



Nepal and the Millennium Development Goals

Final Status Report 2000-2015



Government of Nepal
National Planning Commission
Singha Durbar, Kathmandu
December 2016

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Foreword

Following the United Nations Declaration on Millennium Development Goals (MDGs) in September 2000, Nepal also committed to a new global partnership to reduce extreme poverty and setting out a series of time-bound targets with a deadline of 2015. MDGs were incorporated in the successive periodic plans, annual programmes and budgets. Progress was monitored and reported periodically. This is the final report with an assessment of the achievement made during 2000-2015.

The assessment shows that Nepal's achievements have been remarkable. For example, poverty reduced from 42 percent to 21.6 percent and school enrolment and gender equality in schools increased. Similarly, child and maternal mortality decreased, prevalence of HIV/AIDS contained and access to drinking water and sanitation improved. At the same time, the assessment also shows that one target (proportion of stunted children aged 6-59 months) was unmet and few others were partially achieved. The unmet and the partially achieved MDGs as well as the Sustainable Development Goals (SDGs) have now been incorporated in the Approach Paper of the Fourteenth Plan, Annual Programmes and Budgets.

The National Planning Commission (NPC) would like to extend its appreciation to Dr. Jagadish Chandra Pokharel and his team for leading the preparation of this report. The NPC also acknowledges the contributions, feedbacks and suggestions received from sitting as well as ex-office bearers of the NPC, staffs and officials of the NPC Secretariat and other Ministries and Agencies of the Government, private sector, civil society, development partners and other stakeholders. The NPC also expresses its sincere appreciation to the United Nations Development Programme for providing technical support to prepare this report.

Finally, NPC takes this opportunity to call upon all national stakeholders as well as development partners and other international agencies to work together for materializing unfinished tasks of the MDGs and achieving the SDGs.

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EXECUTIVE SUMMARY

In September 2000, the United Nations adopted the Millennium Development Goals (MDGs) — an international time-bound commitment to reduce poverty and advance other social development targets by 2015. Nepal is one of the 189 countries that committed to these goals. Since then Nepal has aligned its national policies, strategies and plans to achieving the MDGs.

The National Planning Commission (NPC) took the lead in MDG implementation. Periodic assessments were conducted to assess the status of implementation with four progress reports, one needs assessment and one acceleration report produced. These assessments provided valuable information and knowledge for institutional improvements along the way. The process remained on track throughout, despite the decade of violent political conflict (which ended in 2006) and ongoing political instability. The achievement of a number of goals has been commendable and acknowledged internationally. The MDG implementation process in Nepal has been affected and shaped by the country's changing political, economic and social context. The liberalization of politics, the market and civil society following the reforms of the 1990s created

a conducive environment for the acceleration of achievements. The major policy and institutional reforms that followed contributed to the changes.

This final status report assesses the status of achievement of the eight MDGs based on the data available in 2015. This assessment is based on periodic reports and studies on MDG implementation over the past one and a half decade. Its overall finding is that, while most targets have been achieved, some were partially achieved and there are some unfinished agendas. This report suggests that these unfinished agendas should be addressed in the planning and implementation of the follow-on Sustainable Development Goals (SDGs) (2016-2030). This report also articulates the major factors likely to affect the country's future development agenda and the priorities for sustainable development. These factors include the fast rate of urbanization, accelerated labour migration, the remittance-dependent economy, the proliferation of information and communication technology and the high percentage of young people in the population. The following sections and Table A summarize the findings and recommendations on individual goals.

Goal 1 — Eradicate extreme poverty

Nepal has made commendable progress on reducing extreme poverty and hunger in the MDG period (2000–2015). Extreme poverty dropped from 33.5 percent of the population in 1990 to 16.4 percent in 2013 thereby achieving the target of halving the poverty rate by 2015. The rate of reduction was quicker between 2000 and 2015 than in the previous period. Nepal Living Standards Surveys (NLSSs) 2 and 3 found the incidence of poverty to have declined by one percentage point per year between 2005 and 2013. The reduction in the poverty gap ratio means that on average poor people were closer to rising above the poverty line in 2015 than in 2008. The employment to population ratio decreased from 84.3 percent in 2000 to 81.7 percent in 2008 (as reported in 2010) with 2.3 million people (above 15 years of age) employed in 2008, substantially more than in 1998.

Another noteworthy achievement is the reduction of hunger. The country almost met the target of reducing by half the proportion of underweight children (aged 6 to 59 months) two years early in 2013. The country achieved the target of halving the proportion of the population who consume less than the minimum level of dietary energy consumption in 2012 (22.5 percent achieved against the 25 percent target).

Goal 2 — Universal primary education

Nepal's very good progress on achieving universal primary education is shown by the large increases of the net enrolment ratio (NER) to 96.6, the survival rate to 89.4 percent and the literacy rate (15–24 years) to 88.6 percent (all 2013 figures). The gender parity ratio in prima-

ry level gross enrolment stood at 1.09 and the NER at 0.99 in 2015. The establishment of the Department of Education, the transition from a project to a sector-wide approach followed by the integration of various programmes and projects, (principally the Basic Primary Education Programme, the Education for All and the School Sector Reform Programme) contributed substantially to these achievements. After 2000, the government's policies shifted from incremental to fundamental reforms that included the decentralization of school management to communities, the preparation of individual school improvement plans, the financial and social auditing of schools, the supervision of schools by resource centres, supporting schools through per capita grants, and mainstreaming religious schools. Initiatives such as alternative schooling, the flash reporting of disaggregated data, the introduction of teacher licensing, upgrading the entry qualifications of primary teachers (including reservation for targeted groups), the introduction of the National Curriculum Framework and the establishment of a system for assessing learning outcomes also helped improve the quality of education. The provision of midday meals, other health and nutrition programmes and scholarships and toilets for girls helped increase survival rates. The finalization of the Consolidated Equity Strategy for the School Sector and the development of an Education Equity Index to support its implementation is a promising innovation to improve equitable budgeting and planning to address the disparities in access, participation and learning outcomes. A National Literacy Campaign and the establishment of community learning centres have enhanced the literacy rate.

A number of challenges remain despite the decades of government and non-government efforts. These include the mainstreaming of hard-to-reach children (especially from the Tarai and the Mid-Western and Far Western

regions), children with disabilities and trafficked children, and problems related to repetition and absenteeism. Insufficient resources are a major constraint for improving the quality of education. As a result, Nepal struggled to achieve the MDG 2 target by 2015.

The rehabilitation of earthquake-damaged education facilities, the retrofitting of schools, disaster risk reduction training for teachers and students, the implementation of compulsory free basic education, and targeted scholarships and cash transfers to compensate the opportunity costs of poor children attending school would all help improve access for hard-to-reach groups and ensure that all children are safe in school. Similarly, strengthening continuous assessment, re-engineering literacy interventions and linking skills development and self-learning materials to community learning centres (CLCs) would enhance the quality of education and support those in need. Finally, it is necessary to invest in the areas of most need and to ensure that the provincial bodies (as per the new constitution), have sufficient resources and capacity to implement sectoral priorities.

Goal 3 — Gender equality

Gender parity has been achieved at primary and secondary education levels with gender parity index (GPI) scores of 1.09 in primary and 1.0 in secondary education in 2015. Girls have performed better than boys in both primary and secondary level completion rates, as well as the retention rates for Grades 5 and 8. However, more girls drop out of school than boys (mainly due to socioeconomic reasons). Educational disparities remain between boys and girls, districts, income levels, ethnic groups and for children with disabilities. The ratio of women to men in tertiary education has increased over the last decade, but the gap re-

mains between males and females in higher education. The literacy gap between 15–24 year old males and females has reduced but significant differences remain between males and females, geographic regions and income quintiles. The share of women engaged in wage employment in the non-agriculture sector has increased to 44.8 percent, but gender inequality in employment and incomes persists, mostly due to women's lower skill levels and their unpaid care responsibilities.

Several milestones have been passed recently on the political representation of women. The head of state and the judiciary are currently women and close to one-third of Nepal's members of parliament are women. In the civil service, the representation of women has doubled in the last decade due to affirmative action; although the presence of women in positions of high authority is still limited. And women are increasingly opting for non-traditional sectors such as overseas employment and jobs in the police and army. Although a large number of women join the teaching profession at the primary level, their representation decreases at secondary and tertiary levels.

The introduction of gender responsive budgeting by the government in 2007/2008 has seen an increase in the number of directly gender-responsive programmes and projects across sectors; but the budget allocated to the Ministry of Women, Children and Social Welfare (MWCSW), the lead ministry for the promotion of gender equality and women's empowerment, has decreased. Many women and girls suffer from gender based violence (GBV), which constrains their access to economic opportunities, their ability to exercise their legal rights to services, and their education, health and well-being. The 2015 earthquakes compounded the risks and vulnerabilities of women and girls.

Goal 4 — Reduce child mortality

Nepal has achieved all the targets under MDG 4 — reducing the infant mortality rate (IMR), reducing the under-five mortality rate (U5MR) and increasing immunization against measles. The IMR of 108 per 1,000 live births in 1990 and 64 in the year 2000 reduced to 33 per 1,000 live births in 2014 thereby achieving the MDG target early. Similarly, the U5MR of 162 per 1,000 live births in 1990 and 91 in 2000 reduced to 38 per 1,000 live births in 2014. The immunization programme against measles has been successful as 92.6 percent of one-year old children were immunized against measles in 2015. This programme is considered one of the main contributors to the decline in infant and child deaths. However, while the mortality rates have declined, major inequalities need to be addressed within a number of population segments.

Goal 5 — Improve maternal health

Nepal was close to meeting the targets of reducing the maternal mortality ratio (MMR) and increasing the proportion of births attended by skilled birth attendants (SBAs). The MMR in Nepal in 1990 was one of the highest in the world at 850 deaths per 100,000 live births. It declined to 281 in 2005 and 258 in 2015. The proportion of women delivering their babies with the help of a skilled birth attendant increased from just 7 percent in 1990 to 55.6 percent in 2014, a nearly eight-fold increase. However, these improvements have not been uniform and major disparities exist between rural and urban areas and among eco-geographical regions and social groups.

The large reduction in the MMR is associated with the fall in the total fertility rate (TFR) from 5.3 in 1996 to 2.3 in 2014. The latter was largely

due to married couples' increased use of contraceptives from 24 percent in 1990 to 49.6 percent in 2014. The increased use of maternal health services, and the increased attendance at the recommended four antenatal care (ANC) visits have also contributed to reducing the MMR. The fertility rate among 15-19 year old women dropped from 110 per 1,000 persons in 2000 to 71 births per 1,000 persons in 2014. In spite of this progress most of the MDG reproductive health indicators were only partially met by 2015.

Goal 6 — Combat HIV/AIDS, malaria and other diseases

The spread of the human immunodeficiency virus (HIV) in Nepal has halted and begun to reverse. The HIV infection rate (15-49 years) was 0.3 percent in 2000. It was maintained at around this rate for another five years after which it decreased to 0.2 percent. The rate of infection among 15-24 year olds was reduced by 80 percent between 2000 and 2015. The epidemic is 85 percent driven by sexual transmission. However, in 2015 only 66 percent of 15-24 year olds had used a condom during their last sexual encounter and only 36 percent of them had comprehensive knowledge of HIV and acquired immunodeficiency syndrome (AIDS). Of the estimated number of people living with HIV, 26.5 percent were enrolled in antiretroviral therapy (ART) in 2015. A reason for this is that the HIV response is underfunded, with the Government of Nepal only funding about 8 percent of the response. The national response to HIV has, however, been institutionalized in national policy and there is a national strategic plan to end the AIDS epidemic by 2030.

Nepal stands at the pre-elimination phase for malaria with a substantial reduction in malaria incidence and zero death rates. Nepal was close to achieve most of the malaria related

MDG targets by 2015. Still, there are concerns about the slow reduction of indigenous *Plasmodium vivax* cases, inconsistent data, lack of information on some indicators, growing drug resistance and the spread of malaria beyond the southern plains.

Nepal has achieved three of the four MDG targets on tuberculosis. It has halted and reversed the spread of TB, as reflected in the declining prevalence and death rates, and has met the target of 91 percent of cases being treated under the Directly Observed Treatment Short Course (DOTS). It just fell short of the fourth target of the proportion of cases detected.

Goal 7 — Environmental sustainability

Nepal has fully achieved some of the MDG 7 targets, while others have been partially achieved. Regarding target 7A (sustainable development), Nepal makes a very small contribution to global warming with carbon dioxide (CO₂) emissions of only 0.1 tonnes per capita in 2015 and the growth rate of its CO₂ equivalent emissions is low amongst developing countries. The government's banning of ozone depleting substances has resulted in a large decline in the consumption of ozone depleting substances. Energy consumption increased from 7,759 tonnes of oil equivalent (ToE) in 2000 to 11,232 ToE in 2013–14 while the commercial use of energy per unit of gross domestic product (GDP) declined from 3.91 ToE/mRs in 2000 to 3.2 ToE/mRs in 2015. Although fuelwood remains the dominant source of household energy for cooking, the proportion of people using fuelwood as their main source of cooking fuel has slowly declined from about 68.4 percent of the population in 2000 to 53.8 percent in 2015. The use of liquefied petroleum gas increased from 7.7 percent of the population in 2000

to 28.7 percent in 2015. Key factors that have contributed to these improvements are (i) the Nepal government's promotion of alternative energy, (ii) donor support for national alternative energy programmes, and (iii) the government's commitment to and adoption of an adaptation framework on climate change. The biggest challenges to reversing the loss of environmental resources in Nepal are (i) the cost and limited access to renewable energy services (especially for the poor); (ii) inadequate infrastructure and lack of technical, managerial and financial skills; (iii) infrastructure damage caused by 2015 earthquake; (iv) lack of research on Nepal-specific aspects of climate change; and (v) the slow progress on tapping the country's hydropower potential.

With regards to Target 7B (biodiversity loss), Nepal has reduced the rate of biodiversity loss coming close to achieving a significant reduction in the rate of loss by 2010. However, most indicators that measure the reduction in biodiversity loss lack proper updated data. In Nepal 44.7 percent of total land area is dedicated to forest conservation, more than the target of 42 percent by 2030; and 23.3 percent of terrestrial land was protected in 2015, close to the 2030 target of 25 percent. The community ownership of conservation is the key to forest protection. Almost 44 percent of Nepal's households are members of community forestry user groups, with the forest area managed by communities increasing from 1.0 million ha in 2000 to 1.8 million ha in 2015.

Regarding water supply and sanitation (Target 7C), Nepal has achieved the MDG target of halving the proportion of people without sustainable access to safe drinking water and basic sanitation. As of 2015 about 83.6 percent of households had access to an improved source of drinking water and 81 percent had access to sanitation (toilets). The government's Thirteenth Plan (FY 2013/14–2015/16) sought to

achieve the universal coverage of improved water supply and sanitation and guided investments and programmes in this sector.

The assessment of Target 7D on slum conditions is fraught with definitional problems and a lack of systematic data. While the population living in slums and squatters increased from an estimated 11,850 in 2000 to 500,000 in 2010, sufficient, reliable and comparable data to measure the improvement in the lives of these slum dwellers is unavailable. The squatter population comprises mostly freed bonded labourers, landless people and rural migrants. While it is imperative to improve the living conditions of slum and squatter populations by providing them with access to clean drinking water and improved sanitation facilities, it is equally necessary to come up with a plan to reduce the pace of rural-urban migration and provide a proper relief and rehabilitation package to freed bonded labourers.

Goal 8 — Global partnership for development

The MDGs recognized the need for enhanced market access and assistance from development partners (Target 8A). Despite joining the World Trade Organization in 2004, improved market access has not materialised for Nepali goods and services mainly because of supply constraints, the rising cost of production and political and policy instability. On the external front, some of Nepal's high potential products for export face high tariff and non-tariff barriers. Nepal's trade dependence on India has increased.

The level of official development assistance (ODA) (Target 8B) increased in absolute terms during the 2000–2015 period mainly driven by the move towards democracy and inclusive development. However, the actual receipt

of ODA declined from 4.8 percent of GDP in 1999/00 to 2.6 percent of GDP in 2014/15, although Nepal still relies heavily on ODA for its development expenditure. Although Nepal is a Least Developed Country (LDC) and more importantly a Land Locked Least Developed Country (LLDC), Nepal receives comparatively low levels of foreign assistance mainly due to its weak absorptive capacity, with a widening gap between commitments and actual disbursements. This gap stands at 55.4 percent. The effectiveness of ODA is however reflected in the country's sound performance on MDGs 2 to 7 with the enhanced resource flows to the social sector being a major reason for the achievements.

Nepal's debt is relatively low at 25.6 percent of GDP, and foreign debt makes up to 16.1 percent of GDP (Target 8D). Despite the low volume of debt, the debt service ratio is increasing, putting pressure on the country's resources for funding development activities.

Nepal has made tremendous progress in the communications sector (Target 8F), with telepenetration now at more than 106.1 percent and 43.7 percent of the population having internet access although a rural-urban divide persists.

Overall, at the global level, foreign assistance, if properly used and channelled, has the potential to transform the nation by reducing poverty and improving human development. Therefore, efforts must be made, including the systematic adoption of the SDGs, to provide resources and bridge the gap between the least developed and developing nations. Aid dependency should be gradually removed, but meaningful partnerships are needed to achieve this. The receiving nations must shoulder the responsibility of creating a conducive environment for global development. Ultimately, the focus should be on reducing barriers and deepening market access.

Table A: Nepal's achievement of the MDG targets, 1990–2015

GOALS	*Base year 1990	*Status 2000	Target for 2015	*Status in 2015	Fully achieved	Partially achieved
1. Eradicate extreme poverty and hunger						
1A Reduce extreme poverty by half						
Percentage of population living below USD 1 per day (PPP value)	33.5	na	17	16.4	✓	
Percentage of population living below national poverty line	42	38	21	21.6		✓
Poverty gap ratio at USD 1 per day (percent)	na	11.7	6	5.60	✓	
Share of bottom quintile in national consumption	na	7.5	na	8.3		
1B Full and productive employment for all						
Growth rate of GDP per person employed	na	1.6	na	na		
Employment to population ratio	67	84.3	na	78.3		
Proportion of employed people living below USD 1 per day	na	22	17	na		
1C Reduce extreme hunger						
Prevalence of underweight children aged 6-59 months	57	43	29	30.1		✓
Proportion of population below minimum level of dietary consumption	49	47	25	22.8	✓	
Proportion of stunted children aged 6-59 months	60	57	30	37.4		✓
2. Achieve universal primary education						
2A Ensure that children everywhere, boys and girls alike, complete their primary schooling by 2015						
Net enrolment rate in primary education	64	81	100	96.6		✓
Proportion of pupils enrolled in grade 1 that reach grade 5	38	63	100	89.4		✓
Literacy rate of 15-24 year olds	49.6	70.1	100	88.6		✓
3. Promote gender equality and empower women						
3A. Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015						
Ratio of girls to boys in primary education	0.56	0.79	1.0	1.09	✓	
Ratio of girls to boys in secondary education (9–10)	0.43	0.70	1.0	1.0	✓	
Ratio of women to men in tertiary education	0.32	0.28	1.0	1.05	✓	

GOALS	*Base year 1990	*Status 2000	Target for 2015	*Status in 2015	Fully achieved	Partially achieved
Ratio of literate women aged 15-24 years to literate men aged 15-24 years	0.48	na	1.0	0.89		✓
Share of women in wage employment in non-agriculture sector (percent)	18.9	17.7	na	44.8		
Proportion of seats held by women in the national parliament (percent)	3.4	5.8	na	29.5		
4. Reduce child mortality						
4A. Reduce under-five mortality by two thirds, between 1990 and 2015						
Infant mortality rate (per 1,000 live births)	108	64	36	33	✓	
Under-five mortality rate (per 1,000 live births)	162	91	54	38	✓	
Proportion of one-year old children immunized against measles (percent)	42	71	>90	92.6	✓	
5. Improve maternal health						
5A. Reduce the maternal mortality ratio by three-quarters between 1990 and 2015						
Maternal mortality ratio (per 100,000 live births)	850	415	213	258		✓
Proportion of births attended by skilled birth attendants (percent)	7	11	60	55.6		✓
5B. Achieve universal access to reproductive health by 2015						
Contraceptive prevalence rate (modern methods) (percent)	24	35.4	70	49.6		✓
Antenatal care coverage: At least one visit (percent)	na	48.5	100	68.3		✓
At least four visits (percent)		14	80	59.5		✓
6. Combat HIV/AIDS, malaria and tuberculosis						
6A. Have halted by 2015 and began to reverse the spread of HIV/AIDS						
6B. Achieve universal access to treatment for HIV/AIDS for all those who need it by 2015						
HIV prevalence among men and women aged 15-24 years (percent)	na	0.15	Halt and reverse the trend	0.03	✓	
Condom use at last high-risk sexual encounter (15-24 year olds)	na	71.2	na	65.8		
Percentage of population aged 15-24 years with comprehensive knowledge of HIV/AIDS	na	35.6	M:50 F:40	36.4		✓

GOALS	*Base year 1990	*Status 2000	Target for 2015	*Status in 2015	Fully achieved	Partially achieved
Proportion of population with advanced HIV infection receiving antiretroviral combination therapy (percent)	na	na	80	26.5		

6C. Have halted by 2015 and began to reverse the incidence of malaria and other major diseases

Malaria

Clinical malaria incidence (per 1,000 people)	na	na	Halt and reverse the trend	1.74		
Annual parasite incidence (per 1,000 people)	na	0.55	0.06	0.11		✓
Death rate associated with malaria (per 1,000 people at risk)	na	0.55	Halt and reverse the trend	0	✓	
Percentage of children under five with fever who are treated with appropriate anti-malarial drugs	na	3.2	2.5	2.8		✓
Percentage of children under five who sleep under a long-lasting insecticide treated bed net	na	48.2	100	96.8		✓

Tuberculosis

Prevalence rate associated with TB (per 100,000)	460	310	Halt and reverse the trend	211	✓	
Death rate associated with TB (per 100,000)	43	23	Halt and reverse the trend	20	✓	
Proportion of TB cases detected	na	70	85	83		✓
Proportion of TB cases cured under DOTS	40	89	91	91	✓	

7. Ensure environmental sustainability

7A. Integrate the principle of sustainable development into country policies and reverse the loss of environmental resources

CO2 (annual) emission per capita (tonnes)	na	0.2	na	0.1		
Consumption of all ozone-depleting substances (tonnes)	25	99.2	na	1.2		
Energy consumption (ToE) K	6,847	7,759	na	11,232		
Commercial energy use per unit of GDP (ToE/mRs)	1.44	3.91	na	3.2		
Proportion of people using wood as their main fuel	75	67.74	na	53.8		
Proportion of people using LPG as their main fuel	na	7.67	na	28.7		

GOALS	*Base year 1990	*Status 2000	Target for 2015	*Status in 2015	Fully achieved	Partially achieved
7B. Reduce biodiversity loss, achieving a significant reduction in the rate of loss by 2010						
Proportion of land area covered by forests (percent)	37	39.6	40	44.7	✓	
Proportion of total water resources used (percent)	na	na	na	10		
Proportion of terrestrial area protected (percent)	7.4	13.6	na	23.3		
Proportion of species threatened with extinction (percent)	na	na	na	0.4		
Area of forest managed as community forest (million ha)	0.013	1	na	1.8		
7C. Halve the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015						
Proportion of the population using an improved drinking-water source (percent)	46	73	73	83.6	✓	
Proportion of population using sanitation facility (percent)	6	30	80	81	✓	
7D. By 2020, to have achieved a significant improvement in the lives of slum dwellers						
Population living in slum and squatters	na	11,850	na	500,000		

Note: The figures used for the SDGs and this report may differ due to the use of different sources.

Achievements exact to or above the 2015 target are rated as fully achieved and close to and below the target are rated as partially achieved in this report.

*The status data for 1990, 2000 and 2015 is from the nearest available year where data for the exact year is not available.

