 2016). However, the important issue is that Nepal is in the middle of this window and in order to reap the benefits of the demographic dividend Nepal must be prepared to invest in education, empowerment, and employment of young people (World Economic Forum, 2015).

2.5 Age-sex structure

Age structure and population pyramids

In Nepal, the young age population is declining and the working age population is increasing. In 1991 the working age male population, defined internationally as aged 15-64, was 52.9 percent of the total male population and the corresponding figure was 55.3 percent for females (Figure 5). The 1991 pyramid also indicates that fertility was beginning to decline 10 years prior to 1991.

As of 2011, the male working age population increased to 57.9 percent and the corresponding figure for females was 61.6 percent (Figure 6). This shows that the proportion of working age population increased more rapidly for females than for males, however, it must be noted that among the males a large number (1,684,086) were absentees working outside the country while the respective figure for females was 237,408.

A population growth projection conducted by CBS shows that by 2021 the male working age population will increase from 58 percent in 2011 to 64 percent in 2021, with the corresponding figures for females 62 percent and 67 percent respectively (Figure 7).

Population projections for 2031 (Figure 8) shows an increase of working age male population to 66 percent (CBS) and for females 69 percent. CBS projections show fewer female children (9.3 percent females vs. 10.7 percent males) in age group 0-4 in 2021, this pattern continues to 2031. This indicates a decrease in female births each year, with potential implications on the sex ratio balance and implications with respect to gender discrimination and human rights violations.

Population Pyramids based on 2011 census data for 7 States are shown in Appendix IV.

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6   In general, population projections are made using three variants: high variant, medium variant and low variant. CBS 2014 used these three variants for population projection. Each variant is comprised of fertility, mortality and migration assumptions over time; for high variant CBS used slow decline in fertility, plausible decline in mortality and migration, for medium variant all three components assumed plausible decline and for low variant fast fertility decline and plausible decline in mortality and migration was assumed.
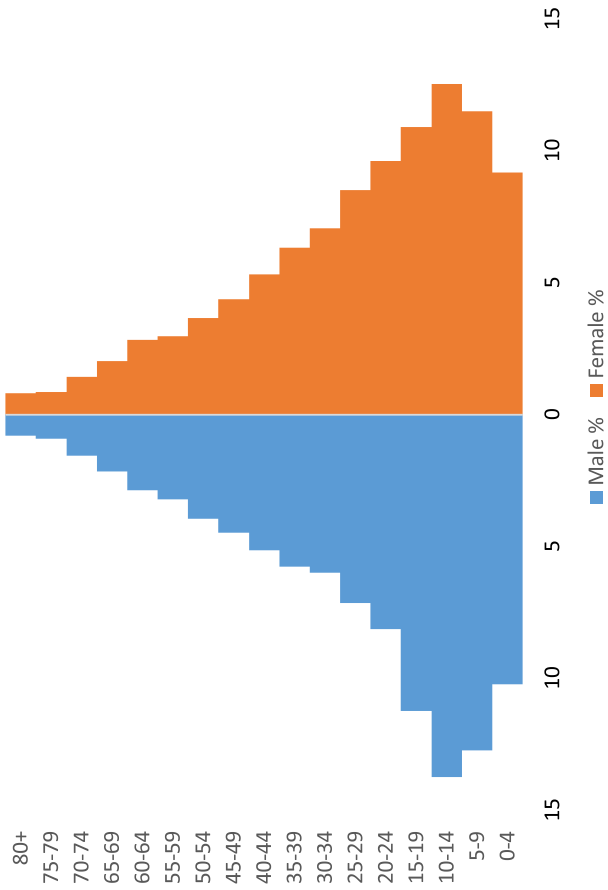
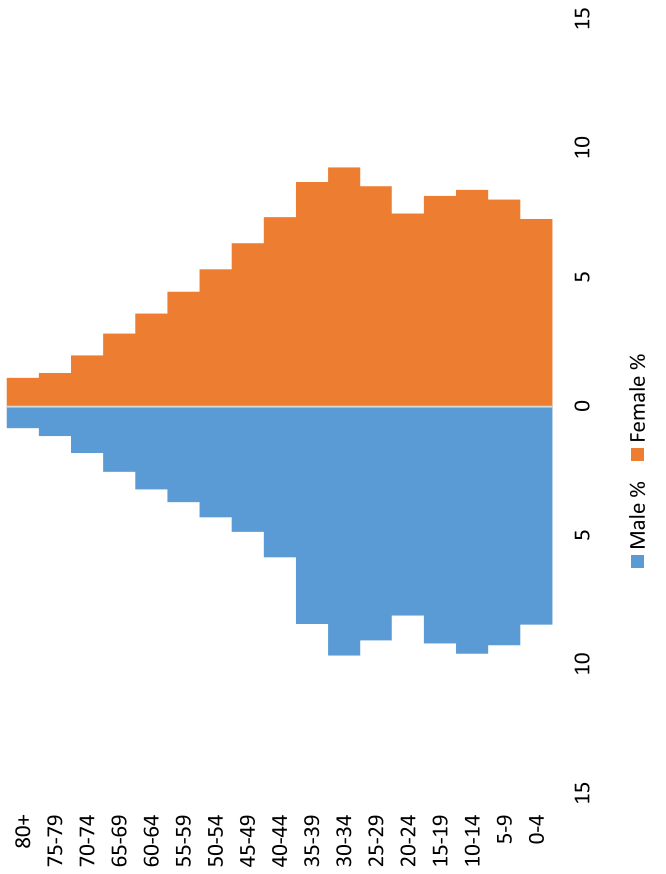Figure 5: Population Pyramid, 1991

Figure 6: Population Pyramid, 2011

Figure 7: Population Pyramid (Projection), 2021
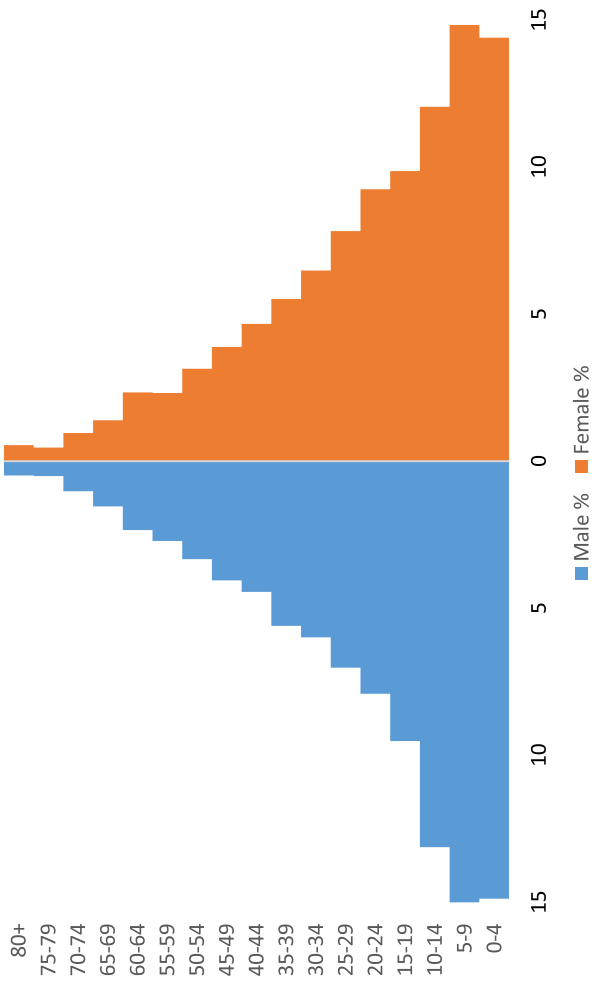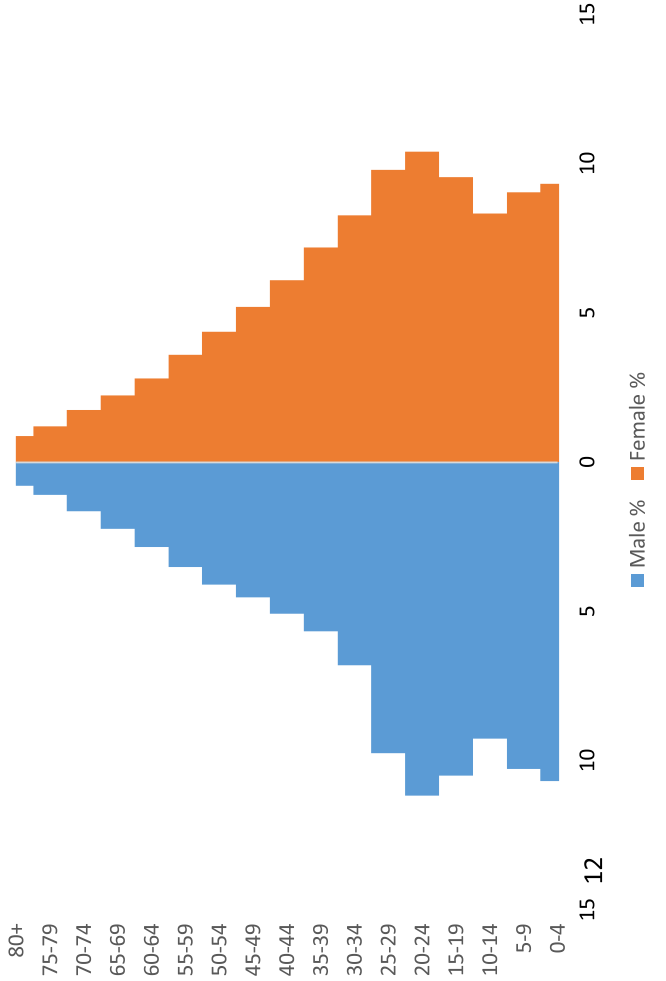
Figure 8: Population Pyramid (Projection), 2031

Male %   Female %

Dependency ratio

Declining fertility and improving mortality over the years have contributed to the decline in the dependency ratio[7] in Nepal. Analysis of total population by age since 1971 shows that the dependency ratio was high in 1971 in that for every 100 persons of working age, 77 were dependent (Figure 9). The dependency ratio was still high in 2011 when every 67 persons were dependent on 100 persons of the working age population. It is expected that by 2021 nearly half of the population will depend on about the same proportion of the working age population and by 2031 proportionally more people will be of working age compared to the dependent population.

Figure 9: Dependency ratio 1971-2031, Nepal
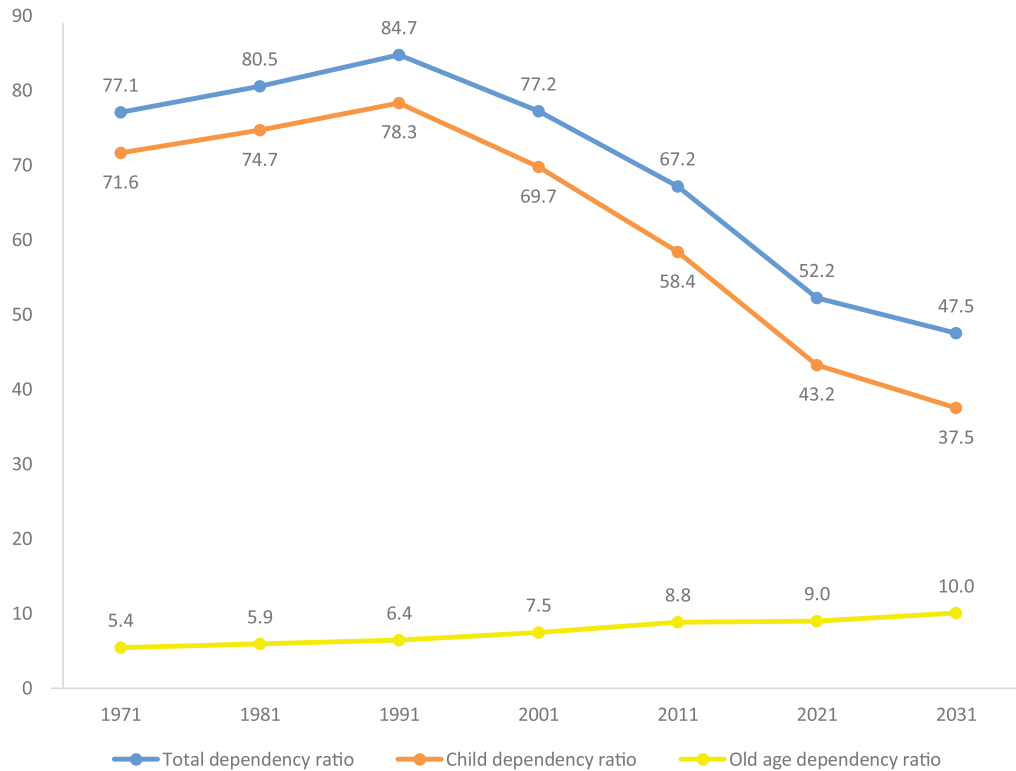
Source: CBS, 2012. National Population and Housing Census 2011: National Report. CBS and UNFPA, 2003. Population Census 2001: National Report; CBS. 1993. Population Census – 1991. Vol. I. CBS. 1984. Population Census – 1981. Vol. I. and CBS, 1975. Population Census 1971. Vol. I

2.6 Demographic dividend

The demographic transition affects the age structure of the population. The demographic dividend is the accelerated economic growth that may result from a decline in a country's mortality and fertility and the subsequent change in the age structure of the population. With fewer births each year, a country's young dependent population grows smaller in relation to the working-age population[8]. With fewer people to support, a country has a window of opportunity for rapid economic growth if the right social and economic policies are developed and investments are made.

There is a variety of different methodologies clustering countries in "Pre-", "Early-","Late-" and "Post-" dividend", in countries in which the Window of Opportunity is "closed", "opening", "open", "passing" or simply

7   Dependency ratio is the ratio of economically active population generally defined as those belonging to 15 - 59 or 15 - 64 age group to the economically inactive population age 0-14 and 60+ or 65+. In this report 15-64 age group is taken as economically active.

8   James Gribble and Jason Bremner. 2012. The Challenges of attaining the demographic dividend. Policy Brief. (Washington, DC: Population Reference Bureau, September).

in countries with an "open" or "closed" windows from different agencies including UNFPA, the World Bank and UNICEF (Herrmann, 2016).

This analysis suggests that small changes in parameters can alter the predictions of when the Window of Opportunity opens and closes to a large extent. In addition, these methodologies do not take into account other factors that heavily influence a country's ability to benefit from a demographic dividend, such as quality education for young people, the access of women to the formal labour force and employment opportunities for young people. Therefore, the calculations of exact period of the Window of Opportunity (opening year and closing year) by different sources may vary depending on the methodologies used or factors considered for the estimation (Herrmann, 2016).

Demographic Dividend at national level

In Nepal, the demographic dividend has begun, with the growth of the working age population becoming higher than the growth of total population. This is likely to end sometime in the coming decades[9] when the growth of the working age population becomes lower than the growth of total population, implying that we are currently in the window of opportunity for Nepal to reap the benefits of demographic dividend (Figure 10).

Figure 10: Demographic window of opportunity: Population growth rates by working status, Nepal
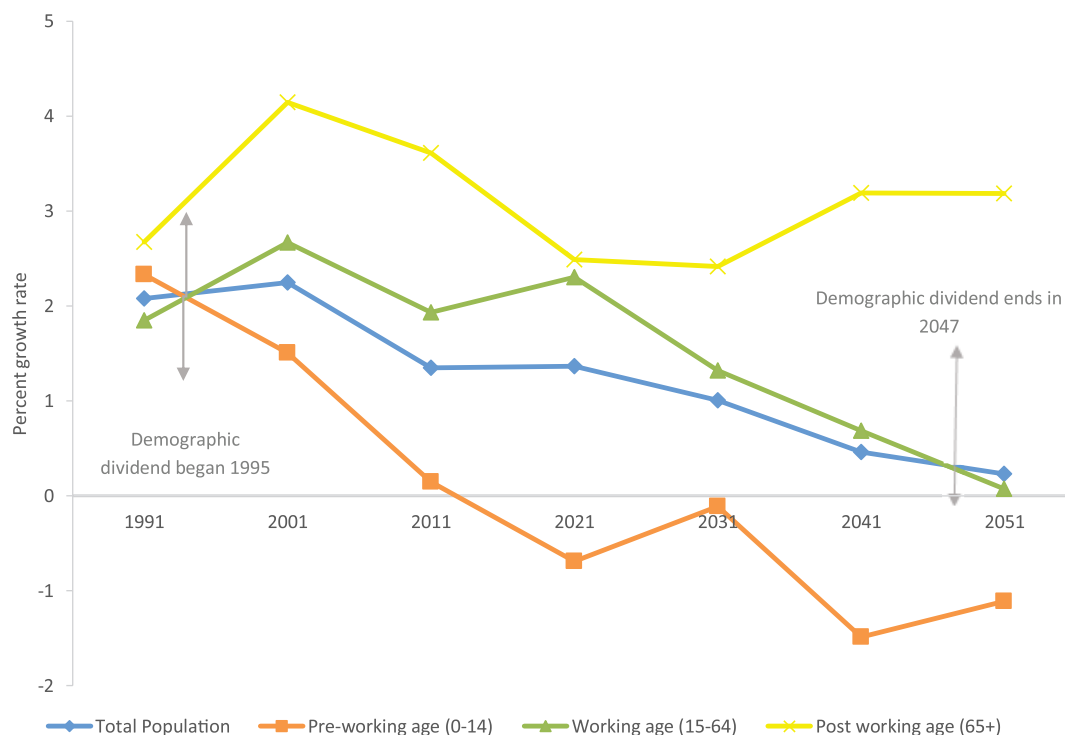
Source: Calculated by Y. B. Karki using population census data of 1981, 1991, 2001, 2011, CBS. 2014 Population Projection 2011-2031 and Population Projection of UNDESA (UNPD) 2015

Demographic Dividend at the sub-national level

In line with a 3E Policy Framework recommended by the World Economic Forum to Reap the Demographic Dividend: Empower, Educate, Employ; UNFPA has performed a small area estimation at the district level that revealed decisive variations on the sub-regional level with respect to the dependency ratio and relevant three indicators in empowerment, education, and employment, of young people.

The district-level spatial distributions regarding the status of the demographic dividend according to the

9   CBS Projection used only up to 2031 (CBS, 2014) and after that UN Population Department data used (UNPD, 2015)

Demographic Dividend Index (DDI) components, and the dependency ratio in 2011, are illustrated in the maps below. Through comparison of the four maps, it is possible to identify the districts where human capital is low. For example, most districts located in the north-east of the country have a relatively low dependency ratio of less than 66 percent. However, most districts have a secondary school attendance rate lower than 50 percent, with two districts lower than 40 percent. Among the 20 districts along the south boundary of Nepal, eight districts with low dependency ratios of lower than 66 percent have a high NEET value of over 15 percent. Most districts with high percentages of child marriage have a correspondingly high dependency ratio. The maps shown below suggest a need to ensure access to health services, jobs, and education, as well as an urgent effort to reduce child marriage among the districts with the high proportion of vulnerable young people.

Map 3: The four maps show dependency ratio, schooling, unemployment, and child marriage, by district
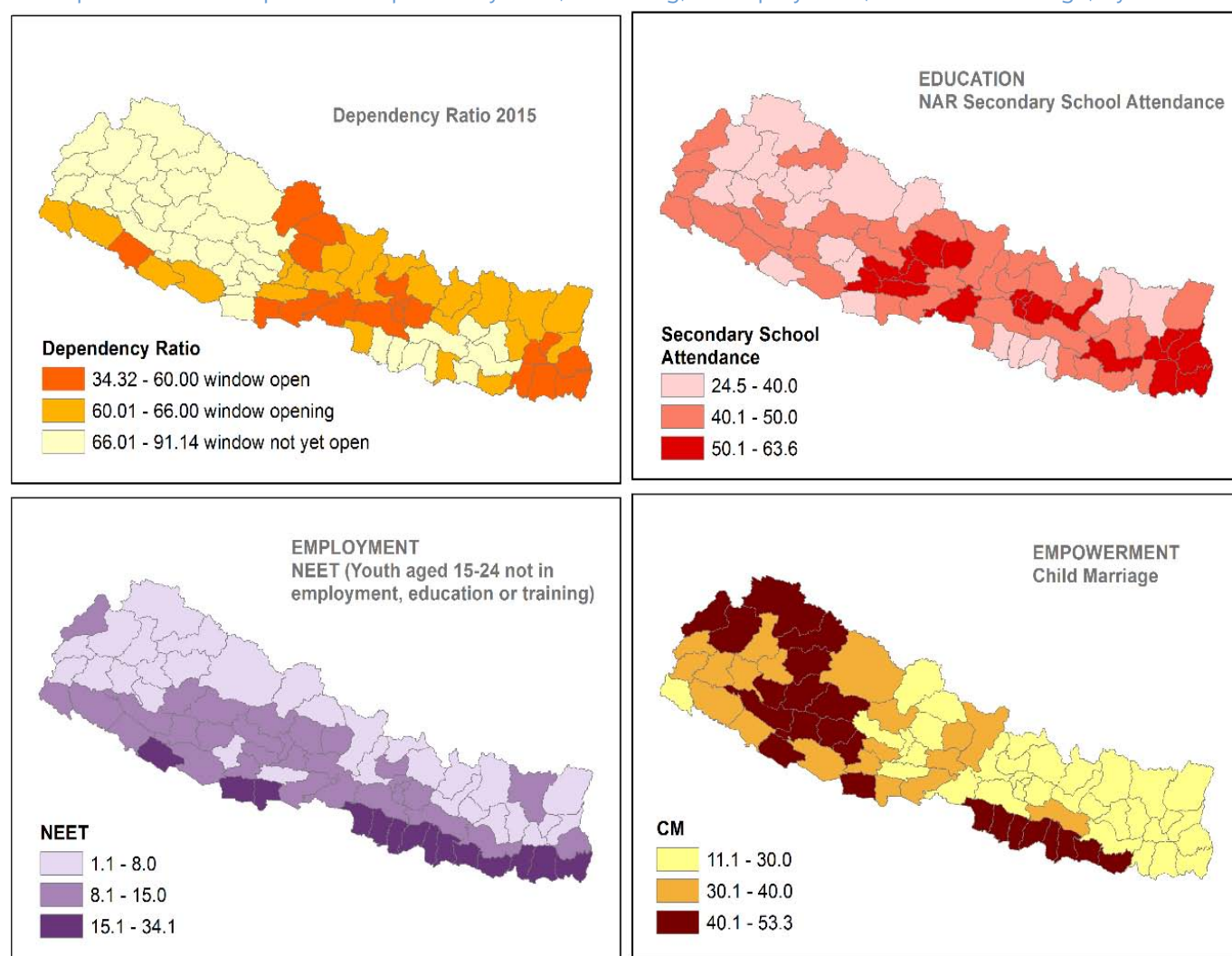
Source: UNFPA, TD/PDB, 2016

2.7 Social demography: Caste/ethnicity

Despite being a relatively small country, Nepal is comprised of 125 caste/ethnic groups as stated in the 2011 census (CBS, 2012). These 125 caste/ethnic groups are grouped into 8 broad major groupings: Chhetri, Bahun, Hill Janajati, Terai Janajati, Terai other castes, Hill Dalit, Terai Dalit and Muslim (see Appendix V for grouping of broad caste/ethnic groups). In addition to the identified groups, CBS has codes for (1) Dalit others, (2) Janajati Others (3) Terai others, (4) Undefined others and (5) Foreigners. The first three are added to the above relevant categories, while 'unidentified others' and 'foreigners' have been excluded due to their very low size.

Figure 11 presents percentage distribution of Nepal's total population by broad caste/ethnic groups. Nationally the largest broad ethnic group is Hill Janajati, 22.2 percent. Second is the Chhetri caste group at 19.2 percent (Chhetri, Thakuri and Sanyasi combined in Figure 11), Terai Middle Castes (13.8%), Bahun (12.7%), Terai Janajati (8.6%), Hill Dalit (8.1%), Terai Dalit (5.9%) and Muslim (4.4%) in that order.

Attempts have also been made to look at the distribution of caste/ethnic population disposition with the newly federated seven States. In State One, the largest ethnic group is Hill Janajati (40%), followed by Chhetri (16%), Bahun (12%) and Terai Janajati (11 percent, Figure 12). In State Two the overwhelmingly largest group is Terai middle castes (48%), the second largest is the Terai Dalit castes (18%), while the third largest is the Muslim population (12%), and the fourth largest is the Terai Janajati (9%, Figure 12).

Figure 11: Percentage distribution of 2011 census population by major caste/ethnic groups, Nepal
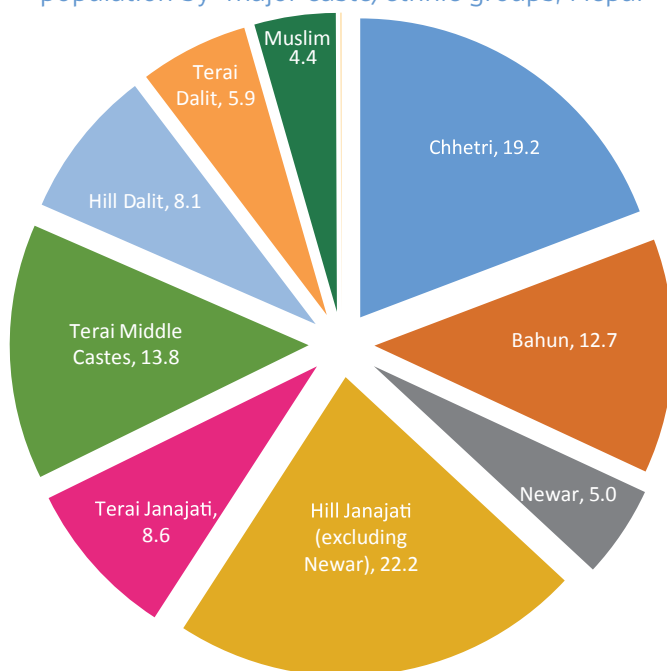
Source: CBS. 2012. National Population and Housing Census 2011

Figure 12: Percentage distribution of 2011 census population by major caste/ethnic groups, by State, Nepal
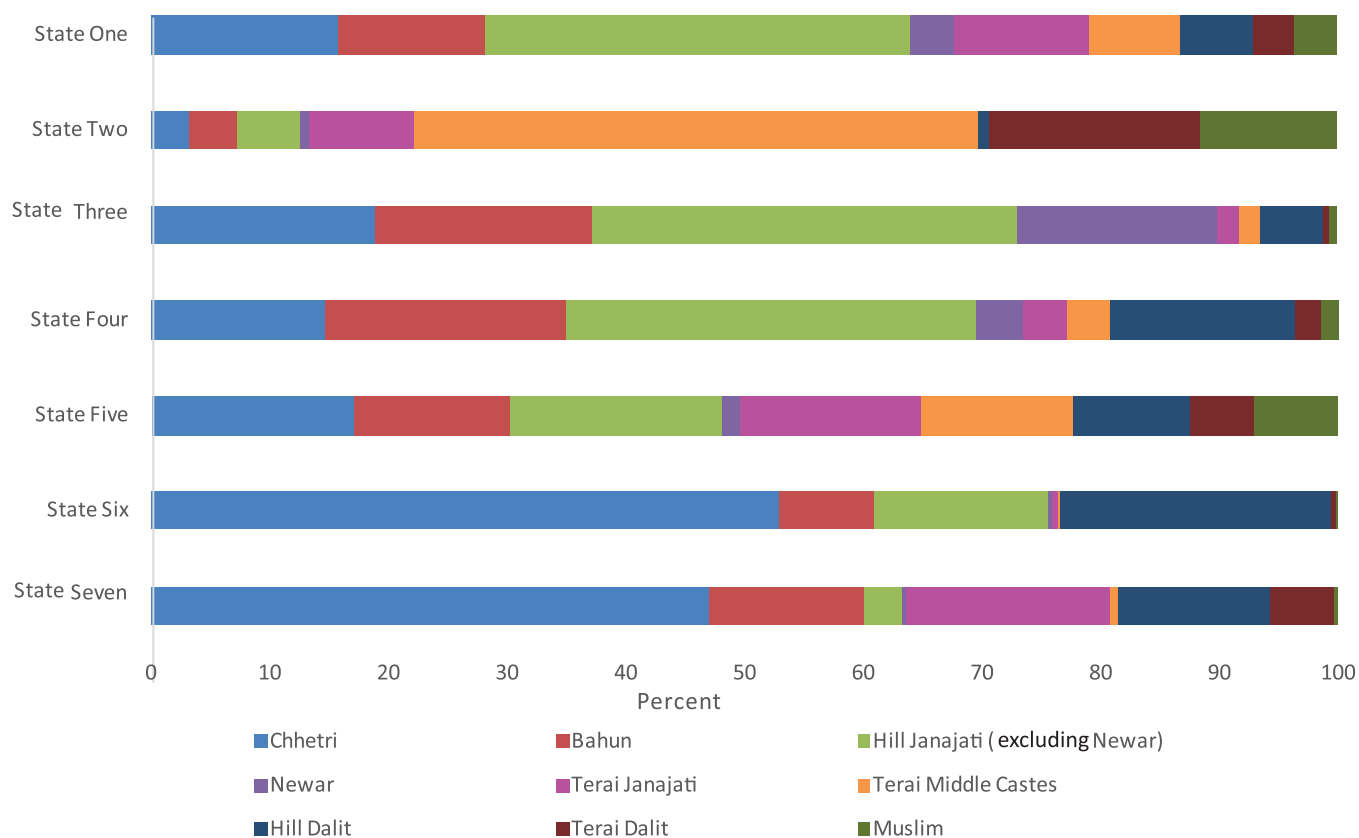
NOTE: (a) Total population of State 4 includes total population of Nawalparasi district

NOTE: (b) Total population of State 5 does not include population of Nawalparasi or Rukum districts

NOTE: (c) Total population of State 6 includes total population of Rukum district

Source: CBS. 2012. National Population and Housing Census 2011

Fifty-three percent of the total population of State Three belong to Hill Janajati group. The second largest group (19%) consists of Chhetri castes and the third largest (18%) is Bahun castes. In State Four, the largest ethnic group is Hill Janajati (39%), followed by Bahun (20%), Hill Dalits (16%) and Chhetri (15%, Figure 12). In State Five, there is a much greater ethnic spread with no single caste/ethnic group larger than 20 percent of the population, although Hill Janajati are nearly 20 percent. In State Six, Chhetri castes group is the largest (53%) of the total population and the second biggest group is Dalit castes (23%) with Hill Janajati the third largest (15%). In State Seven, again Chhetri castes group is the largest comprising of nearly half of the total population (47%). Other large groups in that State are Terai Janajati (17%), Bahun (13%) and Hill Dalits (13%, Figure 12).

Distribution of caste/ethnic populations in the seven States shows that in the four States, namely, Two, Three, Six and Seven, one ethnic group is greater than 50 percent, in the remaining three this is not the case. This perhaps indicates that Nepali people will need to coalesce harmoniously, considering the States are comprised of diverse caste/ethnic groups. However, certain caste/ethnic groups are socially and economically disadvantaged to whom the government and other stakeholders need to pay special attention to lift them up from their disadvantaged positions.

3. Thematic Pillars of Population and Development

In its resolution 65/234 on the review of the implementation of the Programme of Action of the International Conference on Population and Development and its follow-up beyond 2014, the General Assembly underscored the need for a systematic, integrated and comprehensive approach to population and development. One that would respond to new challenges relevant to population and development and to the changing development environment, as well as reinforce the integration of the population and development agenda in global processes related to development. The findings and conclusions of the operational review suggest a new framework for population and development beyond 2014 built on five thematic pillars: dignity and human rights; health; place and mobility; governance and accountability; and sustainability.

3.1 Dignity and human rights

The PoA of the ICPD and its follow-up beyond 2014 calls for any development agenda aiming at the individual and collective well-being and sustainability to guarantee dignity and human rights to all persons. Following more than 10 years of insurgency, a Comprehensive Peace Accord was signed on 21st November 2006 with the objective of settling all issues and restoring dignity and rights to all Nepalese. The interim constitution of Nepal 2007 guaranteed dignity and human rights to all persons and the federal constitution of Nepal 2015 in part 3 clauses 16 and 17 respectively also reaffirms and elaborates the right to live with dignity and freedom as the fundamental rights. Similarly, the right to equality is also guaranteed in clause 19 of the constitution. However, while considerable progress has been made, translation of these rights into actions has been uneven.