ACRONYMS

ADB	Asian Development Bank
AEPC	Alternative Energy Promotion Centre
AIDS	acquired immunodeficiency syndrome
ANC	antenatal care
API	annual parasite incidence (rate)
ART	antiretroviral therapy
BMI	body mass index
CB-IMCI	community based integrated management of childhood illness
CB-IMNCI	community based integrated management of neonatal and childhood illness
CB-NCP	Community Based Newborn Care Programme
CBS	Central Bureau of Statistics
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CMI	clinical malaria incidence
CPR	contraceptive prevalence rate
DAC	Development Assistance Committee
DFID	Department for International Development
DoE	Department of Education
DOTS	Directly Observed Treatment Short course
ECD	early childhood development
ECED	early childhood education development
EMIS	Education Management Information System
EDP	external development partner
EFA	Education for All
EmONC	emergency obstetric and neonatal care
ERO	Education Review Office
EU	European Union
EVI	Economic Vulnerability Index
eVT	elimination of vertical transmission
FCHV	female community health volunteer

FSW	female sex worker
FY	fiscal year
GBV	gender-based violence
GDP	gross domestic product
GER	gross enrolment ratio
GNI	gross national income
GoN	Government of Nepal
GRB	gender responsive budget
GRBC	Gender-Responsive Budget Committee
HAI	Human Assets Index
HIPC	Heavily Indebted Poor Countries
HIV	human immunodeficiency virus
HTC	HIV testing and counselling
ICT	information and communication technology
IMR	infant mortality rate
LDC	Least Developed Country
LGCDP	Local Governance and Community Development Programme
LLDC	Land Locked Least Developed Country
LLIN	long lasting insecticidal (bed) nets
LPG	liquid petroleum gas
MDG	Millennium Development Goal
MDRI	Multilateral Debt Relief Initiative
MEDEP	Microenterprise Development Programme
MICS	Multiple Indicator Cluster Survey
MMR	maternal mortality ratio
MoE	Ministry of Education
MoEn	Ministry of Environment
MoF	Ministry of Finance
MoFALD	Ministry of Federal Affairs and Local Development
MoFSC	Ministry of Forests and Soil Conservation
MoHP	Ministry of Health and Population
MoPIT	Ministry of Physical Infrastructure and Transport
MoSTE	Ministry of Science, Technology and Environment
MoUD	Ministry of Urban Development
MSM	men who have sex with men
MSW	male sex workers
MWCSW	Ministry of Women Child and Social Welfare
na	not available
NASA	National Assessment of Student Achievement
NCASC	National Centre for AIDS and STD Control
NDHS	Nepal Demographic and Health Survey
NER	net enrolment ratio
NGO	non-government organization
NLSS	Nepal Living Standards Survey

NMR	neonatal mortality rate
NPA	National Plan of Action
NPC	National Planning Commission
NPR	Nepalese rupees
NTP	Nepal Tuberculosis Programme
ODA	official development assistance
OECD	Organization for Economic Cooperation and Development
OST	opioid substitution therapy
PAF	Poverty Alleviation Fund
PLHIV	people living with HIV
PMEC	priority minimum enabling condition
PNC	post natal care
PPP	purchasing power parity
PRSP	Poverty Reduction Strategy Paper
PWID	people who inject drugs
REDD	reducing emissions from deforestation and forest degradation
SAARC	South Asian Association for Regional Cooperation
SBA	skilled birth attendant
SDG	Sustainable Development Goal
SIP	school improvement plan
SLC	School Leaving Certificate
SRH	sexual and reproductive health
SSRP	School Sector Reform Programme
TB	tuberculosis
TFR	total fertility rate
ToE	tonne of oil equivalent
TVET	technical vocational education and training
TYP	Three-Year Plan
U5MR	under-five mortality rate
UN	United Nations
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USD	United States dollars
WB	World Bank
WTO	World Trade Organization

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Background and Introduction

Background

In September 2000, building upon a decade of major United Nations conferences and summits, world leaders came together at the United Nations Headquarters in New York to adopt the United Nations Millennium Declaration. This declaration committed their nations to a new global partnership to reduce extreme poverty in line with agreed time-bound targets by 2015— the Millennium Development Goals (MDGs). Nepal is one of 189 countries that committed to the MDGs, a pledge it has renewed in its subsequent national development plans. The primary medium-term strategy and implementation plan for reaching the MDGs, the Tenth Plan Poverty Reduction Strategy Paper (NPC 2003) incorporated the MDGs into its strategic framework. Subsequent plans did the same. The Tenth Plan focused on reducing poverty through private sector-led economic growth. The following Three-Year Interim Plan (TYIP) (2007/08–2009/10) (NPC 2007), maintained the focus on poverty reduction and growth but also stressed the need for the state to assume a greater strategic presence in development, especially in remote areas, and for the inclusion of socially marginalized groups. The next plan, the Twelfth

Plan (2010/11–2013/14), continued the call for strategic investment in the MDG areas. The following Thirteenth Plan (2013/14–2015/16) (NPC 2013b) further emphasized alleviating poverty, and called for enhancing Nepal's status from a least developed country (LDC) to a developing country by 2022 and to a middle income country by 2030.

The previous four MDG progress reports prepared by Nepal: 2002, 2005, 2010 and 2013 (NPC 2002, NPC 2005, NPC and UNCT 2010, NPC and UNCTN 2013) provided a solid foundation for assessing the progress made by Nepal on achieving the MDG targets. This MDG status report is built on previous MDG progress reports adding the achievements made by Nepal since the 2013 progress report.

Introduction

This document is a status report of the achievement of the MDGs in Nepal. It reviews the implementation process over the past 15 years. The report is based largely on the periodic national MDG progress reports and other related reports. These progress reports show that Nepal has made commendable achieve-

ments on several goals and targets whilst some of the targets require further efforts to achieve them.

The purpose of this report is to:

- ⇒ review the trend of progress of the targets over the past 15 years;
- ⇒ review the institutional changes made to enable implementation;
- ⇒ understand the major policies, programmatic interventions and resource allocations made to enable implementation;
- ⇒ compare how Nepal has fared in relation to other countries; and
- ⇒ identify unfinished agendas and business that needs following up on, most likely through the Sustainable Development Goal (SDGs), and to provide pertinent recommendations.

This status report goes beyond progress reporting and is more comprehensive, integrated, analytical and reflective on drawing lessons and making policy recommendations than the previous progress reports. It seeks to answer the following questions:

- ⇒ What have been Nepal's achievement in the past 15 years (2000—2015)?
- ⇒ How do Nepal's achievements compare with other South Asian countries?
- ⇒ What are the overall trends (as opposed to progress at a particular point in time) in the implementation and achievement of the goals?
- ⇒ What has the Government of Nepal (GoN) done in terms of policy, programme, and institutional changes to accelerate the achievement of each goal?
- ⇒ What has been the trend of resource allocation to each goal?
- ⇒ What are the unfinished agendas that

should be carried over to the SDGs?

- ⇒ What policy, programme and institutional changes have worked and what have not?
- ⇒ How can lessons from MDG implementation contribute to the implementation of the SDGs?
- ⇒ How can lessons learned from working towards the MDGs contribute to Nepal's graduation from LDC status by 2022?
- ⇒ How can lessons from MDG implementation contribute to the achievement of Nepal's vision of becoming a middle-income level country by 2030?
- ⇒ How will the new constitution of 2015 affect the implementation of the SDGs.

This report thus assesses the unfinished agendas that should be included in the post-MDG Sustainable Development Goals. It also tries to answer whether the achievements will sustain particularly after the devastating earthquakes of April and May 2015 and the obstructions of supplies to and from the southern border in 2015/16, and the prolonged agitations in the plains (Tarai) areas. It also reflects on the implementation of the MDGs and whether the same mechanism should be adopted for implementing the SDGs. It also covers the unintended positive and negative outcomes of MDG implementation.

Method of Assessment

This assessment is based on information provided in the four periodic MDG progress reports and updated data from the Central Bureau of Statistics, sectoral ministries and other sources that were available in 2015. The periodic national surveys including the Nepal Living standards surveys (NLSSs), economic survey reports, periodic national development plans and policies, and Nepal demographic

and health surveys (NDHSs) are the main sources of data. The trend analysis is based on six data points (1990, 2000, 2005, 2010, 2013 and 2015). Information has been used from the 2005, 2010, and 2013 progress reports and available updated data for the year 2015. Only the original eight goals and targets are included in the analysis.

In addition, relevant financial acts and policies have also been reviewed. Relevant reports and studies from development partners including the Asian Development Bank (ADB), the World Bank and United Nations (UN) agencies have also been reviewed. A number of stakeholders were consulted to gather and check information.

This report has ten chapters. The first chapter is the background and introduction, the second to ninth chapters review and analyse the status and trends of the eight MDGs and their targets. The final chapter includes a summary of findings, the conclusions and recommendations for SDG implementation and the inclusion of unfinished agendas.

The Millennium Development Goals

The eight MDGs (Table 0.1) come from the Millennium Declaration, which was signed in 2000 by 189 countries, including 147 heads of state and government and from further agreement by member states at the 2005 World Summit. The goals and targets are interrelated and should be seen as a whole. They represent a partnership between the developed countries and developing countries “to create an environment – at the national and global levels alike – which is conducive to development and the elimination of poverty” (United Nations Millennium Declaration 55/2).

Table 0.1: The eight Millennium Development Goals

Goal 1	Eradicate extreme poverty and hunger
Goal 2	Achieve universal primary education
Goal 3	Promote gender equality and empower women
Goal 4	Reduce child mortality
Goal 5	Improve maternal health
Goal 6	Combat HIV/AIDS, malaria, and TB
Goal 7	Ensure environmental sustainability
Goal 8	Develop a global partnership for development

MDG Implementation Context in Nepal

Previous development experience and the 15 years of MDG implementation in Nepal is shaped by the political, economic and social context of the country. The year 1990 had witnessed the fall of the Soviet Union and the socialist model of governance and development was no longer an alternative approach to democracy and development. Liberal democratic governance and the free market economy emerged as the unchallenged model for development. This global trend influenced Nepal’s governance and economic development strategies. Reflecting on the context in which the MDGs were developed and adopted and the present context when the MDGs have evolved into the SDGs, provide valuable insights and a learning opportunity. In Nepal this is also an opportunity to understand Nepal’s experience of targeted development practice and assess what has worked, what has not and why? This reflection is valuable as Nepal began to be governed under a new constitution from 1990 that changed its centrally controlled governance system to a more open and plural democratic system following the global trend. Furthermore, the restoration of democracy in 1990 provided the much

needed platform for a more effective role for development partners. The state formulated favourable policies, good governance and established the supportive institutions that fostered momentum towards implementing MDGs.

The promulgation of a new constitution in 2015 sees Nepal entering a new era of political change. The new constitution is designed to be more inclusive than the previous ones. This change in the state and its governance system coincides with the development transition to a more holistic and integrated development approach under the SDGs.

Nepal adopted the Millennium Declaration in 2000, which mainstreamed peace, security and development concerns including environment, human rights and governance. The MDGs, which incorporated the International Development Targets (IDTs) drawn up by UN global conferences of the 1990s, synthesized the goals and targets for monitoring human development and became a guiding development framework for Nepal over the past 25 years. Periodic reviews of progress on implementing the MDGs have been carried out with the National Planning Commission taking the lead in Nepal. Alongside the 2002, 2005, 2010 and 2013 progress reports, a needs assessment report was prepared in 2010 to assess the resource requirement to accelerate the implementation of MDG and achieve the targets (NPC and UNDP 2010). An MDG acceleration framework was produced in 2013 focusing on water and sanitation (NPC and UNDP 2012).

The first progress report (NPC 2002) set the standards and format for monitoring and assessment, which was followed in the subsequent reports. It set the standard to assess the implementation monitoring environment as either 'strong' or 'weak' and assessed the situ-

ation of targets as either achievable, likely, unlikely or potentially likely to be achieved. This schema did not claim to be objective, but it did help to gain understanding of the direction of implementation.

The second progress report (NPC 2005) covered the main changes in the institutional and supporting environment during the period, along with the reporting on progress against the MDGs. This provided important information for reviewing progress, and has been continued since then.

The third progress report (NPC 2010a) helped in the production of the Three-Year Plan for 2010/11 to 2012/13. The data and information from the draft report was used in the preparation of the plan's approach paper. Meanwhile, the MDG Needs Assessment report provided estimates of resources required to achieve the MDGs by 2015. The report also provided insights for thinking beyond 2015 and for shaping Nepal's future development interventions.

The fourth progress report (NPC 2013) in addition to updating the achievements and progress towards achieving the MDG targets, reflected on the totality of Nepal's experience with the MDGs, and helped identify unfinished business and emerging priorities. These studies have helped track progress and provided valuable sources for producing this status report.

State, politics and government policies

The first review of the progress against the MDGs came in 2002 when the political context was governed by an open liberal constitution and competitive multiparty politics. There was a separation of governance powers and fundamental rights, including the rights to free speech and association. The country's

economic policies were becoming increasingly neoliberal. The overall structure of political representation and local government were designed for the direct representation of people at the grassroots level with almost 200,000 political representatives in place down to the ward level. The introduction of the Local Self Governance Act (LSGA) in 1999 strengthened the devolution of power and deepened local democracy through the full decentralization of power and resources. Its implementation required sustained practice and a changed mind-set at the central government level. However, when the MDG assessment was made in 2002, the country was already six years into an armed conflict with serious implications for resource allocation and the implementation of the MDGs.

There were gaps and disharmony between macroeconomic policies and sectoral policies at the beginning of the MDG period. There was a need to harmonize political interests and minimize conflict, whilst development interventions had to be reprioritized to align with the MDGs. The need was felt to redirect resources from security to social development goals. Local engagement had to be strengthened in community development works. The contextualization and localization of MDG attainment strategies were needed. However, the ten year long armed conflict (1996–2006), saw the state largely displaced from rural and remote areas and the suspension of elected local government in 2002. Poverty, exclusion, discrimination and marginalization was high in these areas. Consequently, state and non-government actors' access to those areas got weaker day by day.

By the time the second progress report was prepared in 2005 the armed conflict was at its height causing thousands of deaths, widespread displacement and a serious detrimental effect on the country's development with

widespread human rights violations and the destruction of physical infrastructure and the cessation of local elected government. There was major political instability in the country's government as rebel groups formed their own 'people's governments' in rural areas and the parliament was dissolved and the King assumed direct control in February 2005. These developments led to a political vacuum at the local and national levels, severely constraining development activities.

In 2010, when the third MDG progress report was prepared, the country's politics had undergone huge change towards peace following the signing of the 2006 comprehensive peace agreement between the Maoists and the government. The monarchy was abolished and the country was declared to be a federal secular republic. A constituent assembly elected in 2008 was working towards a new structure of governance under a new more inclusive interim constitution. It was a fragile period with many uncertainties against the backdrop of the huge achievements of ending the armed conflict and bringing about peace.

When the fourth progress report was prepared in 2013, the country was still in a state of political transition. The Maoist combatants had been integrated into society and the Nepalese Army, and the former rebels were in the democratically elected government. Although the peace process had come to an end, the Constituent Assembly had failed to draft a new constitution. The country was preparing for the second Constituent Assembly elections whilst local government bodies were still without elected political representatives and were being run by bureaucrats.

In 2015 while preparing the current report, the Constituent Assembly promulgated the new constitution, which is more inclusive and

gives more rights to ethnic groups, Dalits and marginalized groups. Its aim is to build a more equitable and inclusive nation with the constitutionally ensured rights of excluded people in all aspects of the social, political and economic realms. Its preamble states its aspiration to build,

“people’s competitive multiparty democratic governance, citizen’s freedom, fundamental rights, human rights, adult franchise, periodic elections, total freedom of press, and independent, impartial and capable judiciary and other values of democracy, commitment towards socialism, for prosperous nation building.” (CAS 2015).

A section of the population from the fertile Tarai plains are however unhappy with the new constitution, protesting that it does not satisfy their demands. The prolonged agitation, protests and strikes in the Tarai plains have seriously affected people’s lives socially and economically both locally and nationwide.

Nepal has adopted a federal system so that national development will be more balanced, inclusive and rapid; but this brings new challenges. The nation has to adopt a comprehensive and common vision for the sharing of resources so that state level planning contributes towards the national goals. The 2015 constitution states that:

“the amount of financial provision for state and local level shall be as recommended by the National Natural Resources and Fiscal Commission. The commission shall determine the detailed basis and mechanism of distributing the revenues from Federal Consolidated Fund among federation, states and local units”.

Although the constitution recommends equalization grants to states and local units as per the law, a concrete complementary law on this has yet to be formulated. The equal access to opportunities that is stressed by the constitution is an important challenge for the government to address. The government needs to ensure that marginalized geographic regions (the mountains, the mid-west, the Karnali Zone, and the far and north-western hills) and social groups such as Dalits, Madhesis and Janajati groups¹ enjoy improved opportunities. The constitution is very promising, but the country has the daunting task of implementing it and formulating the supporting laws. The country’s post-2015 agenda should be disaggregated and integrated with state level objectives and goals, which is a mammoth task.

Economy, poverty and inequality

When the first MDG review was completed in 2002, the agriculture sector had a growth rate of 2.5 percent and the non-agriculture sector a growth rate of 2.7 percent resulting in 2.7 percent growth of the GDP of nation on average in 2002 (MoF 2002b). Further, the ratio of the export of goods and services to GDP (at producers’ current prices) was 22.4 percent in fiscal year (FY) 2000/01. The rate of growth of the agriculture sector, which provides the main livelihood of most of the population, was much lower. The gross national product (GNP) remained very low at USD 220 per capita, and inequalities in the means of subsistence and income remained pronounced at regional, sectoral, urban-rural, gender and social ethnic levels. The Ninth Plan (1998–2002)

1 Dalits are the ex-untouchable occupational castes of South Asia. Janajatis are Nepal’s ethnic groups. Madhesis are certain caste and ethnic groups based in the Tarai with close cultural affiliations with India.

aimed to reduce the population living under the poverty line by 10 percentage point and bring down the existing poverty level from 42 percent to 32 percent of the population.

During the second MDG review period (2005), Nepal experienced 3 percent GDP growth. Agriculture and non-agriculture GDP grew by 2.8 percent and 1.6 percent on average. The country witnessed dramatic progress on poverty reduction with a reduction from 42 percent living below the poverty line in 1996 to 31 percent in 2004. However, rural-urban disparities continued with rural poverty at 35 percent compared to 10 percent in urban areas.

The government released its Three-Year Interim Plan (TYIP) for 2007/08-2009/10 in December 2007. Its main objective was to lay the foundation of economic and social transformation for developing a prosperous and modern Nepal. The Poverty Alleviation Fund was established under the Poverty Alleviation Fund Act (2006), and currently continues as an autonomous organization.

The third MDG progress report stated that Nepal's economic growth rate was 3.5 percent. The GDP share of the net exports of goods and services accounted for 32.2 percent at the current prices in 2010/11 down from 37.4 percent in 2009/2010. The share of exports of goods and services to GDP was very low at only 8.7 percent. On other hand the NLSS estimated that the population living below the poverty line had reduced to 25.4 percent in 2008/09 with a 5.5 percentage point drop in five years (CBS 2011a). The Gini coefficient of income disparity, however, revealed that income disparities had increased from a score of 0.41 in 2004/05 to 0.46 in 2008/09 although it then declined to 0.32 in 2011 (CBS 2011a). Analysis of the poverty and inequality trajectory over

the decades shows that economic growth has contributed to reducing levels of poverty although the uneven distribution of income and opportunities remain a major concern.

The MDG needs assessment was carried out in 2010 to identify needs and to identify means of filling resource and other gaps (NPC and UNDP 2010). Since then, the government has carried out a population census in 2011, the Nepal Living Standard Survey (NLSS) of 2010/11 and the Nepal Demographic Health Survey (NDHS) of 2011, and released the 2013 Flash Report on Education.

At the time of the third MDG progress report (2010) Nepal's GDP growth was reported as 5.5 percent at producer prices. The growth in the non-agriculture sector was 5.3 percent, 1.3 percentage points more than the previous year, while the agricultural sector grew by 4.7 percentage points, 3.6 percentage points greater than the preceding year.

The production of this status report took place as Nepal was suffering the aftermath of major earthquakes that killed more than 9000 people and destroyed over half a million private houses and 2500 government buildings. The cost of reconstruction and rebuilding is estimated at over \$7 billion (NPC 2015b).

The promulgation of the constitution in September 2015 was followed by human-made disasters that seriously undermined the country's economy. Major routes on the southern border with India were totally or partially closed resulting in serious shortages of fuel and other commodities, creating an economic and humanitarian crisis in the country. Markets and industries shut down, and critical agricultural inputs became unavailable. People's lives were seriously affected in urban and rural areas.

Sustainability

Nepal has made good progress on reducing poverty and achieving most of the MDGs. But the country still has a long way to go before it can celebrate the sustainable achievement of the MDGs. Slow growth in agriculture is shrinking employment and income-generating opportunities and hindering broad-based growth. As a result, only a small section of the population have benefitted from existing development and economic policies. Nepal's economy is gradually becoming consumption-oriented, mainly pushed by the large remittance incomes, thereby causing a decline in savings and investment rates. A consumption-oriented economy usually leads to dependency resulting in shortages of resources for productive investment.

The country however suffers from a high degree of vulnerability to external macro-economic shocks and major disasters. The vulnerability of the many households who live just above the poverty line was evident in the aftermath of the 2015 earthquakes.

The sustainable achievement of the MDGs therefore demands robust and inclusive growth backed by sufficient attention to the vicious cycle of poverty and human security.

Forces of change and development trends

Four major factors have influenced Nepal's MDG implementation and achievements: urbanization, labour migration, private sector and civil society growth, and the proliferation of information and communication technology (ICT).

Urbanization: The average annual growth rate in Nepal's urban population is 3.2 percent (World Bank 2014), which is among the highest in South Asia. This rapid urbanization has

positively contributed to the achievement of the MDGs and has influenced the country's development trend. In 1990, 9.2 percent of the population lived in urban areas compared to 13.9 percent in 2001, 17 percent in 2011 and a projected 18.6 percent in 2015. It is further projected that over half of the population will be living in urban areas by 2030. This figure is likely to be reached because of the declaration of new urban areas (municipalities) by the government, with municipalities being the proxy for urban areas. The number of municipalities has increased from 58 in 2014 to 217 in 2015. Although the abrupt increase of the urban population is partly due to administrative reasons (with many new municipalities encompassing considerable rural areas), on the whole the urbanisation trend is faster than in most South Asian countries. Urban areas have less poverty, higher literacy, and tend to fare better in all indicators compared to rural areas. Access to services and opportunities tend to be much better in urban areas thus enhancing the living standards and livelihoods of urban people. This trend thus has had large implications for the achievements of the MDGs and will influence the implementation and achievement of the SDGs. Note that there is a specific SDG on urbanization.

Labour migration and remittances: Almost one third of Nepal's 27.8 million population is living and working abroad. However only one third of the migrant population are accounted for, the rest are unaccounted and mostly migrate to or work in India (http://www.un.org.np/oneun/undaf/migrant_workers). These are mostly working age people and they contribute to the national economy through the remittance of large parts of their incomes to their families in Nepal. The flow of recorded labour migration and remittances has increased since the year 2000. The total officially registered migrants abroad was 35,000 in 1999 increasing to more than 100,000 in 2000, to almost 300,000 in 2010

and to 450,000 in 2015. In 2015 remittances made up 29.2 percent of GDP and this high proportion is likely to remain the same or increase in the next decade. The migration trend is likely to increase if economic disturbances continue. This trend negatively affects labour availability and productivity within Nepal while at the same time increasing the demand for imported goods in the short term. However, labour migration has a positive implication on poverty reduction while contributing to the achievement of the MDGs and the sustainability of the economy.

This trend is unlikely to continue in the long-term due to the macroeconomic dynamics of migrant receiving and sending countries. Once this trend kicks off, because of age and other reasons, national economies and the human development culture are likely to take a new turn. The large-scale return of migrants equipped with new skills, exposure, experience backed up with start-up capital, sound age and a work culture could well be a major force in modernizing Nepal's agriculture and significantly contributing to economic growth. Though this trend is yet to become statistically evident there are strong indications that it is beginning. This phenomenon of labour migration and the return of migrants needs to be better understood for formulating strategies to achieve the SDGs.

Private sector and civil society growth: There has been a very large growth in the number of private and civil society sector organisations over the past two decades including NGOs and community based organisations (CBOs). The private sector grew along with the market liberalization and policy reforms that accelerated after 1990. The open liberal policy in education, health, transport, energy and industries increased foreign and domestic private sector investment. The private sector's contribution to gross fixed capital formation increased from 17 percent in 2000 to 17.7 per-

cent in 2010 and 18.9 percent in 2013/14.

The number of NGOs has increased from an estimated 125 in 1990 to 39,759 Social Welfare Council registered NGOs in 2015. This includes grassroots organizations such as community empowerment and microcredit organisations. This movement has helped to achieve and sustain the MDG achievements. The growth in the private business and NGO sectors has created many new jobs and has helped with the achievement of the education, health, women's empowerment and poverty reduction MDG targets. This trend is likely to continue, albeit at a slower pace and contribute to the achievement of the SDGs. The experiences of these multiple actors will be invaluable for the achievement of the SDGs.

Information and communication technology: The advances in the ICT sector have revolutionized Nepali society. The MIS reports of the Nepal Telecommunications Authority (NTA) and the Telecommunications Corporation (NTC) (2007 to 2015) reveal that in 1990 less than 2 percent of Nepal's population had landline phones compared to 379,235 in 2004 and 840,223 in 2010 and 845,742 in 2015. Alongside this has been the dramatic increase in the number of cell phone subscriptions from less than 0.5 percent of the population in 1995 to the equivalent of 35.1 percent of the population (10,041,499) in 2010 and the equivalent of 100 percent of the population (26,663,605) in 2015. This increase in connectivity has increased access to market information and social networking. Though the cost of communication, access to the internet and the quality of networks need improving, the trend of improved communications is likely to increase and facilitate SDG implementation. The combined effect of the large proportion of young people in the population, urbanization and access to information is likely to revolutionize Nepal's economy and lifestyle.

International and regional context

The post-1990s period was a euphoric period globally for democracy, freedom and free markets. The fall of the Berlin Wall and the breakup of the Soviet Union presented western liberal democracy and free market economies as the models for progress. This affected Nepal where a major political movement brought down the Panchayat political system in 1990. The Panchayat system had banned political organizations and controlled social associations and citizens' liberty. Politically there seemed to be no obstacles to moving ahead. The context for regional cooperation was also favourable to Nepal with the South Asian Association for Regional Cooperation (SAARC) appearing to be a viable institution for the political and economic development of its members. This trend continued but domestic conflict made Nepal less attractive for investment growth. The international context has now changed with a new era of power testing and competition set to affect the next decade. More threatening to the peaceful implementation of the SDGs, however, is the conflicts between powerful states and newly proclaimed powers like Islamic State, the Taliban and Boko Haram. Countries will have to adapt to this new context to achieve the SDGs.

Nepal's development context and the SDGs

In 2015, when the SDGs were approved by the UN General Assembly, Nepal's social,

political and economic context faced considerable new challenges and opportunities. The country is about to implement a new constitution although some sections of the population want it amended or reject it altogether. Consequently, agitations around Nepal's southern border crippled the economy by blocking the import and export of goods overland. In addition, the major earthquakes of April and May 2015 devastated almost one-third of the country, and caused many human casualties.

The implementation of a federal structure of governance is beginning. Social equity and inclusion are a major reason for this and other recent political changes. Increasing corruption is another major challenge the government faces.

Energy shortages are a major bottleneck for the country's development, demanding major policy reforms and the implementation of major hydro projects. The 'second phase' reform agenda doesn't seem to be a government priority. The country's relation with its neighbour and largest trading partner India faces many challenges. People's expectations are high. The issue of the sustainability of the achievement of the MDGs is questionable on economic grounds.

Key development and MDG indicators

Table 0.2 presents the available figures for key development and MDG indicators for Nepal from 1990 to 2015.

Table 0.2: Key development and MDG indicators and their values for Nepal (1990 to 2013/15)

Indicator	1990	2000	2005	2010	2015	Source
Population size (millions)	18.11	23.18	25.29	26.85	27.8	WB cited CBS projection
Population growth (per cent)	2.27	2.2	1.5	1.1	1.2	WB cited CBS projection
Life expectancy at birth (years)	55.1	62.1	64.8	67.10	71	UNDP (2014), NPC (2016)
GDP per capita (US\$)	211.18	236.98	321.46	595.77	659	MoF, UNDESA (2015)
GDP growth rate (average percentage)	4.9	5.8	2.9	3.5	5.5	MoF (2001, 2005, 2010, 2014)
Inflation rate (percent)	8.9	3.3	4.4	9.5	9	MoF (2015b)
Human Development Index	0.388	0.449	0.477	0.527	0.54	UNDP (2014)
Population below national poverty line (percent)	42	38	31	25.4	21.6	NPC and UNCT (2013), NPC (2016)
Underweight children aged under 5 years (percent)	57	53	43	38.6	30.1	MoHP et al. (2012), CBS (2015b), NPC and UNCT (2013)
Literacy rate (15-24) years	-	70.1	79.4	86.5	88.6	MoHP et al. (2012)
Net enrolment rate in primary education	72.1	81.0	84.2	93.7	96.6	MoES (2000), MoE (2005), MoE (2009), DoE (2016)
Under five mortality rate (per 1,000 live births)	162	91	61	54	38	MoH (1996), MoHP et al. (2007, 2012)
Maternal mortality ratio (per 100,000 live births)	850	415	281	281	258	UNDP (1992), NPC (2002), MoHP (2009), WHO et al. (2015)
HIV/AIDS prevalence for 15-49 year olds (percent)	-	-	0.35	-	0.2	NCASC (2014a)
People using wood as their main fuel (percent)	75	67.7	69.1	68.4	53.8	NPC (2005), CBS (2015a)
Commercial energy use per unit of GDP (ToE/mRs)	1.4	3.9	3.6	3.7	3.2	NPC (2005), CBS (2009), DWSS (2011)
Area under forest cover (percent)	37	39.6	39.6	39.6	44.7	DFRS (2015)
Population with sustainable access to improved water source (percent)	46	73	81	80.4	83.6	NPC (2005), CBS (2004), MoWSS (2016)
Population with sustainable access to sanitation (percent)	6	30	39	43	81	NPC (2005), CBS (2004), MoWSS (2016)



GOAL 1

Eradicate Extreme Poverty and Hunger

Nepal has made large progress between 1990 and 2015 on eradicating poverty and hunger. While these improvements are likely to continue the achievements vary by region, geographical belt and people's economic status.

MDG Target 1A: 'Between 1990 and 2015, halve the percentage of people below the poverty line'

Status and Trends of Target 1A — Poverty

Table 1.1: Achievements on reducing poverty in Nepal, 1990–2015 (Target 1A)

Indicator	1990	2000	2005	2010	2013	2015	2015 Target
1.1. Percentage of population living below USD 1 per day (PPP value)	33.5	na	24.1	19.7	16.4	16.4	17
1.2. Percentage of population below national poverty line	42	38	31	25.4	23.8	21.6	21
1.3. Poverty gap ratio at USD 1 per day (percent)	na	11.75	7.55	6.1	5.60	na	6
1.4. Share of bottom quintile in national consumption		7.6	6.2	-	8.3	na	-

Sources: NPC and UNCTN (2013), NPC (2011), CBS (2011a), NPC (2016)

Nepal has made large progress on eradicating poverty and hunger (MDG 1), halving the proportion of people whose incomes are less than a dollar a day (Table 1.1). Nepal Living Standards Survey data shows poverty steeply declining from 33.5 percent in 1990 to 19.7 percent in 2010 and 16.4 percent in 2013 (Ta-

ble 1.1). Consumption based poverty stood at 25.4 percent in FY 2010/11, which represents a considerable decline from when poverty was measured using similar data in FY 1995–1996, CBS (2011a). The proportion of the population living below the national poverty line was 42 percent in 1990 and 25.4 percent

in 2010. With this rapid rate of change, about one percentage point per year, the proportion declined to 21.6 percent as per the most recent figures (NPC 2016). The rate of reduction was faster in the 2001–2015 period than in the 1990–2000 period.

Furthermore, the poverty gap declined from almost 12 percent in 2000 to 5.6 percent in 2013, which meant that on average, poor people have moved closer to crossing the poverty line (Table 1.1). The decline in the poverty gap indicates that the cost of lifting the poor above the poverty line has been decreasing over time. The Gini coefficient (the main measure of income inequality), declined from 0.41 in 2000 to 0.32 in 2013, with urban areas having a value of 0.353 and rural areas 0.311 in 2013 (NPC 2014b).

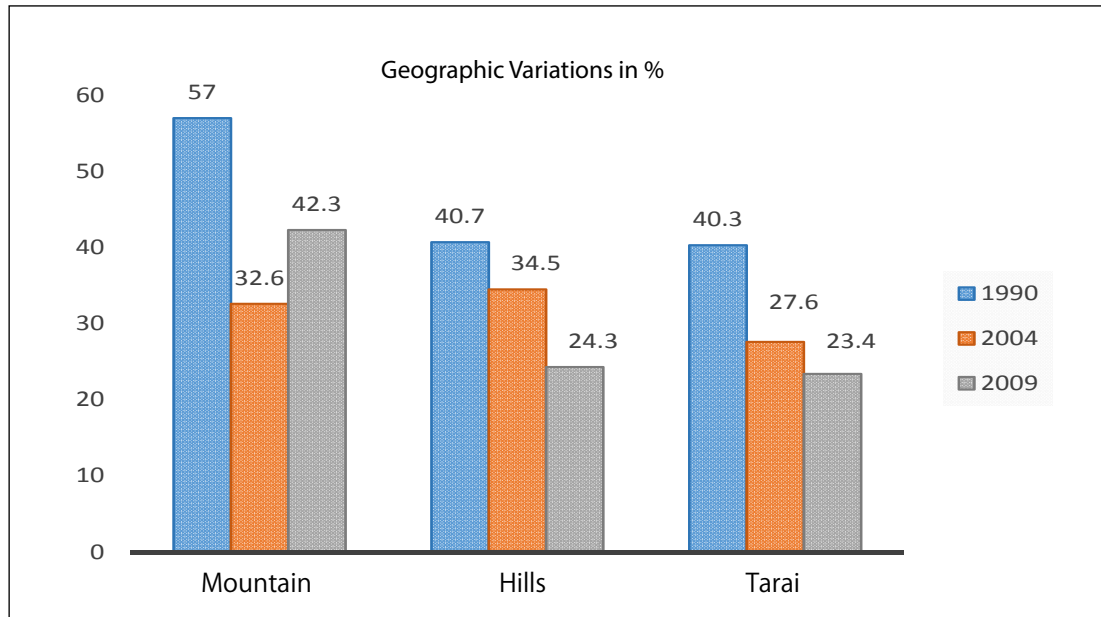
Despite the large drop in poverty, glaring disparities exist between urban and rural dwellers, geographical regions and various social groups. The urban hills are the least poor areas and have the least depth and severity of poverty (CBS 2013). The poverty rate here stands at 10.4 percent compared to the national average of 21.6 percent. In urban areas poverty ranges from 9 percent in the urban hills to 22 percent in the urban Tarai, while in the rural hills it ranges from 18.6 percent in the Eastern region to 41 percent in the Far Western region, and in the rural Tarai it ranges from 21 percent in the Eastern region to 31 percent in the Mid-Western and Far Western region.

The average rate of urban poverty declined from 21.6 percent in 1990 to 15.4 percent in 2009, while the rural poverty rate declined from 43.3 percent in 1990 to 27.4 percent in 2009 (CBS 2006, CBS 2013, NPC and UNCT 2013). The rapid decline in rural poverty has partly been attributed to the large amounts of rural to urban migration with people mi-

grating in search of higher wages in the urban sector. But, there have not been any parallel employment generating activities in the formal sector in urban areas and thus migration has generated high unemployment, low income earning and more poverty in urban areas. Although poverty has declined in comparison to the base year (1990), however, in comparison to 2004/05, it actually increased by almost 6 percentage points in urban areas from 9.6 percent in 2004 to 15.5 percent in 2009 (Figure 1.2). Nevertheless, overall poverty has decreased, which is mostly attributable to remittance incomes, pro-poor government programmes including the PAF, geographically targeted employment programmes (Karnali employment), the BP with the Poor Programme, targeted programmes for poorer sections of the population such as Dalits and Janajatis, the Local Governance and Community Development Programme (LGCDP), and the allocation of substantial amounts of each year's government budget (more than NPR 900 billion since 2010) towards poverty alleviation. The growing urbanization, migration, the influx of remittance incomes and increased access to opportunities have also contributed to these achievements. The national campaigns against poverty have penetrated the minds and activities of the general public making poverty alleviation a common goal.

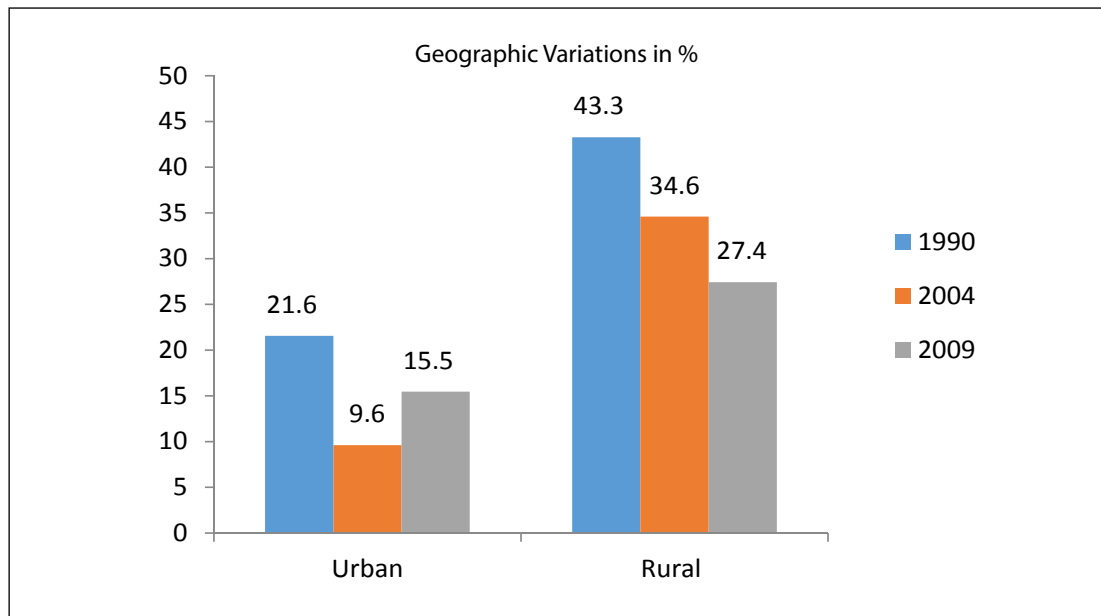
However, there remain stark geographic and social disparities. In 2010/11, the mountains and hills had a higher percentage of poor people than Tarai areas (CBS 2004) (Figure 1.1). Upland areas (mountains and hills) lag behind in access to basic facilities like improved sources of drinking water, toilet facilities, electricity, paved roads, agricultural centres and access to finance. The biophysical characteristics, relative remoteness, inaccessibility of most mountain regions and

Figure 1.1: Geographic variation in poverty (mountain, hills and Tarai)



Sources: CBS (2004) and CBS (2011a)

Figure 1.2: Geographic variation in poverty (urban and rural)



Sources: CBS (2004) and CBS (2011a)

the effects of the 1996–2006 armed conflict are other reasons for the disparities. The mountains, which showed a larger drop in poverty than other areas between 1995/96 and 2003/04, experienced a large increase

in poverty in 2009 (Figure 1.1). The 2010/11 NLSS found the urban hills to be the least poor, with the mountains and rural hills as the poorest domains followed by hills in the Mid-West and Far-Western regions.

Status and Trends of Target 1B — Employment

MDG Target 1B: ‘Achieve full and productive employment and decent work for all, including women and youth’

Table 1.2: Achievements on increasing employment in Nepal, 1990–2015 (Target 1B)

Indicator	1990 ^a	2000 ^c	2005 ^d	2010 ^a	2013 ^a	2015 ^a	2015 Target
1.5. Growth rate of GDP per person employed	na	na	1.4	1.59	na	na	-
1.6. Employment to population ratio	67 ^a	84.3 ^b	91.6 ^c	81.7 ^d	82.2	78.3 ^a	-
1.7. Proportion of employed people living on less than USD 1 per day	na	na	na	22	na	na	17
1.8. Proportion of own account and contributing family workers in total employment	na	83.1	na	81.9	na	81.9	-

Sources: ^{a,b,c} MDGI (2015), NPC and UNCTN (2013); ^d CBS (2009); ^e CBS (2011a)

The employment to population ratio provides an important insight into Nepal’s employment situation. According to the latest Nepal Labour Force Survey (CBS 2009), the employment to population ratio reported in 2000 was 84.3 percent, which decreased to 81.7 percent in 2010 (NPC and UNCT 2013), and then to 78.3 percent in 2014/15 (Table 1.2). Male employ-

ment decreased from 88.3 percent in 1998/99 to 85.5 percent in 2008, whilst female employment decreased from 80.5 percent to 78.5 percent in the same period (Figure 1.3). The overall employed population (above 15 years age) in 2011 was 2.3 million more than in 1998. Furthermore, the latest analysis (CBS 2009) found that 73.9 percent of the population were work-

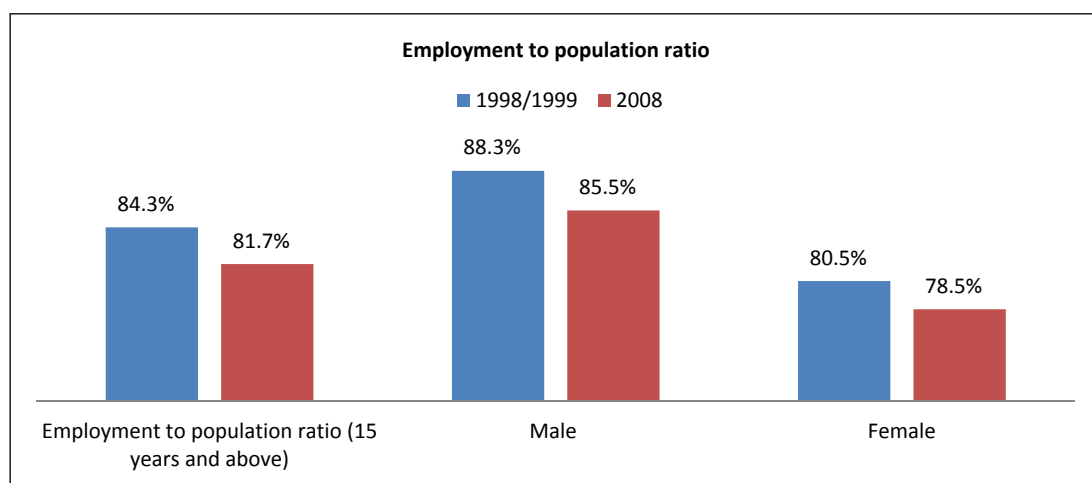


ing in the agriculture sector and 26.1 percent in the non-agriculture sector; and on an average fully employed people were paid NPR 5117 per month, with men paid NPR 5721 per month and women only NPR 3402.

The growth rate of GDP per person employed

(labour productivity) increased from 1.4 percent in 2005 to 1.6 percent in 2010 and to 1.6 percent in 2013 (APO 2013, NPC 2013a). Nepal's productivity increased by 1.6 percent in the first half of the 1990s, but decreased to 0.5 percent in the first half of the 2000s, and increased to 1.6 percent between 2005 and 2013.

Figure 1.3: Employment to population ratio for aged 15 years and above population, Nepal (1998/99 and 2008)



Sources: CBS (1999), CBS (2009)

Nepal maintained a 2 percent growth rate from 1990 to 2000, and a 1.1 percent growth rate from 2000 to 2015. The latest analysis (UNCTAD 2014) shows that the increase in direct productivity has contributed the most (32.7 percent) in overall aggregated productivity, while productivity gains due to structural transformations (shift of labour from lower to higher productive activity) has contributed less (17.9 percent). Most of the productivity gains from 1991 to 2012 have been due to increases in capital and remittances rather than structural effects such as shifts of labour from lower to higher productivity activities.

In Nepal the inflow of remittances increased from 13.5 percent (2000-2008) to 24.8 percent (2012) of gross national income (GNI), and remittances accounted for 29.2 percent of GDP in 2014/15. Since there is little evidence of in-

creasing domestic employment opportunities, and there is wide-scale persistent out-migration it is understood that the direct productivity gain is not exclusively because of technology or more efficient working methodologies but from the multiplier effect of remittance inflows.

As mentioned earlier, most people work in the low productive sector and there has been little mechanization of agriculture. Furthermore, there has been no structural transformations that could result in sustainable increases in productivity and earnings. Thus, the labour force earning less than USD 1 per day has remained the same at around 22 percent in 2010, which is above the 17 percent target.

Nepal has low levels of earning and high levels of employment vulnerability. The extent to which the proportion of people in vulnerable

employment has fallen measures the progress on provision of 'decent jobs'. The International Labour Organisation defines the vulnerable employment rate as "the sum of own account and contributing family workers as a proportion of total employment" (ILO 2013). In 2008, nearly 72 per cent of workers in Nepal were in this category. As the 1998/99 Labour Force Survey (CBS 1999) didn't report on employ-

ment vulnerability, it is difficult to say whether the degree of vulnerable employment has increased or decreased. But figures in the latest Labour Force Survey report self-employment without regular employees at 37.3 percent of total surveyed and family members without pay at 45.7 percent suggest that over 80 percent of total employment may well be vulnerable employment.

Status and Trends of Target 1C — Hunger

MDG Target 1C: Between 1990 and 2015 halve the proportion of hungry people

Table 1.3: Achievements on reducing hunger in Nepal, 1990–2015 (Target 1C)

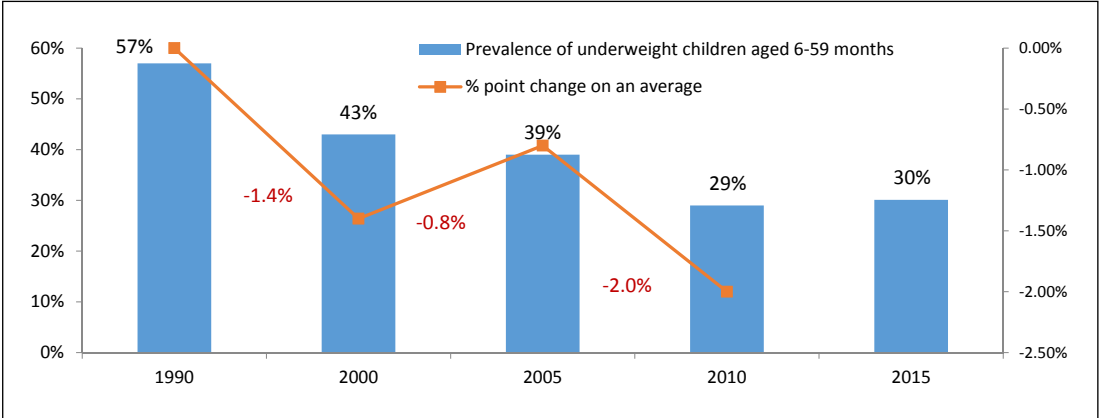
Indicator	1990 ^a	2000 ^b	2005 ^c	2010 ^d	2015 ^e	2015 targets
1.9. Prevalence of underweight children aged 6-59 months	57	43	39	29	30.1	29
1.10. Proportion of population below minimum level of dietary consumption	49	47	40	22.5	22.8	25
1.11. Proportion of stunted children aged 6-59 months	60	57	49	41	37.4	30

Sources: ^aNPC (2002), ^bMoH et al. (2002), ^cMoHP et al. (2012), ^dMoHP et al. (2012), ^eCBS (2015b)

Nepal has made an exemplary achievement by halving the proportion of hungry people. The country met the target of reducing the proportion of underweight children aged 6-59 months by almost half from 2000 to 2013

(NPC and UNCT 2013). The latest data shows that the prevalence of underweight children declined from 57 percent in 1990 to 30.1 percent in 2015 (CBS 2015b; MoHP et al. 2012) (Table 1.3 and Figure 1.4).

Figure 1.4: Prevalence of underweight (children aged 6 to 59 months)



Sources: MoHP et al. (2012), CBS (2015b), NPC (2013b), MoHP et al. (2012)

Rural children were more likely to be underweight (30 percent of them) than urban children (16.5 percent). Also, children living in the mountain zone were more likely to be underweight (35.9 percent) than those in the Tarai (29.5 percent) and hill zone (27 percent). The 2011 NDHS (MoHP et al. 2012) found that the Mid-Western region had the highest percentage of underweight children (37 percent), whilst the Western region had the lowest (23 percent). Among the sub-regions, the Western mountain sub-region had the highest percentage of underweight children (42 percent), while the lowest percentage was in the Western hills (17 percent).