Poverty

Closely related to human rights and dignity is the level of poverty prevalent in the country, which is recognized as both the cause and result of social exclusion. Poverty is the deprivation of one's ability to live as a free and dignified human being with the full potential to achieve one's desired goals in life. The Nepal Living Standards Surveys (NLSS) estimate the national poverty line following the cost of basic needs approach, which is the expenditure value of local currency required to fulfil both food and non-food basic needs. Using the national poverty line, poverty incidence has been falling at an accelerated pace from 41.8 percent to 30.9 percent between 1995/96 and 2003/04 and further to 25.2 percent of the overall population in 2010/11 (Figure 14). This remarkable decline occurred in the backdrop of a significant increase in the national poverty line from NPR 7,696 per capita per year in 2003/04 to NPR 19,261 per capita per year in 2010/11 to account for a higher quality consumption pattern (Asian Development Bank, 2013-2017).

Despite the remarkable decline in the overall poverty level, poverty in rural Nepal is still higher than urban Nepal, even though rural poverty is declining at a faster pace than urban poverty. While urban poverty fell from 21 percent in 1996 to 10 percent in 2004, it again rose to 15 percent in 2011. On the other hand, rural poverty has declined continuously

Figure 13: Five Thematic Pillars of Population and Development
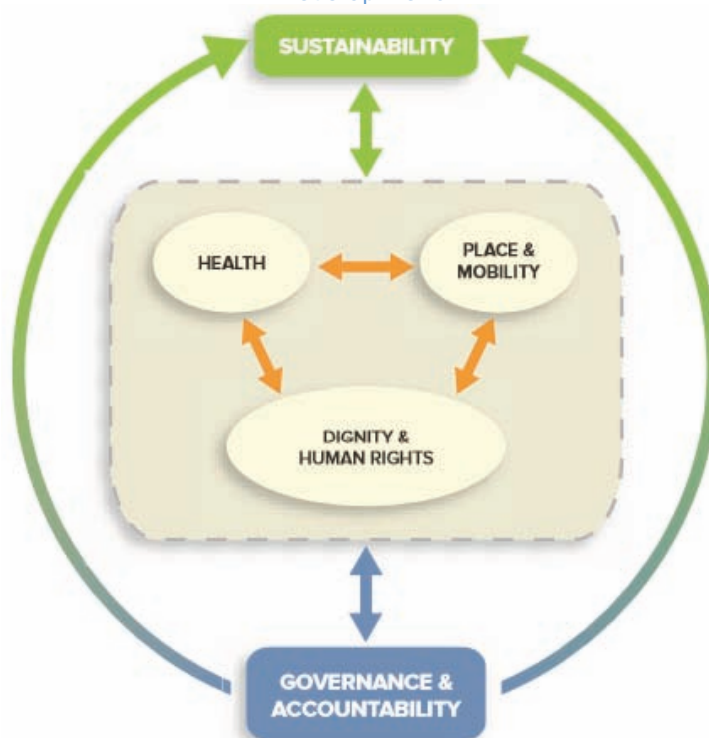
Source: United Nations, 2014

from 43 percent to 35 percent and to 27 percent between 1996, 2004 and 2011 respectively (Figure 14).

In 2011, poverty in the Mountain zone was most prevalent at 42 percent in contrast to an average of 8 percent in the urban Hills. Similarly, the Mountain zone not only has the highest percentage of poverty on average, but it is also increasing. Poverty incidence in the Mountains decreased considerably from 57 percent to 32 percent between 1996 and 2004 but has since increased to 42 percent in 2011. It is comparatively lower in the other ecological zones, 24 percent in the Hills and 23 percent in the Terai.

Figure 14: Population below the poverty line, 1995/96, 2003/04 2010/11, Nepal
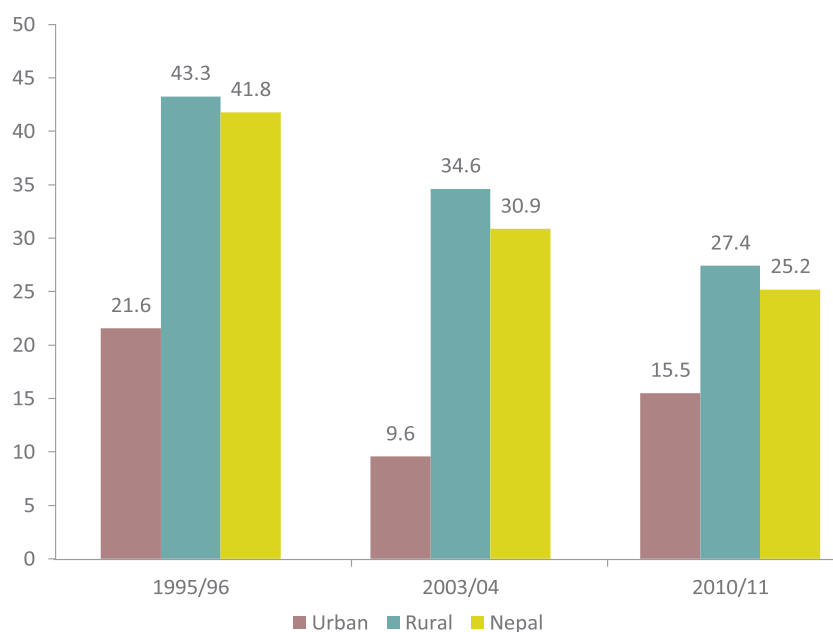
Source: CBS. 2011. Nepal Living Standard Surveys. 1996, 2004 and 2011

Women's empowerment and gender equality

Discrimination against women continues in different forms in Nepal although there have been many positive changes over time. Nepalese patriarchal society and many socio-cultural norms are discriminatory to women. Son preference is high and girls are often married off before they reach maturity. Although in recent years, school enrolment of both boys and girls is equal, the dropout rate is higher among girls. Despite this improvement, according to the 2011 Population Census, the literacy rate among female population 6 years of age and over is lower (57%) than that for males (75%). More interestingly, it is seen that the gap between male and female literacy rates in the past 40 years (1971-2011) has narrowed only slightly, from 19.7 percent in 1971 to 17.7 percent in 2011 (Figure 15).

Figure 15: Literacy of population 6 years of age and over, 1971-2011, Nepal
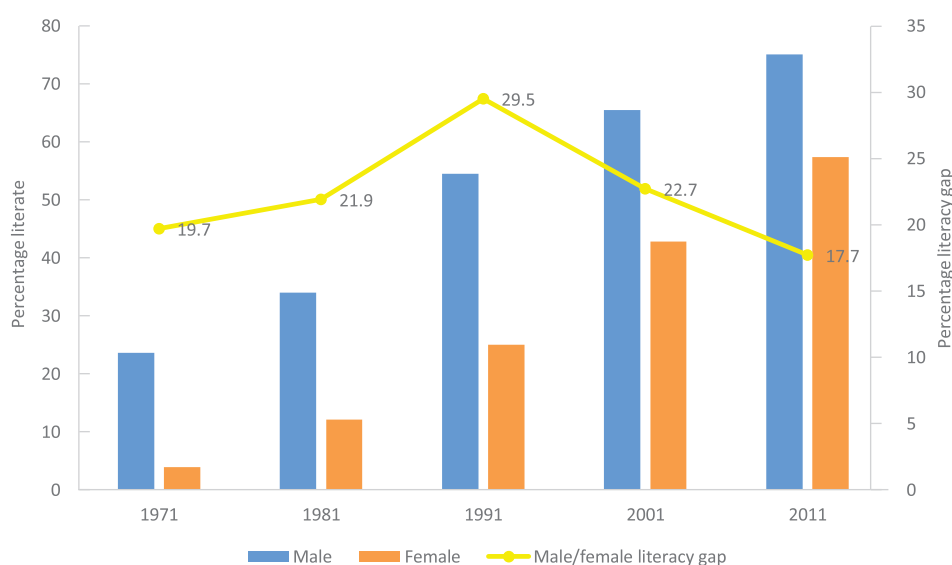
NOTE: Literacy rate in 2011 is based on population 5 years and above

Source: CBS, 2012. National Population and Housing Census 2011: National Report. ; CBS and UNFPA, 2003. Population Census 2001: National Report; CBS. 1993. Population Census – 1991. Vol. I. CBS. 1984. Population Census – 1981. Vol. I. and CBS, 1975. Population Census 1971. Vol. I

Although among the working age population (15-64) the share of females is more than half (53%), their employment in the formal sector is low while in the informal and private sectors their employment is high but the wages are lower for the same type of job compared to their male counterparts. Besides, young girls often start working at an early age for virtually no wage.

Gender-based violence

Domestic violence is defined in Nepal as any form of physical, mental, sexual, or economic harm perpetrated by one person toward another with whom he or she has a family relationship, including acts of reprimand or emotional harm (Ministry of Law and Justice, Nepal, 2009). Domestic violence has negative health consequences for survivors with respect to women's reproductive, physical, emotional, and mental health and to that of their children. For the first time in 2011, a domestic violence module was included in the Nepal Demographic and Health Survey (NDHS).
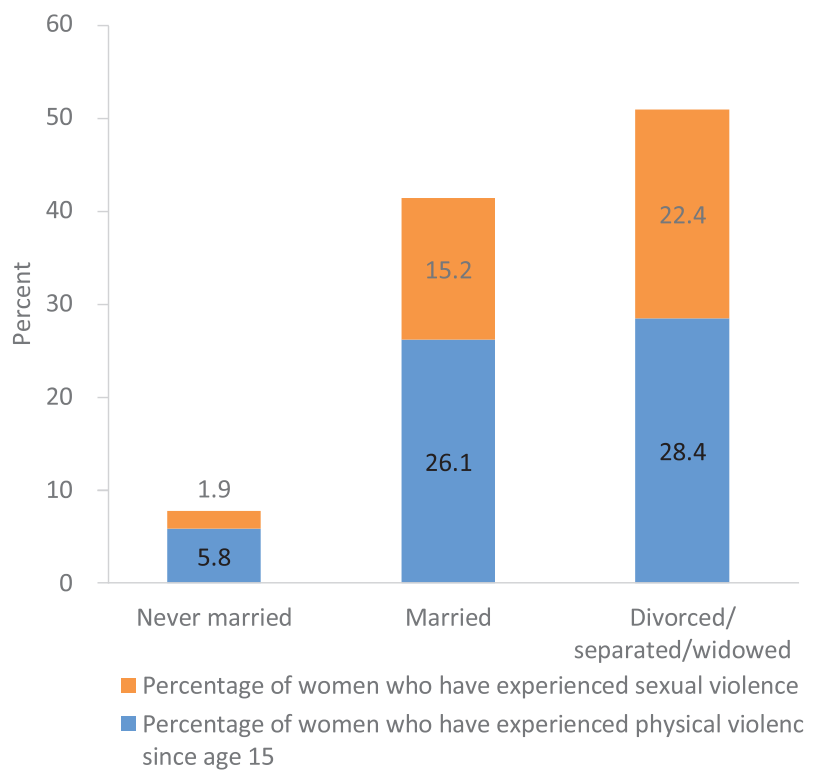
It should be noted, that over 85 percent of perpetrators of physical and sexual violence are current and /or former husbands (MOH, New ERA and ICF International Inc. 2012). The experience of physical violence varies substantially by background characteristics. The percentage of women who have experienced physical violence since age 15 increases with age from 10 percent among women age 15-19 to 30 percent among women age 40-49. Ever-married women are more likely than never-married women to experience physical violence, indicating that, in Nepal, violence perpetrated by spouses is more prevalent than violence perpetrated by other individuals (Figure 16). Twenty eight percent of women who are divorced, separated or widowed, and 26 percent of currently married women, have experienced physical violence since age 15, compared with 6 percent of never-married women.

Physical violence declines with education. For instance, physical violence declined from 33 percent among women with no education to 9 percent among women with a School Leaving Certificate (SLC) and higher education. The relationship between wealth and experience of physical violence is less clear. Physical violence increases from 21 percent among women in the lowest wealth quintile to 28 percent among women in the middle quintile and then declines sharply to 12 percent among women in the highest wealth quintile.

Figure 16: Percentage of women who have experienced physical/ sexual violence, Nepal 2011

■ Percentage of women who have experienced sexual violence
■ Percentage of women who have experienced physical violenc since age 15

Source: MOH, New ERA and ICF International Inc. 2012

There is a notable variation in the experience of sexual violence by age. Younger women (age 15-19) are less likely to report sexual violence than older women (age 30-49). Women who are divorced, separated, or widowed are more likely to have ever experienced sexual violence (22%) than currently married women (15%) and never-married women (2%). The experience of sexual violence decreases with educational attainment from 17 percent among women with no education to 7 percent among women with an SLC and higher education. There is no clear relationship between sexual violence and wealth, although women in the highest wealth quintile are less likely to report sexual violence than women in the other quintiles.

If we analyse the NDHS 2011 data by the new federal structure, State Two, does have the highest prevalence of physical violence (35%) and State Six as the second highest (24%). Prevalence of physical violence in State Five is nearly (23%) and is least (15%) in State Four, second lowest (17%) in State Three and third lowest (18%) in State Seven (Figure 17).

Figure 17: Percentage of women age 15-49, who have experienced physical and sexual violence, by State
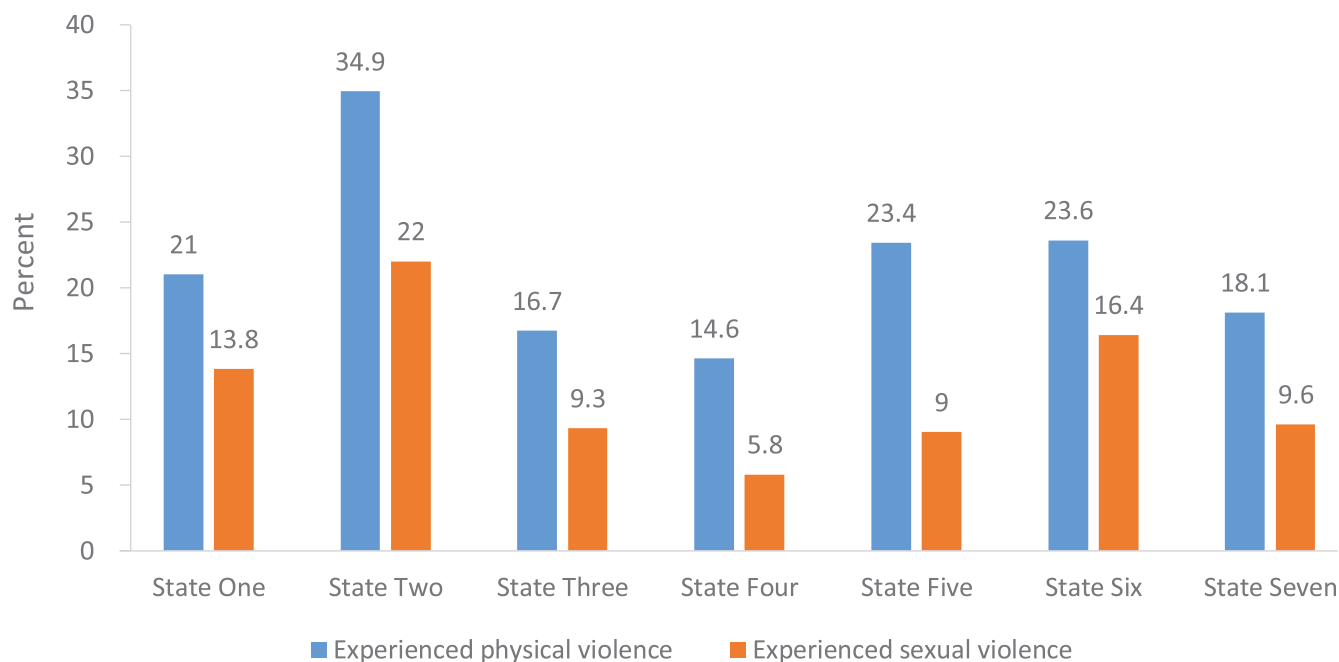
Source: MOH, New ERA and ICF International Inc. 2012

Prevalence of physical violence reported through the NDHS was high in Terai communities such as Muslim (42%), Terai Dalit (38%), Terai castes (36%), and Terai Janajati (34%), and it is equally high (28%) in Hill Dalit community. Among the so called high caste groups and Hill Janajati, the prevalence of physical violence reported is low: Chhetri (18%), Hill Janajati (16%), Newar (13%), and Bahun (12%) (Figure 18).

Figure 18: Percentage of women age 15-49, who have experienced physical and sexual violence by caste/ethnicity, Nepal 2011
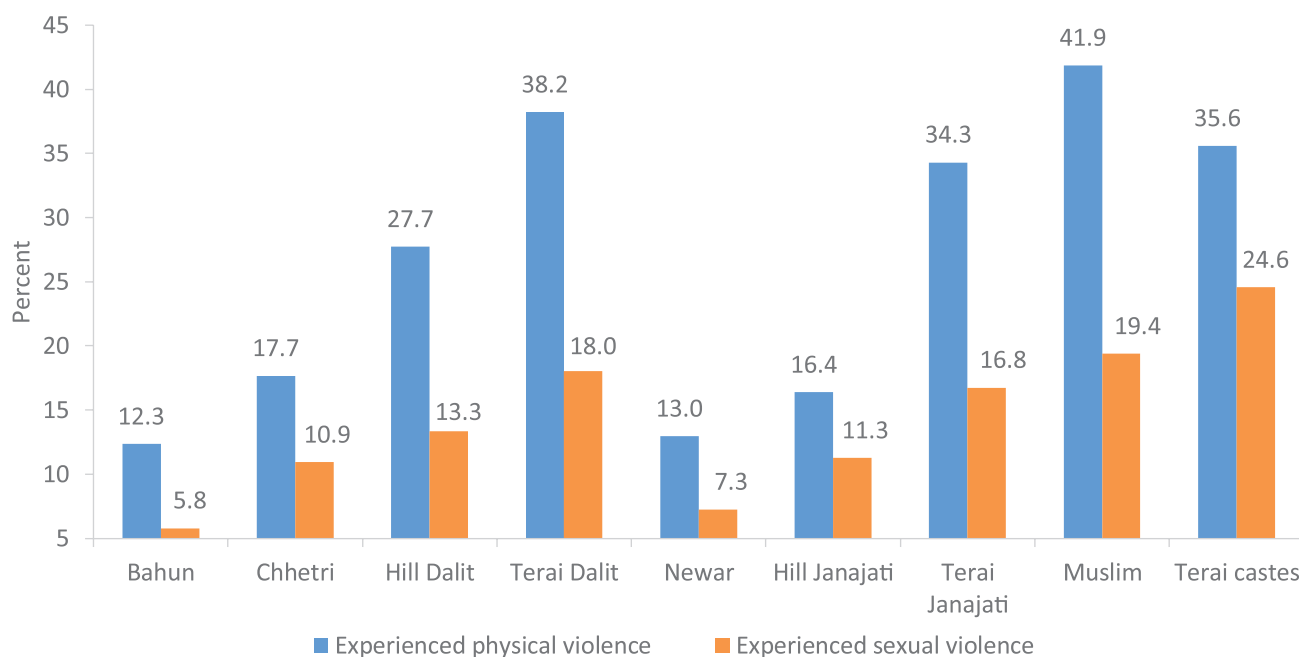
Source: MOH, New ERA and ICF International Inc. 2012

While the NDHS 2011 contained the entire module on Domestic Violence, the previous NDHSs of 2001 and 2006 collected data on attitudes only towards *"wife-beating"* to determine the percentage of men and women aged 15-49 who agreed that a husband/partner is justified in hitting or beating his wife/partner for at least one of the following reasons: if she burns the food, argues with him, goes out without telling him, neglects the children, or refuses sexual relations. As presented in Figure 19, there has been a measurable decline in the proportion of males, from 34 percent in 2001 to 22 percent in 2006, who endorse any of these justifications for this particular form of physical intimate partner violence. Similar trends are noted in women's attitudes, with an overall decline in the justification for abuse between the survey time points. Despite positive trends, nearly one in four women continues to agree that wife-beating is justified under certain circumstances.

Figure 19: Attitude towards female spouse-percentage who agree with at least one of five specified reasons for assualting female spouse, 2001 and 2006, Nepal
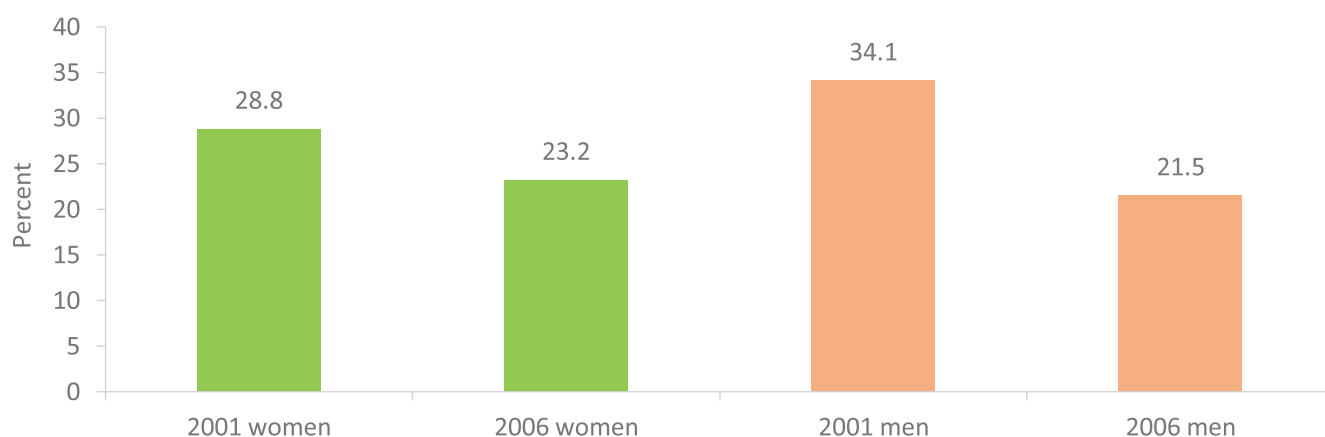
Source: MOH, New ERA and ORC Macro. 2002 and MOH, New ERA and Macro International Inc. 2007

Child, early and forced marriage

Vulnerability to child, early, and forced marriage is related to extreme poverty, the low status of women and community vulnerability, as much as to socio-cultural norms. It should be noted that child marriage is a violation of human rights, compromising the development of girls and often resulting in early pregnancy and social isolation, with little education and poor vocational training reinforcing the gendered nature of poverty. The right to '*free and full*' consent to a marriage is recognized in the Universal Declaration of Human Rights, with the recognition that consent cannot be '*free and full*' when one of the parties involved is not sufficiently mature to make an informed decision about a life partner. Women married before the age of 18 tend to have more children than those who marry later in life. Pregnancy-related deaths are known to be a leading cause of mortality for both married and unmarried girls between the ages of 15 and 19, particularly among the youngest of this age cohort. In fact, young girls aged 15-19 are five times more likely to die of pregnancy-related causes than women over 20.

According to the Civil Code (2016 revision), the minimum legal age at first marriage is 20 years with or without parental consent for both males and females in Nepal. Before 2002, the legal age was 16 years for girls and 18 years for boys with parental consent, 18 years for girls and 20 years for boys without parental consent. Analysis of data from the 2011 census shows a big proportion of the child population was married and among them, 53 percent of females were a big proportion of the child population was married and among them, 53 percent of females was married as children (Figure 20). In the past, child marriage was considered customary, although prevalence has dropped dramatically, it still exists, particularly in the remote rural areas.

Figure 20: Percentage of ever married popualtion (10 years and over) who married before age 18 by sex and age, Nepal, 2011

■ Child marriage: Male   ■ Child marriage: Female   ■ Child marriage: Both sexes
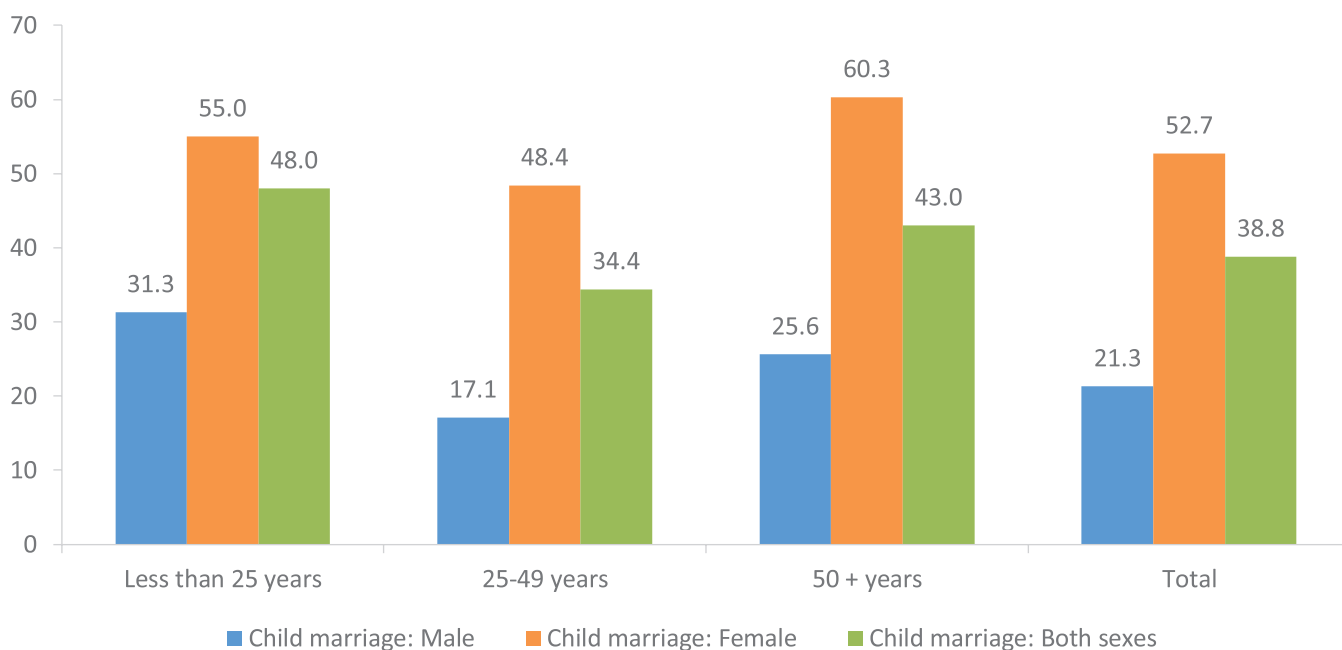
Source: Bajracharya G. And D. R. Bhandari. "Nuptiality Trends and Differentials in Nepal." In Population Monograph of Nepal. Vol. I

Over the years mean age at marriage has been declining but in Midwestern Hill districts and a number of Terai districts it is still low (Bajracharya, D. and Bhandari D.R. 2014). This means that child marriages are continuing in these remote regions of the country. At the same time widowhood, divorce and separation are also increasing.

Figure 21 illustrates the decline in early marriage among women aged 15–49 years over time in Nepal. The proportion of women married by age 15 declined from 23 percent amongst those aged 40-44 to 5 percent among those aged 15-19. This indicates a clear rise in age at first marriage.

Figure 21: Early marriage among women 15-49, Nepal 2014

■ % married before age 15   ■ % married between age 15-18
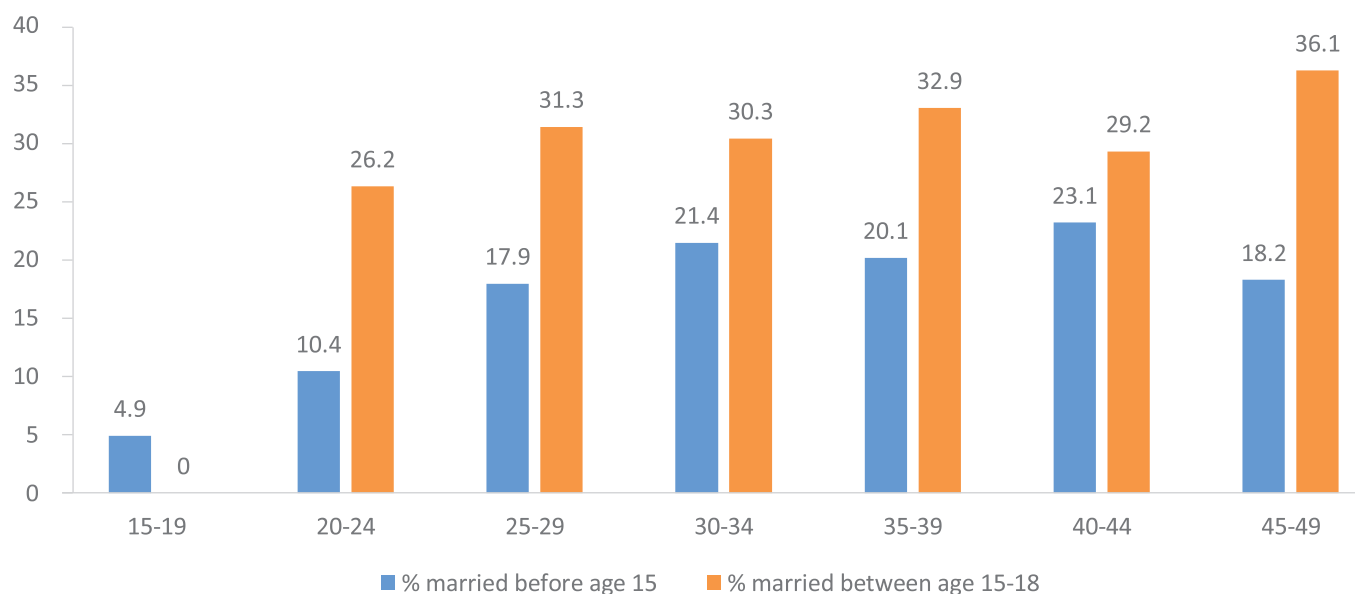
Source: CBS, 2015. Nepal Multiple Indicator Cluster Survey 2014

Gender-biased sex selection

Today, more than 117 million (UN estimates) women across Asia are 'missing', largely due to current sex ratio imbalance at birth as one manifestation of extensive gender discrimination and son preference. Gender discrimination has fuelled alarming sex selection trends in a number of countries, which will impact future generations and will have demographic implications on the sex makeup of developing countries. Gender-biased sex selection (GBSS) in favour of boys is a symptom of pervasive social, cultural, political and economic injustices against girls and women.

GBSS can be measured using sex ratio at birth (SRB), a comparison of the number of boys born versus the number of girls born in a given period. The biologically normal sex ratio at birth can range from 102 to 106 males per 100 females. When many more boys are born than girls, it is a sign that sex selection is taking place. This is now causing increasing concern in some countries (WHO, 2011).

In Nepal, sex selection and son preference are topics that need to be explored extensively. Strong empirical evidence on the practice of sex selection, the pursuing of son preference and the factors that influence SRB remains limited. However, some sources of data show an unnatural rise in SRB in certain areas of Nepal which indicates discrimination against girls and may have significant implications for future population dynamics in the country.

The 2011 census data shows that the sex ratio of the population less than 1 year of age (sex ratio at birth, SRB) is abnormally higher in urban areas (112) compared to rural areas (106). Similarly, among the five regions, the sex ratio of the population is the highest in the Western Region (110) (Figure 22).

Figure 22: Sex ratio of population less than 1 year of age, Nepal, 2011

Region	Sex ratio
Far-western Region	105.7
Mid-western Region	104.0
Western Region	109.7
Central Region	106.2
Eastern Region	105.8
Terai	106.7
Hill	106.7
Mountain	102.6
Rural	105.6
Urban	111.8
Nepal	106.4
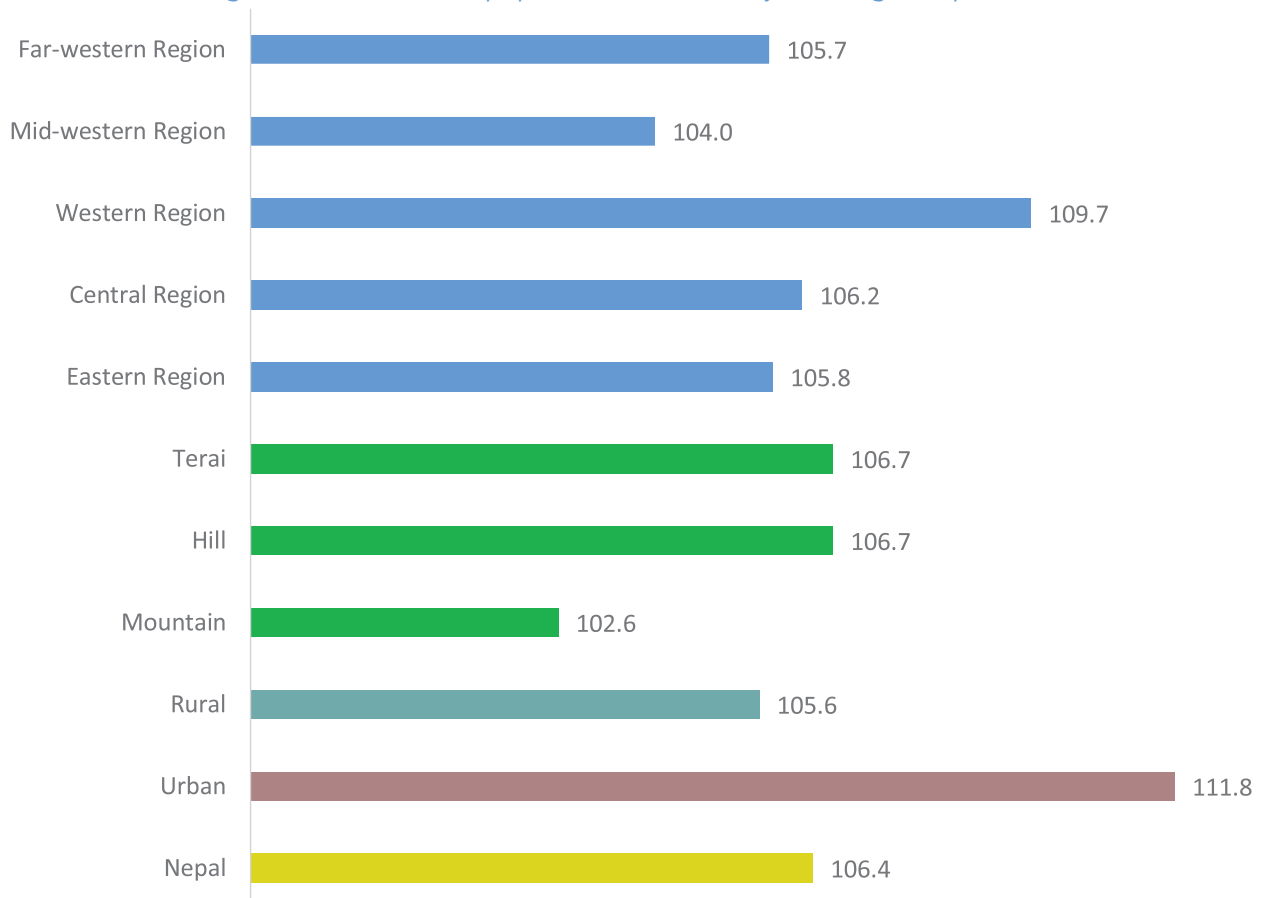
Source: Calculation by Tamang, T.M. (2016) using Population and Housing Census, 2011

Sex ratios of population less than 1 year, as shown in Figure 23, of n ewly federated Seven States, reveal interesting results. The sex ratio is the highest in State Five at 109 males per 100 females and it is also higher than normal i.e. 102-106 in State Three (108) and State Four (107).

Figure 23: Sex ratio of population less than 1 year of age, by State

Source: Calculation by Karki, Y.B. (2016) using Population and Housing Census, 2011

Also, Figure 24 shows that a total of 12 districts with a sex ratio (of the population less than 1 year) that exceeds 110 males per 100 females, based on the 2011 census data. The majority of these districts, including Bhaktapur, Kaski, Lalitpur and Kathmandu are highly urbanized where the access to technologies such as ultrasonography for prenatal sex determination are more available and fertility rates have dropped with many families opting for one child with a strong son preference. Hence, it is likely that these skewed sex ratios in the districts are due to sex-selective abortion, with the termination of pregnancies that are identified as females. Therefore, this calls for further trend analysis and qualitative research to generate evidence to substantiate the existing knowledge related to the skewed sex ratios at birth.
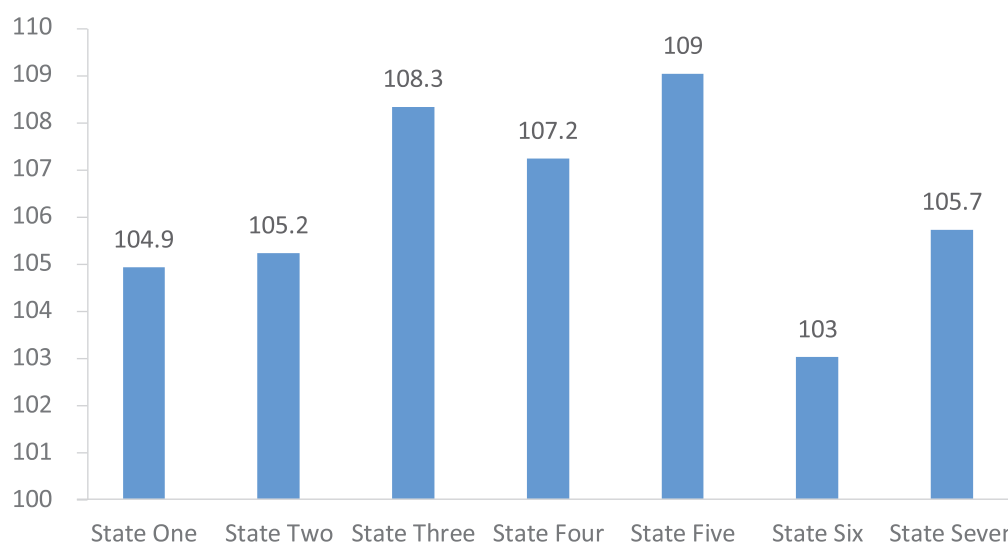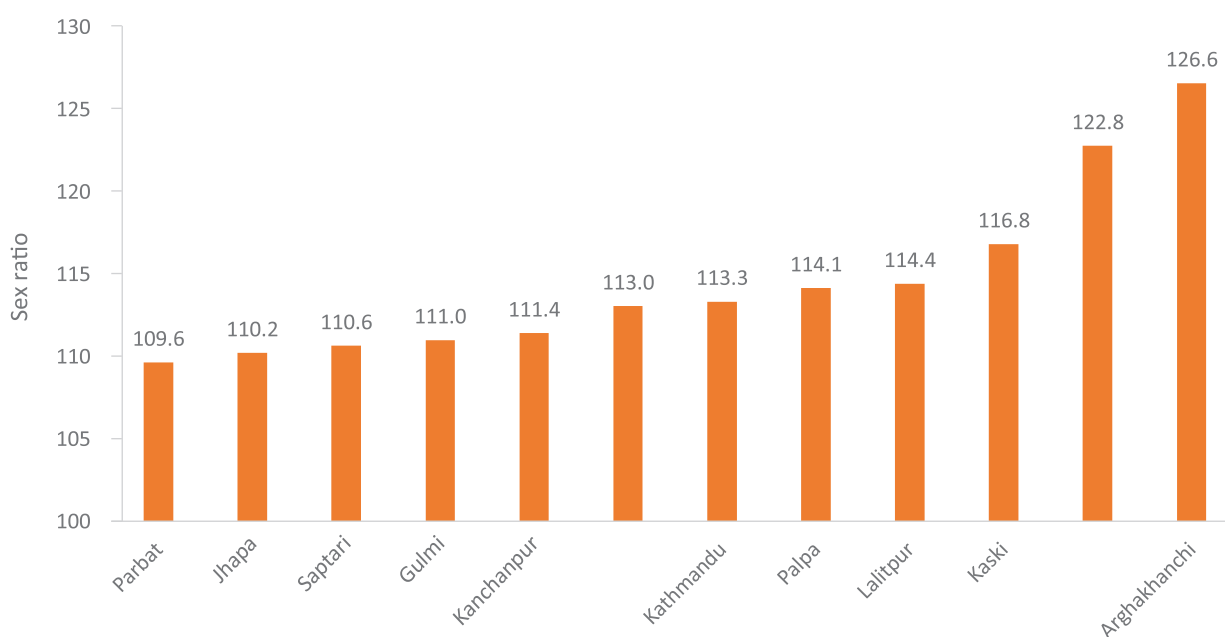
Figure 24: Districts with abnormal sex ratio of population less than 1 year of age, Nepal

Source: Calculation by Tamang, T.M. (2016) using Population and Housing Census, 2011

Adolescents and youth

The demographic importance of young people

Demographic changes in the past decades have led to the largest generation of young people (aged 10-24 years) in Nepal today, comprising of adolescents (aged 10-19 years) and youth (aged 15-24 years). In 2011, 32.8 percent of the population of Nepal was between 10 and 24 (Figure 25). While this proportion will decline in the next 15 years, it will remain above 25 percent until 2031 (CBS, 2014).

Figure 25: Percentage of young people (10-24 years of age), 1981-2031, Nepal
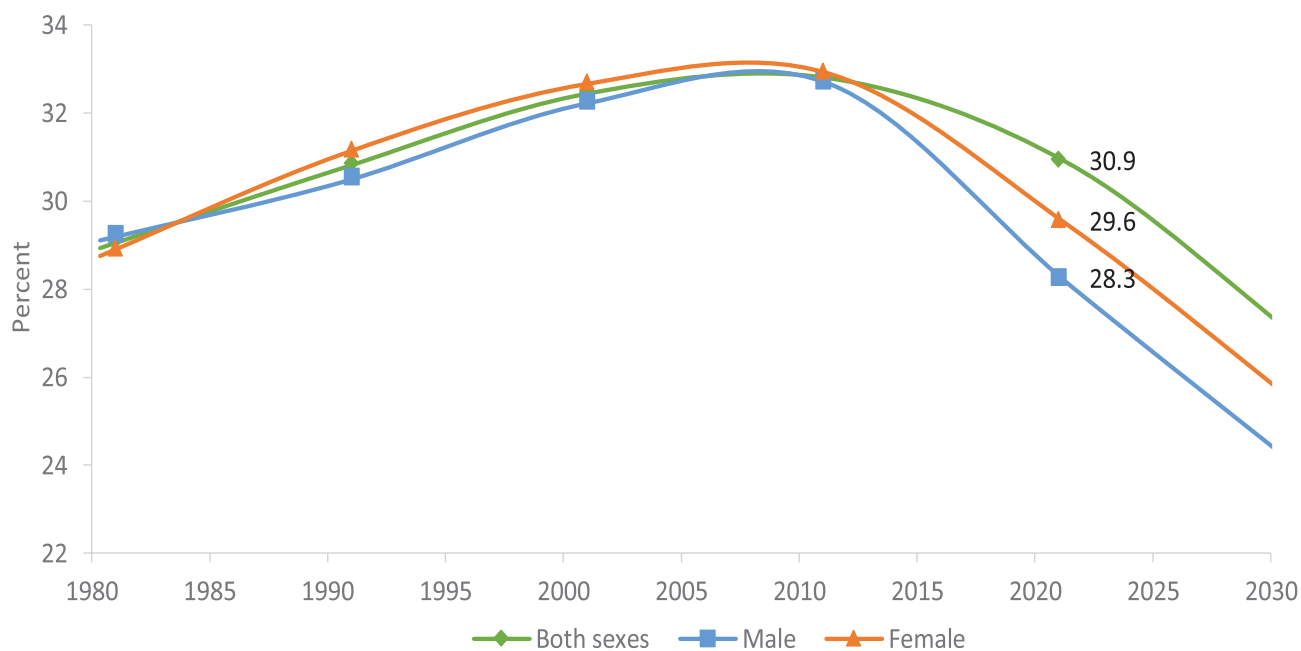
Source: CBS, 2012. National Population and Housing Census 2011: National Report. ; CBS and UNFPA, 2003. Population Census 2001: National Report; CBS. 1993. Population Census – 1991. Vol. I. CBS. 1984. Population Census – 1981. Vol. I. CBS. 2014. Population projection 2011-2031

The centrality of adolescents and youth to the development agenda in the coming decades is due to four crucial conditions:

- The decline in fertility that followed their births means that they must become self-supporting and thrive, for there will be no larger, younger cohort to support them as they themselves age, and they can be expected to live to an advanced age, given increasing life expectancy;

- They will also need to support the existing and growing population of elderly persons;

- The majority of this cohort is growing up in poor rural areas and urban slums who lack access to education and health systems that are of poor quality, reproductive choice and health rights are not guaranteed, jobs are scarce and at times migration elsewhere for jobs is beyond their reach;

- They have expectations, higher than the generations before them, for self-direction, freedom, and opportunity. The information age has taught them their human rights and given them a broader vision of what their lives could be.

The declining fertility rate in Nepal is also providing Nepal with a window of opportunity because the proportion of the population that is of young working age is at a historic high, and these cohorts can, if provided with learning and work opportunities, jumpstart economic growth and development. Therefore, as mentioned earlier in this report, the well-being and the positive social participation of these adolescents and youth hinges on the commitments of the Government of Nepal to protect their human rights, develop their capabilities,

secure their sexual and reproductive health and reproductive rights, prepare them for productive and creative activities and reward them for their labours. Investments in human development, targeting adolescents and youth, are most critical to ensure that they have the capabilities and opportunities to define their futures and to spur the innovations needed for a sustainable future.

Adolescent births

In Nepal, more than 227 thousand girls, aged 15 to 19 years, give birth every year[10]. Early pregnancies take place due primarily to early marriage. Pregnancies occurring at young ages have greater health risks for mother and child, and many girls who become pregnant, drop out of school, drastically limiting their future opportunities, their future earnings, and both their own health and the health of their children.

Births to adolescent mothers aged 15-19 have been declining over the years in Nepal as evident from the data of last five surveys (Figure 26). However, 71 births per 1,000 adolescent mothers take place, it is higher (80 births) in rural areas than in urban areas (33 births) and it varies considerably between regions, with the highest in the Mid-Western Mountains (123 births per 1,000 women) and the lowest in the Central Hills (29 births per 1,000 women). Birth rate decreases with an increase in the educational level of adolescent mothers. Interestingly, in terms of wealth quintile, it is highest for adolescent mothers living in households in the middle quintile (104 births per 1000 women, CBS and UNICEF, 2015). Births for lower quintile young mothers can potentially compound the risk of poor maternal outcomes for both mother and child.

Figure 26: Adolescent fertility trends 1996-2014, Nepal

NOTE: Adolescent fertility rates refer to the three-year period prior to each survey.

Source: Pradhan et al. 1997. , MOH, New ERA and ORC Macro. 2002, MOH, New ERA and Macro International Inc. 2007, MOH, New ERA and ICF International Inc. 2012 and CBS and UNICEF. 2015. NMICS 2014

The demographic importance of population ageing

An inevitable consequence of demographic changes resulting from fertility decline and increased longevity is population ageing. Population ageing presents social, economic and cultural challenges to individuals, families, and societies, but also opportunities to enrich entire households and the larger society.

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10 NDHS 2011 shows 16.7% of women age 15-19 already given birth or pregnant with their first child.

In resolution 65/182, a follow-up to the Second World Assembly on Ageing (2011), the General Assembly decided to establish an open-ended working group on ageing in order to strengthen recognition of the human rights of older persons, assess gaps, and consider, as appropriate, the feasibility of implementing further instruments and measures. In resolution 67/139, entitled "*Towards a comprehensive and integral international legal instrument to promote and protect the rights and dignity of older persons*" (2013), the Assembly decided that the Open-ended Working Group on Ageing would "*consider proposals for an international legal instrument to promote and protect the rights and dignity of older persons*".

In Nepal, from 1971 to 2011, the population aged 60 years or over has increased substantially; in 2011 there were 2.15 million

Figure 27: Trends and projections in the proportion of 60+ population and average annual growth rate, Nepal, 1971–2031
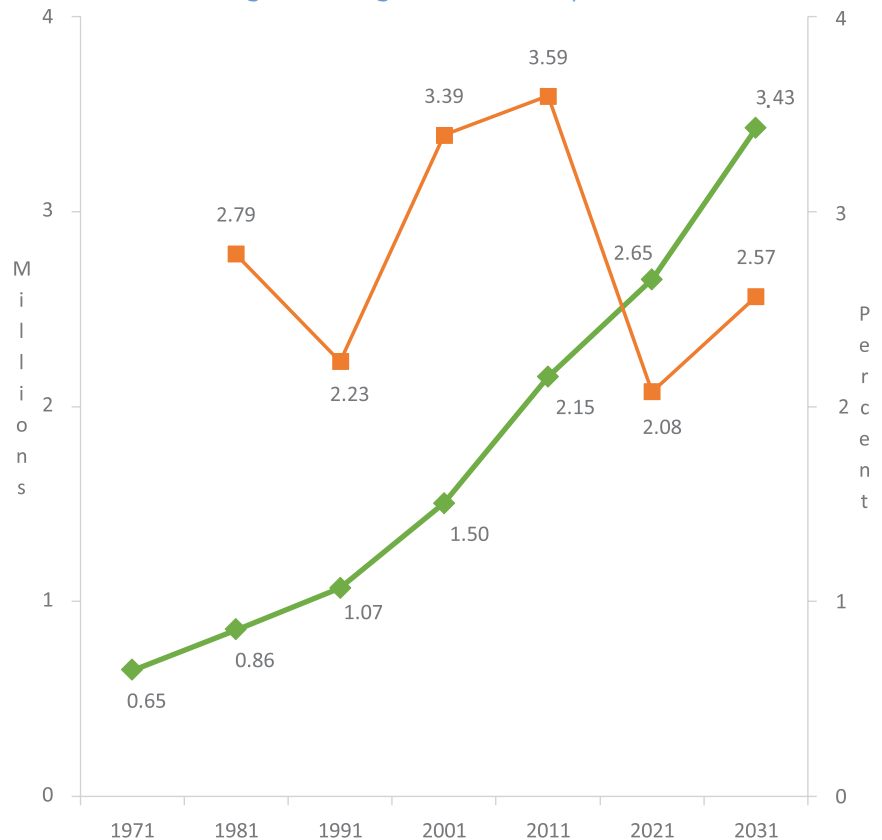
Source: CBS, 2012. National Population and Housing Census 2011: National Report. ; CBS and UNFPA, 2003. Population Census 2001: National Report; CBS. 1993. Population Census – 1991. Vol. I. CBS. 1984. Population Census – 1981. Vol. I. CBS. 2014. Population projection 2011-2031

people aged 60 and over compared to only 0.65 million in 1971 (Figure 27). The size of older persons will reach nearly 3.5 million by 2031, although the average annual growth rate is expected to decline. During 2001-2011 period, the annual growth rate of the population aged 60 years or over was 3.59 percent, while that of the total population was 1.35 percent. In the coming decades, this gap is expected to widen. Therefore it is vital to ensure elderly rights are enshrined within Nepal's laws and that civil structures support this growth.

Persons with disabilities

Persons experiencing a disability are more likely to experience "*violations of dignity*", including social exclusion, violence and prejudice, than persons without a disability. The implications of disability, including the need for social support, extend beyond the individual to households and families impacted by disability, given the added cost of resources spent on health care, loss of income, stigma, and the need for support systems for caregivers.

It is estimated that 15 to 20 percent of persons 15 years and older around the world currently live with a disability (WHO and World Bank, 2011). Disability prevalence is reported to be 21.7 percent in Nepal (ibid, Annex). However, there is no comprehensive data on disability in Nepal. An estimated 7-10 percent of the total population in Nepal are people with disabilities of one form or another. The visually impaired, hearing impaired, physically disabled, mentally disabled are recognized by the Government of Nepal (Meenraj P, 2004). However, CBS in its 2011 census reported the prevalence of disability at 1.94 percent using the same criteria (Malla, U. N. 2012, Disability Statistics in Nepal).

Indigenous people

The PoA of the ICPD of 1994 affirmed the human rights of indigenous peoples. Later that year, the first International Decade of Indigenous Peoples was launched, followed by the Second International Decade of the World's Indigenous People in 2005. The past two decades have seen a notable growth in international actions aimed at protecting, promoting and fulfilling the rights of indigenous peoples. The United Nations Permanent Forum on Indigenous Issues was established in 2000. In 2001 the Commission on Human Rights appointed a special rapporteur on the rights of indigenous peoples, whose mandate was renewed by the Human Rights Council, most recently in 2007. The same year, the United Nations Declaration on the Rights of Indigenous Peoples was adopted by the General Assembly (resolution 61/295), and the Expert Mechanism on the Rights of Indigenous Peoples was established by the Human Rights Council (resolution 6/36).

In Nepal, indigenous people are known as Adivasi/Janajati. According to the 2011 census, indigenous nationalities total 9.5 million people comprise 35.81 percent of Nepal's population (CBS, 2012). The census of 2011 shows 62 indigenous nationalities, 50 in Mountain and Hill zones and 12 in the *Terai*. As in other countries, most categories of indigenous people have historically been, and continue to be, subject to social and political marginalization that has undermined their access to development. They have often been denied both the opportunity to sustain their own cultural heritage and the opportunities commensurate with full social, political and economic integration into the prevailing political system.

The 2015 Constitution of Nepal provides for special arrangements to ensure the rights of indigenous people or Adivasi/Janajatis to exercise their social and cultural rights and preserve and maintain their traditional knowledge, culture and social practices.

3.2 Health

Health priorities

The changes in global population health over the past two decades are striking. There has been a dramatic aggregate shift in the composition of the global health burden towards non-communicable diseases (NCDs) and injuries, including those due to global ageing, and the persistence of communicable, maternal, nutritional and neonatal disorders (i.e. diseases of poverty) in sub-Saharan Africa and South Asia (UN, 2014). Similar developments in the health sector have been observed in Nepal. A 2013 report claims Nepal is facing an increasing burden of NCDs, with injuries from NCDs accounting for more than 44 percent of deaths. Major NCDs in Nepal are cardiovascular diseases, diabetes, cancer, chronic respiratory diseases, oral diseases, and mental disorders.

Sexual and reproductive health

Efforts to improve the quality and accessibility of sexual and reproductive health care since ICPD 1994 worldwide have led to significant improvements in many sexual and reproductive health indicators, with evidence of stronger government commitments to policy, budgeting, and programmes for many of the most pressing sexual and reproductive health goals. Yet aggregate improvements mask inequalities between sexes, among geographic regions, socio-cultural groups, and wealth quintiles of a country.

The persistence of poor sexual and reproductive health outcomes among hard to reach population groups in Nepal underscores the near impossibility of further progress in the realization of health for all persons without sustained attention to strengthening the reach, right and equity-based, comprehensiveness, and quality of health systems. The number and distribution of skilled health workers, a vibrant knowledge sector, and systems of public accountability are among the prerequisites of a rights-based health system and are pivotal to future sustainable gains in sexual and reproductive health. This thematic section recognizes progress in many sexual

and reproductive health outcomes since the ICPD but underscores the continuing fragility of health systems for the poor and the unfulfilled right to sexual and reproductive health.

Numerous UN and bilateral development agencies have defined a human rights-based approach to health as one that aims to realize the right to the highest attainable standard of health based on "a conceptual framework that is normatively based on international human rights standards and operationally directed to promoting and protecting human rights" (UN, 2014). WHO has proposed that human rights-based approach to health is based on seven key principles: availability, accessibility, acceptability, quality of facilities and services, participation, equality, non-discrimination, and accountability (WHO, 2013). As these principles were affirmed in the PoA, combined with the subsequent efforts in making provision of services and underlying social determinants affecting the sexual and reproductive health of women and girls, this can now be seen as reflecting the expansion and strengthening of a human rights-based approach to health.

Child survival

There have been significant improvements in the survival of children in Nepal since 1996. Early age mortality rates have declined, which have contributed to saving children's lives (Figure 28).

Figure 28: Early age mortality trends, Nepal, 1996-2014
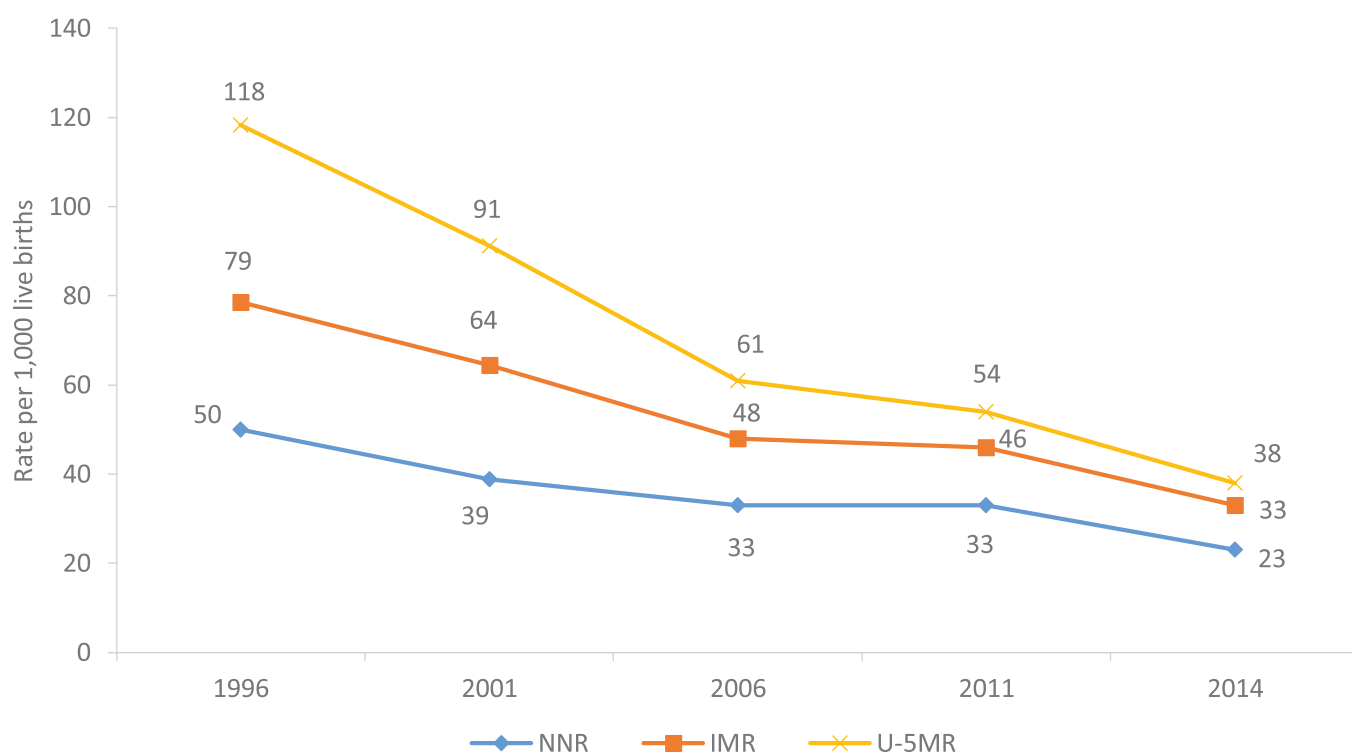
NOTE: Rates refer to the five-year period prior to each survey

Source: Pradhan et al MOH, New ERA and MACRO Intl (1997), MOH, New ERA and ORC Macro (2002) and MOHP, New ERA and Macro International Inc (2007), MOHP, New ERA and IFC Intl, 2012 and CBS. 2015. Nepal Multiple Indicator Cluster Survey 2014

The proportion of neonatal deaths among total under-five deaths has been increasing because declines in mortality rates among neonates have been slower than those for older children (Figure 28). For instance, in 1996, the proportion of neonatal deaths to under 5 years of age (U5 deaths) was only 42 percent which increased to 43 percent in 2001, further to 54 percent in 2006, still further to 61 percent in 2011 and remained the same in 2014. Neonatal survival is highly dependent on the overall health and the continuity of clinical care of mothers in the preconception period, during

pregnancy, at delivery, and during the postpartum period. To improve neonatal survival, women need access to good nutrition before, during and after pregnancy, prevention, and treatment of malaria during pregnancy, syphilis screening and treatment, management of birth complications, adequate treatment of infections in the neonate, and routine support throughout the neonatal period.

Figure 29 shows differentials in childhood mortality by States. To minimize sampling errors associated with mortality estimates and to ensure a sufficient number of cases for statistical reliability, mortality rates shown in Figure 29 are calculated for a 10-year period. Among the seven States, the neonatal mortality rate is the lowest (22 per 1,000 live births) in State Three (Figure 29). As previously mentioned, State Three encapsulates major urban centres including Kathmandu Lalitpur and Bhaktapur. State Two has the highest neonatal mortality of 46 per 1,000 live births, this is much higher than the national neonatal mortality of 33. A similar pattern is seen in infant mortality rates in the seven States. Under-five mortality rate is also lowest in State Three (41 per 1000 live births) while it is highest in State Seven (82 per 1,000 live births) and nearly as high as that in State Two (76, Figure 29).

Figure 29: Neonatal, infant and under five mortality rates, by State, Nepal 2011
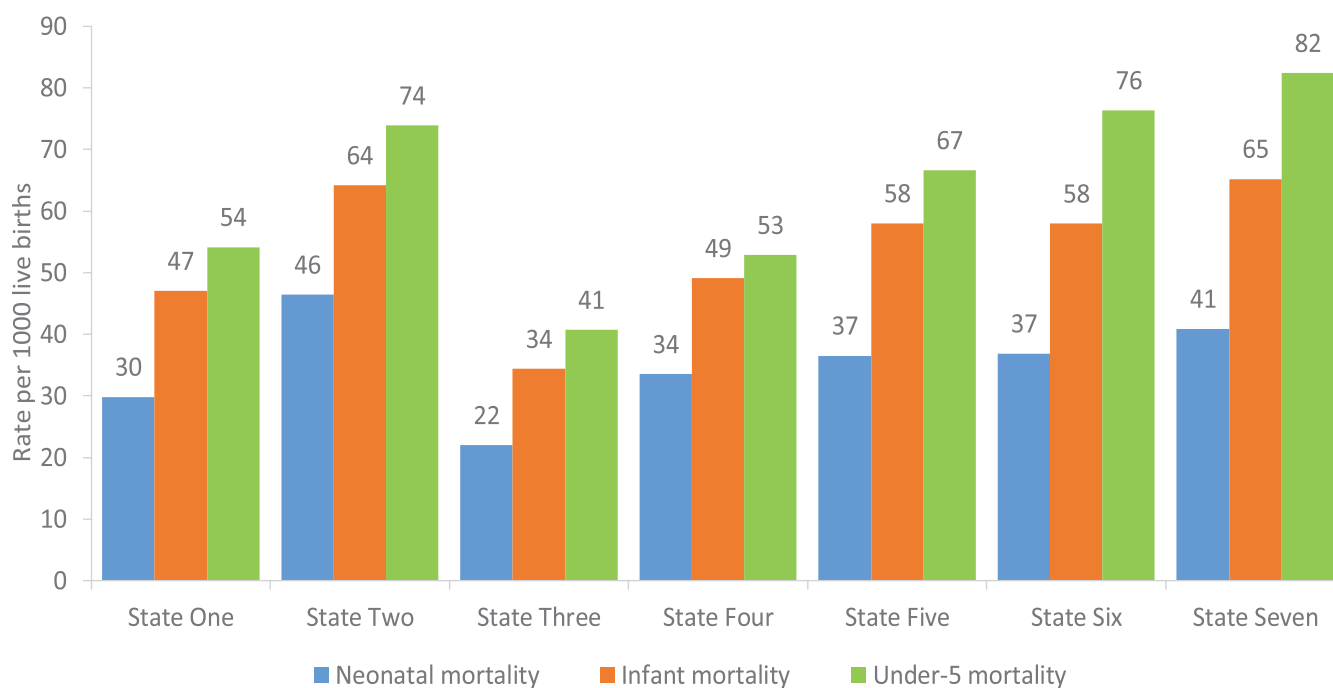
Source: MOHP, New ERA and IFC Intl, 2012

Nutritional status of children and women

Adequate nutrition is critical to a new-born's chance of survival, growth, long-term health, and psychosocial development. Of the three measures of nutritional status of under-five children, namely, height-for-age (stunted), weight-for-height (wasted) and weight-for-age (underweight), underweight has been reduced the most by 38 percent between 2001 and 2014. This is followed by stunting, 26 percent, while wasting has actually gone up by 18 percent during the same period (Figure 30).