There has been only a slight decline in the proportion of wasted children — from 13 percent in 2006 to 11.8 percent in 2011 (MoHP et al. 2012). “Children whose weight-for-height is below minus two standard deviations from

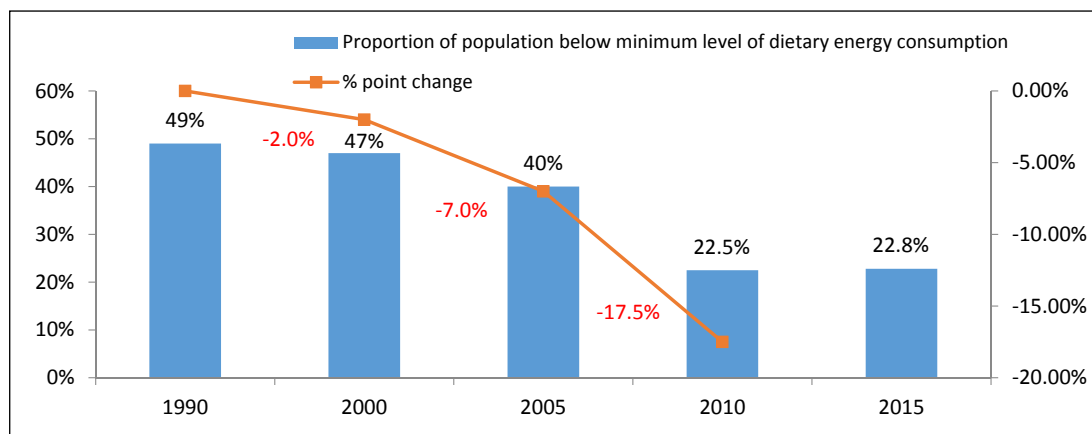
the median of the reference population” are considered wasted or thin (MoHP et al. 2012). Among the 11 percent who were wasted, 3 percent were severely wasted.

Nepal has made very good progress by reaching the target of halving the proportion of the population below the minimum level of dietary energy consumption by 2015 (22.8 percent achieved against the 2015 target of 25 percent) (MoHP et al. 2012) (Figure 1.5).

The proportion of stunted children declined from 57 percent in 2000 to 41 percent in 2010 and further to 37.4 percent in 2015 (Figure 1.6). Forty one percent of children under five are short for their age, and 16 percent are severely stunted. Nepal has made good progress in reducing the percentage of stunted children, although at 37.4 percent the target of 30 is quite far away.

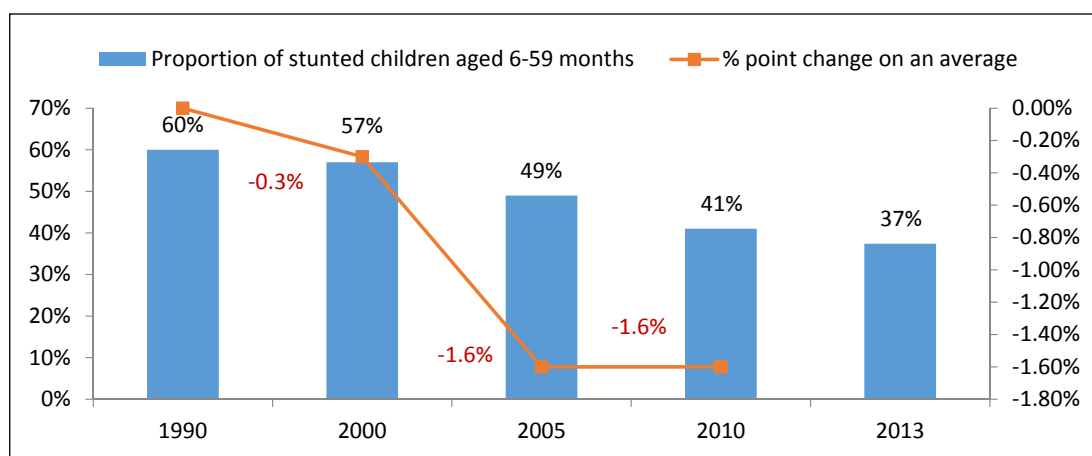


Figure 1.5: Proportion of population below minimum level of dietary energy consumption



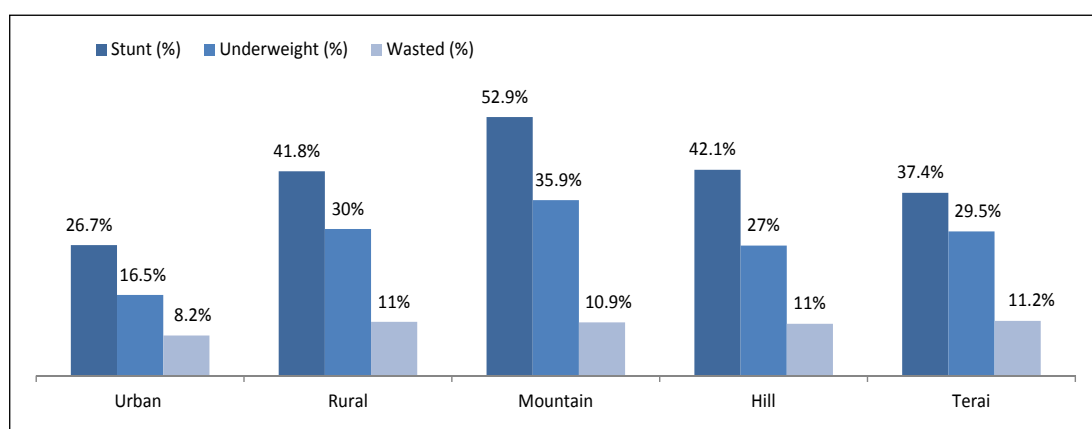
Sources: MoHP et al. (2012), CBS (2015b), NPC and UNCTN (2013), MDGI (2015), CBS (2014b)

Figure 1.6: Proportion of stunted children



Sources: MoHP et al. (2012), CBS (2015b), NPC and UNCTN (2013)

Figure 1.7: Region-wise (stunted, underweight and wasted)



Sources: MoHP et al. (2012), CBS (2015b), NPC and UNCTN (2013)

There has been a clear downward trend of stunting and underweight children since 1990. The percentage of stunted children declined by 8 percentage points between 2000 and 2005, and by a further 8 percentage points between 2005 and 2010 (Figure 1.6). Similarly, the percentage of wasting declined by 15 percent between 2005 and 2010. All three indicators of target 1C significantly reduced by an average of 6 percent points from 1990 onwards, and the rate of change has been greater since 2000.

However, disparities exist in this progress with differential nutritional status across the regions (Figure 1.7). Inadequacies in transportation networks and access to seeds, irrigation facilities, education and incomes are some of the main differentiating factors. It is also evident that the availability of proper nutrition for adults and children is unevenly distributed across the country, and areas with the lowest production and availability of food and the greatest per capita food deficits tend to be the areas with the lowest incomes, highest rates

of poverty and malnutrition. These tend to be the most remote and inaccessible areas.

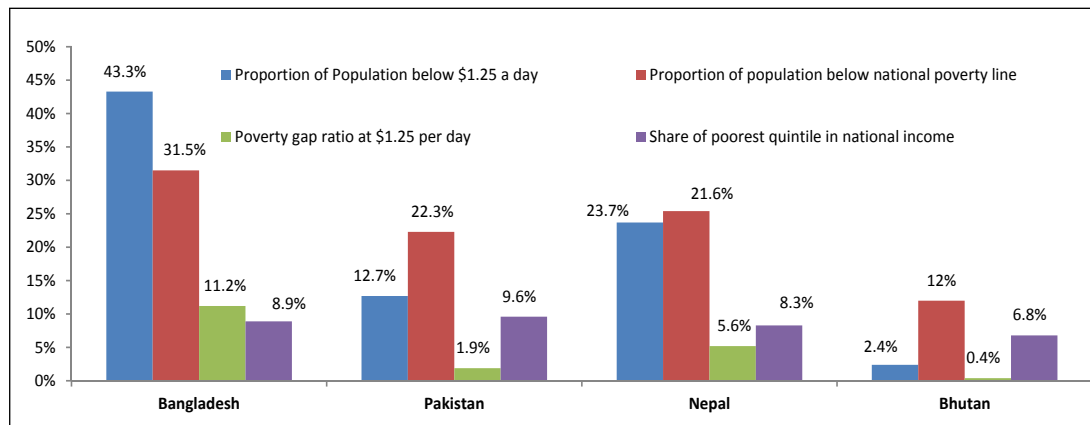
The limited movement of food and resources from surplus to deficit areas is another factor behind this disparity. Although some areas of Nepal have surplus food, these surpluses are often not transferred to rural areas or areas suffering food deficits. It tends to be easier to sell such surpluses across the border to India than to transport them to the country's deficit areas. This is due to both the lack of transport infrastructure and the arbitrage opportunities for traders and ease of access to the Indian market.

Another reason for the disparities are discrimination, social exclusion, taboos and dogmatic beliefs of conservative rural society. For example, some communities give girls less food than boys while females tend to consume less nutritious and healthy food than males. About 37 percent of women (age 15-49 years) are undernourished in the Western Tarai and 27 percent in Nepal as a whole.



Achievements Compared to Other Countries

Figure 1.8: The MDG 1 achievements of Nepal and three other South Asian countries



Sources: MDGI (2015), CBS (2011a), NPC (2016)

Nepal has fared better than several other South Asian countries on most of the MDG 1 indicators, although it has not performed so well on the share of national income of the poorest quintile (Figure 1.8). Concerning the proportion of the population living on less than \$1.25 per day, the Maldives is the best performing of the four SAARC nations followed by Bhutan and Sri Lanka (MDGI 2015). Sri Lanka has the lowest proportion of its population below the national poverty line, followed by Bhutan. Pakistan is the country with the poorest quintile having the highest proportion of national income and consumption, followed by Afghanistan and Bangladesh. Nepal has the highest employment to population ratio followed by Bhutan. However, Bhutan has the least proportion of underweight under five year olds. The Maldives has the lowest proportion of undernourished people, followed by Nepal (MDGI 2015). This comparison shows that Nepal has achieved notable successes in reducing poverty and achieving other MDG targets in comparison to most comparable South Asia countries.

Policies, Programmes and Institutional Changes

Policies and plans

Nepal's recent national plans have been implemented with poverty alleviation as the core development agenda. Explicit attention was given to poverty alleviation in the Eighth Periodic Development Plan (1992–1997). Considering overcoming poverty as one of the major challenges, the Ninth Plan (1997–2002) continued the emphasis on poverty reduction, and with the help of specific policy and programme interventions poverty reduced it by 11 percentage points. It also realized the need to reduce the rates of unemployment. However, only with the introduction of the Poverty Reduction Strategy Paper (PRSP) in the Tenth Plan (2002–2007), did the government prioritize poverty alleviation as a separate development goal through employment generation, skill development and rural development.

The PRSP was based on Amartya Sen's capabilities approach (an individual's actual ability

to be or do something) with the principle that to alleviate poverty in the long run, policies and programmes need to provide the poor with social, environmental and economic opportunities. Key to this is giving the poor the opportunities to participate in making decisions that affect them and giving them an enhanced sense of security and confidence that their futures will be better than the past. The four strategic engines of the PRSP in Nepal were broad-based growth, social sector and rural infrastructure development, targeted and inclusive programme interventions and good governance. Social sector developments such as education, health and safe drinking water were accorded special priority. The PRSP stressed inclusive economic development and sound monitoring and evaluation systems. The incorporation of these factors in the national plan helped bring the national poverty rate down to 25.4 percent by 2009.

The early 2000s saw growing demands for more inclusive participation and gender mainstreaming in development interventions. Therefore, the Three Year Interim Plan (TYIP, 2007/08–2009/10) was formulated with the goal of building a just and equitable society. This plan witnessed a shift in strategic emphasis from growth first and equality second to a rights based approach that focused on the elimination of structural inequalities to enable inclusive growth. The Three Year Interim Plan and the subsequent Three Year Plan (Twelfth Plan) (2010–2013) committed to bringing about a large change in people's living standards by reducing economic and human poverty to create a "Prosperous, Peaceful and Just Nepal". The Thirteenth Plan (2013/14–2015/16) set the target for Nepal's graduation from LDC status to becoming a developing country by 2022. These plans have been major instruments for mainstreaming the concept of inclusive develop-

ment and addressing poverty in the national development agenda.

In regards to foreign employment, following guidance in the Tenth Plan, the government devised its Labour and Employment Policy (2005). This policy ensured the regulation and streamlining of the labour and employment sectors, and protected the rights of employees and provided them with security. It introduced special regulations for migrant workers — the Foreign Employment Act (2007) and Foreign Employment Regulations (2008). These regulations and the decentralization of the issuing of passports to the district level gave a much needed boost to the ease of going abroad to work and sending remittances home.

In other areas, the government implemented the Agriculture Perspective Plan (1995–2015) to improve food security by promoting agricultural production. The plan was strengthened in the Three Year Interim Plan. Major objectives of the TYIP were to enhance the contribution of the agriculture sector to food and nutritional security, employment generation and poverty reduction, and to improve the economic status of rural people by increasing the production and productivity of agriculture and livestock.

Programmes and institutional changes

Nepal has made large efforts to combat income poverty, hunger and to provide decent productive employment to its people. State level and community-based approaches and programmes are in place to achieve these goals. A bundle of programmes and projects have contributed to poverty reduction in Nepal including the Agricultural Support Programme (ASP), the PAF, the Bishweshwar Poverty Alleviation Programme (BPAP), the

Integrated Rural Development Programme (IRDP), the Karnali Employment Programme, the Rural Community Infrastructure Development Programme, the Food Crisis Response Programme and the Microenterprise Development Programme (MEDEP).

MEDEP is one example of a successful programme. It was started in 1998 as a partnership between the Nepal government and UNDP in 10 districts and has since been expanded to benefit many poor people in 38 districts. Its success led government replicating the MEDEP model under the Micro Enterprise Development for Poverty Alleviation (MEDPA) programme across 45 districts. Another government initiative is the PAF that covers 1638 VDCs in 59 districts and has benefitted 770,000 households. Recently, PAF and the Centre for Economic Development and Administration (CEDA) conducted a study in six PAF districts covering 3000 poor households. The impact evaluation study found that the interventions had reduced the poverty rate of sampled households from 50.5 percent in 2007 to 33.1 percentage in 2014 amounting to an average decline of 2.5 percentage points per year (PAF 2015).

In 2012/13 the government established the Ministry of Cooperatives and Poverty Alleviation. In September 2012 it launched a “poor identification and distribution of poverty identity card”. The poor were identified on the basis of their incomes. The newly formed Ministry of Cooperatives and Poverty Alleviation has been lauded for its effort and is working to identify the poverty situation across Nepal to guide future interventions.

Food security interventions have included the distribution of subsidized basic foodstuffs to poor people, subsidized agricultural inputs including fertilizers, integrated community development projects, feeding programmes,

food for work programmes and skills development programmes for the poor.

All line ministries have poverty eradication, employment generation and hunger reduction as a central focus of their programmes and projects. The Ministry of Women, Children and Social Welfare, the Ministry of Youth and Sports, the Ministry of Labour and Employment, the Ministry of Urban Development and the Ministry of Cooperatives and Poverty Alleviation are key sectoral ministries. In July 2008, the Ministry of Federal Affairs and Local Development (MoFALD) launched the Local Governance and Community Development Programme (LGCDP). The Government of Nepal and 13 development partners financed the programme with technical support from UNDP Nepal. The programme had the goal of reducing poverty through inclusive, responsible and accountable local governance and participatory community-led development. The programme in its first phase promoted inclusive and participatory development and built government partnerships. In addition, it helped introduce performance-linked grants for local government bodies. It is now working on its second phase as a national flagship programme that is helping reduce poverty.

The restoration of democracy in 1990 provided the institutional and policy platform for the social development sector that created space for INGOs, donors, bilateral organizations, and multilateral organizations to contribute to Nepal’s social development. In 2014, more than 199 INGOs were registered to work in Nepal.

Resource Allocation Trends

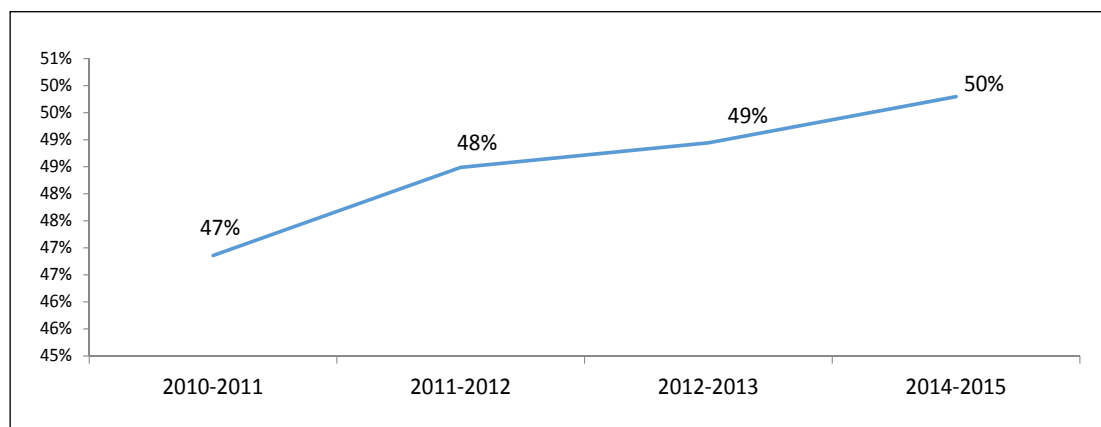
Nepal has implemented a number of social protection systems including income generation for the poor, senior citizens’ allow-

ances, pensions for retired employees, and free basic education and primary health care services. The government has allocated large amounts of money towards achieving the MDGs since the 2010 MDG needs assessment (NPC and UNDP 2010) with more than NPR 33 billion budgeted for social protection since then as a part of pro-poor budgets. The pro-poor part of the government's budget has increased from NPR 158 billion in 2010/2011 (47 percent of total budget) to NPR 308 billion in 2014/2015 (50 percent of the total) (Figure 1.9). The PAF alone disbursed NPR 1.6 billion up to 2013/14.

Furthermore, the government has emphasised social security, and increased the budget for

social programmes targeting senior citizens, single women, widows and persons with disabilities. The government has provided child nutrition grants in the Karnali and mid-western hill regions. The government has also initiated programmes that target the poor, aged people (above 60 years), children, people with disabilities, socially excluded and marginalized communities, and conflict-affected people. More than one-tenth (11.3 percent) of the national budget was allocated on social protection activities in 2015 (MoF 2015a). The government has also implemented employment and income generation programmes and has reviewed policies, programmes and past experiences while setting its objectives, policies and resources for poverty alleviation.

Figure 1.9: Nepal's pro-poor budget as percent of total budget (2010-2014)



Sources: MoF, Red Books (2010-2014)



Unfinished Business

Nepal's poverty line has been revised from an income of \$1 a day in 1990 to \$1.25 a day in 2005 and again to \$1.90 a day in 2015. The World Bank adjusts the level every time a new set of Purchasing Power Parity (PPPs) data is produced by its International Comparison Program. Comparing the above three indicators, absolute poverty stood at 14.9 percent at the \$1.90 a day poverty level in 2010, which is a sharp decrease from 47.1 percent in 2003 and 61.7 percent in 1995. When comparing this with a \$1.25 a day poverty level for 2010, the national poverty line stood at 23.8 percent, down from 53.1 percent in 2003 and 68 percent in 1995. The new poverty benchmark shows a marginal acceleration in absolute poverty reduction, however the indicator is still not comprehensive. The use of more holistic indicators is very important to achieve the poverty and hunger reduction in a real sense.

Rapid urbanization, the continuous growth in the inflow of remittances from foreign employment, increased agricultural wage rates, increased employment and wage rates in the non-agriculture sector and the increased ratio of the active to the inactive population have supported the reduction of poverty. However, it remains a very challenging task to eliminate the remaining extreme poverty and hunger. The remaining poverty is not evenly distributed and the majority of the vulnerable population live and earn their livelihoods in remote areas. Nepal's hills and mountains have many poverty-stricken areas. Hard-to-reach populations, specific geographical areas and marginalized and endangered indigenous people require localized planning and programming efforts to reduce their poverty. A framework for implementing poverty reduction programme at the sub-national and local levels is essential.

MDG Implementation Lessons

Lessons for the SDGs

Although Nepal has made remarkable overall achievements on the MDGs, these achievements have been unequal across ecoregions and population groups meaning that real inclusive development has not been achieved. As such there are important lessons to be learned for the implementation of the SDGs. A major lesson is the importance of building a complex poverty safety net that involves multiple actors, multi-layered government interventions, community participation and social engagement initiatives.

At present, only two-fifths of Nepal's arable land is irrigated year round, a quarter of Nepali farmers do not own their own land, agricultural productivity is low (in aggregate at 3.6 tonnes per hectare) and most financial institutions have little interest in providing financial services to farmers. It is important to recognise that the mobilization of social groups has played a vital role in providing credit to farmers and sustaining development progress over the decades. For example, community savings and credit groups created through various programmes such as LGCDP have been crucial for sustaining development. Thus, it is essential that the government and its development partners scale up such social institutions and integrate their participation in the implementation of national plans.

Nepal's aim of graduating from LDC status by 2022 is contingent on achieving the SDGs and breaking the cycle of poverty. With the SDGs, the achievement of one goal is linked with other goals, so parallel interventions have to be implemented and monitored. The mainstreaming of the MDGs and their targets in the national periodic plans was vital for putting the focus on poverty reduction and ensuring ade-

quate resources for it. Once the new SDG goals are integrated in the periodic plans and annual budgets, there is a need for annual budget audits from the SDGs' perspectives. Plan results frameworks will need to be focussed on the SDGs for monitoring progress on the achievement of these goals.

Additionally, substantial MDG-related data gaps indicate the need to for more surveys to be carried out to fill the gaps and create baseline data for targets that have no database. Moreover, existing surveys need to be tailored to the SDGs, particularly when it comes to gender, social class and geographical location-based target setting, analysis, and the monitoring of outcomes. In addition, there is also a need to collect intra-household information including on nutrition, hunger, poverty, education, health, consumption and income distributions.

Although the SDGs are global goals and the targets have been adapted to the national context (NPC 2015a); they now need to be articulated at sub-national and local levels. The MDG experience shows that national development goals need to be assimilated for higher, more equitable and inclusive outcomes. Sub-national actors and institutions have a fundamental role to play in localizing the SDGs if the goals are to improve all people's lives. The MDG experience should be reflected on for the effective implementation of the SDGs and an appropriate strategy developed to localize the SDGs at provincial and local levels. Last but not least, there needs to be an increased focus on infrastructure development that can support the implementation of the strategy.

Lessons for LDC graduation by 2022

The United Nations has set targets against the three indicators of gross national income (GNI per capita), the Human Assets Index (HAI) and the Economic Vulnerability Index (EVI) for Ne-

pal to graduate to developing country status by 2022. It is mandatory to surpass at least two of the three targets to graduate. Of the three targets, Nepal is likely to achieve two of them and lag behind on the GNI per capita measure. In this scenario, it is essential to maintain the HAI and EVI scores to progress towards graduation. The HAI consists of major education and health determinants; so, it is important to maintain sustained robust interventions to accelerate progress on human asset development in terms of the nutrition of children (MDG 1) and women of reproductive age (NPC 2015a).

To eradicate poverty in the next 15 years needs a one percentage point reduction in poverty per year. Considering the current progress, this is possible but "LDC graduation threshold income requires that per capita income has to increase by nearly 10 percent per annum in the next seven years. And if the income is expected to rise to USD 2,500 in 2030, a further growth of per capita income of 7.5 percent per annum will have to be achieved" (NPC 2015a). With the assumption that Nepal's population continues to grow at 1.3 percent per year and the given criteria of graduation, this implies that Nepal's GDP has to grow by double digits in the next decade. In addition, Nepal aspires to increase the share of the bottom 20 percent of nation income and consumption, for which the country needs to experience accelerated economic growth, which is only possible by focusing on highly productive activities and sustainable income generation (NPC 2015a).