Figure 30: Stunted, underweight and wasted children under five, 2001-2014, Nepal
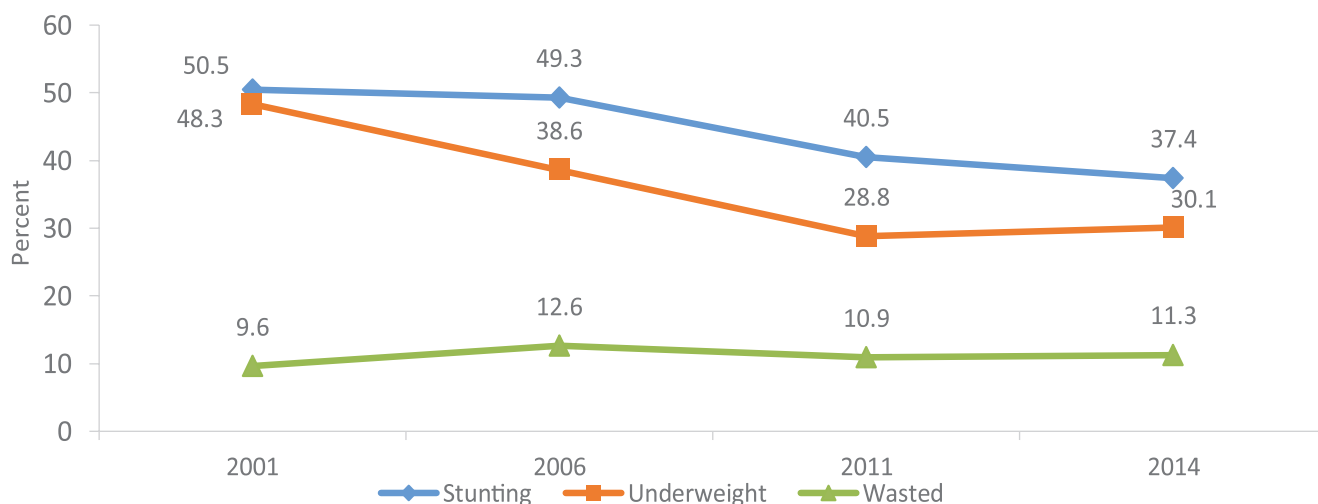
Figure 31 shows the nutritional status of children for under age 5 by State using data of NDHS 2011 according to which highest proportion (55%) of under 5 children are stunted in State Six. Stunting is lowest (33%) in State Three. Stunting is the same (37%) in State One and State Four. In State Seven stunting of children is second highest at 46 percent. In State Two stunting is slightly lower (40%) than the national rate of 41 percent.

Figure 31: Stunted, underweight, and wasted children under five, by State, 2011, Nepal
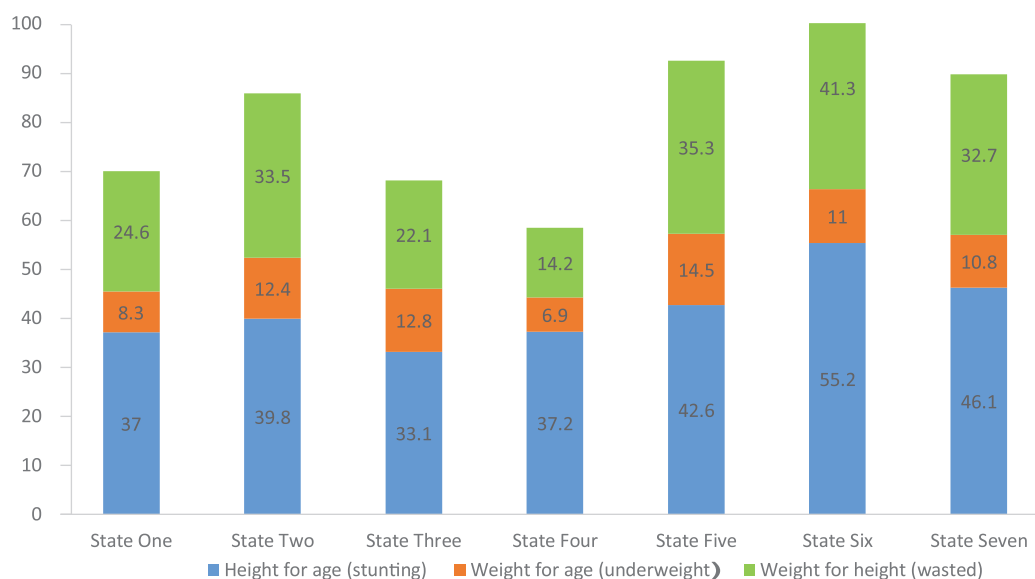
The percentage of wasted children is lowest (7%) in State Four and second lowest (8%) in State One (Figure 31). State Five has the highest (15%) proportion of children of wasted children and State Three is second highest (13%). Prevalence of wasted children is about the same (11%) in State Six and State Seven. The proportion of wasted children is third highest (12%) in State Two.

Low weight for height or underweight is most common (41%) in State Six (Figure 31), second most common (35%) in State Five and this is least common (14%) in State Four. Underweight is the same (33%) in State Two and State Seven. Underweight is slightly higher (25%) in State One than in State Three (22%). Figure 32 shows the nutritional status of under-five children by caste/ethnicity. Of the caste/ethnic groups,

the situation of Newar children is the most promising as stunting, wasting and underweight are all lower than other groups. Stunting proportions are high for Terai Dalit, Chhetri, Terai castes, Hill Janajati and Hill Dalit as they are 40 percent and above; hill Dalit being the worst at 51 percent. Muslim and Bahun have about the same proportion (31%) of children stunted while among the Terai Janajati children the proportion stunting is slightly higher at 33 percent (Figure 32).

Figure 32: Stunted, wasted, and undrweight children aged under 5 years of age, by caste/ethnicity, Nepal 2011
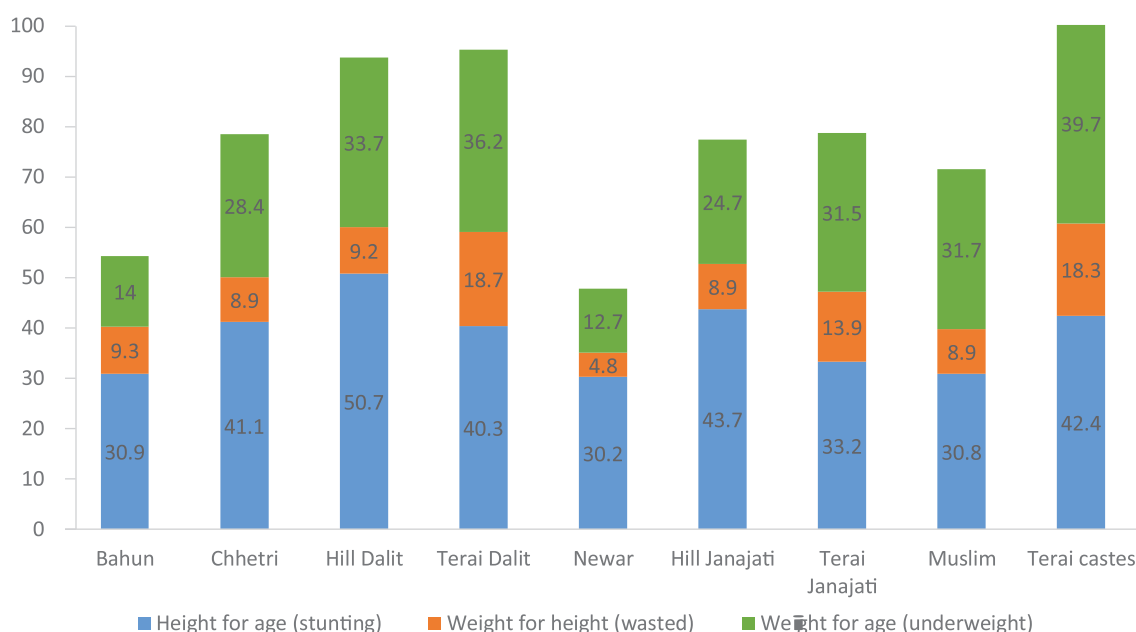
Source: MOHP, New ERA and IFC Intl, 2012

The percentage of wasted children is very high for children of Terai Janajati, Terai castes and Terai Dalit as they are 14 percent and above, Terai Dalit being the worst of at 19 percent. The proportions of wasted children are about the same at 9 percent for Hill Janajati, Muslim, Chhetri, Hill Dalit and Bahun.

Proportions of under five children having low weight for age (underweight) are high for Terai Janajati, Muslim, Hill Dalit, Terai Dalit and Terai castes, 32 percent or more, with Terai castes being the worst of at 40 percent (Figure 32). The proportions of children underweight among Hill Janajati ethnic group (25%) and Chhetri castes (28%) are lower than the national average of 29 percent while underweight among Bahun children is low at 14 percent.

A woman's nutritional status has important implications for her health as well as for the health of her children. Malnutrition in women results in reduced productivity, increased susceptibility to infections, slowed recovery from illness, and a heightened risk of adverse pregnancy outcomes. For example, a woman with poor nutritional status, as indicated by a low body mass index (BMI), short stature, anaemia, or other micronutrient deficiencies, has a greater risk of obstructed labour, of having a baby with a low birth weight, of producing low quality breast milk, of death from postpartum haemorrhage, and of morbidity for both herself and her baby.

BMI is an important index of nutritional status of women as it takes into accounts both height and weight of a woman. BMI is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m^2). A BMI below 18.5 indicates thinness or acute under-nutrition, and a BMI of 25.0 or above indicates overweight or obesity. Thinness or acute under-nutrition is associated with increased mortality and it can affect birth outcomes and lead to obstetric complications.

Table 2: Body Mass Index of Women by reproductive age (15-49), State, and Caste/ethnicity, Nepal, 2011

| Background characteristics | Body mass index | | | Number of women |
| | Normal | Thin | Overweight/obese | |
	18.5-24.9 (total normal)	<18.5 (total thin)	>=25.0 (total overweight or obese)	
Age				
15-19	71.2	25.8	2.9	1,266
20-29	69.3	19.1	11.6	1,938
30-39	69.0	12.2	18.8	1,475
40-49	62.6	15.9	21.5	1,121
State				
State One	69.2	13.5	17.4	1,262
State Two	60.7	32.4	6.9	928
State Three	65.3	12.5	22.2	1,082
State Four	76.9	9.0	14.0	798
State Five	68.0	20.6	11.4	859
State Six	73.5	20.5	6.0	268
State Seven	70.8	23.9	5.3	603
Caste/ethnicity				
Bahun	65.5	17.0	17.5	870
Chhetri	72.9	15.1	12.0	1,115
Hill Dalit	67.8	18.0	14.2	577
Terai Dalit	51.8	44.5	3.7	245
Newar	64.5	8.2	27.3	231
Hill Janajati	75.7	8.4	15.9	1,446
Terai Janajati	68.6	25.9	5.5	659
Muslim	50.6	36.6	12.8	164
Terai castes	57.8	31.3	10.9	495
Total	68.3	18.2	13.5	5,800

Source: MOHP, New ERA and IFC Intl, 2012

Table 2 shows that 18 percent of the total numbers of women of reproductive age are thin or undernourished (BMI < 18.5 kg/m2). Notably, an almost four times higher percentage of women in State Two (32%) than in State Four (9%) are thin (Table 2). In State 5 and State 6 nearly about the same proportion (21%) of women are thin. Also, the proportion of women thin is similar (13 percent – 14%) in State One and State Three. The nutritional status of women in State Seven is not good either with 24 percent thin.

Fourteen percent of the total number of women of reproductive age are overweight/obese (BMI >=25 kg/m2). Overweight/obesity problem seems to be associated with economic wellbeing. For instance, State Three has the highest proportion (22%) of women overweight/obese, followed by State One (17%), State Four (14%) (Table 2).

Younger women are less likely than older women to be overweight or obese. For example, Three percent of women age 15-19 are overweight or obese, compared with 22 percent of women age 40-49. Overweight and obesity are positively correlated with wealth quintile: the proportion of overweight/obese women increases steadily from three percent in the lowest wealth quintile to 30 percent in the highest wealth quintile (Table 2). Among the caste/ethnic groups, the highest proportion (45%) of Terai Dalit women are thin and the Newar women and Hill Janajati women the lowest (8%). High proportions of women belonging to the Muslim religion, Terai castes, and Terai Janajati are thin (37%, 31% and 26% respectively). The proportions thin among Hill Dalit, Bahun and Chhetri are also fairly high (Table 2).

Sexual and reproductive health care

The adoption of the ICPD Programme of Action was a watershed in terms of shifting the emphasis from a purely demographic perspective based on numbers towards a rights-based approach to free choice in access to reproductive health care. The ICPD also drew attention to the importance of education for women and children particularly the girl child and the importance of improving impact toward child health and reducing infant and maternal mortality. The countries participating in the ICPD agreed to increase annual spending on population and related programmes.

By the time the ICPD was held in 1994, Nepal already had had a long history of family planning. The government had already established a population programme by the 1960s. A series of birth reduction targets were set in different development plans. The impact of the programmes, was however, minimal, contraceptive prevalence in 1991 was 25.1 percent and TFR was as high at 5.1 per woman. However, certain aspects of the programme proved positive with the family planning programme being implemented using the national health infrastructure reaching the grassroots, a wide range of contraceptive methods were made available, the programme was not coercive, and a number of important NGOs were active in advancing the agenda.

Fertility, contraception and family planning

Fertility

Fertility in Nepal fell by 63 percent between 1976 and 2014 falling from 6.3 children per woman to 2.3 (Figure 33). Falling fertility is largely the result of a desire for smaller families, coupled with better access to contraception. Aspirations for smaller families are affected by many factors, including improvements in child survival and expanded opportunities for women, especially education (Cleland J. G. et al., 2010).

As indicated by Figure 33, fertility decline began in Nepal in the early 1980s and by the turn of the century, i.e. in the three years preceding the Nepal NDHS 2001, the total fertility rate (TFR) declined to 4.1. However, the pace of fertility decline was the fastest between 2001 and 2006, TFR declined to 3.1 from 4.1, a reduction of one child per woman in five years. Following 2006, the pace of fertility decline continued but at a slower pace. However, it is unclear as to why this is the case.

Figure 33: Trends in Total Fertility Rate, Nepal, 1976-2014
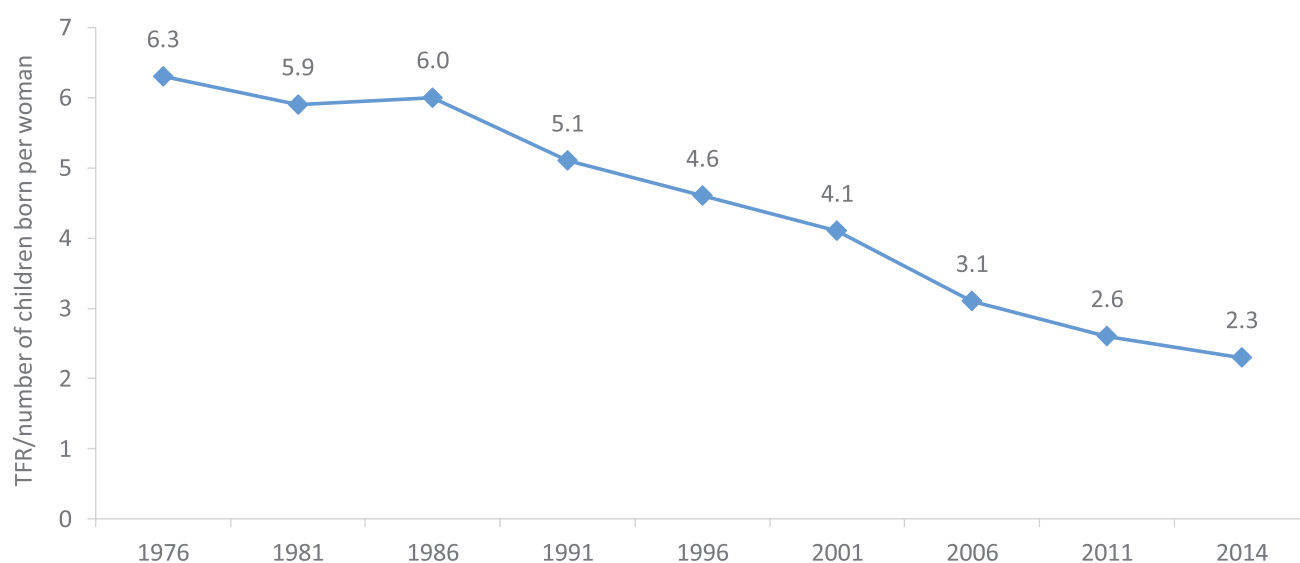
NOTE: Rates refer to the three-year period prior to each survey.

Source: Goldman, N., et al, 1979; MOH, 1983; MOH, 1987; MOH, 1993; Pradhan et al, 1997; MOH, New Era and ORC Macro, 2002; MOH, New Era and Macro Intl, 2007; MOHP, New ERA and IFC Intl, 2012 and CBS and UNICEF, 2014

Among the major caste/ethnic groups, Bahun women had the lowest fertility in 2006 but by 2011 Newar women surpassed them exhibiting the fastest pace of fertility decline (33%) between 2006 and 2011 (Figure 34). Hill Dalit women showed the second fastest pace of decline (Figure 34). The third fastest decline is observed for Chhetri women at 23 percentage points and the decline of fertility among Bahun is similar to Chhetri at (22%). Fertility decline is also fast among Hill Janajati women at 19 percent while among their Terai Janajati counterparts the pace of decline was only 11 percent. The slowest pace of fertility decline is observed for Terai middle castes women at only 7 percent whereas among the Terai Dalit and Muslim women fertility increased in the 2006 and 2011 period (Figure 34).

Figure 34: TFR by caste/ethnicity 2006 and 2011
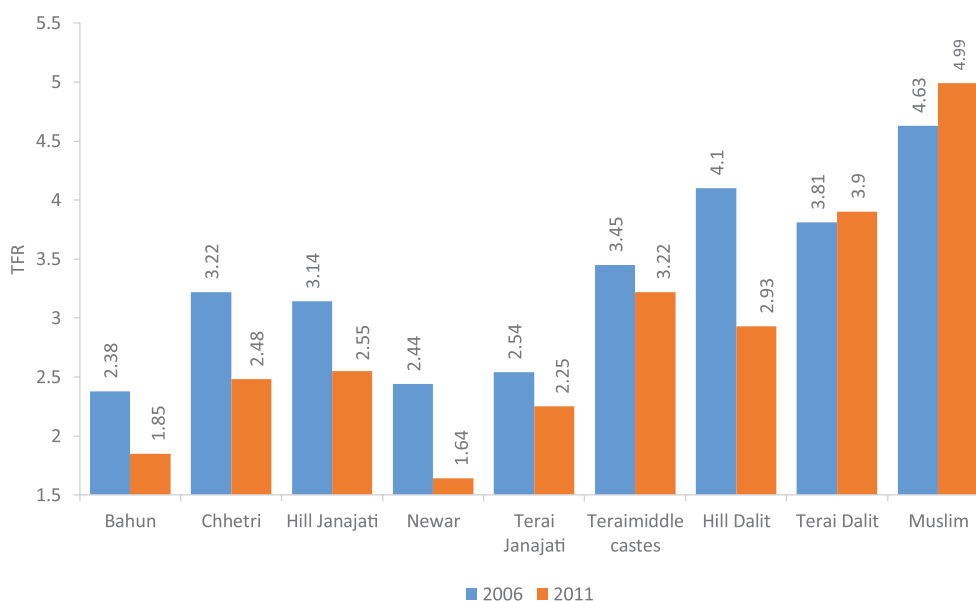
NOTE: Rates refer to the three-year period preceding the survey.
Source: MOH, New Era, and Macro Intl, 2007; MOHP, New ERA and IFC Intl, 2012

An attempt has also been made to estimate TFR for the newly federated seven States of Nepal using NDHS 2011 data. The estimated TFR is highest for State Six at 3.72 births per woman (Figure 35). State Six comprises of districts of Karnali zone (a Mountain zone to in the West) and neighbouring districts such as Rukum, Salyan, Surkhet, Dailekh, Jajarkot, Dolpa, Jumla, Kalikot, Mugu and Humla. State Two exhibits the second highest fertility rate at 3.42 births per woman. This State comprises 8 central and south eastern Terai districts. The third highest TFR is estimated for State Seven at 2.79 births per woman. This State comprises of 9 Far-Western districts extending from Darchula, a Mountain district in the north to Baitadi, Dandeldhura etc. in the Hills to the Kailali and Kanchanpur Terai districts.

The lowest fertility of 1.78 births per woman is found in State Three which encapsulates the largest urban centres which tend to have lower fertility rates due to easier access to reproductive services and information. The second lowest fertility is found for

Figure 35: Total Fertility Rate, by State, 2011
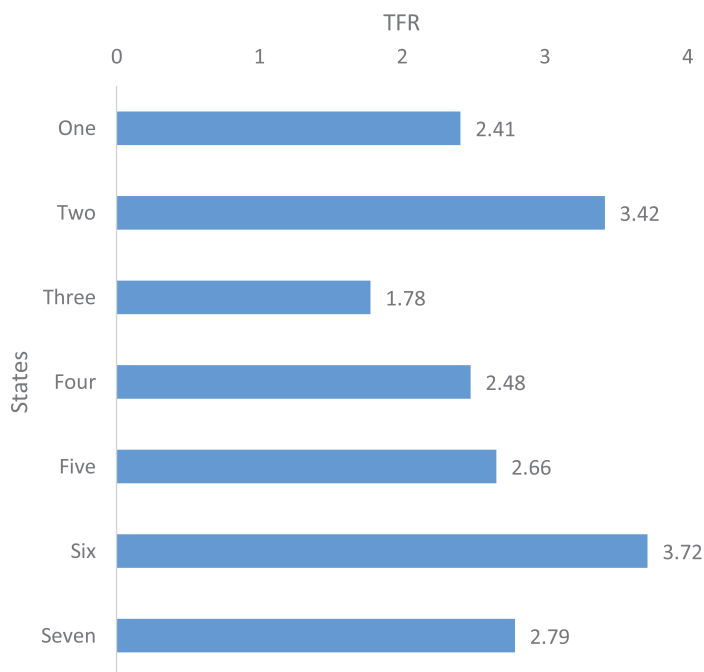
NOTE: Rates refer to the three-year period preceding the survey. Source: MOHP, New ERA and IFC Intl, 2012

State One at 2.41 births per woman (Figure 35), this State is comprised of 14 eastern districts which extend from Mountain region to Hills and the southern Terai districts of Jhapa, Morang and Sunsari.

Contraceptive Use

Despite progress in contraceptive use in Nepal, the Contraceptive Prevalence Rate (CPR) has stalled in recent years (Figure 36). This has been attributed to the legalization of abortion, spousal separation due to the migration of husbands for jobs outside the regular place of residence, and increasing age at marriage (Khanal, et al. 2013).

Figure 36: Trends in Contraceptive Prevalence Rate, Nepal, 1976-2014
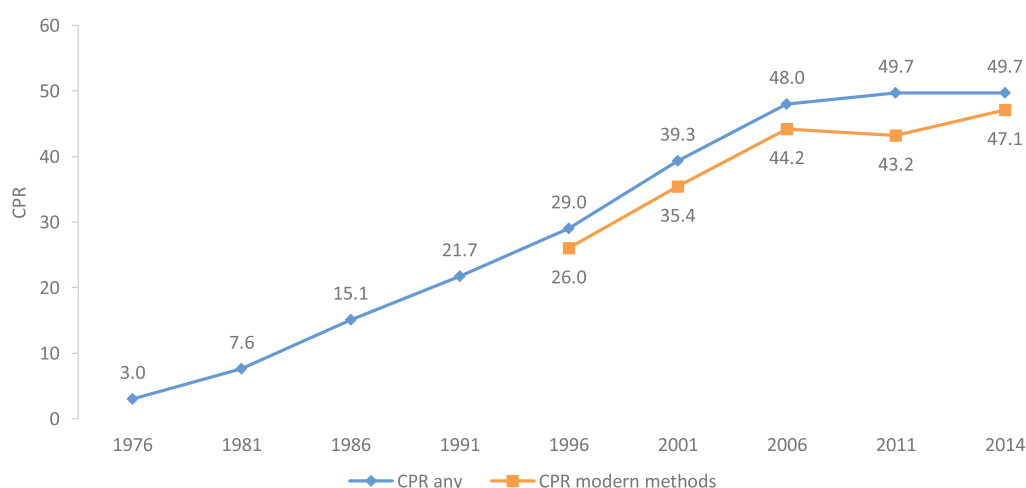
Source: MOH, 1977; MOH, 1983; MOH, 1987; MOH, 1993; Pradhan et al, 1997; MOH, New Era and ORC Macro, 2002; MOH, New Era and Macro Intl, 2007; MOHP, New ERA and IFC Intl, 2012 and CBS and UNICEF, 2014.

Method-wise, after 1981, female sterilization has been the most popular form of contraception. Among the spacing methods, the pill was most popular in use until 1986, by 1991 injection became the most popular and continues until now, followed by condom use. However, by 1996, condom use surpassed pill use except in 2014 when the pill again became more popular than the condom (Figure 37).

Figure 37: Trends in contraceptive method mix, Nepal, 1976-2011
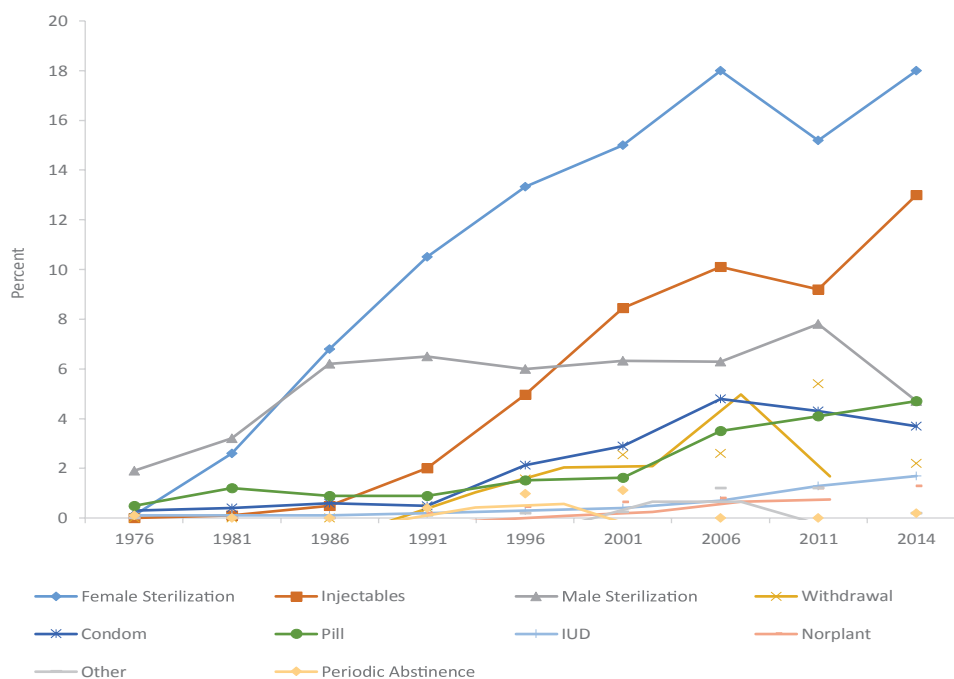
Source: MOH, 1977; MOH, 1983; MOH, 1987; MOH, 1993; Pradhan et al, 1997; MOH, New Era and ORC Macro, 2002; MOH, New Era and Macro Intl, 2007; MOHP, New ERA and IFC Intl, 2012 and CBS and UNICEF, 2014.

The important features of method mix are that nearly half (47%) of all contraceptive users are sterilization methods adopters, mostly female sterilization, modern spacing methods users accounting for about 40 percent and about 10 percent of users are traditional method users. Among the spacing methods users, only a few women have adopted long acting methods such as Intra-uterine device (IUD) and Implant. It should be noted that the National Family Planning Costed Implementation Plan 2015-2020 endorsed by the Ministry of Health in 2015 addresses many of these constraints (MoHP, 2015)

Of the seven newly federated States, State Three has the highest CPR (62.3%) followed by State Seven (51.9%), State Five (47.9%), State Two (47.2%), State Four (45.9%), State One (45.7%) and State Six (42.8%), in that order (Figure 38).

Figure 38: Percent distribution of currently married women age 15-49 by any method and any modern contraceptive method, by State, Nepal 2011
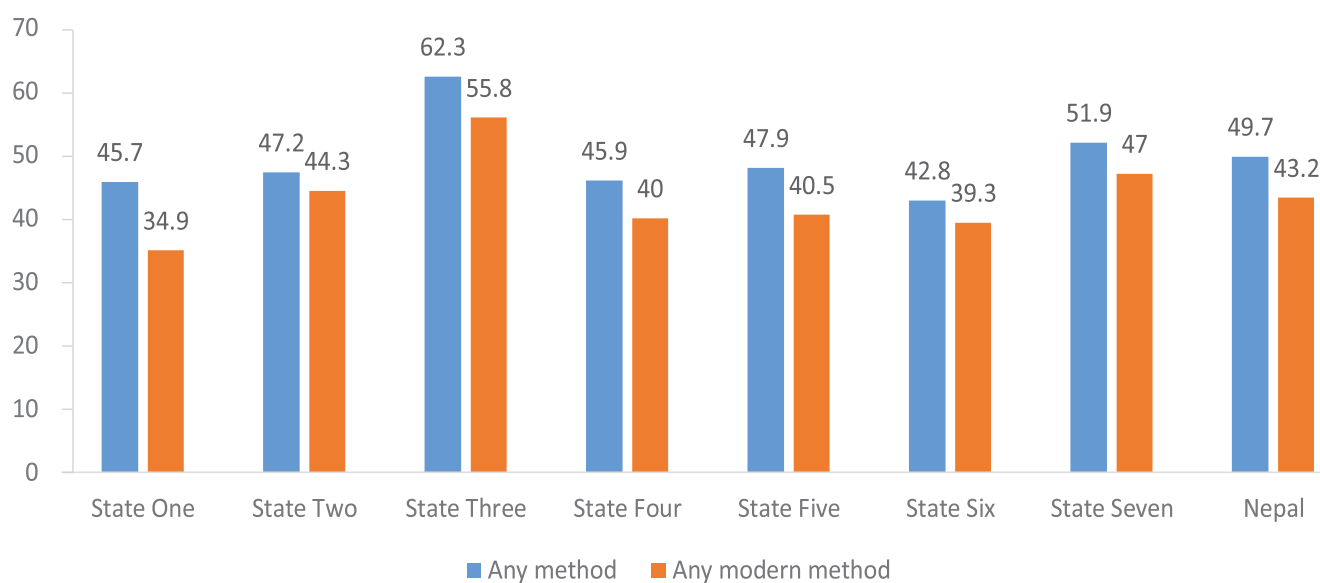
Source: MOHP, New ERA and IFC Intl, 2012

Among the modern methods of contraception use, the sterilization method accounts for 53.3 percent nationally with three States exhibiting higher proportions than this. In State Two, sterilization accounts for 82 percent of all modern contraceptive methods use and of the two sterilization methods, female sterilization method accounts for 75 percent. In no other State is the share of female sterilization as high and among the male sterilization method State Six tops the list as 43 percent of all modern contraceptive methods is male sterilization. The gap between male and female sterilization methods is the narrowest in State Four 12.6 percent and 11.8 percent respectively (Not shown in the figure).

Unmet Need for Family Planning

Different surveys show the persistent high unmet need for family planning in Nepal. Around the turn of the century, unmet need for family planning was 28 percent (17 percent for limiting and 11 percent for spacing), this only slightly declined in the following 10 to 12 years (Figure 39). Unmet need for family planning has increased among the adolescents aged 15-19 from 42 percent in 2011 (MOHP, New Era and IFC International Inc. 2012) to 48 percent in 2014 (NMICS, 2014) and also among youth aged 20-24 from 37 percent to 39 percent during the same period (not shown in the figure)

Figure 39: Trends in unmet need for Family Planning, Nepal 1996-2014
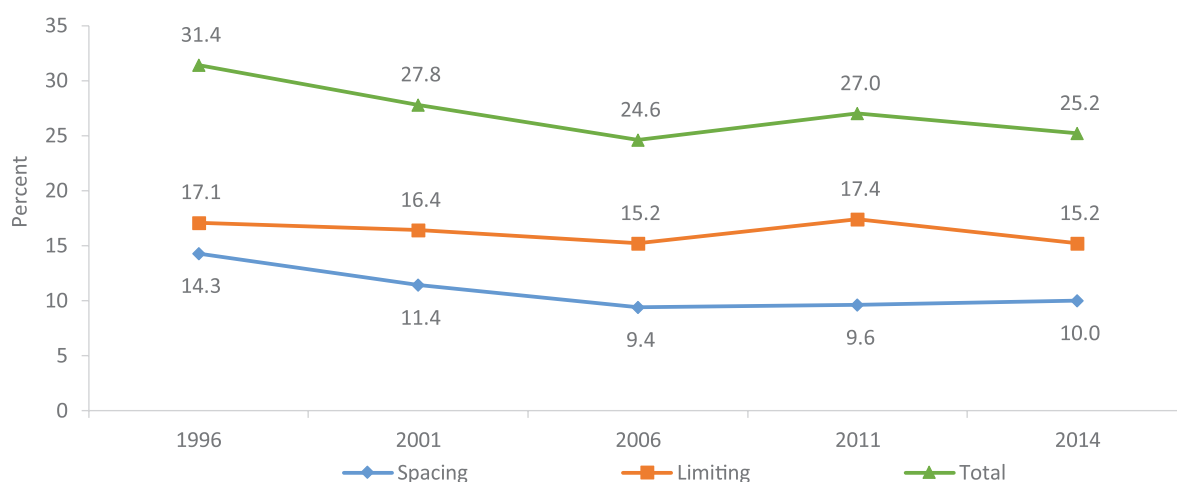
Source: Pradhan et al, 1997; MOH, New Era and ORC Macro, 2002; MOH, New Era and Macro Intl, 2007; MOHP, New ERA and IFC Intl, 2012 and CBS and UNICEF, 2014.

Need and demand for family planning

Currently, married women who say that they do not want any more children or that they want to wait two or more years before having another child, but are not using contraception, are considered to have an unmet need for family planning. Women who are using family planning methods are said to have a met need for family planning. Together they constitute the total demand for family planning.

As of 2014, 25.2 percent of currently married women in Nepal had an unmet need for family planning services, 10 percent for spacing and 15.2 percent for limiting births (Figure 39). At the same time, 50 percent of currently married women are currently using a contraceptive method, with 6 percent using for spacing and 44 percent using for limiting (NMICS, 2014). If all women with unmet need for spacing and limiting were to use family planning, the contraceptive prevalence rate would increase from 50 percent to 77 percent. Unmet need for family planning declined with age from 42 percent among women age 15-19 to 13 percent in the oldest age group (Figure 41). The demand for family planning is highest among women age 35-39 (88%) and lowest among those age 15-19 (59%) (Figure 40).

Figure 40: Unmet/Met need for Family Planning, by age
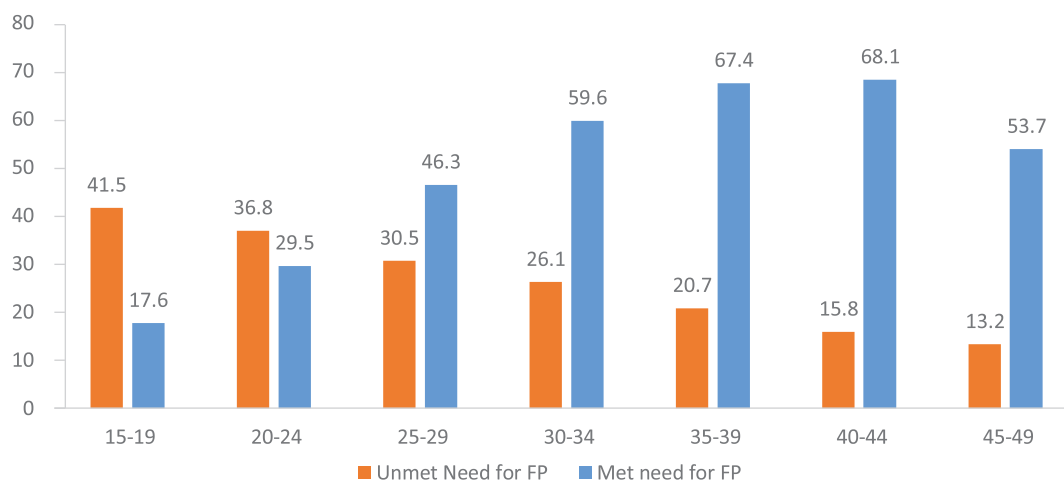
.Source: MOHP, New ERA and IFC Intl, 2012

Unmet need is highest in State Four (35%), second highest in State One (31%), and lowest in State Three (21%) (Figure 41). Unmet need is lowest among Terai Janajati women (16%) and highest among Muslim women (39%) (Figure 41). Further analysis of why this is the case is needed.

Figure 41: Unmet need for Family Planning, by State and caste/ethnicity, 2011
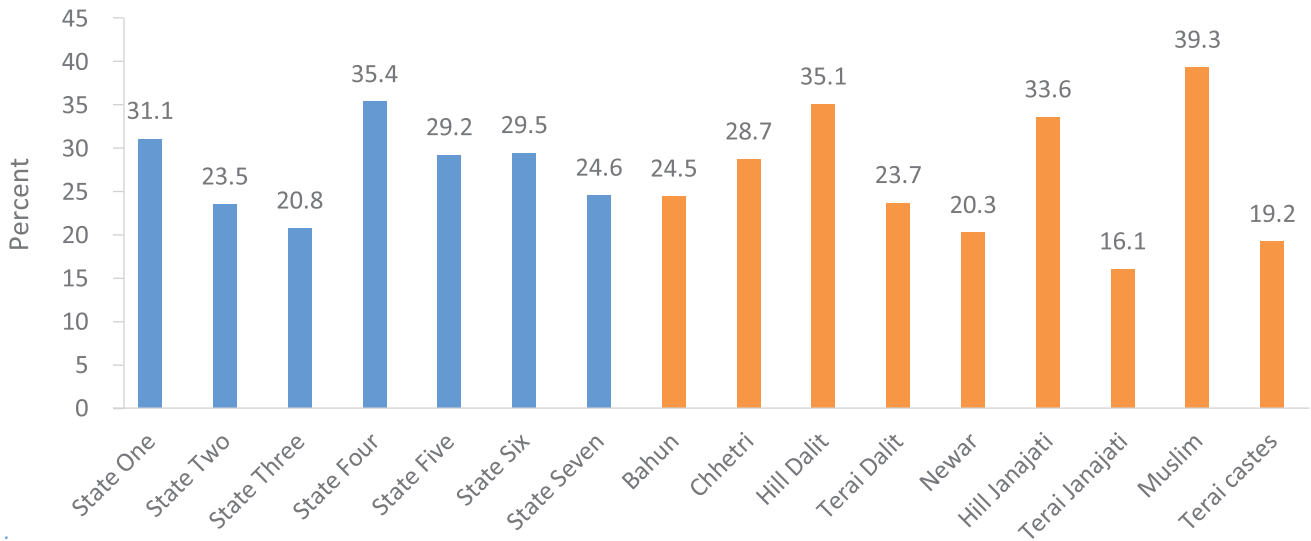
Source: MOHP, New ERA and IFC Intl, 2012

According to NDHS 2011 (MOHP, New ERA and IFC Intl, 2012) 65 percent of the demand for family planning is currently being satisfied in Nepal. In terms of modern methods of contraception, the percentage of demand satisfied comes down to 56. This implies that Nepal's family planning program has some way to go to meet both the spacing and limiting needs of couples. The percent of the demand for family planning that is currently being satisfied by seven States vary a great deal ranging from 75 percent in State three to 57 percent in State Four (Figure 42).

Figure 42: Percentage of the demand for contraception that is satisfied, by State
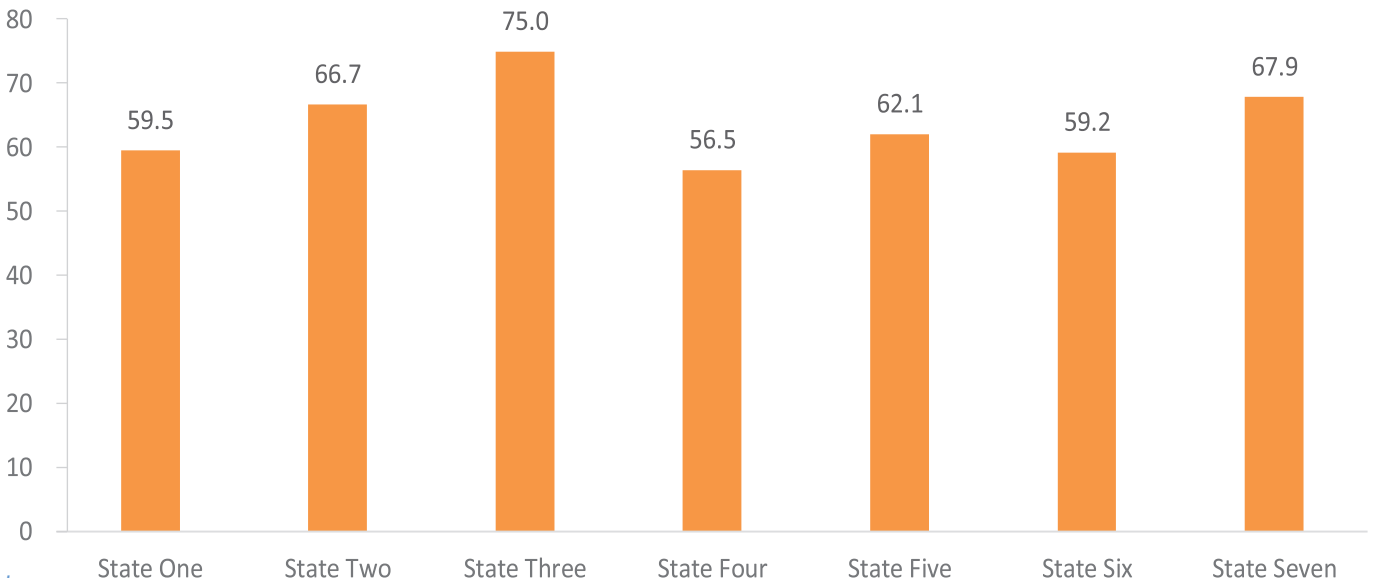
Source: MOHP, New ERA and IFC Intl, 2012

The percentage of demand for contraception that is satisfied is highest among the Terai Janajati followed by Newar, Bahun in that order and it is the lowest among the Muslim women (Figure 43).

Figure 43: Percentage of demand for contraception that is satisfied, by caste/ethnicity
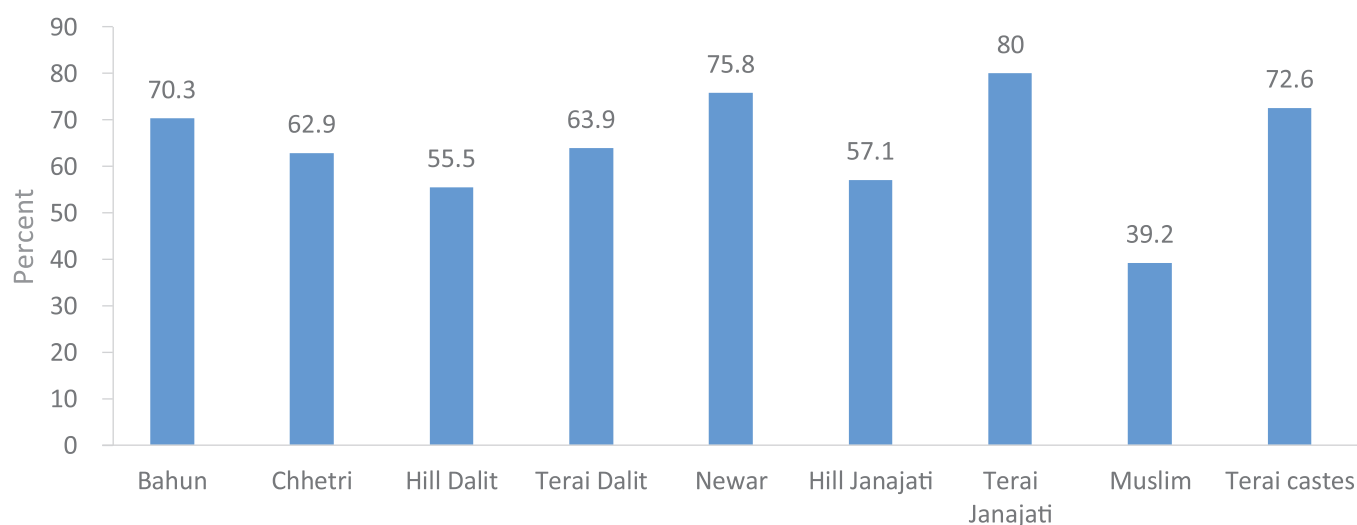
Source: MOHP, New ERA and IFC Intl, 2012

Abortion

Following ICPD 1994 and ICPD+5, the Government of Nepal passed two important legislative measures to ensure reproductive rights. In March 2002, Nepal's Parliament approved legislation to permit abortion on request during the first 12 weeks of pregnancy for any reason, up to 18 weeks of pregnancy in cases of rape or incest and up to any gestation in case of disability or risk to the woman's life or foetus deformity (MOH. 2003, Annual Report 2002/03). It also allowed an exclusive right of the woman to decide whether or not they want to terminate their pregnancy. Their husband or other members of the family cannot, according to the law, influence her decision. The law prohibits termination of pregnancy of any gestation for the sole purpose of sex selection.

Despite the legalization of abortion, many women still fall prey to unsafe abortion practices and put themselves at high risks of maternal mortality and morbidity. A study conducted by Guttmacher Institute and Center for Research on Environment Health and Population Activities (CREHPA) shows that in 2014, women in Nepal had 323,100 abortions, of which 137,000 were legal, and 63,200 women were treated for abortion complications. The abortion rate was 42 per 1,000 women aged 15–49, and the abortion ratio was 56 per 100 live births. Overall, 50 percent of pregnancies were unintended, and the unintended pregnancy rate was 68 per 1,000 women of reproductive age (Puri et al., 2016).

Maternal mortality

Of all sexual and reproductive health indicators, the greatest gains since 1990 have been made in the maternal mortality ratio (MMR). In the early 1990s, more than 500 women died each year for every 100,000 live births from largely preventable causes related to pregnancy and childbirth, and by 2015 the MMR had declined by more than 50 percent, from 539 deaths per 100,000 live births in 1996 to 258 (WHO, UNICEF, UNFPA, WB & UNPD, 2015, Table 3).

Table 3: Levels and trends of MMR, Nepal

Survey/Study year	Maternal Mortality Ratio	Method	Source
1991	515	Sisterhood	MOH. 1993. NFHSS 1991
1996	539	Sisterhood	Pradhan et al 1997.
2006	281	Sisterhood	MOHP, New ERA, and Macro Int'l Inc. 2007.
2004	740	Regression model	WHO, UNICEF & UNFPA 2004
2010	380	Regression model	WHO, UNICEF, UNFPA & WB 2010
2010	229	Sisterhood	Pradhan et al. 2010
2012	170	Regression model	WHO, UNICEF, UNFPA & WB, 2012
2013	190	Regression model	WHO, UNICEF, UNFPA, WB & UNPD, 2013
2015	258	Regression model	WHO, UNICEF, UNFPA, WB & UNPD, 2015

Post-partum haemorrhage, sepsis, obstructed labour, complications of unsafe abortion, and eclampsia, all preventable, are among the leading causes of maternal deaths in Nepal (MOH, 2010). Women under 20 are at high risk of maternal death and for women aged 35 or over the risk increases dramatically, they are three times more likely to die than younger women. Maternal deaths also varied between different ethnic groups, with the highest rates among Muslims followed by Terai women and Dalit women. Most women who died from maternal causes had not received any formal education (MOH, 2010). Although Nepal did not achieve Millennium Development Goal 5 (improving maternal health), with its targets of reducing MMR by three quarters from 539 in 1996 to 135 by 2015, nevertheless, it is on track to do so at a later date.

The main source of maternal mortality data is the periodic sample surveys, mainly the Demographic and Health Sample Survey (DHS), conducted every five years in Nepal. The DHS uses the direct sisterhood method which collects data from women whose siblings have died. A distinct advantage of the method is that it produces a multiplier effect on the rare event of pregnancy-related mortality because each respondent usually has more than one sibling, boosting the size of the sample. However, this is countered by many disadvantages. In higher fertility settings, there is potential for more than one sibling to be sampled and to each report the same death. On the other hand, in high mortality settings there may be no-one left alive to sample and to report, whilst in high mobility environments, siblings without good communication links may not have the information to report.

There are several other disadvantages with the method. The confidence intervals are always high (especially in lower fertility settings, because there are fewer dead siblings to report on). Added to this problem is the fact that the derived ratios span a period of seven to nine years, depending on the sample size, making conclusions on trends very difficult to draw with any level of confidence (Asian Regional Workshop on Estimating Maternal Mortality from Census Data. 2015. 4-7 May. Bangkok). As the derived ratios span such a long time period, a non-sampling error can result from the long reporting period increasing recall bias, such that the further back in the reporting period a death occurred, the more likely it is to be unreported.

Since 2010, many censuses have included questions on deaths of 15-49 year old women and whether the deaths occurred whilst pregnant or within six weeks of the end of pregnancy or childbirth. A major strength of census data is that it can be disaggregated to the sub-national level and that, compared to surveys, there are no sampling errors. The census does not normally collect maternal mortality data, but pregnancy-related deaths data, which includes maternal deaths. The key distinction between maternal death and pregnancy-related death is difficult to pinpoint using standard enumeration techniques unless some further verbal questioning takes place. A post-census verbal autopsy is therefore recommended if maternal mortality data is to be collected during a census.

Antenatal Care

Gains in maternal survival over the past 20 years can be attributed in part to advances in the use of antenatal care, institutional delivery, caesarean section advancement, and skilled attendance at delivery, postnatal care (PNC) of mother, emergency obstetric care and family planning among select sectors of society. In Nepal, the proportion of pregnant women making 4 and more antenatal care visits to a health facility has increased by nearly 7 times, increasing from 9 percent in 1996 to 60 percent in 2014 (Figure 44).

Figure 44: Number of ANC visits during last pregnancy, 1996-2014, Nepal
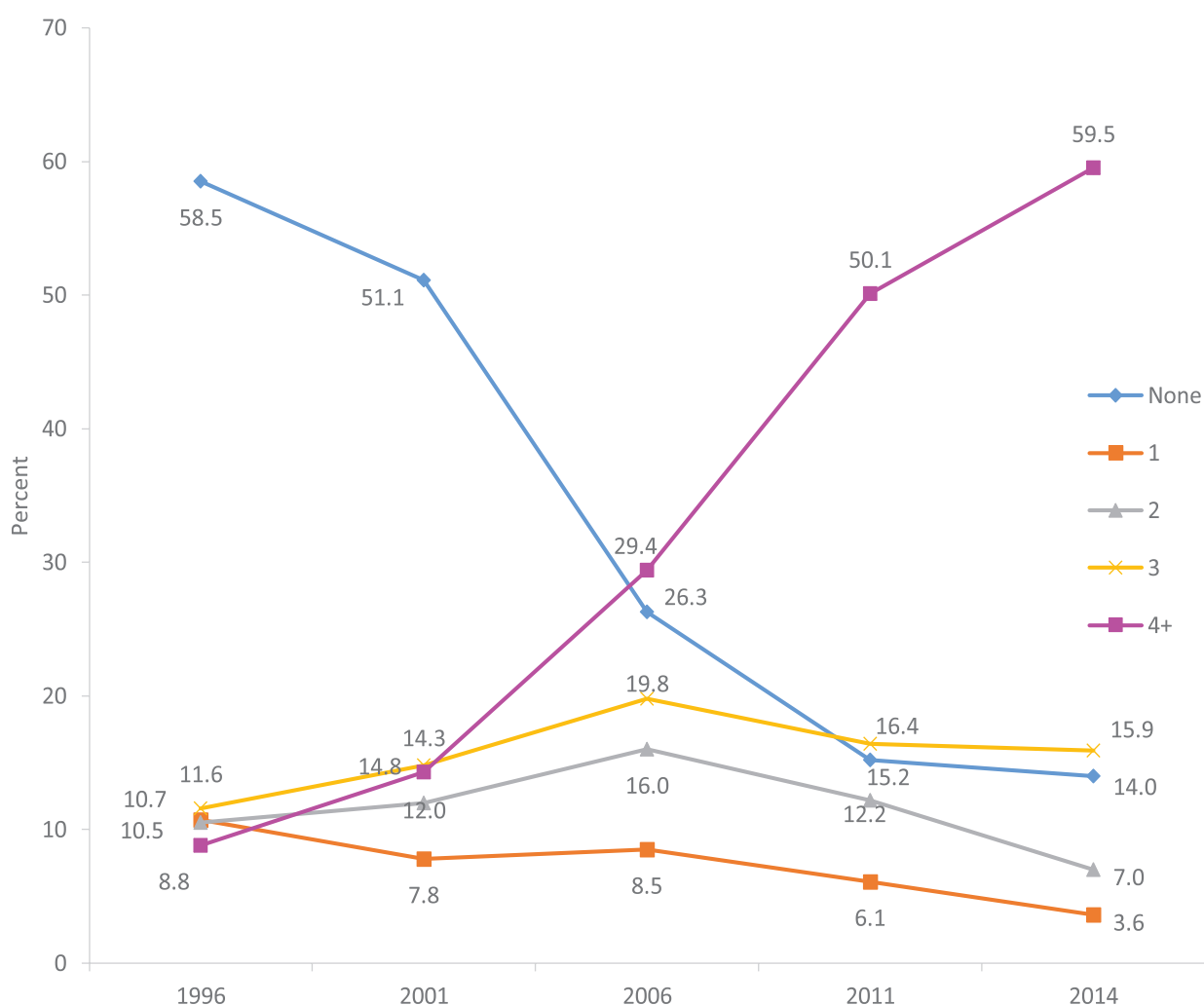
Source: Pradhan et al, 1997; MOH, New Era and ORC Macro, 2002; MOH, New Era and Macro Intl, 2007; MOHP, New ERA and IFC Intl, 2012 and CBS and UNICEF, 2014.

Figure 45 shows trends of pregnant women for ANC visits by State. State Two and Six have a problematically low rate of ANC visits for mothers who have given birth, 33.4 percent and 41.6 percent respectively. State Three and State Seven, the two States with the larger urban populations, have the highest rate of ANC visits (Figure 45).

Figure 45: Percentage of women age 15-49 who had a live birth with at least 4 ANC visits for the most recent live birth, by States, 2011, Nepal
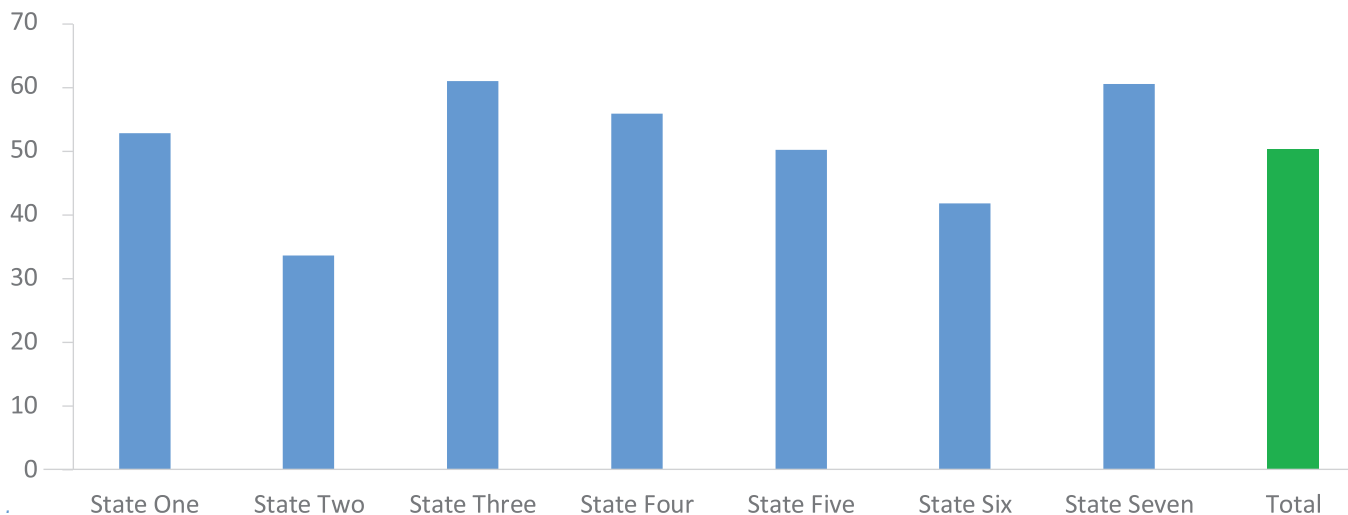
Source: MOHP, New ERA and IFC Intl, 2012

ANC visits have improved over time for all ethnic groups between 2001 and 2011. Visiting numbers have improved the most for the Bahun, with a 50 percentage point increase from 2001 to 2011, followed by the Terai Janajati with a 43 percentage point increase in the same period. As with other cases the marginalized Terai Dalit and Muslim populations have gained the lowest increase in ANC visits, 18 percentage points and 26 percentage points respectively (Figure 46).

Figure 46: Percentage of women, aged 15-49, who had a live birth with at least 4 ANC visits for the most recent live birth by Caste/ethnicity, 2001-2011
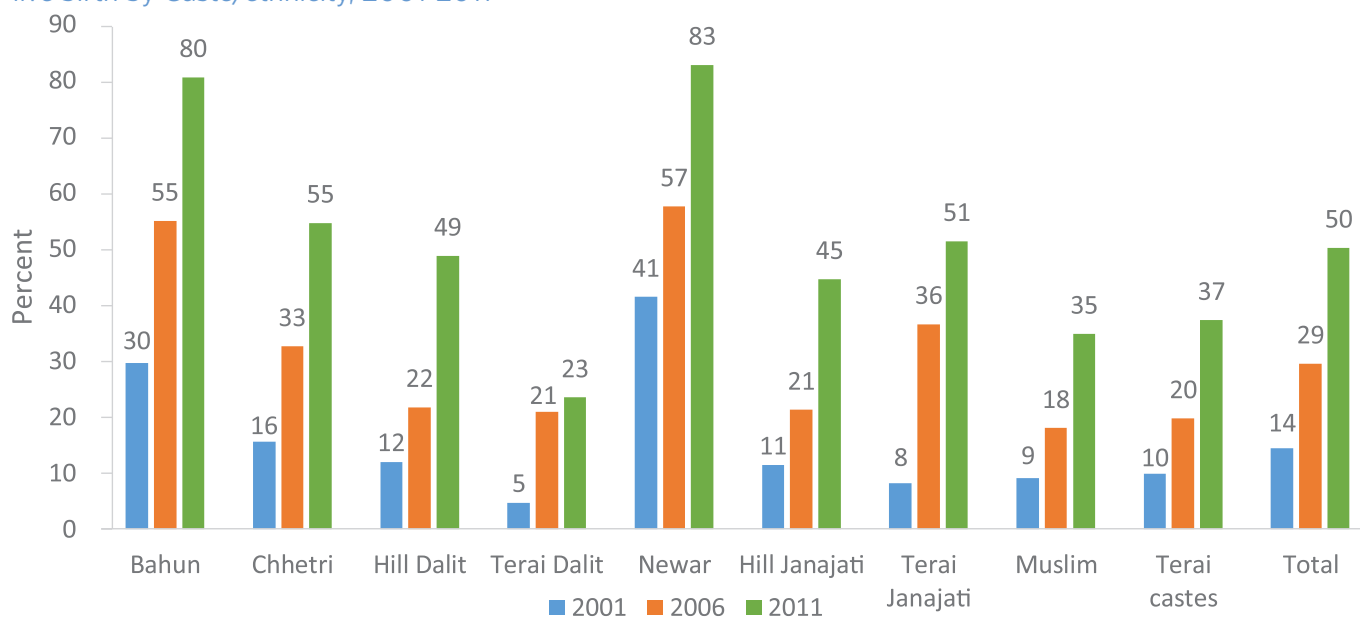
Source: MOH, New Era and ORC Macro, 2002; MOH, New Era and Macro Intl, 2007; MOHP, New ERA and IFC Intl, 2012 and CBS and UNICEF, 2014

Delivery Care

The percentage of births taking place in health facilities has increased by nearly seven times in the past 20 years, from 8 percent in 1996 to 55 percent in 2014 (Table 4). This has occurred due to continued government encouragement of institutional deliveries through free delivery services and payment for transportation costs for pregnant women. Delivery by caesarean section is also increasing. The percentage of births assisted at delivery by a skilled birth attendant (SBA) has increased by more than six times in the last 20 years, from 9 percent in 1996, to 56 percent in 2014 (Table 4). The trend for PNC check-up of mothers has followed a similar trend.

Table 4: Delivery and PNC Care, 1996-2014, Nepal

Year					
Year	Health facility delivery (%)	Percent Delivered by C-section (%)	Delivery by skilled birth attendant (%)	PNC check-up of mother (%)	Source
1996	8.0	1.0	9.0	13.0	Pradhan et al MOH, New ERA and Macro Intl Inc. 1997
2001	9.1	0.8	10.9	20.7	MOH, New ERA and Macro Intl Inc. 2002
2006	18.0	2.7	19.0	33.0	MOHP, New ERA and Macro Intl Inc. 2007
2011	35.3	4.6	36.0	44.5	MOHP, New ERA and ICF Intl, 2012
2014	55.0	9.0	56.0	58.0	CBS and UNICEF. 2015. NMICS 2014

Among the seven federal States, the women in State Six are less likely to be assisted by SBA during their deliveries compared to women in other States (Figure 47).

Figure 47: Percentage of births delivered by a skilled birth attendant, by State, 2011, Nepal
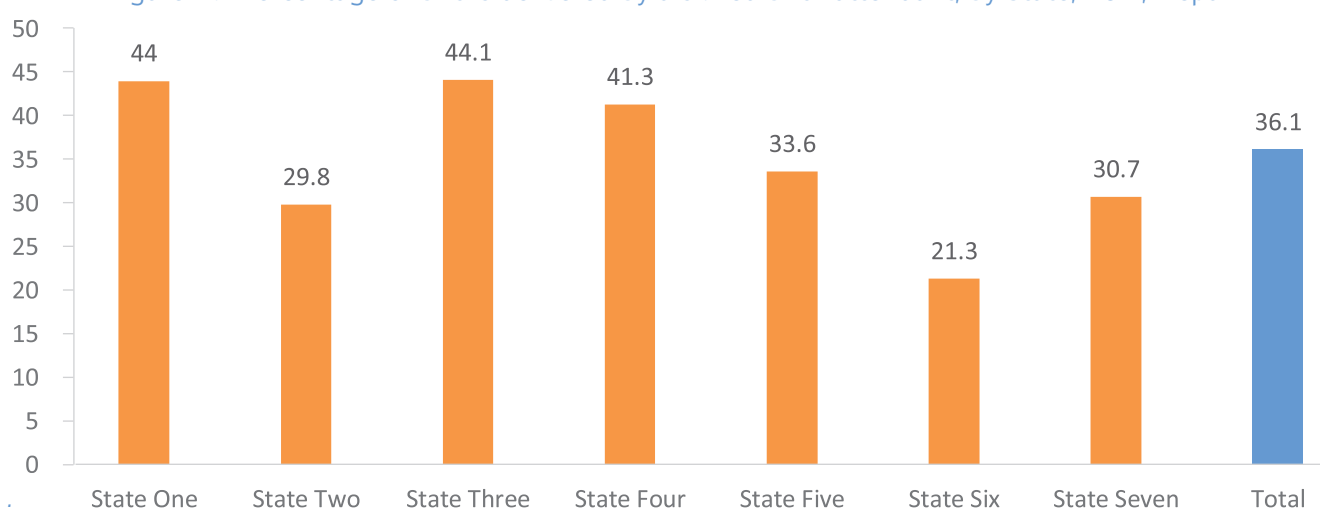
Source: MOHP, New ERA and IFC Intl, 2012

As shown in Figure 48, access to a SBA is marked by inequalities among groups by caste/ethnicity. Although, increasingly, deliveries are being assisted by SBA among all social groups, the Terai Dalit women have the lowest level of use (22.3%, Figure 48).