New Challenges — Disasters and Externalities

It is estimated that the devastating earthquakes of April and May 2015 caused an additional 2-3 percent of people to fall below the national poverty line, meaning that the percentage of poor people was more than 21 percent by the end of 2015 (NPC 2015b). Moreo-

ver, market access, access to education, health care, electricity, clean water and other important facilities remain a luxury for many people. The limited progress of many rural people in climbing out of poverty is being hindered by the effects of climate change, floods, insurgencies, economic blockages and other natural disasters. It is a huge challenge to overcome these barriers and the post-2015 development agenda will need to pick up where the MDGs left off. It is necessary that the gaps caused by the earthquakes need to be gradually filled to eradicate poverty and hunger and promote sustained and inclusive economic growth.

Nepal's economic indicators are not encouraging as the post-earthquakes level of GDP growth dropped by over 1.5 percentage points from the estimated 6 percent pre-earthquake scenario, and it was at the lowest level in eight years. This has a direct impact on poor households and rural sectors, which are already deprived of basic facilities. In addition, the five-month long obstruction and blockade of fuel and essential supplies on southern border in 2015/16 is likely to have pushed many people further into poverty, at least in the short term. As the obstruction negatively affected industrial and agricultural inputs as well as outputs, growth will be significantly lower than projected for the current fiscal year. Agriculture growth was 1.9 percent in the last fiscal year (MoF 2015a) and was expected to be about 1 percent in the current year 2015/2016. However, due to irrigation facilities being affected by the fuel crisis and the closure of many Tarai-based industries, the agriculture sector is expected to have had negative growth in fiscal year 2015/16.

Nepal has a growing working population and it is a major challenge for the government to generate employment opportunities. The government has to increase investment in employment generating programmes, but is constrained by the need for financial resources to recover from the earthquakes and

the economic blockade. It is also a challenge to ensure equal wages for similar kind of work for men and women. Major constraints are the unfavourable investment environment, inadequate resources (skills and financial resources), weak coordination among sectoral ministries and departments and insufficient capacity to cope with climate change. The biophysical characteristics, relative remoteness, and inaccessibility of most mountain areas regions are another major challenge to the equal distribution of the country's resources.

Conclusions and Recommendations

Conclusions

Poverty and hunger reduction is the highest development priority of the Government of Nepal. Despite the long period of political instability and transition towards peace, Nepal has made significant progress on achieving most of the MDG targets on poverty, hunger and employment. Robust government interventions, growing urbanization, increased access to opportunities, the influx of remittance incomes and infrastructure improvements have contributed to these achievements. However, disparities in terms of poverty and income inequality need to be addressed. Furthermore, the achievements are vulnerable to domestic and external factors as the achievements have mostly been driven by remittances.

The post-2015 development agenda will pick up where the MDGs left off and so the remaining gaps must be gradually filled to eradicate poverty and hunger and promote sustained and inclusive economic growth. The unequal outcomes among the regions, genders and social groups for all MDG indicators demands more segregated target settings, and a more comprehensive understanding of the multidimensional nature of poverty.

Recommendations

- 1) Poverty needs to be measured more holistically than it was under the MDGs by making assessments more holistic and capturing social factors, accessibility and capability factors, while also accounting for other non-market factors. For example, the Multidimensional Poverty Index (MPI) of the Oxford Poverty and Human Development Initiatives and UNDP goes beyond a traditional focus on incomes to reflect the multiple deprivations poor people face with respect to education (years of schooling and child enrolment), health (mortality and nutrition) and living standards (electricity, sanitation, drinking water, floor, cooking fuel, and asset ownership). The incomes and consumption capacity data from NLSS 2010-11 (CBS 2011a) classified 24.5 percent of Nepalese households as poor while the multidimensional poverty indicators showed a poverty rate of 45 percent.
- 2) Nepal's stagnating agricultural sector needs immediate policy attention. Agriculture is still the major employer and a major source of livelihood for rural farm households. Improving this sector is of utmost importance for developing rural areas.
- 3) Government programmes and interventions should focus on the linkages between structural transformation, agriculture mechanization, economic growth and human development. Economic growth must be accompanied by creating decent jobs in higher productivity activities and the mechanization of agriculture. The government should formulate policy and programme interventions that generate transformative growth and enable inclusive development.
- 4) The post-2015 agenda should focus on the structural transformation of Nepal towards a modern diversified economy that builds upon higher value-added sectors and more knowledge-intensive activities. This change should provide a broader platform for the mechanization of factors of production, reverse the decline in productivity and increase employment.
- 5) Complement employment generation schemes with skills development programmes.
- 6) Poverty reduction programmes should focus on the poorest areas including the Karnali Zone, the other hill and mountain districts of the Mid and Far Western regions and rural Tarai districts.
- 7) Continuous efforts are needed to increase crop and livestock production and productivity by expanding irrigation facilities, empowering women, improving access to market information, improving access to markets, developing infrastructure and improving agriculture extension.
- 8) Mechanize agriculture, install large-scale irrigation systems and promote smart labour technology to sustain agriculture growth.
- 9) Create off-farm employment, enhance community involvement in financing agriculture, enabling cooperatives to finance farm-based and off-farm income generating activities.
- 10) The government should prioritize agricultural production, trade and marketing with a particular focus on hill and mountain market systems to address the low levels of agriculture production and weak agricultural markets to form a robust foundation for achieving food security.



GOAL 2

Achieve Universal Primary Education

MDG Target 2: Ensure that children everywhere, boys and girls alike, complete their primary schooling by 2015

Status and Trends of Target 2 — Primary Schooling

Table 2.1: Achievements on access to primary schooling in Nepal, 1990–2015 (Target 2)

Indicator	1990	2000	2005	2010	2013	2015	2015 target
2.1. Net enrolment rate in primary education	64 ^a	81 ^{a1}	84.2 ^{a2}	93.7 ^{a3}	95.3 ^{a4}	96.6 ^c	100
2.2. Proportion of pupils enrolled in Grade 1 that reach Grade 5 (survival rate)	38 ^a	63 ^{a1}	79.1 ^{a2}	77.9 ^{a3}	84.2 ^{a4}	89.4 ^c	100
2.3. Literacy rate of 15-24 years olds	49.6 ^a	70.1 ^b	79.4 ^b	86.5 ^b	88.6 ^d	na	100

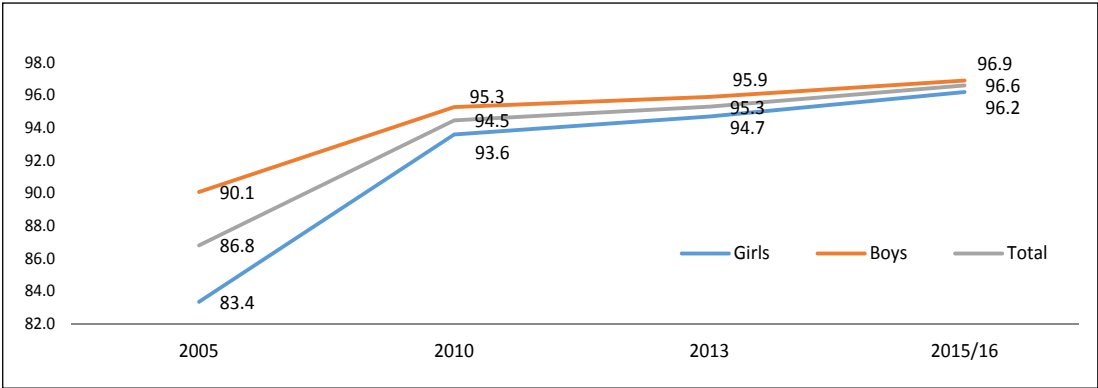
Sources: ^aNPC and UNCTN (2013), ^{a1}MoES (2000), ^{a2}MoE (2005), ^{a3}MoE (2009-10), ^{a4}MoE (2014), ^bNPC and UNCTN (2013), ^cDoE (2016), ^dMoHP et al. (2012).

Enrolment

The net enrolment rate (NER) in primary schooling in Nepal grew from 81 percent in 2000 to 96.6 percent in 2015/16 (Table 2.1). A significant hike in the NER happened between 2005 and 2010, which was probably due to the Welcome to School Programme including an enrolment campaign that began in 2005. Another contributing reason was probably the smooth operation of school programmes after the signing of the Comprehensive Peace Agreement (CPA) in November 2006 between

the government and the Communist Party of Nepal-Maoist. However, the slow progress made between 2013 and 2015 indicates the difficulty of enrolling children from hard-to-reach groups into the mainstream education system. Regarding gender, the NER in primary schooling for girls was 83.4 percent in 2005, compared to 90.1 percent for boys in the same year. This disparity has narrowed significantly at the national level over the years and has been almost equal since 2011 (Figure 2.1). The national average figures mask considerable geographic variations in the NER.

Figure 2.1: Trends in net enrolment rates in primary education by gender in Nepal

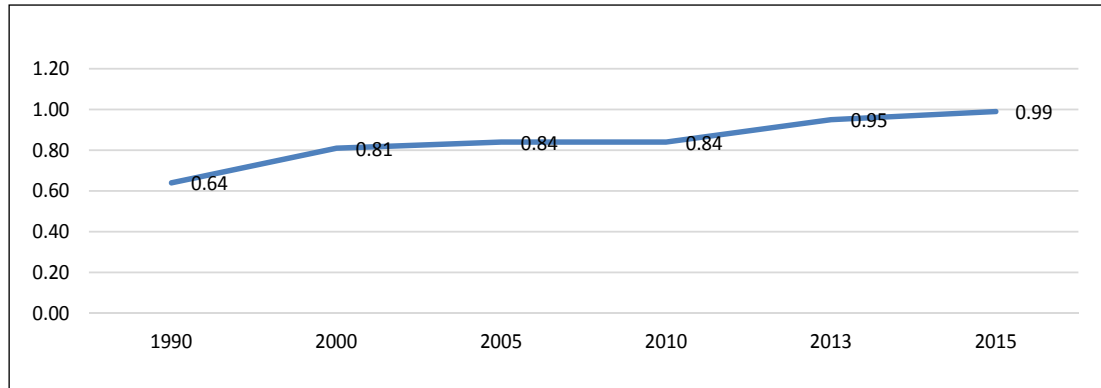


Sources: DoE (2005), DoE (2010), DoE (2013), DoE (2015), Flash I reports

The gender parity index (GPI) in NER increased from 0.64 in 1990 to 0.99 in 2015 (Figure 2.2). Gender parity in the gross enrolment rate was 1.09 in 2015/16 showing that more girls are enrolling in primary education than boys (DoE 2016).



Figure 2.2: Gender parity index in primary level NER in Nepal

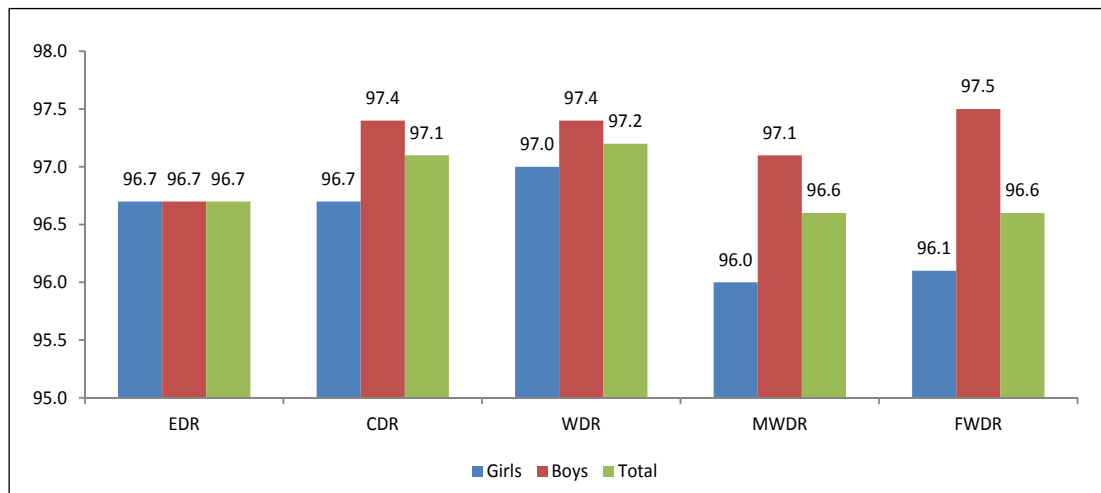


Sources: DoE (2005), DoE (2010), DoE (2013), DoE (2015), Flash reports

The very good overall progress on the NER however masks regional and district wise disparities with 30 districts having a below national average NER (DoE 2016). The total

and gender-wise achievements also vary by development region (Figure 2.3). This is highly pronounced in the Central, Mid-Western and Far Western Development Regions.

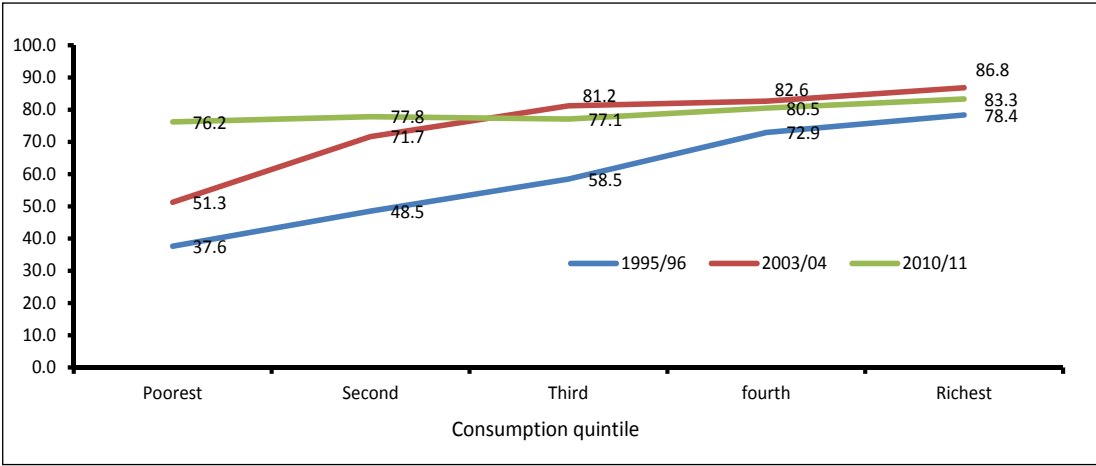
Figure 2.3: Net enrolment rate in primary education by development region and gender, Nepal, 2015



Sources: DoE (2015), Flash I report 2014

The gap in NER between the richest and poorest consumption quintiles was quite pronounced in 1995/96 and had considerably reduced by 2010/11 (Figure 2.4).

Figure 2.4: Total primary NER by consumption quintile, Nepal, 1995/96 to 2010/11



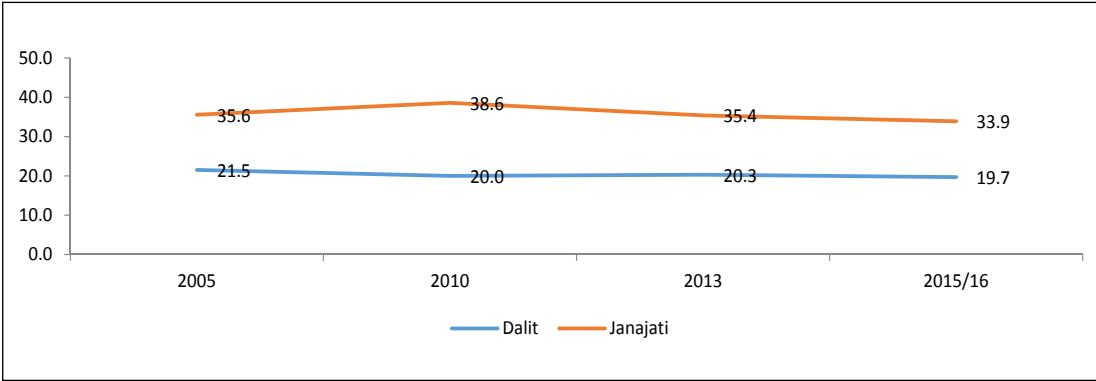
Sources: CBS (1996), CBS (2004), CBS (2011), Nepal Living Standard Surveys 1995/96; 2003/04; and 2010/11

Nepal’s education system has not calculated the net and gross enrolment rates of Dalit and Janajati children (the disadvantaged social groups), it only provides their share of total enrolment. This makes it difficult to estimate the actual trends of enrolment of these children. The representation of Dalit and Janajati students against total enrolment in primary

education has slightly decreased between 2005 and 2015/16.

The total enrolment of students in primary education is slightly decreasing in response to efficiency which is measured through reduction in repetition and dropout rates (Table 2.2).

Figure 2.5: Dalit and Janajati students’ shares in total enrolment in primary education, Nepal



Sources: DoE (2005), DoE (2010), DoE (2013), DoE (2015), Flash I reports

Table 2.2 : Information on Nepal's schools (2000–2015)

Indicator	2000	2005	2010	2013	2015
Early childhood development (ECD) and pre-primary education (PPE)	4,038	4,069	29,089	34,174	35,121
Total schools	26,036	28,026	32,130	34,782	34,806
Primary schools	25,927	27,525	31,655	34,298	34,335
Religious schools	-	-	665	818	895
Repetition rate in Grade 1	41.8	30.4	26.5	19.9	15.2
Repetition rate in Grade 5	10.8	11.5	6.7	5.3	5.3
Drop-out rate in Grade 1	13.6	-	10	7.6	6.4
Drop-out rate in Grade 5	12.7	-	7.5	6.0	3.1

Sources: DoE (2005), DoE (2010), DoE (2013), DoE (2015), Flash reports

Student survival rates

Despite fluctuations over the years, there has been remarkable progress in the survival rates of primary education students increasing from 38 percent in 1990 (NPC 2005) to 89.4 percent in 2015. This indicates systemic improvements in the quality of education. The higher survival rates of girls than boys after 2010 indicate their better performance. The expansion of incentive schemes for girl students in 2004 under the Education for All Programme (2004–09) could be a major reason for this achievement. Other reasons

may include more child-friendly school environments (more girls' toilets), more female teachers, a more gender responsive curriculum and improved teacher training materials. The rapid expansion of early childhood education development (ECED) across the country since the beginning of the Education for all Programme in 2004 is another positive influence on this achievement. The share of children in ECED centres and classes, which was 39.4 percent in 2004 reached 80.6 percent in 2015/16 (DoE 2016). This impressive increase means that 62.4 percent of new entrants in Grade 1 have ECD/PPC experience.



However, the poor quality of much ECD has implications for school readiness. The survival rate achievement has also been influenced by various incentive schemes, including scholarships, whose scope and coverage has expanded significantly over the years. For instance, until 2009/10, girls' scholarships were only available for 50 percent of enrolled girls, but it has been offered to all girls since 2010-11 (MoF 2011). However, the value of these scholarships are relatively low.

Similarly, the National Curriculum Framework (NCF), which was introduced in 2005 may have helped improve teacher performance in classrooms. Other strategies that may well have helped improve the primary survival rate include school-based health and nutrition programmes, advocacy campaigns started under the Basic and Primary Education Project (1992–1997), and targeted interventions to establish minimum standards for enabling Child-friendly schools. The Priority Minimum Enabling Conditions related to classrooms, teachers, textbooks, reading corners and gender segregated toilets have also contributed. Similarly, affirmative policies

and legislation to strengthen social inclusion within the teacher force and school management have also played significant role in enhancing the survival rate.

Literacy rates

The literacy rate of the 5 years and older population was 65.9 percent (male 75.1 percent, female 57.4 percent) in 2011 (CBS 2012). The Global Monitoring Report presents Nepal an exemplary case (UNESCO 2015c) noting the rapid improvement in the literacy of women aged 20-34 years. Nepal was the only country in the report that has seen a sustained improvement at the cohort level over three survey waves. One of the reasons for this achievement could be the success of the National Literacy Campaign (2008–2012) (UNESCO 2015c). The rate of literacy among 15-24 year olds increased from only 49.6 percent in 1990 to 86.5 percent in 2010 and to 88.6 percent in 2013 (NPC 2013b). The large increase from 2005 to 2010 could be attributed to the national literacy campaign launched



in 2008/09. However, there was a focus on literacy programmes from the beginning of the Education for All (EFA) programme in 2004. Also, as for the NER, the resumption of other educational programmes in 2006 after the end of the armed conflict may have also contributed.

With 82.7 percent of women aged 15-24 years literate (MoHP et al. 2012) there is little difference between the overall average literacy rate and the females literacy rate. The 15 years of age and over female literacy rate

nearly tripled between 1990 (17 percent) and 2011 (47 percent). However, considerable variations exist across regions and age groups. There are much lower literacy rates among 20-24 year olds except for in the western region (Table 2.3). The Multiple Indicator Cluster Survey (MICS) found literacy rates of 88.3 percent for 15-19 year olds and 79.1 percent for 20-24 year olds in 2014 (CBS 2015b). This survey also reported that only 79.5 percent of the poorest quintile 15-24 years were literate compared to 98 percent from the richest quintile.

Table 2.3: Literacy rates for 10-24 year olds by development region, 2011, Nepal

Region	10-14 years			15-19 years			20-24 years		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Eastern	95.5	93.3	94.4	96.7	94.0	95.3	93.7	80.1	85.4
Central	87.1	86.4	86.8	91.9	85.2	88.4	87.0	68.0	75.9
Western	98.2	95.9	97.1	98.2	92.3	95.2	94.8	89.2	91.7
Mid-Western	97.1	96.5	96.8	97.8	91.8	94.6	98.6	77.0	85.6
Far Western	97.9	94.1	96.1	98.6	89.5	93.5	97.9	70.9	81.0
Nepal	94.0	92.6	93.4	96.4	91.2	93.6	93.8	79.2	85.2

Sources: MoHP (2012a)

Policies, Programmes and Institutional Changes

A large share of the achievements in the education sector can be credited to improvements in the institutional set up over the last two decades. The Ministry of Education has initiated a number of important projects over the past two decades — the Primary Education Project (PEP), the Basic and Primary Education Programme (BPEP) 1 and 2, the Secondary Education Support Project (SESP), the Education for All (EFA) project and the School Sector Reform Programme (SSRP). The latter concluded in July 2016.

The Department of Education (DoE) is responsible for implementing school level edu-

cational programmes leaving the ministry responsible for planning, implementing and monitoring interventions in school education. The seventh amendment (2001) to the Education Act, 1971 was a milestone in educational reform in Nepal as it shifted responsibilities for school governance to the community level.

After 2000, the government's education policies shifted from incremental changes towards fundamental reforms including the decentralization of school management to communities. This empowered communities to manage local schools and enhanced the community ownership of schools. This required the restructuring of government offices at the central level, clustering schools under resource centres and school supervi-

sion units and making schools accountable for their performance.

The decentralization of education sector planning and implementation is associated with the formation of school management committees (SMCs) and parent teacher associations (PTAs) in all schools. These have strengthened the local governance of schools and encouraged more local accountability and the more effective use of resources. Supporting newly established community schools through funds for textbooks, scholarships, the per capita funding (PCF) of salary and non-salary costs has helped expand schooling facilities in communities, especially in remote areas. These interventions have improved enrolment and participation. At the same time, strategies were introduced to improve overall standards and ensure minimum learning environments, which also helped increase enrolment and participation. The National Curriculum Framework supports the development and implementation of local curricula. Finally, the Local Self-Governance Act, 1999 has helped institutionalize the decentralization of school governance and is having an impact on accountability.

The government now welcomes education provided by religious institutions, such as Muslim *madarsahs*, Buddhist *gumbas* and Hindu ashrams and is supporting them with educational materials. These schools have been incorporated into the national educational database with 895 incorporated as of 2015/16 compared to none in 2005. This has helped to expand access to education services in these religious settings and aligned them with the national system. But many such institutions are yet to be registered.

A number of measures have been introduced to combat the learning difficulties faced by many school children including the develop-

ment of local curricula and curricula in languages other than Nepali, primary education in mother tongues, and child friendly teaching and learning. With the same aim alternative education provisions such as flexible schooling and skills development programmes were introduced during this period in parallel to formal education. And strong coordination with non-governmental and community organizations that work in the education sector on designing and implementing educational activities has also enhanced teaching and learning.

The Education Management Information System (EMIS) flash reporting system was started in 2004. This system carries out a nationwide school census twice a year with reports produced within six months of data collection. The EMIS captures education outcomes and inputs and has substantial disaggregated data on the socioeconomic and demographic features of school children. This data has been used to improve planning, budget allocations and service delivery. As part of the further institutionalization of evidence and need based planning, the Education Review Office (ERO) has been established under the SSRP. The ERO facilitates assessments of learning outcomes in core subjects in Grades 1, 5 and 8 through the National Assessment of Students' Achievements (NASA).