Figure 48: Percentage of births delivered by a skilled birth attendant by Caste/ethnicity, 2001-2011, Nepal
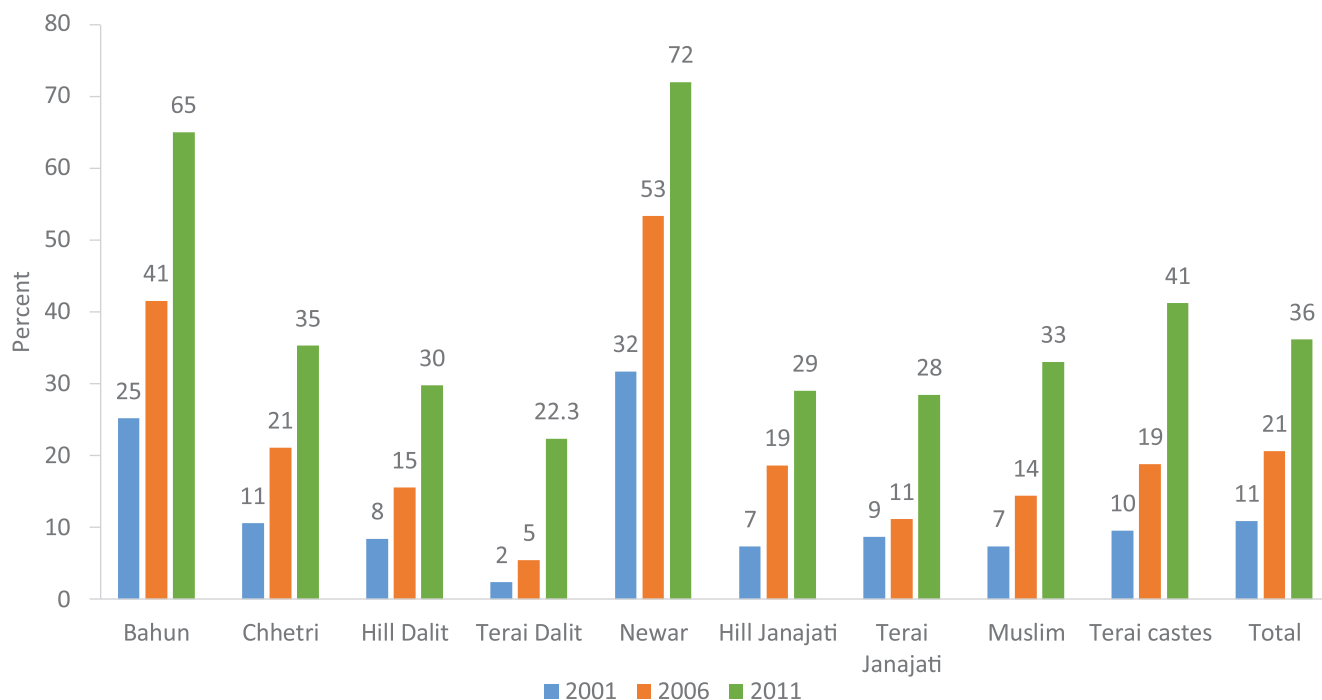
Changing patterns of life expectancy

In Nepal, life expectancy at birth for both sexes increased from 54.0 years from 1991 to 66.6 years in 2011, a gain of 15.6 years, reflecting changes in female life expectancy at birth from 53.8 to 68.0 years and in male life expectancy from 54.1 to 65.5 years over the same period (Figure 49). Since data on life expectancy first became available (1952/54), it had nearly increased two and a half times by 2011.

Figure 49: Trends of life expectancy at birth, Nepal, 1952/54-2011
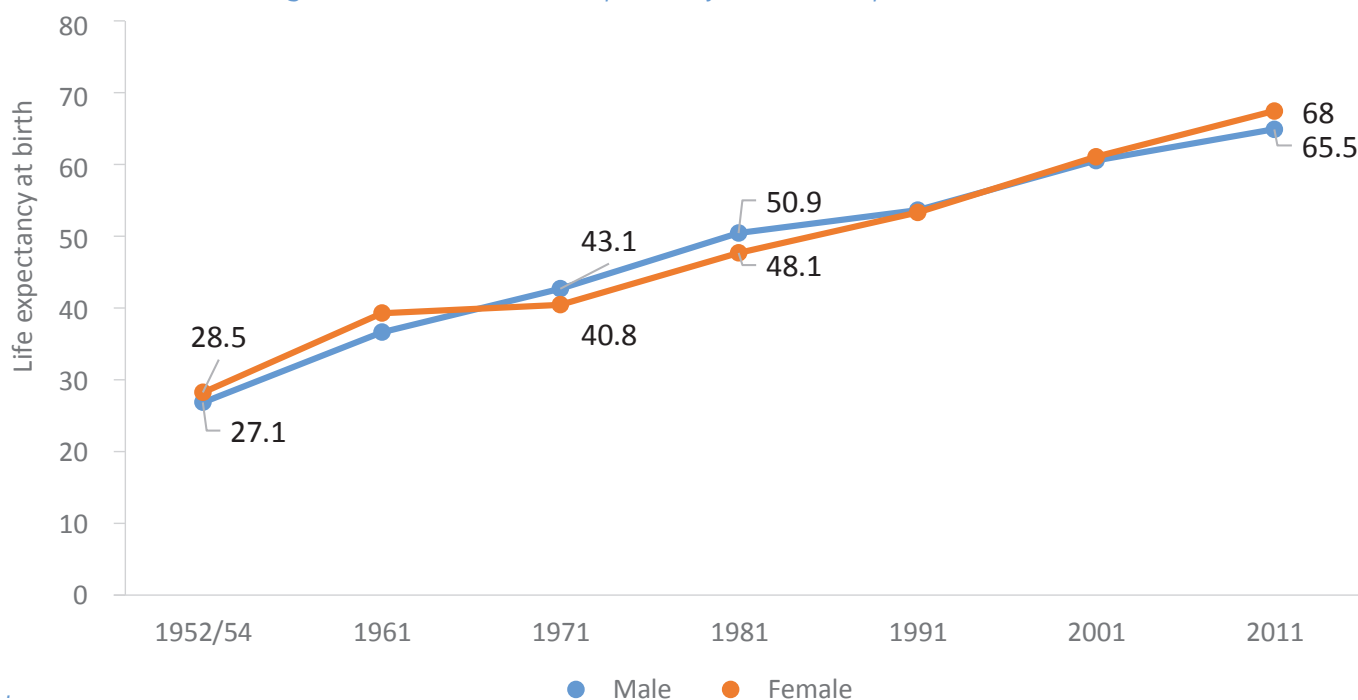
Average annual gains in life expectancy were high until 1961. These gains overtime coincided with the eradication of malaria, until 1971 the average annual gain in life expectancy was less than 0.5 years. During the 1971-1981 period the average gain in life expectancy was 0.75 years and both males and females gained nearly equally. From 1981 to 1991 gains in life expectancy were slow. However, from 1991 to 2011 gain in life expectancy improved and females gained more than their male counterparts.

At the national level, as of 2011, females have a higher life expectancy than males (2.5 years). However, districts such as Okhaldhunga, Khotang, Udayapur, Solukhumbu, Panchthar, and Rasuwa, females outlive males by more than 3 years. Except in Arghakhanchi district, life expectancy at birth for females is lower than that of males (see Appendix VI).

Inequalities in life expectancy are dynamic; they change over time, both within and between populations, reflecting variable political, economic and epidemiological contexts. Because a central obligation of states is to respect, promote and protect the human rights of its people, life expectancy is an aggregate indicator of the extent to which states fulfil this obligation, and invest adequately in the capabilities, health, social protection and resilience of its citizens.

3.3 Place and mobility

The importance of place and mobility as a thematic pillar resides in linking the large-scale trends and dynamics of population: household formation and composition, internal mobility and urbanization, international migration, and, land and displacement. All to the achievement of both individual dignity, well-being and, sustainable development.

This following section of this report discusses the changing social and spatial distributions of the population and suggests approaches to integrating these changes into public policies so that they may support the human needs for a safe and secure place to live and to allow for mobility. Analysis covers the changing structure of households, internal migration, urbanization, and international migration in relation to place and mobility in the context of Nepal.

The changing structure of households

The PoA/ICPD called on States to develop policies to provide better social and economic support to families, acknowledge the rising cost of child-rearing, and provide assistance to the rising number of single-parent households. The PoA recognized that the family could take various forms. However, little mention was made of prevailing trends in family or household structures at the time, other than the noted rise in single-parent households. It did not anticipate the growing instability of marital unions in many societies, or the growing heterogeneity of household structures and living arrangements, including the one-person, single-parent, child-headed, and grandparent-headed households that characterize many families today.

Hence, the principal objectives of the PoA, to ensure that families and households have secure homes and that parents have the opportunity to give due attention to the well-being of their households, especially their children, was reaffirmed during the ICPD review in 2014. This is important given that households are growing increasingly more diverse in structure, which a rising number of persons live alone, and that children worldwide are more likely to be raised by a single parent.

The rise in one-person households

In the two decades since the ICPD, there is emerging evidence that shows a measurable rise in single-person households in Nepal partly due to several converging social trends, such as rising age at marriage, the rate of divorce and proportions of unmarried persons. For instance, the percentage of one-person household slightly increased from 3.7 percent in 1991 to 4.7 percent in 2011 (Central Bureau of Statistics, 2014).

Delayed marriage

The singulate mean age at marriage (SMAM) for women and men has increased in Nepal in the past 50 years. The SMAM for male has increased from 19.5 years in 1961 to about 23.8 years in 2011 while for female it has increased from 15.4 years to 20.6 years during the same period. The difference between the male-female SMAM is gradually narrowing (Figure 50).

Figure 50: Singulate mean age at marriage (years) by sex, Nepal 1961-2011
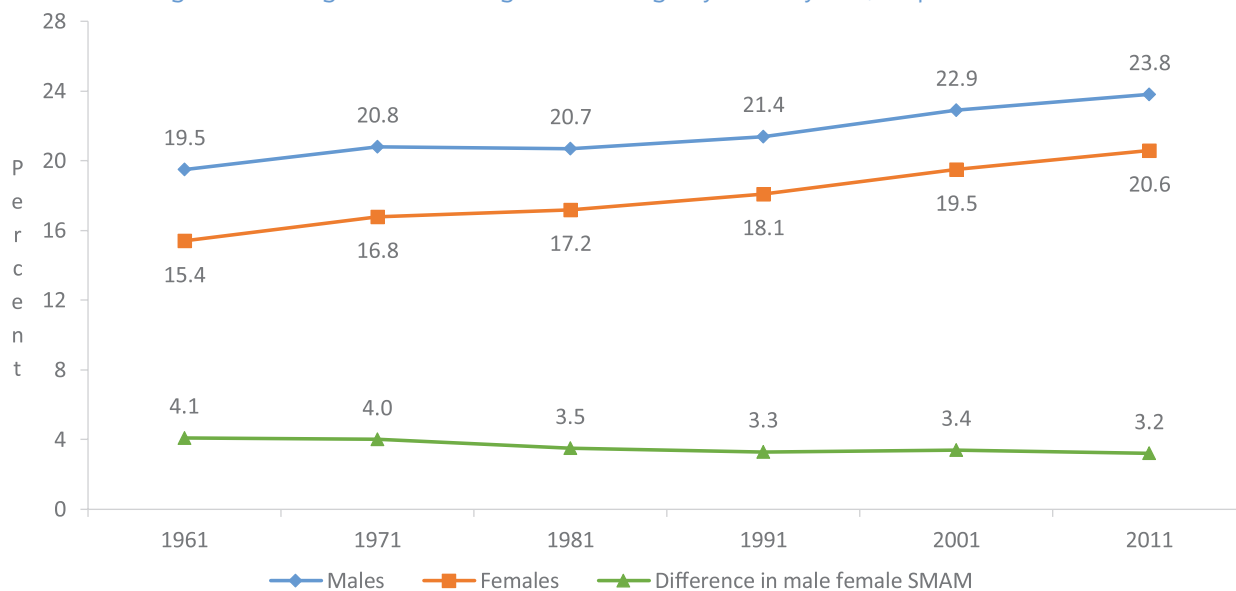
Source: Bajracharya, G. and Bhandari, D. R. 2014

Rise in the proportion of the population who never marry

In Nepal, the proportion of the population who never marry is increasing. For instance, the proportion of the male population (aged 10 years and above) w ho are never married increased from 33.1 percent in 1971 to 40.6 percent in 2011 (Figure 51). On the other hand, the proportion among the female population who never marry has increased from 20.8 percent to 31.1 percent for the same period (CBS, 2014).

Figure 51: Trend in percentage of never married population aged 10 years and over, Census years 1971-2011, Nepal
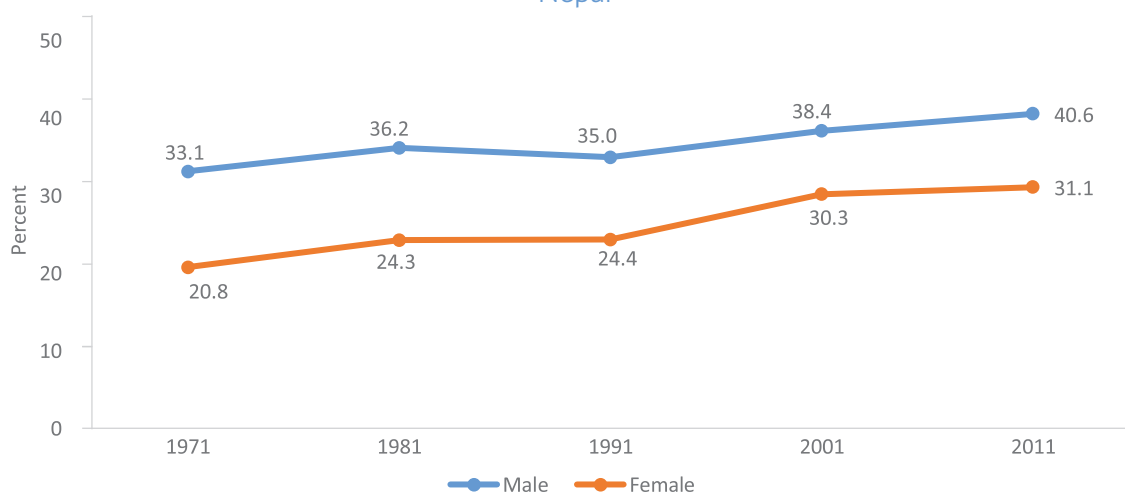
Source: Bajracharya, G. and Bhandari, D. R. 2014

Rise in divorce

Although incidences of divorce/separation among both ever-married men and women is very rare (less than 1 percent), the proportion of persons divorced or separated has also increased in the last decade (intercensal

period 2001-2011), especially after the age group 30-34 years for both men and women. The divorce/separation rate is higher among women in all age groups compared to men, which may be due to the prevalence of men deserting their first wives and taking second wives.

Therefore, the observed rise in one-person households in Nepal, as is the case globally, reflects numerous social changes, including delayed marriage, non-marriage, divorce and widowhood. In this context, it is now time that Nepal should take into consideration the growing diversity of household structures and living arrangements, and the corresponding needs of gradually growing one-person households among both young and older people in order to reduce social isolation. Specific aspects of social protection systems relevant to the well-being of families and households such as increasing efforts to ensure health, education and welfare services and supporting and assisting vulnerable families (divorced/separated women) should be prioritized in policies and plans of the government.

Internal migration and urbanization

Internal migration

The Framework of Actions for the follow-up to the ICPD PoA recognizes that mobility, and safety and security during internal migration, are central to the opportunity for people to secure new and better capabilities, work and livelihoods. Analysis of various census data reveals that the number of persons residing in areas other than their place of birth has increased by nearly six times in the last four decades in Nepal. According to the 1971 census, the number of persons residing in regions other than their region of birth was 445,128 and this figure in subsequent censuses of 1981, 1991, 2001 and 2011 increased to 929,585; 1,228,356; 1,727,350, and 2,654,0047 respectively (Figure 52).

Figure 52: Internal migration, 1971-2011, Nepal
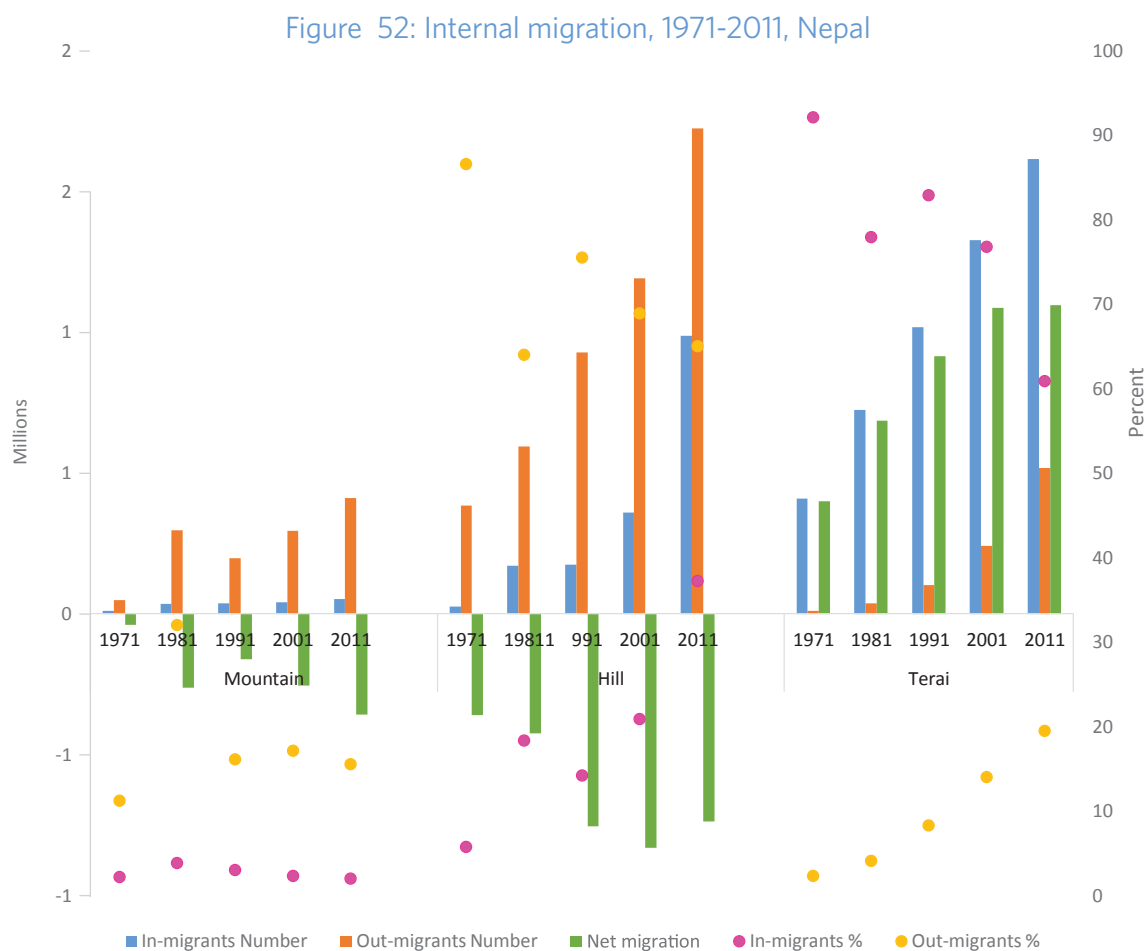
Source: Suwal, B.R., 2014

The 2011 census data, as well as past census data, indicates that in Nepal most internal migration occurs from Hills to Terai and rural to urban areas. Migration experts argue that internal migration in Nepal is mainly due to regional imbalances in the distribution of resources, opportunities, access to services, poverty, unemployment, difficult livelihoods, and food scarcity for households (Suwal, 2014).

Lack of economic opportunities at the place of birth is one of the push factors to move to other places outside the country for their livelihood. In the past, people from the Mountains and Hills moved to the Terai to acquire land and seek improved economic opportunities. This trend is still continuing, though at a much slower pace, with the Terai the largest gainer of population through the migration process. One of the adverse effects of unmanaged internal migration is that it can create labour shortages in the place of origin and a surplus of labour in the place of destination. With the increasing number of in and out of country migrants, Nepal is gradually facing these problems as many agricultural households in the Hills are facing shortages of agricultural labour.

In this context, specific policy interventions such as the regionally balanced distribution of physical infrastructures, socio-economic services, and the development of small towns and satellite cities in rural regions need to be formulated and effectively implemented to manage internal migration. This is especially important from Hills to Terai and rural to urban areas. At the same time, the government should support people's right to move internally as a means to improving their lives.

The scale and pace of urbanization

One of the important significant trends in internal migration in Nepal is urbanization, including both circular and permanent movements from rural areas into urban settings large and small. Urbanization in Nepal is reported to be slow. Also the definition of urban centres has not been consistent over the years. In the past, only population size was considered by the government while later infrastructure development was also taken into account. However, urbanization experts comment that the universally accepted criteria of population size, density, contiguity and occupational structure of population are given scant attention. Political ad hoc decisions in assigning municipal urban areas are quite evident (Sharma, P. 2003).

The urban population in Nepal has grown from 4 percent in 1971 to 42 percent in 2011[11]. The total urban population increased from 0.46 million in 1971 to 11 million by 2011 which is nearly a 24-fold increase (Figure 53). It is said that new places were declared urban centres on a haphazard basis without following a consistent definition of urban areas over time and therefore the total urban population reported here is said to be strictly not urban.

Figure 53: Number of urban centres and percentage distribution of population by residence, 1952/54-2014
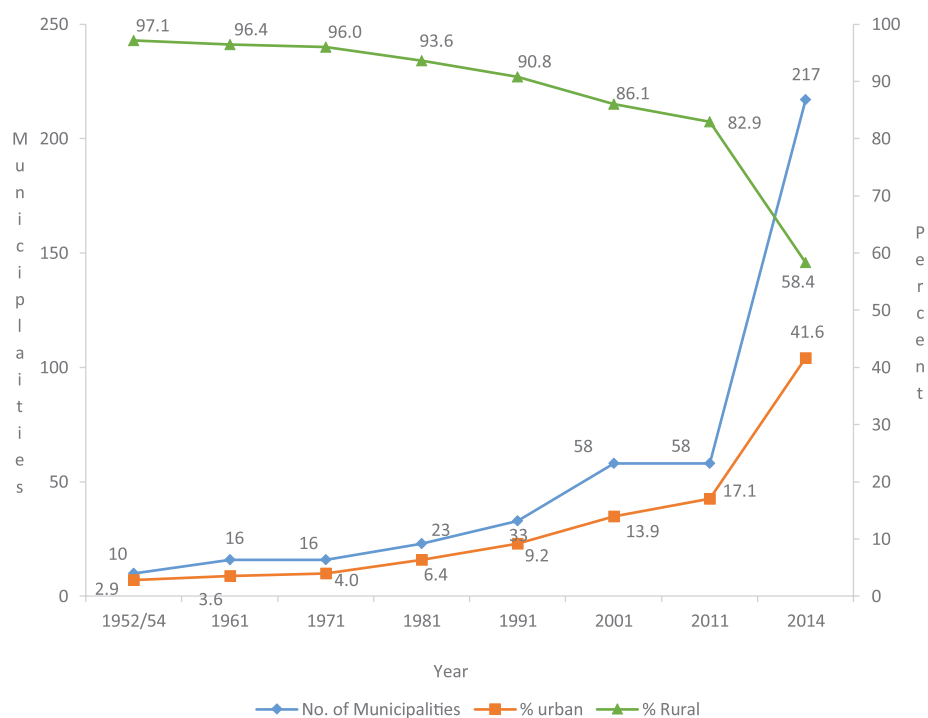
Source: Sharma, P. 2003; CBS, 2012; CBS, 2016

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11   Institutional populations of newly declared municipalities are not included in this calculation

In this context, a reasonable urban population projection by age and sex for the next five decades for major urban regions would help to plan for infrastructure development, education, health improvement, employment, and environmental growth. From this, it is evident that proper and realistic urban development planning, with the help of reasonable estimates of population size by major urban regions, would contribute substantially to economic growth of the country in a relatively short period of time.

International Migration

International migration has become a key feature of globalization in the twenty-first century. Attracted by better living and working conditions and driven by economic, social and demographic disparities, conflict and violence, some 230 million people, 3 percent of the world's population, currently, live outside their country of origin. Migrants whose rights are protected are able to live with dignity, security and, in turn, are better able to contribute to their host societies and countries of origin, both economically and socially, than those who are exploited and marginalized.

Nepali people are very mobile, not only internally but also internationally. Nepal's history is full of episodes of international migration. That a large number of males in their prime migrate to cities within the country and particularly outside of Nepal for work is obvious to anyone who has visited the Mountains and Hills of Nepal. Though precise data on this feature is not available, anecdotal evidence indicates it is mostly males who have migrated for work. Moreover, when migration involves the movement of whole families they cannot be recorded and as a result, the actual volume of emigration cannot be ascertained. In order to obtain such information migration surveys of special nature are, perhaps, worth administering.

However, various censuses and surveys give some magnitude of international migration and these reports contain a mostly sporadic account of emigration. The census of Nepal collects information on the foreign born population and also information on absenteeism. The trend of immigration of foreign born populace is on the increase and the proportion of the foreign born populace to total population was about 2 percent in 1981, increasing to 2.4 percent by 1991, and to 2.7 percent in 2001. This however decreased to 1.8 percent in 2011 (Figure 54). Of the total foreign born population, Indians comprise of 94 percent or more.

Figure 54: Foreign born population, 1981-2011
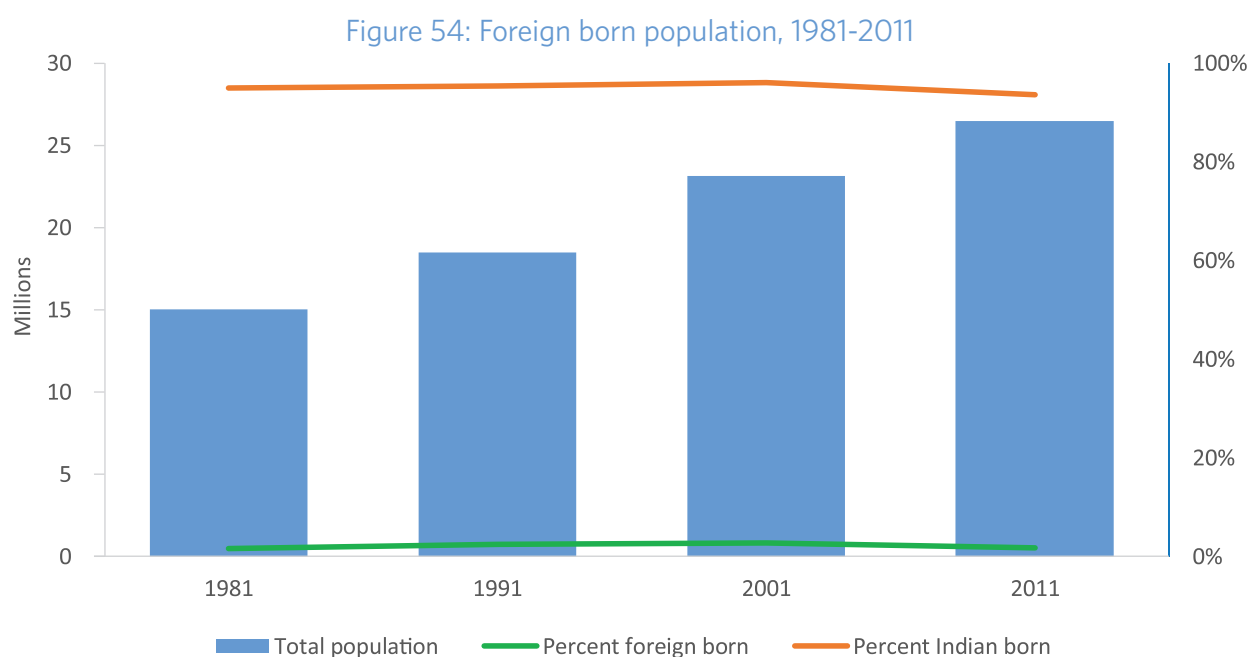
Source: CBS, 1984, 1993, 2003 and 2012.

Decennial censuses also collect information on absentee population in which they are treated as emigrants. The absentee population of Nepal has been a major issue in demographic, social and economic aspects of the country with one in every four households having at least one member absent or living out of the country. The absentee population reported in 2011 was 1,921,494, a huge increase from 762,181 enumerated in the 2001 census.

Of the total population, including absentee population, the proportion of emigrants has increased over the years. Over 90 percent of emigrants moved to India in 1981 but by 1991 it slightly fell below 90 percent, by 2001 this proportion decreased to 77 percent and by 2011 it further declined to 38 percent (Figure 55). This also indicated that international migration flows have become increasingly diversified in terms of the destination countries, other than India, in the recent decades.

Figure 55: Absentee Population, 1981-2011
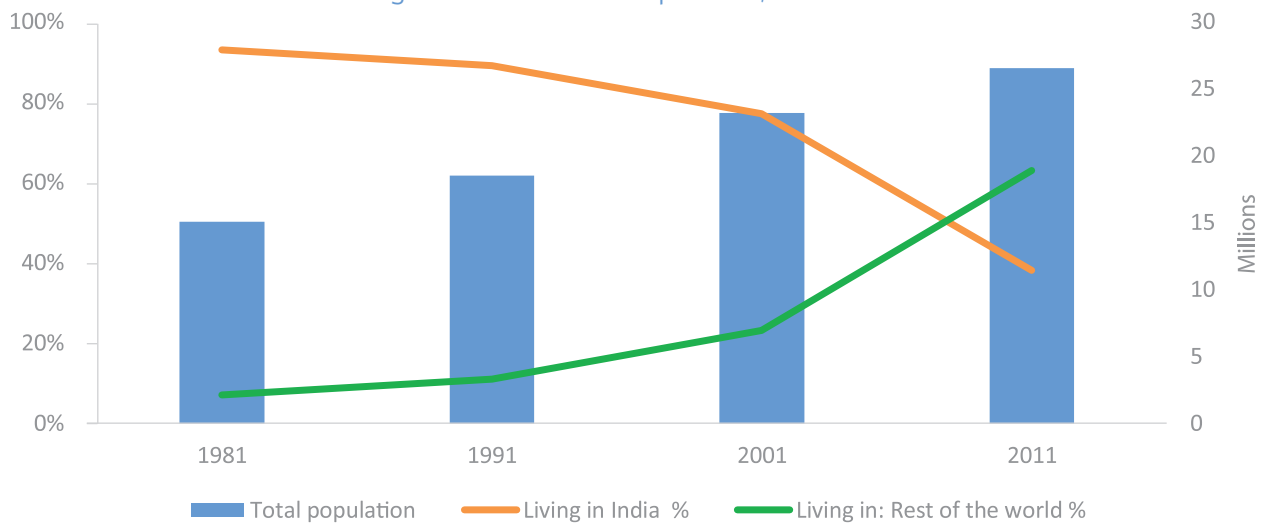
Source: CBS, 1984, 1993, 2003 and 2012. Source: CBS. 1984, 1993, CBS and UNFPA 2002 and CBS 2014

Overall, international migration is a prominent phenomenon in the population dynamics of Nepal. The net migration rate in 2011 is estimated at 10.32 per 1,000 population with emigration outnumbering immigration, which is thought to have had a substantial effect on the decline in fertility in Nepal. A large volume of the youth population has been consistently moving abroad to different destinations of the world. The majority (about 77%) of the total absentee population are in the age group 15-34 years with proportionately a larger percentage of the males (about 78%) compared to females (70%).

Financial transfers in the form of remittances sent by migrants to Nepal, through formal channels, contributed to nearly 29 percent of the country's Gross Domestic Product (GDP) in 2014/15 (Ministry of Finance, 2015/16). Worker outflows and remittance inflows are likely to continue, given the scarce domestic job opportunities, large young population, and the reach of the migrants' networks. Anecdotally, migrant households spend remittances more for consumption and less in human capital, such as education and health care. One of the major challenges that the Government of Nepal recognizes in relation to international migration is that there is no reliable data on migration, such as cross-border migration to India.