School education planning takes a bottom-up approach starting from the school level. All schools have to undertake annual financial and social audits and develop school improvement plans (SIP), which are based on multi-year individual school plans. These individual school plans are considered by village development committees (VDCs) while formulating village education plans (VEP), and at the district level in district education plans (DEP) and finally on up to the national level in the annual strategic implementation plan (ASIPs), and annual work plan and budgets (AWPBs).

To bring about the more gender balanced composition of teachers and duty bearers, 33 percent of all new teacher positions are reserved for women teachers. The proportion of female teachers at the primary level has increased from 35 percent in 2008 to 42.3 percent in 2015/16. Positions are also reserved for Madheshi, Janajati, Dalit and disabled teachers and office bearers and for candidates from geographically remote areas.

Several reforms have been introduced during the last decade at system, institution and programme level to help fulfil the government's commitment to education for all. These reforms have made the education system more inclusive and equitable. They have enhanced access to education through the provisions of incentives and have motivated children to enrol and remain in schools. These reforms are summarized below.

Support to improve the education system has moved from project-wise interventions to a sector-wide approach (SWAp). Under the SWAp the SSRP (2009–2016) aimed to ensure equitable access to quality basic education for all children, expand access to ECED services and enhance functional literacy and competencies among youth and adults. The plan period saw a large increase in ECED and the number of schools. The quality of education and inclusivity were other important aspects of the program.

The number of early childhood education and development and pre-primary education (ECED/PPE) centres in communities and schools increased from 4,038 in 2000 (DoE 2000) to 35,121 in 2015/16. This has led to a very large increase in the number of Grade 1 students with ECED/PPC experience. The government has taken a liberal approach to supporting schools through textbook grants, scholarships and school operation grants since the implementation of the EFA (2004–

09). This has helped increase the number of schools and widen access to education, particularly for girls. The number of primary schools has grown from 25,927 in 2000 to 34,335 in 2015/16 (DoE 2015).

The Welcome-to-School campaigns, the expansion of ECED and scholarships for girl students have increased the number of girl students and have had a positive impact on overall enrolment. Building on this success the government is in the process of adapting the equality-based scholarship provisions for girls into equity-based scholarship provisions by following the needs-based target approach. The midday meals programme, which is implemented in food-deficit districts, and the girls' incentive programme have also helped increase enrolment, regular attendance and full-day participation thus reducing dropout and retaining girls in primary school (MoE and WFP 2011). Other factors that have improved girls' access to education have been reservations for targeted groups in the teaching profession (introduced after the Fifth Amendment of the Teacher Service Regulations, 2010), public services and higher studies; and the establishment of residential facilities for girls in remote locations implemented during phase 2 of the Basic and Primary Education Programme (1999–2004).

The introduction of the National Curriculum Framework in 2007 has helped put in place a comprehensive system to regularly review curricula and facilitate the development and implementation of local curricula. This system also supports teachers to effectively implement curricula in their classrooms. And to make school curricula more competency-based, in 2012 the government introduced soft skills-oriented elements in the curriculum.

The Fifth Amendment of the Teacher Service Regulations also upgraded the entry qualifica-

tions of primary teachers. The institutionalization of teacher training and the introduction of teacher licensing have helped ensure that teachers have the required qualifications. These interventions have helped improve the transition rate from primary to lower secondary level, with it rising from 85.4 percent in 2009 to 89.9 percent in 2013 showing an increase of almost five percentage points for both girls and boys (Poyck et al. 2015).

The nationwide literacy campaigns that have been run since 2005 and the establishment of community learning centres (CLCs) across the country (particularly since the government started funding CLCs under EFA) have provided access to literacy learning at the community level.

It is also important to note the contributions made by the growing number of privately run schools most of which are English medium schools. They have widened access to quality education.

Resource Allocation Trends

The share of spending on education as a percentage of the national budget is presented in

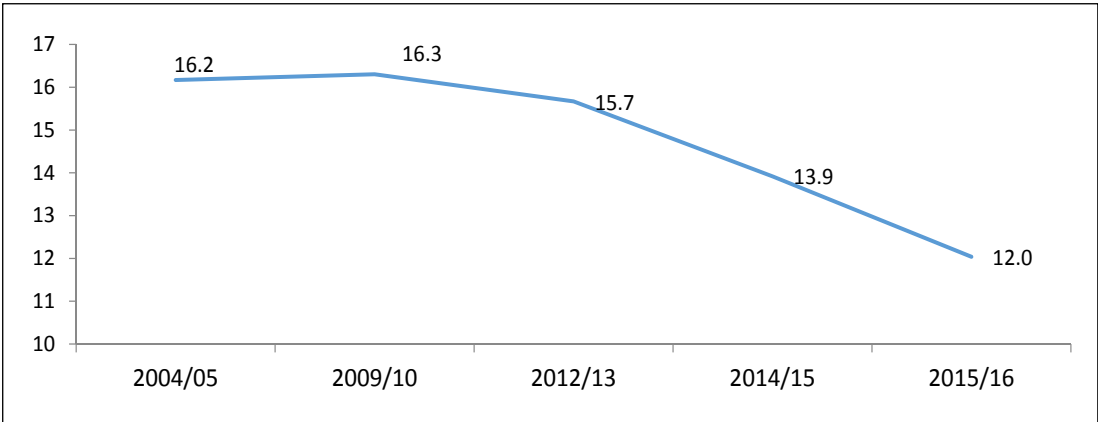
Figure 2.6. Although the exact amount spent on primary education and EFA is unavailable, the data indicates that the annual share of public financing on education is relatively high. This is considered as one reason for the large achievements made by Nepal in education, particularly at the primary level.

In addition to funding national agencies, the government provides resources for education activities at the district and sub-district levels. These allocations are based on needs identified by local bodies and thus allocations vary by district.

Donor support to the education sector has been aligned with the national education budget through the SWAp over the last 10 years. However, donor support in total and in primary education has declined over this period.

The SSRP noted that about 86 percent of the education budget went on school education with the major share going on teacher salaries, which left limited scope to fund interventions to improve the quality of education (MoE 2009). This is one of the unfinished MDG agendas along with the need to improve survival rates. Other remaining challenges are

Figure 2.6: Education budget as a share of Nepal’s total national budget (in percent)



Sources: MoF (2004), MoF (2005), MoF (2009), MoF (2012), MoF (2014), and MoF (2015), Red Books

the harmonization of international technical assistance in the national budget and the monitoring of the results of the large amounts that INGOs and NGOs invest in the education sector (around US\$ 15 million annually). These resources also need harmonizing with the public financing.

Donor support to the education sector has been aligned with the national education budget through the SWAp over the last 10 years. However, donor support in total and in primary education has declined over this period.

Unfinished Business

The limited progress on improving the survival rate and the retention of students in the primary level is a serious issue. Unless this is addressed, the current achievements on NER and survival may remain under threat.

The slower pace of improvement in the NER since 2010 indicates the persistent challenge of enrolling children from poor households and hard-to-reach families. The government introduced its Consolidated Equity Strategy in 2014 to address equity across access, participation, and learning outcomes (DoE 2014). The implementation of the strategy through the development of targeted planning and budgeting approaches based on an Equity Index is an encouraging innovation that should support policy makers to better target and support the hardest to reach children and the pockets of disparity that remain in Nepal. Addressing the challenge of equitable access needs the linking of families with out-of-school children with economic safety-net programmes. This is also important for children with high levels of absenteeism and who are prone to drop out due to economic difficulties. Another common reason for chil-

dren dropping out of school is poor academic performance (NPC 2011). For many poorer households the attendance of their children at school has large opportunity costs. Cash transfers would be one option for addressing the lost opportunities. Building separate toilets for girls is also important as only 65.2 percent of the 28,057 community schools had such facilities in 2010-11 (DoE 2012).

The inclusion of children with disabilities in mainstream education is another area of unfinished business. An enabling environment is needed to allow children with disabilities to complete at least secondary education. Adequate scholarships and incentives need providing and disability-friendly infrastructure put in place in schools including access ramps. Counselling services are needed for children with disabilities and child victims of human trafficking and other social problems. Such interventions will improve enrolment and the survival rate of disabled students.

The re-engineering of literacy interventions is important to enable students to retain the knowledge and skills gained. Experience shows that many students only retain a limited amount of the skills and knowledge imparted to them in literacy programmes and many fall back to their previous state of illiteracy.

Despite many successes a number of areas need to be carefully looked at in the future. For instance, the quality of school education could be further enhanced with the inputs of locally elected bodies. School mapping and teacher redeployment have yet to be effective. Despite the government's decision to make compulsory and free basic education, it has not come into effect. Teacher training has not brought the desired learning achievements among students. In order to facilitate improved learning outcomes, soft skills have to be imparted from early grades and be institutionalized.

The National Assessment of Student Achievement (NASA) is a government initiative to monitor learning outcomes in Grades 3, 5 and 8. The results of the Grade 8 NASA in 2013 showed low achievements, particularly in the Nepali language (ERO 2015). Many students had inadequate reading and writing skills to the level required to manage higher studies. Many had a very limited ability to write essays, reports and summaries and to express their views and those of others. Furthermore, many students lacked higher cognitive skills including the ability to analyse facts, to think logically, to generalise, to justify and to transfer learning from one context to another (ERO 2012).

The Grade 3 and 5 NASA results from 2014 also show poor learning outcomes. Compared to international standards many Grade 3 students performed inadequately in mathematics and Nepali. Similarly, the average mathematics, Nepali and English proficiency of Grade 5 students in the 2014 NASA was lower than the international standards. Though many students could memorize simple facts from texts, fundamental thinking and basic interpretations of paragraphs, tables, and charts

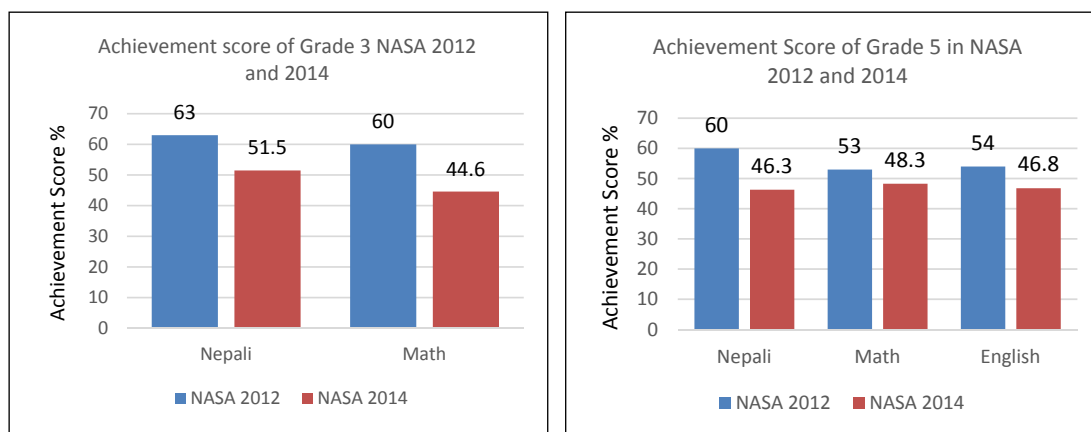
were weak with weak problem-solving and analytical skills (ERO 2014).

Figure 2.7 shows the reduced scores of Grade 3 and 5 children in the 2014 NASA in Nepali, maths and English.

Surveys conducted by development partners through ASER (Annual Status of Education Report)-type tests suggest the same for Nepali and Mathematics in lower grades. A nationwide sample survey by DFID (2011) revealed that a large number of Grade 4 students had not mastered even the Nepali alphabet (at least 10 percent) and could not recognize double-digit numbers (at least 25 percent). A survey of six VDCs in two districts of western Nepal found weak basic learning on language and numeracy after several years of school education. Only around 20 percent of Grade 3 students had mastered consonant and vowel letters, while around 5 percent had mastered numbers up to 100 — learning targets that are expected to be achieved by the end of Grade 1. These studies indicate that learning is not happening effectively through school education and only a limited number of children are benefiting.



Figure 2.7: Comparison of student achievements in Grades 3 and 5 in 2012 and 2014 by subjects



Sources: ERO (2012); ERO (2014)

MDG Implementation Lessons

Lessons for the SDGs

The SDG's education goals and targets are SDG 4 and targets 4.1, 4.2, 4.5 and 4.6. The corresponding indicators with Nepal's targets are as follows:

- i) Net enrolment rate in primary education and primary completion rate, with a 99.5 percent target for 2030.
- ii) Child grants for pre-primary education attendance to early childhood education (90 percent).
- iii) Gender Parity Index (0.62).
- iv) Overall literacy rate and women's literacy rate of 15-24 year olds (99 percent in both cases).

The SDG targets and indicators are much wider than those of the MDGs. Three of the seven SDG education targets are on technical and vocational education and training (TVET) with the SDGs giving much more emphasis to skill enhancement and the employability of graduates. This emphasis on TVET demands a review of Nepal's school education policy. Two of the MDG 2 indicators are covered by

SDGs 4.1 and the targets for 2030 are more or less similar. This means that the SDGs envisage that these targets were not fully achieved in 2015.

An NER of 96.6 percent in 2015 meant that Nepal almost achieved the MDG NER target. To continue improving the NER and to sustain the achievements issues related to quality and economic and socio-cultural disparities need to be attended to in the SDG period. But there is still a large gap in the second and third MDG 2 indicators, which stood at 89.4 and 88.6 percent in 2015. To make further progress on indicator 2 (under MDG 2) (which is indicator 4.1c under the SDGs), concerted efforts are needed to improve the quality of education. Other issues that also require serious attention for maintaining the current achievements include mainstreaming out-of-school children, enhancing completion rates and decreasing repetition rates through the continuation of existing and new motivational schemes. The status of the third MDG 2 indicator is also not fully satisfactory. The achievements are vulnerable as, in the absence of opportunities to practice newly learned literacy skills, there is a likelihood that many newly literate people will forget their recently learned skills.

Lessons for Nepal's LDC graduation by 2022

The MDG 2 indicators are not directly related to the Human Assets Index (HAI), which is one of the three LDC graduation indices. However, two of the indicators (gross secondary school enrolment ratio and adult literacy rate 15 years and above) under HAI are somewhat related to MDG 2. Therefore, some of the progress on the MDG indicators will have enhanced the HAI. Improving primary school enrolment and completion will continue to be important for the LDC graduation index as it facilitates the transition of students from primary to basic and secondary education. This requires the continuation of policy and institutional reforms the ministry initiated during the MDG period. Also, the SSRP that played a key role in enhancing school education concluded in July 2016 and the follow-on School Sector Development Plan (SSDP, 2016/17–2022/23) will contribute to enhance the HAI and support Nepal's LDC graduation.

New Challenges — Disasters and Externalities

The earthquakes of 2015 left many schools unable to function. The National Reconstruction Authority has made only slow progress on rehabilitating and rebuilding the many damaged and destroyed schools. The provision of education in damaged, unsafe or temporary structures is inappropriate and risky. The teaching-learning environment under such arrangements is likely to be adversely affected by winter cold, monsoon rains and hot summer conditions. The reconstruction of educational facilities is therefore a top priority along with assessing the safety of all school buildings from the disaster risk reduction perspective for safe schooling. It is also necessary to

include soft-skills in the curriculum for raising awareness on disaster risk reduction among schools and also educate communities to handle similar challenges that could occur anytime in future.

The 2015 constitution gives local governments the responsibility for school education in line with the systems in place in other countries with federal systems. However, the varying status and capacity of local government means that detailed studies and appropriate institutional, infrastructural and legal interventions are needed to support this policy change.

The lack of fuel in the country between September 2015 and February 2016 made it difficult for many children to travel to school and thus negatively affected their education.

Despite the declaration of schools as zone of peace in 2011, smooth functioning of many schools is a challenge. However, little effort has been made by the government to address this deeply rooted problem. At the minimum, teachers' security concerns should be addressed as it often turns them into political cadre.

Conclusions and Recommendations

Conclusions

The government, local communities and development partners have made continuous efforts to increase school enrolment and to enhance the teaching-learning environment to improve survival rates. These interventions have been instrumental in enhancing the literacy rates. These efforts have helped the government attain the MDG 2 achievements. However, equity, access, quality and

efficiency problems remain. These are more pronounced in rural and remote locations and in regard to certain caste and ethnic groups and geographical areas. Perhaps the time has come for Nepal to monitor compulsory and free basic education to further narrow the gap in NER and improve the survival rate.

Although, the NER has more or less stabilized nearby the target, the slower progress on the survival and literacy indicators show that Nepal has not attained MDG 2 by the 2015 deadline. And the achievements made so far were put at risk by the 2015 earthquake and the 2015/16 economic blockade. These externalities may have long term impacts that could disrupt the positive trends in the survival and literacy indicators. Therefore, Nepal has to continue making efforts to attain the overall target while working to sustain the existing achievements. This calls for further strengthening collaborative action between government and non-state actors including I/NGOs with a proven specialization in education. Hence, the education SDG that the UN approved in October 2015 is highly relevant and is an instrument to complete unfinished business from the MDG agenda.

3.7.2 Recommendations

- 1) The achievement of the 100 percent NER target demands the introduction of more incentives to cover opportunity and programme costs and to improve the institutional framework. The latter involves implementing compulsory education and new legal provisions.
- 2) The equitable distribution of basic and secondary schooling facilities, including ECD, demands more focused and comprehensive resource rationalization. This includes merging existing facilities and opening new schools, as appropriate. School mapping needs to be completed and new facilities need to be planned for this to happen. Other related measures include assuring the timely availability of textbooks, mainstreaming religious schools and implementing standard regulatory practices in private schools.
- 3) Pre-primary education helps instil the habit of going to school. It is recommended that one-year of pre-primary education be made compulsory for all children.
- 4) Overhaul the curriculum and teaching methods to facilitate behavioural changes among citizens through soft skills starting from the early grades.
- 5) Almost a third (30.6 percent) of all basic education schools did not meet at least three of the five priority minimum enabling conditions (PMECs) in FY 2013/14. These conditions need to be put in place through large investments. There is also the need to rationalize existing resources through school mapping and to increase investments, particularly on basic and secondary education, for ensuring basic enabling conditions (infrastructure, teachers, learning materials, and textbooks) in all schools.
- 6) The enrolment of children from poorer households should be encouraged through an economic safety-net programme. Many poorer parents are challenged by the opportunity costs of their children attending school. Cash transfers are one option to compensate parents, particularly for the 'hard-to-mainstream' children. Existing scholarships can be re-designed to offer adequate support to the neediest children to retain and mainstream them. These interventions would help improve the survival rate.

- 7) Skill training and enterprise development are prioritized by the SDGs. However, many skill training aspirants and new micro entrepreneurs have limited literacy. Therefore, the government should aim to integrate literacy programmes and skill training initiatives. Furthermore, as four of the seventeen SDGs are related to TVET, there is the need to develop and implement all strategies that could facilitate skills learning opportunities.
- 8) Improve classroom instruction by developing the capacity of head teachers, by giving head teachers adequate authority, by ensuring the timely availability of textbooks and by building the capacity of school management committees and parent teacher associations .
- 9) The education plan for beyond 2015 and the envisaged programmes and projects should be fully aligned with the SDGs. Also, many of the targets and indicators in the education SDG (SDG 4) have been developed internationally and thus need to be contextualized and localized.



GOAL 3

Promote Gender Equality and Empower Women

Nepal has made good progress between 1990 and 2015 in achieving gender parity in access to primary, secondary and tertiary education. Women's empowerment and gender equality achievements have also been made in other social and political spheres. The new constitution enshrines the fundamental rights of women and the Government of Nepal is committed to attaining the objectives of the related international conventions it has signed up to through acts, policies, plans and gender responsive budgeting. While Nepal is on track on promoting gender equality and women's empowerment, achievements vary across regions, caste and ethnic groups and economic status. Discrimination and violence against women and girls persists in many different spheres.

MDG Target 3: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015

Status and Trends of Target 3 — Gender Equality

Table 3.1: Achievements on gender equality in Nepal, 1990–2015 (Target 3)

Indicator	1990	2000	2005	2010	2013	2015	2015 target
3.1. Ratio of girls to boys in primary education	0.56	0.79	0.90	1.0	1.02	1.09 ^a	1.0
3.2 Ratio of girls to boys in secondary education (Grades 9-10)	0.43	0.70	0.84	0.93	0.99	1.0 ^a	1.0
3.3 Ratio of women to men in tertiary education	0.32	0.28	0.50	0.63	0.71	1.05 ^b	1.0
3.4. Ratio of literate women aged 15-24 years to literate men aged 15-24 years	0.48	na	0.73	0.83	0.85	0.89 ^c	1.0
3.5. Share of women in wage employment in non-agriculture sector (percent)	18.9	17.7	na	19.9	44.8	na	
3.6. Proportion of seats held by women in the national parliament (percent)	3.4	5.8	na	32.8	na	29.5 ^e	

Sources: ^aDoE (2015), ^bUGC (2015), ^cCBS (2014b), ^dCBS (2011a), ^eLPS (2015)

Primary education

Nepal has achieved gender parity in all levels of education. There has been a large increment in the ratio of girls to boys in primary education from 0.56 girls to every boy in 1990 to 1.09 in 2015 (Table 3.1) (DoE 2015). Parity has been achieved in both the gross enrolment ratio (GER) and net enrolment ratio (NER) at primary and lower secondary levels with the gender parity index in the primary level NER standing at 0.99 and in the lower secondary level NER at 1.02. Gender parity in the GER in primary education increased from 0.91 in 2004 to 1.01 in 2007 and 1.09 in 2015 (Figure 3.1). Similarly, the gender parity index in the primary level NER was achieved in 2011 at 0.99 and has remained at this level. The NER in primary levels for girls more than doubled from 46 percent in 1995/96 to 95.7 percent in 2014/15 and increased more than five-fold at the lower secondary level from 14 percent in 1995/96 to 75.5 percent in 2014/15 (DoE 2015). There has also been good progress in the share of enrolled Dalit and Janajati students with a GPI of 1.02 at primary and 1.09 at lower secondary level and 1.05 for Dalit students at all levels in 2015 (DoE 2014).

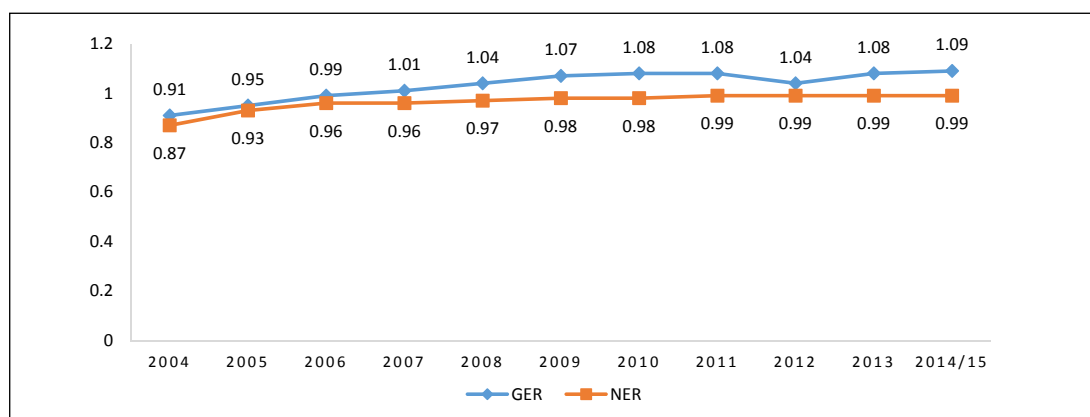
Girls have fared better than boys in both primary and lower secondary level completion.

The completion rates were:

- 86.9 percent for girls and 86.5 percent for boys at primary level in 2014/15 compared to only 59 percent for girls and 79 percent for boys at primary level in 2000; and
- 90.4 percent girls and 89.7 percent for boys at lower secondary level in 2015 compared to 35.5 percent for girls and 51.9 percent for boys at secondary level in 2000 (DoE 2015).

The survival rate (or retention rate) is also in favour of girls in both Grade 5 (87.5 percent girls vs 86.5 percent boys) and Grade 8 (76 percent girls vs 73.3 percent boys). This implies systemic improvements in quality and equity in the education system over the years. Various studies in the sector have shown that scholarships and incentive schemes have increased the enrolment of girls in school, their retention and completion, and in reducing drop outs (Stenback, 2015). In addition, the improved enabling environment through the provision of midday meals, separate toilets, free textbooks, residential schools for girls, and the presence of female teachers has also contributed to this achievement. Though the scholarship coverage was expanded to all girl students (from previously only 50 percent of girls) the efficiency and equity in distribution of scholarships needs improving.

Figure 3.1: The gender parity index in primary level GER and NER, 2004-15, Nepal



Sources: DoE (2015)

Out-of-school children who have never attended school and school drop-outs remain major concerns. The number of drop-outs is highest in Grades 1 and 8 with the latter resulting in low enrolment in secondary education (only 70 percent). In 2011, 12 percent of the female population ages 6-24 years had never attended school compared to the national average of 8.7 percent (CBS 2011a). This shows that more girls than boys dropped out due to various socioeconomic reasons such as poverty, early marriage and work responsibilities at home (DoE 2015). There is also a high dropout rate among children from Tarai /Madhesh, Dalit and Muslim communities (UNESCO 2015a).

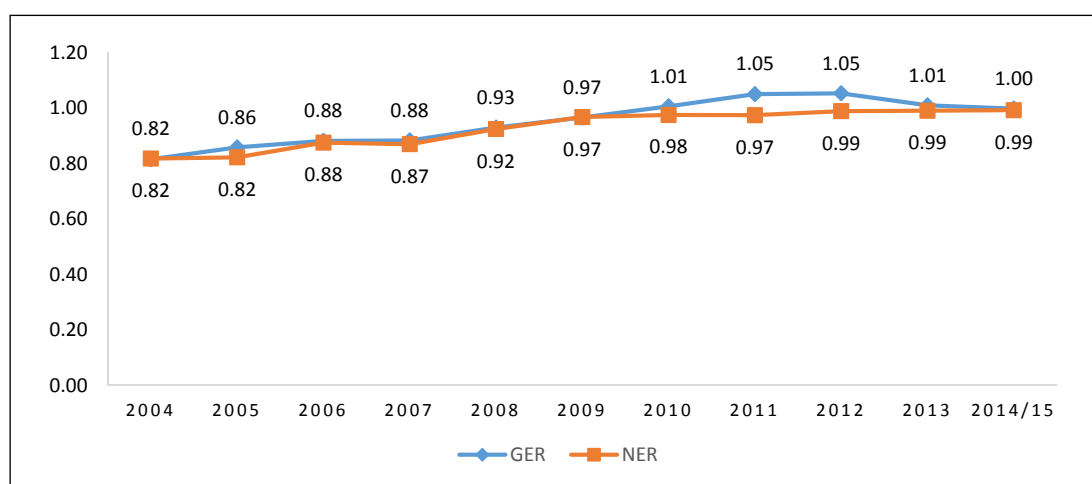
Secondary education

There was one girl enrolled at the secondary level (Grades 9-10) to every boy in 2015 and 1.02 girls to every boy at the higher secondary level (Grades 11-12) in the same year. Parity has been achieved in the secondary education GER with the ratio increasing from 0.82 in 2004 to 1.01 in 2010 with it remaining steady since then (Figure 3.2). Parity was achieved in the secondary education NER at 0.99 in 2012 (from

0.82 in 2004) and it has remained steady. This implies that more 'right-aged' girls are completing primary education and enrolling in secondary education. The NER for secondary level girls increased from 40.1 percent in 2009 to 55.9 percent in 2015 while at higher secondary level there has been a lesser increase from 6.81 percent in 2008 to 13.3 percent for girls and 12.9 percent for boys in 2015 (DoE 2015). But the share of girls in secondary and higher secondary education has increased to 50.7 percent and 50.8 percent respectively, which implies that more boys are dropping out early or discontinuing schooling than girls. This could be due to the much greater tendency of boys to seek overseas employment, and hence leave the system early for other skills training while boys from the poorest quintiles opting for labouring works early on.

Although the overall GPI for secondary education has reached parity at the national level, there are large differences between development regions and districts across the country. In several districts the NER for girls is lower than for boys and vice-versa. There are high disparities in the NER for girls and the GPI in the mountain and hill districts of the Mid-Western and Far Western Development Re-

Figure 3.2: The gender parity index in secondary level GER and NER, 2004-15, Nepal



Sources: DoE (2015)

gions and in central Tarai districts. The data shows that where the NER differential between boys and girls is higher the overall NER tends to be very low. In addition, access to secondary education for girls from marginalized groups remains an issue (Cummings et al. 2013; Stenback, 2015).

Learning achievements are also adversely affected by students' gender, caste, and ethnicity. Gender roles after marriage for women traditionally and still to this day confine many women to the household, which makes it less relevant and less of a priority for girls to pursue secondary and higher secondary education. Other socio-cultural barriers such as caste discrimination, isolation from public (*purdah*), limited Nepali language skills, and harmful practices such as isolation during menstruation (*chhaupadi*), lack of female toilets, early marriage² and childbirth increase girls' likelihood of dropping out of school. In Nepal, married girls are 11 times more likely to be out-of-school compared to their unmarried peers and early marriage is cited as the second most common reason for school drop-out for girls aged 15-17 years and the most common reason for 20-24 year old women dropping out of school. Across all caste groups the number of out-of-school girls are higher in comparison to the out-of-school boys in primary, lower secondary, secondary and higher secondary age groups (DoE 2015).

Only data on the total share of enrolment of Dalit and Janajati students is available to analyse their access to education. The total share of girls among Dalit students and the ratio of Dalit girls to boys has varied only margin-

ally between secondary and higher secondary levels, but the proportion increased (slowly) from school years 2009 to 2015. The percentage enrolment of Dalit girls was 45.2 percent in secondary level in 2009 and 45.1 percent in higher secondary level increasing to 49.1 in secondary level and 46.5 in higher secondary level in 2014 (DoE 2015). The GPI for secondary and higher secondary remained relatively low at 0.95 and 0.87 in 2014 for Dalit students. The percentage of age ready Janajati girl students studying at secondary level was 49.6 percent in 2009 and 53.1 percent in school year 2014, whereas at the higher secondary level it was 52.6 percent in school year 2009, slightly increasing to 52.8 percent in school year 2014. Thus the GPI has been achieved for Janajati students with more Janajati girl than boy students. Muslims have the least access to education, even lower than Dalit communities (DoE 2014).

Tertiary education

The ratio of women to men in tertiary education has considerably increased over the last decade from 0.5 females to every male student in 2005 to a ratio of 1.05 in 2014; thus parity has been achieved. However, a wide gap remains between males and females pursuing masters degrees (a GPI of 0.82) compared to 1.09 at the bachelors level. The GPI is low in many tertiary technical subjects such as science and technology (0.3), engineering (0.12) and medicine (0.84) while it is high for education with more women than men studying education at bachelors level (1.67) (UGC, 2015). The share of female enrolment in tertiary education has

2 Nepal's early marriage rates are one of the highest in the region, with 18 percent of women aged 20-49 years old married before the age of 15 and 48.5 percent of women aged 20-49 years old married before the age of 18 (CBS 2015b).

steadily increased from 11 percent in 2010 to 33 percent in 2013, but remains low. The gender-wise gross enrolment ratio shows that 23 percent of the total students enrolled in bachelor level were women in 2013/14, which drops to 6.3 percent at master's level (UGC 2015).

The female population (aged 25 and over) with at least a secondary education is still much lower compared to their male counterparts — 17.9 percent vs 39.9 percent (NPC 2014b). This shows that though the number of women with a higher education has increased in the past decade far fewer women have such a qualification. The social compulsions of marriage and early on having children are major impediments to women's advancement to higher education and embarking on career jobs that require more time, mobility and costs.

Youth literacy

Literacy among 15-24 year old females has increased from 32.7 percent in 1991 to 80.2 percent in 2011 (CBS 2014b) and further in-

crease to 82.7 in 2013 (MoHP et al. 2012) (Table 3.2). The literacy gap between males and females among 15-24 year olds reduced from 35 percentage points in 1991 to 12 percentage points in 2013. And gender parity increased to 0.89 but it is yet to meet the 2015 target of 95 percent as per the EFA National Plan of Action (NPA) (UNESCO 2015a). A key reason for the significant improvement in female youth literacy could be the focus of literacy initiatives on women and the mobilization of community learning centres (CLCs) followed by the National Literacy Campaign Programme (2008–2012). The lowest level of 15-24 year old female literacy in Nepal is in the central Tarai at 57.9 percent compared to 75.9 percent of the same group in the Central Development Region. Although the gender gaps in overall literacy rates have decreased over the years, the rates are still high ranging between 12 and 35 percent across geographic regions and income quintiles. Females constituted 68.7 percent of illiterate 15-24 year olds in 2011 compared to 31 percent of male (CBS 2014b).

Table 3.2: Youth literacy rate, for age groups 6 years+ and 15-24 years, Nepal, 1991–2015

Age-group	1991			2001			2011			2013			2015		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
6+ year olds	54.5	25	39.6	65.5	42.8	54.1	76.0	57.8	66.6	na	na	na	na	na	na
15-24 year olds	68.2	32.7	49.6	80.6	60.1	70.1	89.9	80.2	84.8	94.6	82.7	88.6	na	na	na

Sources: CBS (2011b), MoHP et al. (2012)

Labour and employment

Despite government initiatives to promote women's participation in the labour force, a significant gender disparity exists in women's participation in the labour force and employment. The labour force participation rate of economically active females is 79.4 percent compared to 80.9 percent of males giving a female-to-male ratio of 0.98 (CBS 2011b).

In 2011 women of the economically active age group were mostly engaged in self-agriculture (67.7 percent), 14.8 percent in the 'extended economy', which includes activities such as fodder and firewood collection, fetching water and other household chores, while 20.6 percent were economically inactive as they were not employed or were not seeking employment. In 2011, 24.9 percent of economically active females were in wage

employment in the non-agriculture sector as compared to only 4.7 percent of them in 1995; but a wide gender gap exists with only 44.8 percent of economically active females compared to 76.4 percent of such males being engaged (mostly from urban areas and the richest quintiles) (NPC 2014b). The proportion of women has only increased a little over the past two decades despite their wide engagement in the carpet and garment industries and service sectors.

Gender inequality in employment and daily wages persists mostly due to women’s low skill levels and the time they have to spend on unpaid care work. In 2011, most of the economically active females were in personal services (42 percent), followed by construction (25.4 percent) and manufacturing (18.8 percent) as compared to males who were 40 percent in the construction sector, 20 percent in personal services and 16.6 percent in manufacturing. Despite the considerable progress, most working women are engaged in the non-formal sector in agricultural and non-agricultural jobs and in the organized sector,

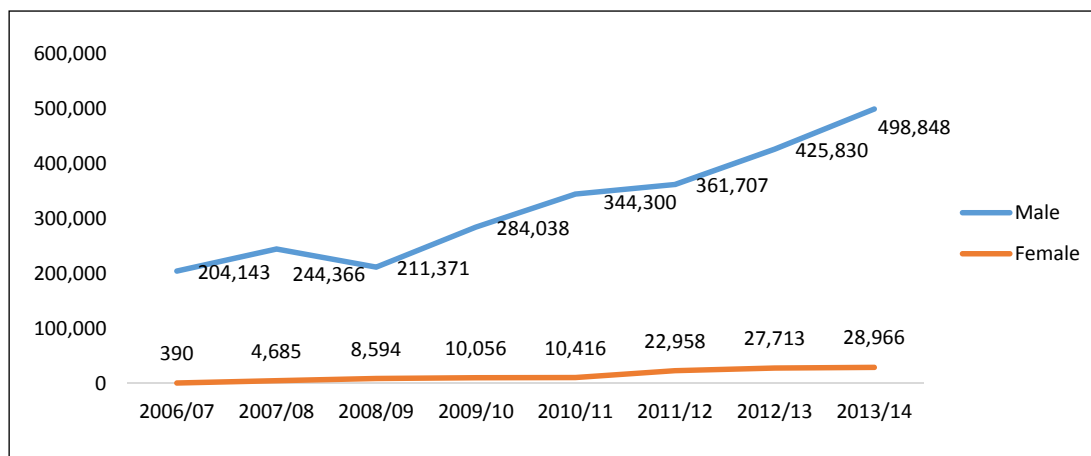
women are most often in low paid, less productive, low capital intensive jobs.

There is gender inequality in daily wages. The rate of wage increases in the nominal daily wage rate in the agriculture and non-agriculture sectors has been higher for male workers than female workers. And 61 percent of women are not paid for their work at all, compared to only 12 percent of men (MoHP et al. 2012).

Women are increasingly engaging in non-traditional areas of work for women such as overseas employment, the police, the army and teaching. The 1990 and 2011 census data reported a doubling in female absentees working outside of Nepal (ILO 2015). Poverty, gender-based violence and better employment opportunities are some of the push and pull factors for women’s foreign employment (DoFE 2014). The Department of Foreign Employment (DoFE) recorded only 161 women who migrated for foreign employment in the 1985–2001 period while in the single year 2013/14, 28,966 permits were issued to women going abroad to work (Figure 3.3).



Figure 3.3: Labour permits issued disaggregated by gender



Sources: ILO (2015)

The increased number of policewomen — they now account for 6 percent of all police personnel, has improved access for women and children to police services. The establishment of women and children service centres (WCSCs) has increased the reporting of domestic violence cases by 379 percent (Nepal Police 2014). Women account for 8.4 percent of Nepal Army personnel with many of them in technical fields (24.5 percent). Ten percent of Nepal Police and 2 percent of Nepal Army personnel serving as UN peacekeepers are women.

There are a large number of primary level women teachers, but due to the limited professional training opportunities and social constraints for career progression there are many fewer women teachers in higher levels of education. The proportion of primary level women teachers increased from 39.6 percent in 2009 to 42 percent in 2014 due to the government’s policy of recruiting at least one female teacher out of three in the approved quota at primary level. But only 17.3 percent of secondary teachers were women in 2014 (GPI 0.21) and 15.5 percent higher secondary teachers (GPI 0.19). The reservation policy has led to an increase in the proportion of Dalit

and Janajati women teachers — in 2014 Dalit women teachers accounted for 3.6 percent of all primary teachers and 5.2 percent of all secondary teachers while Janajati women teachers accounted for 27.7 percent of all primary teachers and 16.7 percent of all secondary teachers (DoE 2015).

However, the gender gap in men’s and women’s access to economic resources and opportunities has seen only limited progress. Land entitlement is a prerequisite for women to have access to other resources and services for long term investments. The 1997 amended Land Act (1964) gives women equal tenancy rights with males, but the lack of related legal frameworks impedes the full implementation of this provision. However, the proportion of women owning fixed property (land, houses, etc.) increased from 11.7 percent at the time of the 2001 census to 19.7 percent of women at the 2011 census. This increase could be contributed to the 30-40 percent subsidy on (land registration) tax if land is registered in the name of a women suggesting that women’s rights in practice to claim, own, use and control land and other fixed property is still limited. Although widows have had full entitlement to inherit property from their hus-

bands without any conditions and divorced women have the right to an equal share of their husbands' property; women's actual access to family property has only increased a little. In spite of various credit programmes, women's access to institutional credit is still very limited at both individual and household enterprise levels, which is a major impediment for the economic empowerment of women.

Political participation

The new constitution is a landmark for women's political participation in Nepal. The provision to have gendered representation in key positions of the state structure resulted in the first woman head of state (president) in Nepal's history in 2015. The chief justice and speaker of the House of Representatives are also women at the current time. Women's

representation in the legislature increased from less than 6 percent in 1999 to 33 percent in the Constituent Assembly of 2008. The present legislature parliament has 29.5 percent women's representation. Participation by women in water, forest, and agriculture user groups, cooperatives and committees has also risen, and with it their access to local resources. But patriarchal norms and values practiced across and within groups continue to limit women's overall empowerment.

Due to the reserved quotas for women in the civil service as per the amended Civil Service Act (2008), women's participation in gazetted and non-gazetted levels has increased from 13 percent in 2010 to 22.7 percent in 2015 (MoGA 2015). But the proportion of women in the judiciary has declined from 5.5 percent in 2000 to 3 percent in 2015 due to the low number of women studying law (NJA 2013).



Other issues

Women and girls in Nepal are exposed to a variety of forms of violence (physical, sexual, psychological and structural), which impedes their productivity, growth and overall advancement (MoHP et al. 2012). Gender-based violence constrains women's access to economic opportunities, education, health, and their exercising of their legal rights and the overall well-being of families and communities. In 2011, 22 percent of women aged 15-49 years had experienced physical violence at least once since age 15 while 12 percent of women aged 15-49 years reported having experienced sexual violence at least once (MoHP et al. 2012).

Achievements Compared to Other Countries

Nepal's achievements on gender equality are set against the achievements of other South Asian countries in Table 3.3. Nepal has made considerable improvements compared to other countries in meeting the gender gap in both primary and secondary level education (UNESCO 2015b). Nepal had a lower GPI in primary and secondary education than India and Bhutan in 1999 but had surpassed these countries in 2012. Nepali 15-24 year old girls have the highest level of literacy of the featured countries while Nepal has the highest proportion of female parliamentarians.

Table 3.3: Comparison of key indicators among South Asian Countries

Indicator	GPI in primary education GER		GPI in secondary education GER		Female youth literacy in percent	Women MPs in percent	
	1999	2012	1999	2012		2011	2015
Afghanistan	0.50	0.72	0.2	0.52	19	28	28
Bangladesh	-	-	1.0	1.17	80	20	20
Pakistan	0.68	0.88	-	-	68	23	21
Bhutan	0.84	1.02	0.78	1.02	51	9	9
India	0.82	1.03	0.71	0.98	77	11	12
Nepal	0.75	1.08	0.68	1.01	82.7	33	29.5

Sources: <http://data.worldbank.org/indicator>, UNESCO (2015b)

Policies, Programmes and Institutional Changes

Policies and programme changes

Nepal's ratification of the Convention to Eliminate all Forms of Discrimination Against Women (CEDAW) in 1991, the International Conference on Population and Development (ICPD) in 1994 and the Beijing Platform For Action (BPFA) in 1995 led to the country adopting gender mainstreaming and wom-

en's empowerment as a major strategy for empowering women in the Ninth Five-Year Plan (1997-2002). This included policies to integrate gender issues in all sectors at the national and regional levels, the elimination of gender inequalities in all laws, the introduction of affirmative policies and actions to reduce inequality, the mandatory representation of women in policies and programme development at all levels and women's rights to the ownership of land. The Tenth Five-Year Plan (2002-2007) promoted efforts to integrate gender in other sectors like governance,

poverty reduction, education, health and agriculture.

The Local Self Governance Act (1999) introduced the mandatory provision of 20 percent women's representation on local councils and committees. This resulted in more than 40,000 women serving on local bodies and the extensive mobilization of women into groups by NGOs and INGOs. The PRSP (2002–2007) had the inclusion of women and other disadvantaged groups as one of its four pillars. The PRSP's monitoring system strengthened the gender outcomes to a certain extent.

The gender budget and audits commissioned under the Mainstreaming Gender Equality Programme (funded by UNDP) were instrumental in engendering policy changes. The gender audits carried out by the Ministry of Finance (MoF), MWCSW, MoFALD, the Ministry of Health and Population (MoHP) and the Ministry of Education (MoE) assessed related acts, laws, regulations, policies, plans, programmes and budgets from the gender perspective and their impact on advancing women and gender equality. These exercises led to the formulation of guidelines for gender mainstreaming during planning and budgeting at the local level. MoF set up a Gender Responsive Budgeting Committee to engender the Economic Survey and Budgeting Guidelines that resulted in the successful incorporation of gender issues in the 2001 census and the Tenth Plan.

Nepal developed a National Plan of Action (NPA) to address the 12 areas of concern of the Beijing Platform for Action (BPFA) (2003). Progress on these areas continues to be monitored through international discussions and by NGOs, and most recently at the 2015 Beijing +20 meetings. Nepal has enacted various acts and laws to address the most serious forms of crime and violence against women.

The National Plan of Action (NPA) against Trafficking in Children and Women for Sexual and Labour Exploitation (MoWCSW 2001) was drafted in 1998 while the Domestic Violence (Crime and Punishment) Act was passed in May 2009. The act defined physical, mental, sexual, financial and behavioural violence as domestic violence, and provided for a response system for the violation of rights. Following its ratification of the SAARC Convention on the Trafficking of Women and Children (2005), the government enacted the Human Trafficking Act (2007) and the adoption of Human Trafficking and Transportation (Control) Regulations (2008). The National Plan of Action against the Trafficking of Women and Children and Transportation (Control), 2011–2016 was produced to implement these acts and regulations. A detailed implementation plan is currently being developed. The latest NPA has the five priority areas of prevention, protection, prosecution, the capacity building of concerned organizations, and support and coordination; but effective implementation remains a challenge.

The Act to Amend Some Nepali Acts for Maintaining Gender Equality (2006) amended provisions in 17 acts including the Civil Code. It introduced several provisions for protecting women's rights to ancestral land and property, and sexual and reproductive health. The NPA against Gender based Violence (OPMCM 2010) was prepared to accelerate the prosecution, protection and prevention of such harmful activities. This NPA has successfully raised awareness and enhanced coordination and linkages among 13 ministries, 3 commissions and NGOs to address gender-based violence (GBV) issues. It called for a concerted effort across health, education, legal rights, and security to address GBV. However, there are many limitations for the implementation of related laws. There are no separate family

courts to deal with domestic violence cases. However, mechanisms exist to support and protect women through various service centres such as the one-stop crisis management centres in hospitals, the women and children service centres of the Nepal Police in all districts, and at the national level the Women's Rights Commission, the Human Rights Commission, and the GBV Complaint Management and Monitoring Unit at the Office of the Prime Minister and Council of Ministers (OPMCM). There are also resource groups in districts that handle complaints, investigate cases and support victims. Awareness raising activities and coordination among stakeholders has resulted in an increased number of women victims seeking support services.

To increase the number of women in public service decision making position, the Civil Service Act (2007) requires 45 percent of all vacant posts to be reserved for women and excluded groups, of which 33 percent must be for women. The act also includes positive discriminatory provisions on the age limit for women joining the civil service, and shorter probation and eligibility periods for promotion. This has resulted in women's increased recruitment into the civil service, although the numbers of women in higher level has decreased.

The gender responsive budgeting adopted in 2007/08 by the government is showing results. The inter-ministerial Gender-Responsive Budget Committee (GRBC) monitors sectoral budget allocations and public expenditure from a gender perspective whereas the GRB guidelines (MoF 2012c) guide sectoral ministry budget preparation. As a result, the allocation of GRB increased from 11 percent in 2007/08 to 22 percent in 2015/2016. The GRBC is overseeing the application of the guidelines by all line ministries and is running capacity development programmes for gender focal

points and officials and providing support at the ministerial level.

The Interim Constitution of Nepal (2007) was pivotal in providing special rights for women alongside ensuring the fundamental rights to all citizens irrespective of sex, class, caste, ethnicity, religion and disability. It introduced the provision for 33 percent representation of women in state structures and mechanisms. As a result, the Constituent Assembly Election Act (2007), required detailed requirements for drawing up the list of candidates for the elections to the Constituent Assembly and for the allocation of proportional representation (PR) seats from the gender perspective. This resulted in the election of almost 33 percent women representatives in the Constituent Assembly (2008). The progressive Interim Constitution did not however include all the CEDAW provisions for promoting substantive gender equality. It also fell short of upholding several economic and social rights that are defined by the International Covenant on Economic, Social and Cultural Rights as fundamental rights.

The Constitution of Nepal 2015 has a separate article on women's fundamental rights (Article 38) that gives the right to women to participate in all state structures and bodies on the principle of proportional inclusion, the right to special opportunities in education, health, employment and social security on the basis of positive discrimination, equal rights to women to lineage without any gender discrimination, equal rights to property and family affairs and the rights to safe motherhood and reproductive health. There are also rights against any kind of violence or oppression based on religion and social and cultural traditions while Article 11 guarantees Nepali women equal rights to transfer their citizenship to their children by descent even for children without an identified fa-

ther. Legal provisions give the first priority to mothers over the custody of the children in separation and divorce cases. However, some of these provisions have not materialized in practice. Lack of clarity on the legal provisions and the patriarchal mind-sets of many government officials have prevented many women from getting citizenship and birth registration certificates for their children.