Remittances can be attracted to strategic sectors with potential for productive investment increasing employment and production. Therefore, policy incentives should opt for productive investments with a greater value added that rely mainly on locally available resources that fall on strategic sectors that have the potential to generate employment or trigger a process of local development. This may, in the long term, help sustain the population especially in the Hills, which is the main place of origin of both internal and international migration in Nepal. Further effort is required for strengthening the capacity of research and data systems to enhance the knowledge base on migrants.

3.4 Governance and accountability

The PoA, ICPD had emphasized that "Governments... should strengthen their national capacity to carry out sustained and comprehensive programmes on collection, analysis, dissemination and utilization of population and development data". This generated momentum at the national level for the creation and renewal of institutions to address population dynamics, sustainable development, sexual and reproductive health, the needs of adolescents and youth, and gender equality. The past 20 years have also seen a measureable increase in the formal participation of intended beneficiaries in the planning and evaluation of population, development-related investments, and in the elaboration of common indicators to measure development. As the world reappraises goals for the future, progress in participation is at the core, along with the generation and use of knowledge, adequate resources and cooperation, and the critical and continuing need for global leadership to implement population and development beyond 2014.

Strengthening the knowledge sector related to the Programme of Action

Sustainable development cannot be achieved without evidence-based programming in governance. Effective governance demands good statistics to monitor progress and to hold leaders accountable for their activities and achievements. Investing in statistical capacity in demography, public health, human rights, migration, economic growth, employment or climate change makes it possible to understand their linkages and impact on sustainable development and to shape the policy process.

To address inequality within the country, to better target vulnerable populations and to ensure the benefits of development for all, sub-national and local data projections are necessary. Wide arrays of data including censuses and surveys, vital registration, and administrative systems that enable the monitoring of development indicators are needed. For this, more technically oriented and systems-level agenda needs to be forwarded, combined with the momentum to establish academic centres, think tanks, or strong ministries or departments within the government need to work together. While CBS has made significant advances in the collection of disaggregated population data, there are no channels for providing population data directly to line ministries based on specific needs, nor is there necessarily an avenue for their analysis, or strong partnerships between university researchers, academia, and government leaders.

Civil registration

Civil registration and the resulting vital statistics are key public goods that benefit individuals and enable good governance. Civil registration is the compulsory, permanent, continuous and universal recording of the occurrence and characteristics of vital events. Through the official recording of births, deaths, migrations, marriages and divorces, it provides individuals with the documentary recognition of their legal identity, their family relationships, their nationality and their ensuing rights. These records can also be a source of vital statistics, serving the planning and monitoring needs of almost all development sectors, including health.

Recognition of the importance of legal identity by the international development and human rights communities has led to the increased profile of birth registration as a human rights issue. While the most developed countries have achieved universal coverage, in the least developed countries only about one third of births are registered (UNICEF, 2013). Nepal has had a civil (vital) registration programme since 1977, based on the Birth, Death and Other Personal Incident Act 1976, and the Birth, Death and Other Personal Incident Regulations 1977. Despite legal requirements that new-borns are registered within 35 days of birth, children in Nepal are much more likely to be registered closer to their entry into school at five years of age, when a birth certificate is a part of the documentation required for school enrolment, than during their first few years of life.

Birth registration of children 5 years of age is increasing over the years. For instance, birth registration of

children five years of age was 35 percent in 2006 (MOH, New ERA and Macro International, Inc. 2007) which increased to 42.3 percent in 2011 (MOH, New ERA and ICF International, 2012) and it further increased to 58.1 percent by 2014 (CBS and UNICEF, 2015).

The Department of Civil Registration, Ministry of Federal Affairs and Local Development, register vital events in all 75 districts of the country. Registration of vital events increased to 706,336 in 2000/01. In 2011 this increased to 1,133,061, representing a growth of 60 percent. The number of divorces registered has grown phenomenally, 57 percent, followed by marriages, 90 percent, deaths, 66 percent, migration, 55 percent, and births, 54 percent, (Figure 56).

Figure 56: Vital events registration in Nepal, 2000/01 and 2011/12
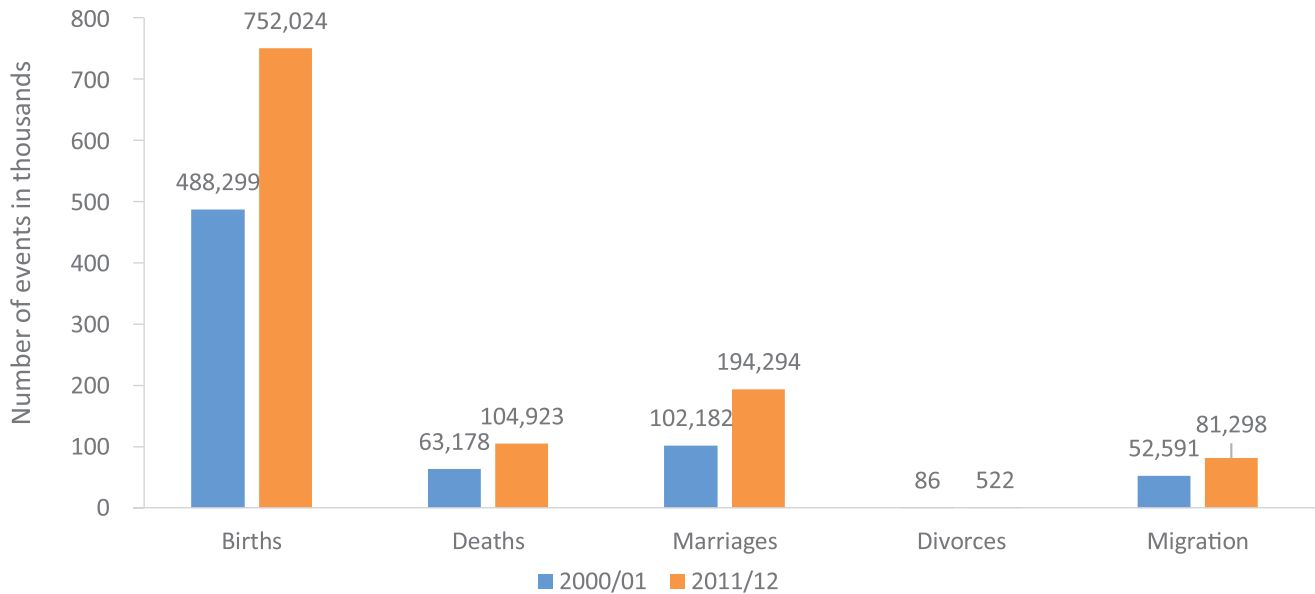
Source: Ministry of Population and Environment. HMG of Nepal, Nov 2002 and Department of Civil Registration, Ministry of Federal Affairs and Local Development, Government of Nepal. 2016

Despite the gradual growth of vital events registration, the data is of little value as it is not processed in the format that would be useful for analysis. For instance, the total births registered are shown for a particular year but they include births occurring at any time in the past, they do not tell the number of births that occurred during a particular time. There are similar problems associated with death, marriage, divorces, and migration events. In addition, the problems surrounding civil registration often disproportionately affect women. For example, women who have difficulty in registering the births of their children in the absence of a male relative are often unable to claim financial and social support for their children, as well as nationality. Studies show that discrimination occurs in practice, even when legislation is gender-neutral (R. M. M. Wallace et al, 2009). Therefore, civil registration of vital events has to be thoroughly revised so that when it is established in a locality it registers every citizen with proper information and is processed in a timely fashion to make the best use of the data for planning, monitoring, and evaluation purposes.

Population censuses

The population census is the primary source of information on the size, distribution, and characteristics of a country's population and the basis for calculation, estimation and projection of a variety of indicators needed for policymaking, planning and administration in all development sectors. Censuses have the potential to provide data at the lowest geographical levels and in countries with incomplete civil registration systems, population censuses, along with household surveys, provide needed statistics on vital events (Principles and Recommendations for Population and Housing Censuses: Revision 2, 2008).

Population censuses cover a variety of topics. In the Nepal 2011 census, data on basic demographic characteristics of age, sex, marital statu s, place of birth, fertility, mortality (including maternal mortality), were collected. Information on socio-economic characteristics such as literacy, education, religion, language, caste/ethnicity, disability, labour force participation and occupation were also collected. The census additionally collected information on household and housing characteristics.

The census is conducted in Nepal every ten years, with the first census taken in 1911. The first scientific census with the technical assistance from the UN was conducted in 1952/54. The eastern half of Nepal was enumerated in 1952 and the western half in 1954. As this census was not conducted at one point in time it was only partially scientific. Therefore, the 1961 census is regarded as the first scientific census of the country. Thereafter, the census is conducted in Nepal every ten years, with the next occurring in 2021.

Surveys

Household surveys focusing on demographic and health data have been a valuable resource for the development field since the 1970s, providing critical population data for Nepal, which was lacking reliable vital registration data.

The Nepal Fertility Survey, conducted in 1976, as part of the World Fertility Survey, was a valuable source of nationally comparative data on fertility, maternal and child health, family planning, domestic violence, etc. Subsequently, demographic and health surveys have been carried out every five years to collect new data on sexual, reproductive and gender outcomes including HIV knowledge and behaviour, among others, and to include youth, men, and unmarried women. Likewise, the multiple indicator cluster surveys, which provide internationally comparable data on the situation of children and women, have been conducted in an interval of five to seven years in Nepal since the 1990s.

Similarly, the living standards surveys collect data for the objective measurement of the living standards of the people and for determining the level of poverty in the country. The surveys aim to assess the impact of various government policies and programs on the socioeconomic changes in the country during the last seven to eight years by covering a range of topics including demographic trends, migration, consumer behaviour, education, employment, remittances and changes in households, amongst many others. Nepal has completed three rounds of the survey, the first of which was conducted in 1995/96 and the third being conducted in 2010/11.

Despite the recent expansion of these household surveys on many health and population topics, other gaps remain, for example on the health of younger adolescents (10-14 years), older persons, migration behaviour and household behaviour relevant to environmental sustainability, among others. Likewise, while data enables broad stratification across ecological zones, geographic and development regions, and attention to rural-urban differences, further spatial disaggregation into extreme rural, peri-urban, small, medium or mega city like Kathmandu, is generally not possible.

The objective of the PoA of focusing on the integration of population data into development planning has not been fully realized in the last two decades, despite detailed elaboration and its importance for ensuring development without discrimination. There is a need for stronger links between CBS, academic researchers, ministries such as the population and environment, health, public administration, finance, agriculture, trade and industry, employment, and others. The MoH produces the HMIS every year but there is a lot of scope to make this system better for planning and monitoring purposes. The Public Service Commission deals with administrative data and there too the data bank has to be drastically improved to understand how equitable the system is.

The Ministry of Women Children and Social Welfare is concerned with sensitive issues of children and women but no data is available to understand how the social protection system of the government is functioning. The Government of Nepal allocates about 15 percent of its annual budget to the Ministry of Education and yet educational statistics are not up to the expected standards. Therefore, MIS of health, education, women, children and administration call for drastic improvements.

Using data for development planning and monitoring

Periodic censuses and demographic and health surveys have produced powerful materials for public knowledge. They have been effective due to their use by the government, local academics, private sector and NGOs for analysis, decision-making, policy formulation, evidence-based planning, and monitoring of programme activities.

The periodic census data is extensively used by the Government of Nepal and its different Ministries/district line agencies and the NPC for periodic sectoral development planning. The periodic demographic and health survey data is also widely used for planning and monitoring of development programmes and projects. Similarly, other survey data such as the NLSS, Labour Force Survey, are also used for development planning and monitoring of programmes.

The undertaking of periodic situation assessments in key areas helps to determine present and future needs across different sectors and population groups and represents the basis for improved targeting of public policy. While a number of sectoral or population-based assessments or surveys conducted in Nepal during the previous five years deal with different themes, the issue of coverage remains a concern, since few surveys cover both the national and the sub-national levels. For instance, periodic demographic and health surveys and other similar studies do not adequately take into account socio-economic groups or caste/ethnicity. In view of the centrality of equality to the goals of the ICPD, the PoA recommends that, in principle, all relevant social and health data should be appropriately disaggregated by relevant factors such as age, sex, ethnicity, locality, and wealth, in order to increase understanding of disparities in social development and enable policymakers to redress inequalities. The household surveys mentioned above all enable such disaggregation to varying degrees. Nevertheless, many studies do not adequately address the concerns arising from fast growing urban areas and changing societal characteristics.

Given this, Nepal should ensure adequate evidence based measures that allow monitoring of inequality and inequity in access to public services, accountability structures and information. This evidence gathering should include sampling that will enable stratification and comparisons by caste and ethnicity, age (including youth and older persons), household wealth, and with greater attention to spatial circumstances. Especially important is evidence that reflects insecurity of place, such as slums or informal settlements, among recent migrants and internally displaced and conflict affected persons.

Evidence-based, results-based monitoring, informed decision making, which is free from political interference and transparent, that allows for delivery of development programmes, is necessary for Nepal to attain the SDGs by 2030.

3.5 Sustainability

Rapid population growth in the Twentieth Century gave rise to widespread and heavily politicized concerns about overpopulation and the possibility that the world would not be able to generate enough food or other essential resources to sustain its people (Ehrlich, 1968). The PoA reflected a remarkable consensus among diverse countries, that increasing access to health and education and greater human

rights for women, including their reproductive health rights, would ultimately secure a better social and economic future, and also lead to lower population growth, than efforts targeted at birth control. The evidence of 2014 overwhelmingly supports the accuracy of that consensus (UN, 2014).

The operational review conducted by the UN (Framework of Actions, 2014) has shown that population dynamics are intrinsic for development and help shape the critical aspects of dignity, health, place, and mobility. The rise in heterogeneity means that population dynamics are contextually specific and dependent on many other aspects of the different development paths that countries are taking. Too often, however, population dynamics, and particularly population size and growth, are treated as undifferentiated and global in discussions about other phenomena that are indeed global. Climate change, one of the most important challenges for sustainability, is fundamentally global; its trajectory is dependent on the intersection of population and models of economic growth, production and consumption, and it will demand global responses. Understanding this intersection, is therefore, essential for creating pathways to sustainable development.

4. Integration of Population Dynamics in the SDG Agenda

4.1 Paths to sustainability: Population and Development beyond 2014

Successful implementation of the ICPD/PoA has demonstrated that the protection of individual human rights and the advancement of gender equality accelerates inclusive development and contributes to a further deceleration of population growth. Accomplishments since 1994 have been substantial, allowing for further opportunity to reflect on unfulfilled goals for sustainable development beyond 2014, and within the post-2015 agenda. While each recommendation in Framework of Actions for the Follow up to the PoA of the ICPD Beyond 2014 can be addressed on its own, they echo and complement one another and provide a foundation for achieving sustainable development, as summarized in the following seven paths to sustainability.

Strengthen equality, dignity and rights

The ICPD 1994 set forth that all persons are "free and equal, in dignity and rights". This has guided efforts to expand human rights protection systems and means of accountability in Nepal and elsewhere, in particular to fulfil and protect the reproductive rights of women and young people. However, discrimination and lack of opportunity remain a daily reality for many women, girls, young persons, older persons, migrants, persons with disabilities, indigenous peoples, ethnic and religious minorities, persons of diverse sexual orientation and gender identity, people living with HIV/AIDS, refugees, sex workers, and others who are in some way marginalized.

In Nepal, human rights violations against women and girls, including GBV, harmful practices, unequal access to education and employment, leadership, and decision making, constitute major threats to their dignity and wellbeing. Moreover, the effect is felt by their families and communities, as well as creating increasing barriers to the achievement of inclusive sustainable development. The full realization of gender equality and women's empowerment is therefore imperative.

Moreover, the evidence reviewed herein highlights a growing body of social research demonstrating that stigma, discrimination and violence, thereby the exclusion of persons from full participation in society, have costs that are manifest not only in the physical and mental health of those affected, but in their restricted productivity and achievements. In order to secure the tremendous benefits to development of human creativity, innovation, and productivity, far greater investment, now and in the future, is required to create more just, non-discriminatory, and non-violent societies.

The population and development agenda set out in 1994 remains strong, yet unfulfilled. Therefore, the agenda beyond 2014 should be based on the recognized universality of human rights and dignity for all persons, in present and future generations. It is necessary to ensure that the sectoral benefits outlined in the PoA reach all persons in order to end the intergenerational transmission of poverty and help build sustainable, adaptive and cohesive societies.

Invest in lifelong health and education, especially for young people

The principled need for good health and quality education, including comprehensive sexuality education, must be reaffirmed and inform multiple divisions of government and private sector investments. Lack of education and ill health are the most common risk factors and manifestations of poverty, curtailing economic growth and human wellbeing and limiting the capability of both individuals and societies to innovate and thrive in a changing world. Investments in the education and health of girls and women have been historically neglected, however, as evidenced by the contribution to global development in the past 20 years, resulting from women's greater empowerment and education and the progressive realization of their reproductive rights, women have provided increasingly high returns for societies.

The largest demographic cohort of young people has already entered the workforce. Their success will define Nepal's sustainable development trajectories given our increasingly interconnected and globalized economies. The opportunity to enrich the lives of young people and provide them with the capabilities they will need to expand their individual choices and shape an innovative and sustainable future is now.

As societies age, a phenomenon occurring in Nepal now, the legacies of under-education persist, underscoring the need for a lifelong approach to education. Such an approach will enable older persons to contribute to changing economies, thereby providing a second demographic dividend via an engaged, experienced and well-trained older workforce.

Achieve universal access to sexual and reproductive health and reproductive rights

Women, especially young women, continue to struggle for individual human rights and the freedom to decide on their personal future. The extent to which different communities in Nepal have tolerated the use of force and violence to sustain patriarchal control over women is a great injustice. If women are to contribute to the enrichment and growth of society, to innovation and to development, they must have the opportunity to decide on the number and timing of their children, and to do so free from violence or coercion, with full confidence that pregnancy and childbirth can be entered into without fear of illness, disability or death, and with confidence in the likelihood that their children will survive and be healthy.

Early marriage is not a guarantee of social protection, and leads to many of the health risks of early childbearing and often an end to a young women's education. Postponing early marriage and childbearing provides the time for young women to develop their capabilities, move outside the household or migrate to a new place, enter the labour market to earn income, and embark on marriage and motherhood with greater autonomy and knowledge. Delayed marriage and childbirth also saves lives. Complications from pregnancy and childbirth together are the main cause of death among adolescent girls 15-19 years old in Nepal, as one in five married adolescents die from pregnancy related deaths.[12]

Gender equality cannot be achieved unless all girls and women can make free and informed choices about sex and reproduction, this demands renewed investment to ensure universal access to quality sexual and reproductive health and reproductive rights for all. Measuring the degree of inequity in service coverage is not currently feasible in Nepal, and data is generally only available for indicators in reproductive, maternal, new-born and child health by using data from national household health surveys.

The achievement of universal access to quality sexual and reproductive health and reproductive rights for all, demands urgent renewed investments directed towards holistically strengthening health systems, thereby bringing these critical services to where people live. This should be a core dimension of proposals for universal health coverage. Further, structural inequalities and other barriers to access, including those due to stigma and discrimination, must be addressed to fully ensure the necessary realization of sexual and reproductive health and rights for all.

Ensure security of place and mobility

Migration is an intrinsic feature of a globalizing world, in which people increasingly have information and access to different places, both within and beyond national borders. In Nepal, poverty and lack of opportunities lead people, in particular young people, to migrate internally or abroad to secure better wages, generate remittances and expand their opportunities for a better life. For young women in Nepal living in highly patriarchal conditions, such migration is increasingly recognized as a search for freedom and autonomy that may seem impossible at home.

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12   Author's estimate

For many in Nepal, migration is less a choice than a necessity for family or individual survival. Sustainability through security of mobility and place means ending forced migration and supporting people who do want to move. For those who want to remain, it is vital to build better livelihood options and create social conditions of dignity, equality and opportunity, in order to decrease push factors. Even without push factors, many wish to migrate to improve their social or economic condition. For those who do, freedom to move means removing the obstacles faced by migrants or potential migrants, embracing their contributions to societies of destination as well as origin, and protecting migrants and members of their families from discrimination or other forms of exclusion. Investments in communities of origin and destination have to be supported by the promotion and protection of human rights and fundamental freedoms of all persons, irrespective of their migratory status, and by combating all forms of discrimination that migrants face, including the violence and exploitation faced by women and girls.

Build sustainable, inclusive cities

Nepal's cities and towns are rapidly growing, with the proportion of the population living in municipalities more than 40 percent, planning for urbanization and building sustainable cities needs to be prioritized. Municipalities that are accepting population growth are connected to the rural areas around them. Delivering services to the poor and marginalized, is therefore, a key part of sustainable development and of the effective development of rural areas.

Future environmental outcomes depend to a great extent on the decisions that are made with respect to location and patterns of urban settlement and growth. Municipalities present significant potential advantages in terms of conciliating the economic and demographic realities of the twenty first century with the demands of sustainability and of coping with the effects of climate change. It is widely recognized that controlling for income, urban concentration is more resource efficient and, with its advantages of scale, allows for more sustainable land use. Moreover, the protection of biodiversity and of natural ecosystems, including the conservation of natural forests, depends on the absorption of population in densely populated areas. Environmentally oriented proactive urban planning, including improved energy efficiency, especially in the transport and housing sectors, could transform cities into a vital part of the solution to climate change and other environmental challenges. The fact that Nepal is undergoing a dramatic urbanization process opens an enormous opportunity for sustainability if the right policies are put in place.

These policies must combine the aims of resource efficiency and minimized negative environmental impact by ensuring that cities are designed for and deliver dignity, human rights, and opportunities for the poor and marginalized, both within the city and beyond. Strong links between cities and rural areas that facilitate access to the city and the flow of people and resources can stimulate markets, improve access to services and create opportunities. As people move to cities, vital to their security of place is ensuring sufficient affordable housing. Given that urban growth and density tend to drive up prices there is an increased risk of excluding the poor. At the 2005 World Summit, world leaders committed to slum prevention and upgrading in order to eliminate widespread practices of slum clearance and evictions. Justice systems need the authority to enforce these commitments and to protect the security of land tenure, particularly for women, who are often denied inheritance, and for both women and indigenous groups, who are often denied property ownership in practice, if not in law (UN, 2014).

Change patterns of consumption

A fundamental change to patterns of consumption is required to slow down the frenetic waste of natural resources, to refocus development aspirations on achieving dignity for all and to enrich prospects for human dignity for future generations. Without marked changes in consumption behaviour and material aspirations, particularly among those at the top end of the consumption curve, who account for so great a drain on resources, new technology and improvements in business and transport practices can only delay impending disasters.

One of the most established, effective and just means of change that the Nepal government can undertake to introduce efficiencies and ensure that physical, social and economic opportunities are equally accessible and beneficial to all is the generation and maintenance of universal, cost-efficient public infrastructures and services. Vital public services include clean water, communication systems, a strong public health system, regulated utilities, and energy-efficient public transport systems.

Strengthen global leadership and accountability

Global leadership and knowledge-based accountability are required to achieve progress in the six areas described above, through political will, cohesive and concerted civil society participation, and the generation and use of knowledge to monitor and evaluate sustainable development commitments.

New systems of leadership and participation may be needed, to ensure the democratic participation of all population groups in governance processes and public institutions for the ensured delivery of investments that promote social, economic and environmental sustainability. However, participation and leadership also demand sound and accessible information on population dynamics, human rights, present, and emerging trends in social and economic equality, and the pending threats to the environment. This should be used as a basis for shared priority-setting, policymaking, budgeting, and accountability. The revolution in information technology provides the potential to bring this information to people around the world, including young people and those who are marginalized and deprived, thereby creating a foundation for broader knowledge, transparency, and inclusion.

4.2 Linkages between the SDGs and ICPD

"The 2030 Agenda for Sustainable Development", as a set of 17 goals, with 169 targets and 239 indicators, is universal, integrated and indivisible in nature and relevant to all countries, including Nepal. Nepal should support the global principles of integration, contextualization at country level or localization and collaboration to advance the SDGs.

In adopting these goals and targets, Nepal faces specific challenges to achieve sustainable development. In particular, the special challenges faced by Nepal due to its high level of vulnerabilities such as its status of being a LDC, landlocked, subject to natural calamities such as earthquakes, landslides, and flooding because of mountainous terrains, tumultuous society affected by frequent conflicts and political instability. Nepal needs to take into account these realities when adopting the 2030 agenda and the key elements of the ICPD beyond 2014 Framework of Action.

Sustainable development depends on comprehensive and integrated investments in populations to ensure that they can achieve their capabilities and contribute fully to development. These include, inter alia, the fulfilment of dignity, equality and human rights, universal access to quality education, decent work, and lifelong good health, security of place, accountable systems of governance based on transparent national and sub-national data, and resilience in the face of environmental and other humanitarian threats.

There are strong points of convergence between the 2030 Agenda and ICPD, including:

- Both the 2030 and the ICPD Agendas are broad, people-centred, human rights-based, sustainable development agendas;
- Both include a strong focus on the rights and empowerment of women, girls and young people;
- Both recognize that our shared global challenges are interdependent and as such require an integrated approach to achieving sustainable development in its three dimensions: the economic, social and environmental;
- The ICPD Agenda with its strong normative foundation, grounded in human rights and through the Framework of Actions, provides a strong analytical basis for achieving sustainable development.

Goals and targets to advance these aspirations converge across the ICPD PoA, the Framework of Actions for the follow-up to ICPD beyond 2014, recent regional development agendas, as well as the 2030 Agenda.

Below are some clear examples of interlinkages between the SDGs and the ICPD with reference to Nepal.

Goal 1: No poverty

The focus of the ICPD 1994 on poverty reduction in various forms has helped reduce poverty between 1990 and 2010; the number of people globally living in extreme poverty fell by half as a share of the total population in developing countries (from 47% to 22%). In Nepal, between 1995/96 to 2010/11, poverty incidence fell from 41.8 percent to 25.2 percent. Despite the remarkable decline in overall poverty level, poverty in rural Nepal is still high, and therefore, there is a need to continue the initiatives in the areas of population and development that began with the ICPD in 1994, to contribute to achieving SDG 1, ending poverty in all its forms everywhere.

Goal 3: Good Health and well-being

Efforts to improve the quality and accessibility of sexual and reproductive health care, since ICPD 1994, have led to significant improvements in various sexual and reproductive health indicators, with evidence of stronger government commitments to policy, budgeting, and programmes, for many of the most pressing sexual and reproductive health goals. Evidence from Nepal supports this statement. Nevertheless, inequalities exist between different groups as progress is noticed in households in the upper household wealth quintiles, while progress is slow or marginal among poor households and certain geographical locations. The persistence of poor sexual and reproductive health outcomes among the poor, particularly in lower socioeconomic groups underscores the challenges to further progress in the realization of health for all persons. This will not be possible without sustained attention to strengthening the reach, comprehensiveness, and quality of health systems. The number and distribution of skilled health workers, a vibrant knowledge sector, and systems of public accountability are among the prerequisites of a rights-based health system and pivotal to future sustainable gains in sexual and reproductive health. In order that every Nepali at all ages lives a healthy life requires continuation and strengthening of basic and sexual and reproductive health and rights including universal access to sexual and reproductive health care services, maternal health, HIVAIDS including information and education on SRH.

Goal 4: Quality education

In general, Nepal has made tremendous progress in basic general education but this has given rise to more educated unemployment and frustration in the young population. The basic education is not equitable. Therefore, in order to provide equal opportunity and achieve equitable outcomes for sustained economic and social wellbeing, it is necessary to expand the opportunities for diverse peoples, through better health and education opportunities. This will also help expand the collective pool of creative energy, ideas, and contributions in Nepali society. If conditions are favourable or if opportunities are created for lifelong learning for all, technical skills, economic and social innovations will thrive allowing for many people to have the opportunity to fully participate and succeed in society. Technical and skill education should include education on gender equality and human rights, citizenship and peace, comprehensive sexuality education.

Goal 5: Gender Equality

In Nepal GBV, is rampant despite many years of efforts by the government and civil society organizations to stop it. Harmful practices including early and forced marriage, Chhaupadi and physical and sexual violence must all end. In order to end these malpractices, girls and women must have universal access to sexual and reproductive health and reproductive rights. In addition, the concept of male involvement in sexual and reproductive health services, education and reproductive rights should be promoted.

Goal 8: Decent Work and Economic Growth

In Nepal, a demographic dividend (where the growth of the working age population exceeded the growth of the total population) began in 1990s and is estimated to end around 2040s. There is, therefore, a window of approximately few decades for Nepal to take advantage of the demographic dividend for economic growth. Economic growth is, however, not possible without proper and large scale investment in basic, technical and vocational education for youth and job creation.

Goal 10: Reduced inequalities

This goal is aimed at reducing inequality and calls for addressing trends that produce the circumstances of inequality. These include income growth, social, economic and political inclusiveness, social protection, regulation of global financial markets, the representation and voice of developing countries in global decision making forums, and orderly, safe, regular and responsible migration. Although in Nepal the *Gini coefficient* was 33[13] in 2010, it masks the suffering of a large proportion of the population living in poverty, circumstances that were aggravated by the 2015 earthquake. Therefore, Nepal needs to adopt policies that are pro-poor, support social protection, ensure timely and proper utilization of foreign assistance, attract foreign direct investment for development projects and make the best of remittances from Nepali's working abroad.

Goal 11: Sustainable Cities and Communities

This goal recognizes that increasingly cities are becoming essential to national and regional development prospects, but that much needs to be done to harness their potential and address existing gaps. Globally, common urban challenges include a huge array of issues that directly are currently being witnessed in Nepal. Urbanization in Nepal is rapid but haphazard. Therefore, ensuring inclusive and sustainable urbanization, including access for all people to adequate, safe and affordable housing and basic services, will be a major challenge for the Government of Nepal.

Goal 16: Peace, Justice and Strong Institutions

Stability, peace and inclusive societies are important for sustainable development. Since 2006 Nepal has become a post-conflict society. However, there has been a lack of political stability, resulting in a frequent change in government. Local level politically representation has been lacking, negatively affecting policy implementation at the district level. Goal 16 is focused not only on peace and inclusive societies but also on justice, crime and governance aspects, as well as a legal identity for all. Therefore, it is imperative for the government to function in a legitimate way to ensure that there is a lasting peace and that the democratic institutions that are now in place provide for the citizens of Nepal in a just and responsible manner. This includes the necessity to strengthen governance and accountability at the district and municipal levels.

Goal 17: Partnerships for the Goals

This goal includes specific targets on data, monitoring, and accountability, among others. The analysis presented in this report highlights some of the data coverage and measurement challenges for each of the goals of the 2030 Agenda. Given the enormous data need required for the SDGs, Nepal is not currently in a position to produce the data and statistics, particularly at a disaggregated level that is required for monitoring progress in the principle of 'leave no one behind'. Concerted efforts to strengthen the capacity of national statistical systems will be critical to the measurement of progress towards achieving the SDGs, informed decision-making and strong accountability. At the same time, the statistical community will need to develop new methodologies, as currently there are no internationally agreed statistical definitions and guidelines for some indicators.

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13   A Gini index of 0 represents perfect equality, 100 represents absolute inequality.

5. Policy Implications

A review of secondary information on population and development, including the analysis of the primary data on population dynamics reveal several important issues related to integration of population dynamics in Nepal's Sustainable Development Planning. In order to address these issues, attention of the relevant national stakeholders has been drawn on the following policy implications.

1. Prepare for a growing population
Until 2001, the fertility rate in Nepal was high, but the mortality rate was declining, resulting in a moderate rate of population growth. Despite declining fertility and mortality in recent years, Nepal's population, which was 26.5 million as of 2011, is projected to grow to 30.4 million by 2021, and 33.6 million by 2031. In order to maintain social and economic developments that have so far been achieved, and to make greater progress in the years to come, Nepal needs to make preparations to meet the challenges arising from this dual situation.

2. Plan for potential returnee migrants
Between 1961 and 2001, the average annual population growth rate was above 2 percent. Since then, the population rate has declined. Between 2001 and 2011, the growth rate was 1.35 percent. The low growth during this period is attributable to the large number of the absentee population; estimated at around 1.92 million. It can be expected that many members of the absentee population will return to Nepal when they retire or otherwise leave the countries where they currently reside. Nepal, therefore, needs to plan for these potential returnee migrants in order to sustain the increased population size.

3. Make the most of demographic dividend
Since the demographic dividend has begun in Nepal, with the growth of the working age population becoming higher than the growth of total population, Nepal must prioritize investment in education, work skills, empowerment, and employment for young people to reap the benefit of the demographic dividend.

4. Introduce policy interventions to retain population in their place of origin
The analysis of migration data demonstrates that the volume of internal migration to the Terai increased in terms of absolute number in every subsequent census. The Terai as a safety valve for the rapidly growing population of the highland zone cannot be a long-term solution. The Terai itself is increasingly under pressure to accommodate a large number of internal migrants, the growth resulting from its own natural increase and apparently increasing immigration. Given the declining job opportunities in foreign countries for the Hill emigrants and the limited capacity of the Terai to observe the Hill out-migrants, it has now become necessary to think of plans and programmes that can sustain the Mountain and Hill population in their place of birth.

5. Streamline urbanization
In 2011 there were 58 municipalities, with the proportion of urban population to the total population at 17 percent. However, by 2015 this number increased to 217[14], resulting in the proportion of the population living in municipalities increasing to 42 percent. In order to determine what constitutes a municipality and manage expectations, it will be important to have clear criteria in place and apply these consistently. The Government of Nepal should continue to promote inclusive and sustainable urbanization, including access for all people to adequate, safe and affordable housing, and basic services.

6. Eradicate poverty uniformly
Poverty levels have decreased over the years in Nepal. However, there are zones, areas, and social groups where this reduction has not had a significant impact. The poverty reduction programme should focus on

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14   Total number of municipalities and metropolitan cities has been increased to 246 as per the latest report of the Government of Nepal.

the areas and groups that have not made much progress so far. The initiatives in the areas of population and development, which began with the ICPD in 1994, should continue. This will contribute to achieving SDG 1, ending poverty in all its forms everywhere.

7. Provide schooling and a skill learning environment for young girls to avoid early marriage
Despite the Government law of banning early marriage, a sizeable proportion of girls are married early. This can be reduced by creating a learning environment to give these girls agency over their own future and thereby hopefully avoiding early marriage.

8. Empower girls and women to lead a decent life
Provide ample opportunities and freedom to girls and women to live a life of dignity and freedom. Enact policies and laws to punish any acts that reinforce harmful practices that help to continue or strengthen harmful practices such as early marriage, dowry, Chhaupadi, and any other practices that subjugate females.

9. End gender-based violence
Research shows that about one in five women face physical violence and about one in eight women face sexual violence in life. The perpetrators are often their intimate partners. There is therefore a need to ensure strong implementation of laws that penalise the perpetrators provide services to support survivors and promote women and girls' empowerment at all levels.

10. Recognize and address harmful practice of gender-biased sex selection
In Nepal, sex selection and son preference are topics that need to be explored extensively. Some sources of data show an unnatural rise in SRB in certain areas of Nepal. Sex selection in favour of boys is a reflection of pervasive socio-cultural and economic injustice and discrimination against women and girls and may also have significant implications for future population dynamics in the country. Therefore, this calls for further trend analysis and research to generate evidence to substantiate the existing knowledge related to the skewed sex ratios at birth.

11. Reduce births to adolescent mothers
Births to adolescent mothers has decreased over the years, however, it remains high at 71 births per 1000 adolescent mothers[15]. On average, the number is higher (80 births) in rural areas than in urban areas (33 births), moreover, it varies considerably between regions. As adolescent girls face huge risks during this period, comprehensive sexuality education as well as sexual and reproductive health programmes must be geared to these adolescents to ensure underage pregnancy is reduced.

12. Address the needs of elderly population
With gradually improving health conditions in the country, people are living longer. As of 2011, the number of people 60 years of age and over was approximately 2.5 million. Social protection programmes should be designed to address the needs of the increasingly large elderly population.

13. Provide care and support to the disabled
The government has a number of programmes to take care of the disabled, but this is not sufficient. Over two percent of the total population are disabled; the scale of support needs to be raised.

14. Mainstream indigenous peoples
In Nepal, there are more than 62 indigenous groups; they should be given opportunities to sustain their own cultural heritage and be provided opportunities commensurate with full social, political and economic integration to allow them adequate and equitable access in the prevailing political system.

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15   Key indicators from the 2016 DHS were released at the time of publishing of this report. They show an even higher number of births to adolescent mothers. Subsequent updates of the PSA will reflect the latest estimates.

15. Strengthen social protection system

Specific aspects of social protection systems, relevant to the wellbeing of families and households, such as increasing efforts to ensure health, education and welfare services, and supporting and assisting vulnerable families (divorced/separated women), should be prioritized in policies and plans of the government.

16. Create an environment for all to attain the highest standard of health

Numerous UN and bilateral development agencies have defined a human rights-based approach to health as one that aims to realize the right to the highest attainable standard of health. The human rights based approach to health, based on seven key principles: availability, accessibility, acceptability, quality of facilities and services, participation, equality and non-discrimination, and accountability, should be adopted and implemented. Efforts must be made in making the provision of services and underlying social determinants affecting the sexual and reproductive health of women and girls, reflect the expansion and strengthening of a human rights-based approach to health.

17. Formulate policies and programmes to drastically reduce early age mortality

Despite good gains in early age mortality reductions in Nepal, more efforts are needed to reduce mortality in the first month of life and sustain healthy life until the child is five years old. Programmes must be selective in focusing in the areas or communities where early age mortalities are high.

18. Improve nutritional status of children and mothers

Nutritional status of pregnant mothers and new-born children such as height, weight of children, anaemia, and nutritious food during pregnancy, must be addressed. Special attention should be paid to young mothers as they are more susceptible to complications during and after pregnancy.

19. Ensure universal access to sexual and reproductive health and reproductive rights (SRH/RR)

Policies are in place to address reproductive health and rights of women, however these policies are poor in implementation. A strong and robust implementation mechanism must be designed to empower women to exercise their SRH/RR.

20. Strengthen family planning programme

Data shows that CPR for modern methods is stagnant. However, the practice of family planning can contribute to good health and wellbeing of women. Policies should be made to enable women and men to practice safe family planning methods, while at the same time unmet need for FP should be addressed.

21. Strengthen governance and accountability

Sustainable development cannot be achieved without evidence-based governance. Effective governance demands good statistics to monitor progress and to hold leaders accountable for their activities and achievements. Investing in statistical capacity in demography, public health, human rights, migration, economic growth, employment, and climate change makes it possible to understand their linkages and impact on sustainable development, and to shape the policy process.

22. Strengthen disaggregated data collection, analysis, and use, for evidenced based planning and monitoring at the national and sub-national level

In line with "*leaving no one behind*" and Nepal's federal structure, Nepal should ensure adequate evidence-based measures that allow monitoring of inequality and inequity in access to public services, in addition to accountability structures and access to information. This evidence gathering should include sampling that will enable stratification and comparisons by caste and ethnicity, gender, age (including youth and older persons), persons with disabilities, household wealth, and with greater attention to spatial circumstances. Especially important is evidence that reflects insecurity of place, such as slums or informal settlements, among recent migrants and internally displaced and conflict-affected persons.

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Annexes

Appendix I: Total Population, Nepal, 1911-2031

Census year	Total Population	Average annual growth rate during the previous 10 years, exponential
1911	5,638,749	N/A
1920	5,573,788	-0.13
1930	5,532,574	-0.07
1941	6,283,649	1.16
1952/54	8,256,625	2.28
1961	9,412,996	1.64
1971	11,555,983	2.05
1981	15,022,839	2.62
1991	18,491,097	2.08
2001	23,151,423	2.25
2011	26,494,504	1.35
2021 (Projection)	30,378,055	1.37
2031 (Projection)	33,597,032	1.01

Appendix II: Distribution of districts by States

Distribution of districts by States	
States	Districts
State One	Taplejung, Panchthar, Illam, Jhapa, Morang, Sunsari, Dhankuta, Tehrathum, Sankhuwasabha, Bhojpur, Solukhumbu, Okhaldhunga, Khotang, Udayapur
State Two	Saptari, Siraha, Dhanusha, Mahottari, Sarlahi, Rautahat, Bara, Parsa,
State Three	Sindhuli, Ramechhap, Dolakha, Sindhupalchowk, Kavrepalanchowk, Lalitpur, Bhaktapur, Kathmandu, Nuwakot, Rasuwa, Dhading, Makawanpur, Chitwan
State Four	Gorkha, Lamjung, Tanahun, Syangja, Kaski, Manang, Mustang, Myagdi, Parbat, Baglung, Nawalparasi (East of Bardghat).
State Five	Nawalparasi (West of Bardghat), Rupandehi, Kapilbastu, Palpa, Argakhanchi, Gulmi, Pyuthan, Rolpa, Dang, Banke, Bardiya, Rukum (East).
State Six	Rukum (West), Salyan, Surkhet, Dailekha, Jajarkot, Dolpa, Jumla, Kalikot, Mugu, Humla
State Seven	Bajura, Bajhang, Aachham, Doti, Kailali, Kanchanpur, Dadeldhura, Baitadi, Darchula

Source: Ministry of Law, Justice, Constitutional Assembly and Constitutional Affairs. Constitution of Nepal, 2015. September, 2015

Appendix III: Population growth by district, 2001-2011

SN	District	Census		Inter-censal average annual growth rate
		2001	2011	r
1	Manang	9,587	6,538	-3.83
2	Khotang	231,385	206,312	-1.15
3	Mustang	14,981	13,452	-1.08
4	Tehrathum	11,3111	101,577	-1.08
5	Bhojpur	20,3018	182,459	-1.07
6	Syangja	31,7320	289,148	-0.93
7	Dolakha	20,4229	186,557	-0.91
8	Parbat	15,7826	146,590	-0.74
9	Gorkha	288,134	271,061	-0.61
10	Sindhupalchowk	305,857	287,798	-0.61
11	Okhaldhunga	156,702	147,984	-0.57
12	Gulmi	296,654	280,160	-0.57
13	Taplejung	134,698	127,461	-0.55
14	Lamjung	177,149	167,724	-0.55
15	Arghakhanchi	208,391	197,632	-0.53
16	Panchthar	202,056	191,817	-0.52
17	Ramechhap	212,408	202,646	-0.47
18	Nuwakot	288,478	277,471	-0.39
19	Rasuwa	44,731	43,300	-0.33
20	Palpa	268,558	261,180	-0.28
21	Dhankuta	166,479	163,412	-0.19
22	Solukhumbu	107,686	105,886	-0.17
23	Kavrepalanchowk	385,672	381,937	-0.10
24	Dhading	338,658	336,067	-0.08
25	Myagdi	114,447	113,641	-0.07
26	Sankhuwasabha	159,203	158,742	-0.03
27	Baglung	268,937	268,613	-0.01
28	Doti	207,066	211,746	0.22
29	Tanahun	315,237	323,288	0.25
30	Illam	282,806	290,254	0.26
31	Sindhuli	279,821	296,192	0.57
32	Rolpa	210,004	224,506	0.67
33	Baitadi	234,418	250,898	0.68
34	Makawanpur	392,604	420,477	0.69
35	Pyuthan	212,484	228,102	0.71
36	Darchula	121,996	133,274	0.88
37	Udayapur	287,689	317,532	0.99
38	Rukum	188,438	208,567	1.01

39	Aachham	231,285	257,477	1.07
40	Siraha	572,399	637,328	1.07
41	Bardiya	382,649	426,576	1.09
42	Saptari	570,282	639,284	1.14
43	Dhanusha	671,364	754,777	1.17
44	Dadeldhura	126,162	142,094	1.19
45	Mahottari	553,481	627,580	1.26
46	Salyan	213,500	242,444	1.27
47	Nawalparasi	562,870	643,508	1.34
48	Morang	843,220	965,370	1.35
49	Dailekha	225,201	261,770	1.50
50	Bajhang	167,026	195,159	1.56
51	Jhapa	688,109	812,650	1.66
52	Kapilbastu	481,976	571,936	1.71
53	Kanchanpur	377,899	451,248	1.77
54	Dang	462,380	552,583	1.78
55	Parsa	497,219	601,017	1.90
56	Sarlahi	635,701	769,729	1.91
57	Surkhet	288,527	350,804	1.95
58	Jumla	89,427	108,921	1.97
59	Sunsari	625,633	763,487	1.99
60	Chitwan	472,048	579,984	2.06
61	Bara	559,135	687,708	2.07
62	Bajura	108,781	134,912	2.15
63	Dolpa	29,545	36,700	2.17
64	Rupandehi	708,419	880,196	2.17
65	Humla	40,595	50,858	2.25
66	Kailali	616,697	775,709	2.29
67	Mugu	43,937	55,286	2.30
68	Rautahat	545,132	686,722	2.31
69	Jajarkot	134,868	171,304	2.39
70	Banke	385,840	491,313	2.42
71	Kaski	380,527	492,098	2.57
72	Kalikot	105,580	136,948	2.60
73	Bhaktapur	225,461	304,651	3.01
74	Lalitpur	337,785	468,132	3.26
75	Kathmandu	1,081,845	1,744,240	4.78
	Nepal total	23,151,423	26,494,504	1.35

Appendix IV: Population pyramids for 7 States

Population Pyramid, State 1, 2011

Population Pyramid, State 2, 2011

Population Pyramid, State 3, 2011

Population Pyramid, State 4, 2011

Population Pyramid, State 5, 2011

Population Pyramid, State 6, 2011

Population Pyramid, State 7, 2011
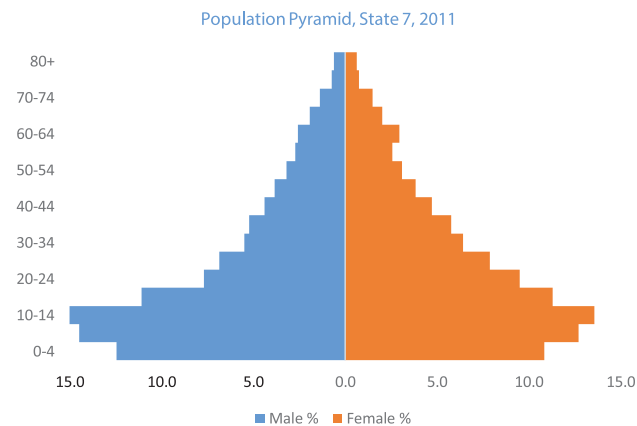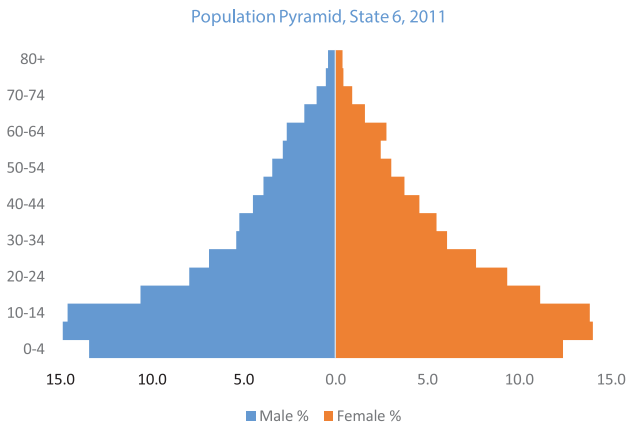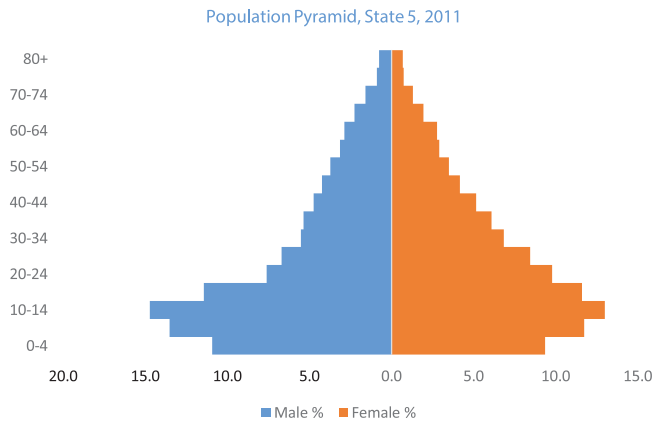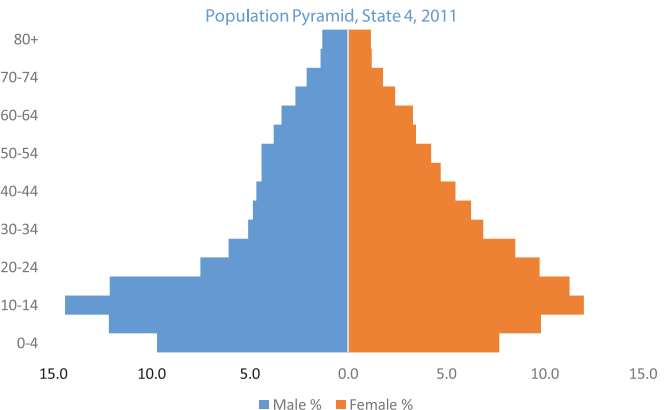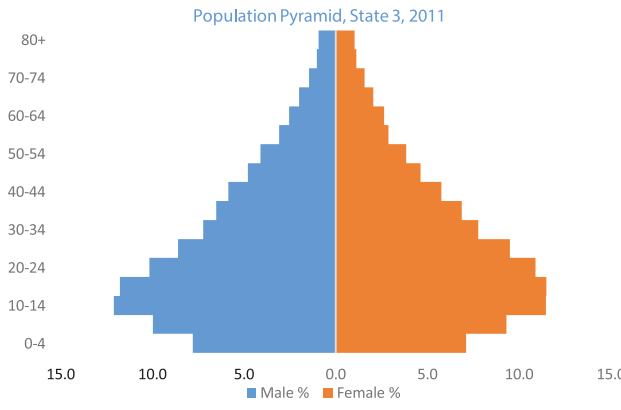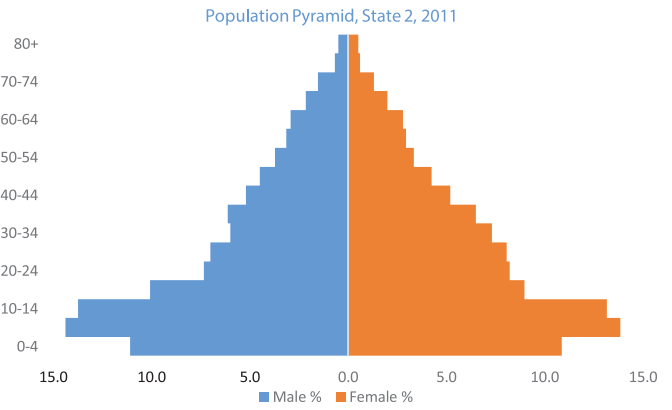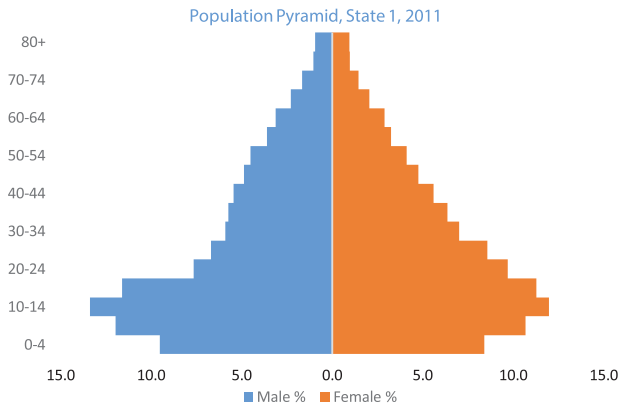
Appendix V: Broad caste/ethnicity grouping

	Chhetri				
1	Chhetri -Hill	46	Aathpariya	90	Nurang
2	Thakuri - Hill	47	Bantaba	91	Bangali
3	Rajput - Terai	48	Dolpo	92	Kamar
4	Sanyasi/Dashnami	49	Thulung	93	Punjabi/Shikh
	Bahun	50	Mewahang Bala	94	Dhunia
5	Bahun - Hill	51	Bahing	95	Jaine
6	Bahun - Terai	52	Lhopa	96	Natuwa
	Hill Janajati	53	Samgpang	97	Dhandi
7	Magar	54	Khaling	98	Dhankar/Kharikar
8	Tamang	55	Topkegola	99	Khawas
9	Newar	56	Loharung	100	Rajdhob
10	Rai		**Terai Janajati**	101	Kori
11	Gurung	57	Tharu	102	Sarbaria
12	Limbu	58	Dhanuk	103	Amat
13	Sherpa	59	Rajbansi	104	Dev
14	Gharti/Bhujel	60	Satar/Santhal		Terai Others
15	Kumal	61	Jhangad/Dhagar		**Hill Dalit**
16	Sunuwar	62	Gangai	105	Kami
17	Majhi	63	Dhimal	106	Damai/Dholi
18	Danuwar	64	Tajpuriya	107	Sarki
19	Chepang/Praja	65	Meche	108	Gaine
20	Thami	66	Kisan	109	Badi
21	Bhote	67	Koche		**Terai Dalit**
22	Yakkha	68	Munda	110	Chamar/Harijan/Ram
23	Darai		Janajati Others/ Adibasi	111	Musahar
24	Thakali		**Terai Middle Castes**	112	Dusadh/Pasawan/Pasi
25	Pahari	69	Yadav	113	Sonar
26	Chhantyal/Chhantel	70	Teli	114	Lohar
27	Bote	71	Koiri/Kushwaha	115	Tatma/Tatwa
28	Brahmu/Baramo	72	Kurmi	116	Khatwe
29	Jirel	73	Kewat	117	Dhobi
30	Dura	74	Kathbaniyan/baniya	118	Bantar/Sardar
31	Lepcha	75	Mallaha	119	Kahar
32	Raji	76	Kalwar/Sudhi	120	Chidimar
33	Byasi/Sauka	77	Hajam/Thakur	121	Dom
34	Hayu	78	Kanu	122	Pattharkatta/Kushwadiya
35	Walung	79	Nuniya	123	Halkhor
36	Raute	80	Kumhar	124	Mali
37	Hyolmo/Yehlmo	81	Haluwai		Dalit Others
38	Kusunda	82	Kayastha	125	**Musalman/Churaute**
39	Lhomi	83	Badhaee		Undefined Others
40	Kalar	84	Marwadi		
41	Kulung	85	Baraee		
42	Ghale	86	Lodh		
43	Nachhiring	87	Rajbhar		
44	Yamphu	88	Bin		
45	Chamling	89	Gaderi/Bhedhar		

Appendix VI: Life expectancy at birth for males, females and both sexes, 2011, Nepal

Area	Life expectancy at birth			Area	Life expectancy at birth		
	Total	Female	Male		Total	Female	Male
Nepal	66.6	68.0	65.5	District			
Residence				Parsa	67.3	68.0	66.6
Urban	70.5	71.0	70.1	Chitwan	69.2	69.5	68.9
Rural	66.6	67.6	64.9	Gorkha	68.9	69.9	68.0
Ecological Region				Lamjung	69.5	70.9	68.3
Mountain	64.1	65.5	62.8	Tanahu	69.8	70.4	69.2
Hill	68.9	70.3	67.6	Syangja	70.1	71.3	69.0
Tarai	65.1	66.3	64.0	Kaski	73.5	73.9	73.2
District				Manag	69.9	71.2	68.4
Taplejung	65.1	66.2	64.1	Mustang	69.6	69.9	69.1
Panchthar	66.2	67.9	64.6	Myagdi	69.6	70.2	69.1
Ilam	67.5	68.5	66.5	Parbat	72.7	73.2	72.2
Jhapa	67.3	68.1	66.6	Baglung	68.3	69.1	67.6
Morang	67.3	68.8	65.9	Gulmi	70.6	71.6	69.7
Sunsari	67.2	67.4	67.0	Palpa	71.3	71.7	71.0
Dhankuta	69.1	70.5	67.8	Nawalparasi	67.8	68.4	67.2
Terhathum	68.7	69.7	67.8	Rupandehi	68.0	68.6	67.4
Sankhuwasabha	69.3	69.5	69.2	Kapilbastu	61.3	61.7	60.9
Bhojpur	68.8	69.9	67.8	Arghakhanchi	69.4	69.3	69.5
Solukhumbu	66.7	68.4	65.0	Pyuthan	65.8	67.1	64.6
Okhaldhunga	66.8	68.7	65.1	Rolpa	64.8	66.1	63.5
Khotang	67.0	68.8	65.2	Rukum	64.9	66.2	63.7
Udayapur	68.3	70.1	66.6	Salyan	65.3	66.7	64.0
Saptari	64.8	65.6	64.0	Dang	66.3	67.6	65.1
Siraha	65.6	66.7	64.6	Banke	63.8	64.1	63.5
Dhanusa	62.9	64.2	61.7	Bardiya	64.6	65.9	63.4
Mahottari	63.5	64.7	62.3	Surkhet	66.5	67.8	65.2
Sarlahi	62.9	64.3	61.6	Dailekh	65.2	66.0	64.4
Sindhuli	67.8	69.3	66.5	Jajarkot	61.7	63.0	60.5
Ramechhap	68.8	70.1	67.4	Dolpa	57.7	58.7	56.7
Dolakha	69.8	70.9	68.7	Jumla	62.7	63.8	61.6
Sindhupalchok	69.3	70.2	68.4	Kalikot	59.7	60.3	59.2
Kavrepalanchok	70.7	70.9	70.5	Mugu	59.5	60.2	58.9
Lalitpur	73.2	73.6	72.9	Humla	58.9	60.0	57.9
Bhaktapur	74.2	74.5	74.0	Bajura	59.5	60.8	58.3
Kathmandu	73.0	73.6	72.5	Bajhang	60.4	61.7	59.2
Nuwakot	69.1	70.5	67.8	Achham	65.0	66.2	63.9
Rasuwa	67.4	69.1	65.8	Doti	65.0	65.9	64.1
Dhading	68.8	69.7	67.9	Kailali	66.2	67.4	65.0
Makwanpur	68.0	68.7	67.3	Kanchanpur	66.1	67.3	65.0
Rautahat	59.6	60.9	58.4	Dadeldhura	64.4	65.7	63.1
Bara	64.6	65.7	63.5	Baitadi	64.2	65.5	63.0
				Darchula	64.6	65.8	63.3

Source. Joshi, P. L. 2014

Glossary of terms

Absentee Population	An individual absent from the household and gone abroad for more than six months before the census date.
Age Dependency Ratio	The ratio of persons in the ages defined as dependent (under 15 and over 64 years) to persons in the ages defined as economically productive (15–64 years).
Average household size	Average number of usually residing population of a household. Total population of a specific area divided by the total number of households of that area provides average household size.
Child Mortality Rate	The number of deaths of children aged 1-4 years during a year per thousand mid-year survivors of children aged 1-4 years.
Crude Birth Rate (CBR)	The number of live births in a year per 1,000 mid-year population.
Crude Death Rate (CDR)	The number of deaths in a year per 1,000 mid-year population.
Demographic dividend	The demographic dividend is the accelerated economic growth that may result from a decline in a country's mortality and fertility and the subsequent change in the age structure of the population. With fewer births each year, a country's young dependent population grows smaller in relation to the working-age population. With fewer people to support, a country has a window of opportunity for rapid economic growth if the right social and economic policies developed and investments made.
Demographic transition	The shift from a traditional pattern of relatively high mortality and fertility to a modern pattern of relatively low mortality and fertility. Because the decline in mortality usually precedes the decline in fertility, there is an interim period of rapid natural population increase during the transition period.
Economically active population	The economically active population comprises all persons of age ten years and above of either sex who furnish the supply of labour for the production of economic goods and services as defined by the United Nations System of National Accounts during a specified time-reference period.
Emigrant	Person who moves out of a country for the purpose of establishing a new usual residence.
Household head	The person whether male or female reported by the household as being mainly responsible for the maintenance and management of the household. The person should be usual resident of the household and should be aged 10 years and above
Immigrants	Persons who enter into a country for the purpose of establishing a new usual residence.
Infant Mortality Rate (IMR)	Total number of deaths of children under one year of age per 1,000 live births in a specific period (normally one year).
In-migrants	Persons who move into a different area within a country for the purpose of establishing a new usual residence.
Internal migration	The movement of people within a country for the purpose of establishing a new usual residence.
International migration	The movement of people between and among countries for the purpose of

	establishing a new usual residence
Labour force	Population of age 10 years and above who are economically active. In labour force, persons employed and unemployed are included; and persons those are not seeking employment, housewives and students are excluded.
Labour force participation rate	The number of persons in the labour force (economically active) divided by the corresponding total number of persons (usually those 10 years and above).
Literacy	The ability to read and write in any language with understanding and ability to do simple arithmetic. Literacy pertains to persons at ages five years and above. In Nepal population aged five years and above who can read and write is considered as literate.
Institutional Population	Population reported to be residing in institutional residence/housing units such as barracks, hostels, cantonments, prisons etc. at the time of census.
Life Expectancy (e^x)	Represents the average number of years remaining to a person who survives to the beginning of a given age or age interval x.
Life Expectancy at Birth (e^0)	Number of years a newborn child can be expected to live under a given mortality condition of an area in a given year.
Marital Status	Refers to the personal status of each individual in reference to the marriage laws or socio-religious customs of the country. All persons except the single are ever-married persons. Information on marital status is gathered from all persons aged 10 years and above.
Median Age	The age that divides a population into two numerically equal groups; that is, half the people are younger than this age, and half are older.
Maternal Mortality Ratio	The number of women who die as a result of pregnancy and childbirth related complications per 100,000 live births in a given year.
Migration	Movement of people across a specified boundary for the purpose of establishing a new usual residence.
Natural increase	Population increase that is the result of births and deaths; growth occurs when the number of births in a given time period (e.g. a calendar year) exceeds the number of deaths; negative growth, or population decline, occurs when the number of deaths exceeds the number of births.
Net Migration Rate	Difference between in-migration and out-migration of a particular place, divided by the mid-year population of that place expressed in per 1,000 population. For international migration, difference between immigration and emigration is taken as numerator.
Neonatal mortality rate	The number of neonatal deaths per 1000 live births. A neonatal death is defined as a death during the first 28 days of life (0-27 days).
Out-migrants	Persons who move out of an area within a country for the purpose of establishing a new usual residence in a different area of the same country.
Population Census	The total process of collecting, compiling, evaluating, analyzing and publishing demographic, economic and social data pertaining to all persons in the country or

in a well-limited territory.

Population Change	The difference between the size of the population at the end and the beginning of a period.
Population Density	Number of persons usually residing per square kilometre of land area in a specific spatial area.
Population Distribution	The patterns of settlement and dispersal of a population.
Population dynamics	Study of human population, including its size, distribution, composition, and the factors that determine changes in these variables. Population change is driven by birth, death rates, immigration and emigration
Population Growth Rate	The average annual rate of change of population size during a specified period usually expressed as a percentage.
Population Projection	Computation of future changes in population numbers, given certain assumptions about future trends in the rates of fertility, mortality and migration based on given base population size, structure and distribution.
Population Pyramid	Diagram, usually a bar chart depicting the distribution of a given population by age and sex. By convention, the younger ages are at the bottom, with males on the left and females on the right.
Sex Ratio	The number of males per 100 females in a population.
Sex Ratio at Birth[16]	The number of male live births per 100 female live births. In the human species the ratio between males and females at birth is slightly biased towards the male sex. The natural "sex ratio at birth" is often considered to be around 105. This means that at birth on average, there are 105 males for every 100 females.Nature provides that the number of newborn males slightly outnumber newborn females because as they grow up, men are at a higher risk of dying than women not only due to sex differentials in natural death rates, but also due to higher risk from external causes (accidents, injuries, violence, war casualties). Thus, the sex ratio of total population is expected to equalize. Instead if a country's population sex ratio does not equalize or rather exceeds the 105 threshold, it means societies with a dominating preference for male child tend to intervene in nature and reduce the number of born girl child by sex-selective abortion and infanticide
Singulate Mean Age at Marriage	The probability of being single (not married) cohort of the population below 50 years of age who have attained age of 15 years and above. It represents the mean age of persons' first entry into marital union (departure from single status).
Total Fertility Rate	The average number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the age specific fertility rates of a given time period.
Unmet Need for Family Planning	Women with unmet need are those who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child.:

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16   An under-registration of female births also contributes to sex ratios at birth above the natural level.