To engender the planning and budgeting process at the local level MoFALD introduced its Gender and Social Inclusion Policy (MoFALD 2010) and Resource Mobilization Guidelines (MoFALD 2013) that stipulate the 33 percent participation of women in local level planning and programming and the allocation of 35 percent of grants to local bodies to activities to benefit (i) women-related activities (10 percent), (ii) children (10 percent) and (iii) disadvantaged groups (15 percent). These provisions have increased the amount of funds allocated and expenditure on the targeted groups (UNICEF and ADDCN 2012). MoFALD has formalized the Local Bodies Gender Budget Audit Guideline (MoFALD 2008) to facilitate the formulation of gender-responsive budgets in local bodies; although its results will take some time to materialise.

Policy reforms in the education sector were initiated and implemented under the School Sector Reform Plan (2009–2015) aimed at narrowing the gender gap in access to primary education through scholarships, incentives, separate girls' toilets, school feeding programmes, engendering the curriculum and text books, the inclusion of women on school management committees, and quotas of female teachers (with at least one female out of each three primary teachers recruited). This resulted in large increases in girls' enrolment and a reduction in the gender gap at the primary level.

The Foreign Employment Act and Regulation (MoLE 2007) and the Foreign Employment Policy (MoLE 2012) provide for equal opportunities and protection mechanisms for women migrant workers in foreign employment. A number of initiatives such as the establishment of a labour desk at the airport, the appointment of female labour attachés, mandatory pre-departure training to all women migrants, free legal clinics and help desks, free training for domestic workers and immediate shelter and protection for women returnees are provided for women migrant workers.

The Thirteenth Plan (2013–2016) gives high importance to women's basic rights, and gender mainstreaming for inclusive and equitable national development.

Institutional mechanisms

The strengthening of the institutional framework and mechanism has been instrumental for gender mainstreaming across sectors including the establishment of the Ministry of Women, Children and Social Welfare in 1995. The government's Women's Development Programme (1983) has mobilized large numbers of women across socioeconomic backgrounds into saving and credit groups that have promoted women's leadership and skill enhancement. The programme has brought about women's empowerment, gender mainstreaming and increased women's inclusion. The permanent establishment of all district level women development officer posts has facilitated and strengthened the implementation and monitoring of gender mainstreaming at the district level. The National Women's Commission was established in 2007 and its act was promulgated in 2010 to promote and protect women's rights. But the commission has not been able to realise

its full potential due to an unclear mandate, overlapping responsibilities with MWCSW, and limited resources.

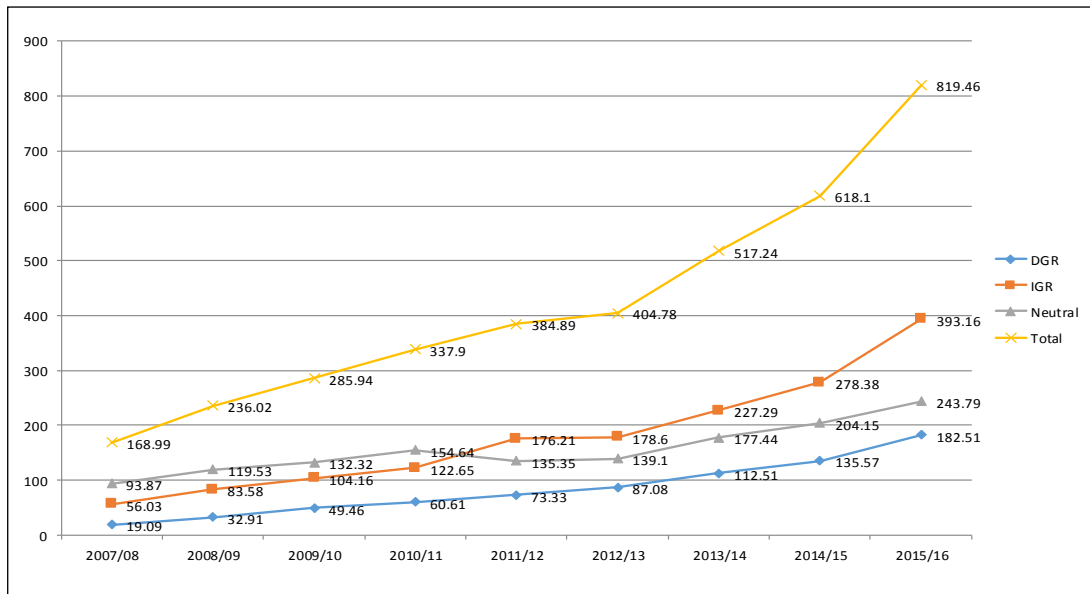
The establishment of gender equality divisions and units in sectoral ministries and the development of gender policies and strategies in the ministries of health (MoH), education (MoE), urban development (MoUD), local development (MoFALD) and at the department of irrigation have increased gender responsiveness of their programmes including budget allocation. Inter-ministerial coordination has increased due to the appointment of gender focal persons and the establishment of an inter-ministerial gender mainstreaming coordination committee led by MWCSW.

Resource Allocation Trends

Nepal introduced gender responsive budgeting in FY 2007/08 followed by a series of gender budget audits in several sectors, and the application of a gendered budget classification system throughout the government machinery. Figure 3.4 shows the trend of more gender responsive budgeting between 2007 and 2015 with directly gender responsive (DGR) and indirectly gender responsive (IGR) budgets increasing much more than the neutral budgets. The allocation for directly gender responsive programmes and projects across sectors almost doubled from 11.3 percent of the total budget in 2007/08 to 22.3 percent in 2015/16 (MoF 2015c).



Figure 3.4: Gender responsive budgeting trend 2007/08-2015/16, Nepal (in NPR Billion)



Sources: MoF (2015c)

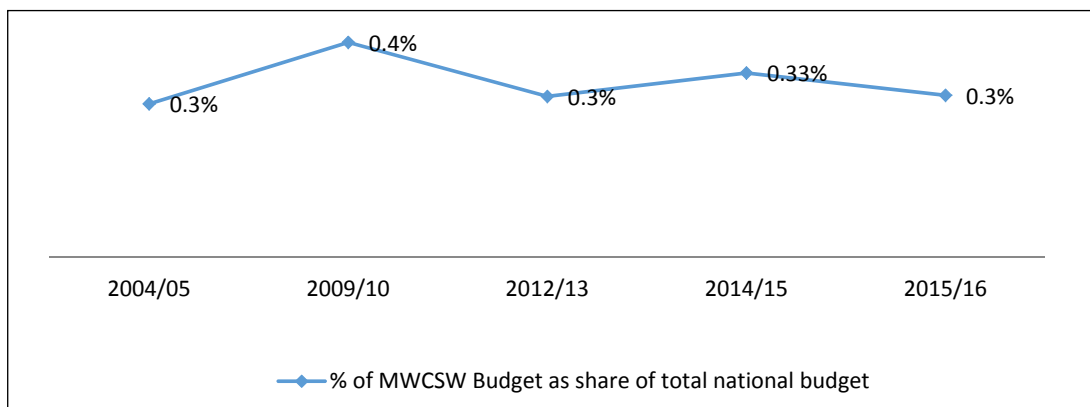
Note: DGR- directly gender responsive, IGR- indirectly gender responsive

However it is very likely that actual expenditure is less than the amount allocated for gender responsive programmes across sectors. The actual trend cannot be articulated due to the lack of proper expenditure tracking systems. The systemic monitoring and tracking of gender responsive budgets needs to be pursued by the government.

The share of spending on women’s empowerment and gender equality as a percentage of

the total national budget decreased from 0.4 percent in 2009 to 0.3 percent in 2015 (Figure 3.5), though the volume of the budget received by MWCSW to promote gender equality and women’s empowerment increased substantially from 2012. However, the allocated budget has been underspent in all years except for 2012 with highest underspend in 2013. This could be due to political uncertainty, widespread strikes and forced closures (*bandhas*) and the elections to the Constituent Assembly.

Figure 3.5: MWCSW’s budget as a share of total national budget



Sources: MoF (2004), MoF (2009), MoF (2013a), MoF (2015b), MoF (2015c)

Unfinished Business

The great achievements made on achieving gender parity at all levels of education have masked the significant disparities in education outcomes across regions, genders and social groups. Caste, ethnicity and religion are strong determinants that restrict girls belonging to disadvantaged groups from accessing quality school education as well as continuing higher education. Learning outcomes and pass rates for girls continue to be lower than for boys. In secondary education, low enrolment rates continue, which are directly related to the economic status of households. There are higher levels of gender disparity in the poorer wealth quintiles. Learning outcomes at secondary and higher secondary level have been poor due to the lack of specialist subject teachers and high dropout rates due to widespread failure of the school leaving certificate (SLC) exams. Geographic remoteness is another reason for girls not to take secondary education due to the lack of residential facilities for girls (Cummings et al. 2013; Stenback 2015). The current blanket approach to the targeting and distribution of scholarships and incentives for girl students does not really cater to the specific needs of girls from different socioeconomic background.

Although gender parity has increased in tertiary education the enrolment rate of females is still very low. Early marriage and childbirth are key reasons for females not pursuing higher education. There is also a serious gender gap in the teacher cadre especially in higher levels, which affects girls' participation in schooling. There are few female teachers in secondary and higher secondary schools and very few teachers from disadvantaged groups (especially Dalits). There are very few female head teachers.

Although the proportion of economically active women is quite high in Nepal compared to other South Asian countries, these women are mostly engaged in subsistence agriculture and the care economy. Similarly, the gains made by Nepal in increasing female youth literacy over the years is yet to provide economic dividends due to the lack of relevant employment opportunities and the inability to link available skills to labour market demands.

Women working in the non-agriculture sector are still largely engaged in low paying low-skilled jobs, mainly in the unorganized sector. Policies and laws are weakly enforced due to the lack of adequate programmes and mechanisms, the lack of institutional capacity and resources and limited coordination between concerned agencies. Only 10 percent of Nepal's migrant workers have TVET-qualifications (ILO 2015). Most women migrants are unskilled and work as domestic workers. The ineffective enforcement of compensatory measures for violations of women migrants' rights is another impediment.

In the political sphere, provisions under the constitution do not guarantee full equality unless there is a legal framework and provisions that are non-discriminatory against women. Legal equality is necessary for the political empowerment of women and the country has a lot to do in terms of removing existing discriminatory provisions in acts, regulations and laws. Despite women's quotas, male dominance prevails in voice and decision making and often women are placed as token representatives just to meet the 33 percent requirement in state structures. Lack of equal inheritance rights, lack of access to economic assets and resources, socio-economic inequities and threats continue to limit women's full participation in politics.

Many policies and legal mandates to improve gender equality and the inclusion of women have been inadequately implemented due to Nepal's prolonged political transition, weak systems of public service delivery, and lack of accountability in the public service. Informal social norms, practices, values, and biases also constrain the implementation of measures to transform power relations. Most sectoral ministries lack the capacity to implement gender responsive planning and budgeting.

The inadequate monitoring of gender related policy interventions remains a challenge due to the lack of systemic monitoring and a results framework and gender neutral indicators, the lack of disaggregated data and information and inadequate technical and financial resources. The ineffectiveness of some programmes is mainly due to the lack of regular monitoring of increased participation and benefits to women from interventions and the limited use of disaggregated data to inform decision making at the national level.

MDG Implementation Lessons

Lessons for the SDGs

While the MDGs limited their gender equality targets to education-related targets, the SDG targets are much wider and require qualitative and household level data and information. The gender equality goal (SDG 5) contains six targets and 27 indicators, many of which are new challenging targets. SDG targets such as the elimination of wage discrimination for similar work, the elimination of physical and sexual violence, the elimination of all harmful practices (such as child, early and forced marriage) require strong laws and their enforcement, a sound database and monitoring systems and effectively implemented pro-

grammes. This work is especially challenging as it requires the re-structuring of the social architecture to address local, sub-national and national issues.

The proposed SDG 5 targets include the elimination of gender disparities at all levels of education by 2030. Although this has already been achieved at the national level, the achievement varies among women across different locations, income levels and social groups, particularly on tertiary level education which currently stands at 1.05. Further, equalising the ratio of literate women aged 15-24 years to literate men aged 15-24 years (which currently stands at 0.89) will be very challenging to achieve by 2030 without specific programmes and resources to address the issue. The target of increasing the number of seats held by women in the national parliament to 40 percent, and increasing women's share in public service decision-making positions to at least 28 percent will need to be rigorously pursued with strong commitments from the political parties. It will also need programmes to enhance the leadership capacity of potential women candidates, local elections to be fairly conducted through proportional representation, a strong regulatory framework and adequate mechanisms, specialized training and support systems to increase the proportion of women in public service decision-making including women from disadvantaged groups.

Gender equality should be a goal in itself as well as mainstreamed throughout other goals, with gender disaggregated indicators and targets to capture inequality of outcomes at various levels including qualitative aspects. This may cover the type and quality of services provided, the type of employment, the degree of autonomy and bargaining power, and decision making capacity for the more holistic measurement. It is good to see that the education SDG (SDG 4) has gender par-

ity as a target. The last target emphasises the fundamental rights of women by including indicators on sexual and reproductive health and reproductive rights. The attempt made to mainstream gender at the macro-economic level, including financing for development, is progressive but will be challenging to meet.

The achievement of the SDG targets and indicators demand effective mechanisms, accountability and commitment, adequate resources and adequate capacity. A more integrated and coordinated approach is required among sectoral agencies and targets and indicators linked to sectoral outcomes and outputs. Accurate measurement and targeting for women's inequality and empowerment can be done only when a framework for empowerment is clearly defined and agreed upon. The measurement of women's voice and decision making, bargaining power, agency and autonomy will add to the overall empowerment of women.

Lessons for LDC graduation by 2022

One measure for graduating to developing country status is the Human Assets Index (HAI) that consists of education and health sector indicators. Although significant improvements have been made on health and education in the last two decades. Nepal needs to sustain the HAI score achieved in 2015. The projections for this score for 2018 and 2021 suggest that Nepal will comfortably achieve the threshold for graduation, although for this to happen Nepal has to address disparities and inequities in development outcomes across regions, genders, castes, ethnicity, and religions. This requires increased investments on reaching the harder to reach segments, policy reforms and programme implementation in partnership with the public and private sectors.

Except the education sector no other sectors have explicit gender and women's empowerment related targets and indicators. As women's empowerment and equality covers other broader dimensions under economic and political spheres other than school level education and maternal safety, the broader dimensions need to be captured to improve women's status and position in the country.

New Challenges — Disasters and Externalities

Women, men, girls and boys were differentially impacted by the earthquakes of April and May 2015. In 2015, the 14 districts most affected by the earthquakes had 2.7 million women, 26.5 percent female-headed households, 39,987 women with disabilities, and 28 percent of the female population was aged 14 or below (CBS 2012). In Gorkha district, the epicentre of the first earthquake, about 55 percent of casualties were female. According to initial UN estimates outlined in the Flash Appeal just after the disaster about 3.2 million women were among the population affected by the earthquakes including 525,000 women of reproductive age, 126,000 pregnant women and around 40,000 women at immediate risk of gender-based violence.

The difficulties suffered by women due to the recent earthquakes, as identified by the Post Disaster Needs Assessment (NPC 2015c) need systemically tackling in a timely way to prevent affected women from falling into the vicious cycle of poverty, increased drudgery, increased risk of sexual and gender based violence, human trafficking, and discrimination in access to resources. This is especially so for single and elderly women and female-headed households, including discrimination on the distribution of reconstruction and

compensation packages due to lack of official documents to show their rights to land and property. If not addressed, these issues will undermine the achievements made so far on key gender indicators.

Finally, the recent Tarai-Madhesh movement (2015) in the aftermath of the earthquakes, followed by the economic and trade blockade of the southern border severely affected many people. It increased the hardship of many people in meeting their daily needs for food, transport and medicine; deprived millions of children of their right to education and imposed hardship and vulnerability on many women and girls. It is estimated that 7.5 million students in classes 1 to 12 and 0.6 million higher education students were affected (MoF 2015a). This had implications on the enrolment and completion rate of students, including girls. The prolonged political instability, disruption in the education sector and delays in implementation of the reconstruction plan may have induced a large out-flux of unemployed and school-dropped out youth to seek work outside Nepal. Furthermore, this situation has negatively affected the daily lives of many women, Dalit, poor, differently abled and marginalised communities due to their lack of basic essentials. The thriving black market made it very difficult for these people to meet their basic needs. In addition, the inability of the government to provide reconstruction materials on time has further aggravated the situation and put women and girls, at greater risk of insecurity and violence due to the delays in rebuilding houses.

Conclusions and Recommendations

Conclusions

Nepal has successfully achieved most of the gender equality and women's empowerment

targets. There has been an overall improvement in gender mainstreaming across sectors as evident by the enactment of various acts and regulations followed by policies, plans and programmes. Efforts have also been made to 'engender' sectoral national budgets. Institutional frameworks and mechanisms have been established although they need to be strengthened and coordination needs improving. The education sector has had the most promising outcomes. However, participation and the quality of education, learning outcomes and exam pass rates and the transition to higher education continue as major challenges.

The progress made on mainstreaming gender concerns at policy, programmes and institutional levels need to be sustained in various ministries and line agencies. Accountability for gender equality remains a major challenge due to the lack of adequate mechanisms, resources and clarity on roles and responsibilities. Past efforts to institutionalise gender equality by developing policies and guidelines alone will not work without adequate resources, capacity, mechanisms and the authority to implement mandates effectively.

Recommendations

- 1) Enforce related acts and policies and implement targeted programmes to address gender inequality and gaps among caste and ethnic groups and strengthen existing institutional mechanisms to sustain achievements made so far.
- 2) Encourage strong political commitments and accountability from senior leaders and government officials for gender mainstreaming.
- 3) Facilitate coordinated efforts and commitment from sectoral agencies, commu-

nities, families and men and women for the holistic development of women and to address gender equality.

- 4) Ensure that gender equality and women's empowerment continue as key government priorities. Gender equality needs to be mainstreamed in all SDG goals with specific disaggregated indicators and targets. The specific constraints faced by women from disadvantaged caste and ethnic groups and remote areas need to be identified and indicators set to address them.
- 5) Produce a consolidated National Policy on Gender Equality and Women's Empowerment based on a broader human rights standard framework that advances substantive equality for women related to educational attainment, economic empowerment, socio-cultural conditions, discrimination, gender-based violence, political empowerment and decision making and sexual health and rights.
- 6) Expand and implement affirmative action and targeted programmes in all sectors to ensure equitable distribution of resources, opportunities and benefits.
- 7) Make technical and vocational training more available and link it to secondary education to serve the increasing number of women entering overseas employment. Women should be encouraged to study technical subjects and undertake skills training prior to going for overseas employment.
- 8) Strictly enforce compensatory measures for violations of women workers' rights.
- 9) Review macro-economic policies and address gender inequality in subsidies, taxation and trade to expand economic empowerment opportunities for women. Financial institutions should be more accessible to women, with women-friendly lending products and financial services. Promote the commercialization of agriculture, entrepreneurship among women, provide business support services and improve market linkages.
- 10) Make the quota systems a means of giving women more decision-making power in the civil and political spheres. Stricter enforcement is needed to enable more women leaders to emerge. Further, the capacity of women office holders and potential leaders needs building up.
- 11) Strengthen the institutionalization of gender-responsive budgeting through a strategy, training officers, and developing tools for the more efficient allocation of resources. Expand expenditure tracking on the gender-responsive part of budgets.
- 12) Enhance the capacity of MWCSW and the National Women's Commission. Minimise overlapping roles and strengthen functional linkages between concerned line agencies at central and local levels. The staff and structure of MWCSW need to be strengthened and it needs adequate financial and human resources, training on strategic planning, budgeting, and monitoring and authority to fully implement its mandate.
- 13) Women and girls were disproportionately affected by the 2015 earthquakes. Sensitivity to the special needs and capacities of women and girls and their protection must be considered while building houses, schools, toilets and other infrastructure. Livelihood packages should be

provided for the most vulnerable households to mitigate economic stress and enhance resilience against future disasters. Cash transfers are an option for vulner-

able groups who suffered large economic losses including single women, widows, Dalit and poor ethnic group women and female-headed households.



GOAL 4

Reduce Child Mortality

Children are the most valuable assets and they are highly susceptible to disease with many children losing their lives every year. Most children die due to avoidable causes. MDG 4 presents the essential requirements for reducing child mortality.

MDG Target 4: Reduce under-five mortality by two-thirds between 1990 and 2015

Status and Trends of Target 4 — Under 5 Mortality

Table 4.1: Achievements on reducing under 5 mortality in Nepal, 1990–2015 (Target 4)

Indicator	1990	2000 ^b	2005	2010 ^d	2015 ^e	2015 target
4.1 Infant mortality rate (per 1,000 live births)	108 ^a	64	48 ^c	46	33	36
4.2 Under-five mortality rate (per 1,000 live births)	162 ^a	91	61 ^c	54	38	54
4.3 Proportion of one-year-old children immunized against measles	42 ^d	71	85 ^f	88	92.6	>90

Sources : ^aMoH (1996), ^bMoH et al. (2002), ^cMoHP et al. (2007), ^dMoHP et al. (2012), ^eCBS (2014b), ^fNPC (2005)

Note : Data from the nearest available year is used where data for the exact year is not available.

Child mortality has declined markedly in Nepal since 1990. The infant mortality rate (IMR) and the under-five mortality rate (U5MR) declined from 108 and 162 deaths per 1,000 live births in 1990 to 33 and 38 in 2014 (Table 4.1). The neonatal mortality rate (NMR) has come down from 39 deaths per 1,000 live births in 2001 (MoH et al. 2002) to

23 in 2014 (CBS 2014). Nepal thus achieved MDG Target 4.

There is, however, considerable variation in child mortality by eco-geographical and development region, with the IMR and U5MR ranging from 73 and 87 per 1,000 live births in the mountains to only 50 and 58 per 1,000

live births in the hills, with both higher in the Mid-Western (IMR 58 and U5MR 73) and Far Western (IMR 65 and U5MR 82) development regions compared to other regions. Child mortality in rural areas is higher than in urban areas, with an IMR of 55 and an U5MR of 64 in rural areas in 2011 (MoHP et al. 2012).

The decline in the IMR, U5MR and NMR has been more marked among women with secondary or higher levels of education than among those with no education. Similarly, the overall decline in childhood mortality has been more pronounced in urban than rural areas. The decline in IMR has been observed in all eco-geographical regions.

Nepal carried out national measles campaigns in 2005 and 2008 with subsequent dramatic decreases in measles-like outbreaks and laboratory confirmed measles cases

(NPC 2013b). The proportion of one-year-old children immunized against measles through routine immunization increased from 42 percent in 1990 to 92.6 percent in 2014, thus surpassing the MDG target of more than 90 percent of children by 2015. However, the coverage is not uniform. There are some disparities in access to anti-measles vaccination in terms of gender, wealth quintiles, rural-urban settings, eco-geographical and development regions.

The urban-rural difference in measles coverage is small, with children in urban areas slightly more likely to be fully immunized than rural children. There is a marked difference in immunization coverage between children of women with no education and children of women in other education groups. In terms of gender, boys are slightly more likely than girls to be immunized against measles (NPC 2013b).



Achievements Compared to Other Countries

Nepal is one of 10 fast track countries³ that are on-track to achieve MDG 4. Nepal notably has a lower IMR and U5MR than India and Bhutan (Table 4.2) among five South Asian countries.

Table 4.2: Achievements of South Asian countries on MDG 4

SN.	Countries	IMR ^a (per 1,000 live births)	U5MR ^a (per 1,000 live births)
1	Sri Lanka	8	10
2	Maldives	9	11
3	Bangladesh	33	41
4	Nepal	33 ^b	38 ^b
5	Bhutan	36	45
6	India	44	56

Sources: ^aWHO (2014), ^bCBS (2015b)

Policies, Programmes and Institutional Changes

Nepal's political commitment to improving child health, increased financial investment and the focused, coordinated and aligned efforts of the government, national and international NGOs, UN agencies, bilateral organizations and communities have been central to achieving improved newborn and child health (Smith and Neupane 2011).

Nepal has also achieved MDG 4 because of the improved coverage of interventions to prevent or treat the most important causes of child mortality through a variety of community-based and national campaign approaches (NPC 2013b). These include the high coverage of the semi-annual vitamin A supplementation and de-worming programme; the Community-based Integrated Management of Childhood Illness (CB-IMCI), Community Based-Integrated Management of Neo-natal

and Childhood Illness (CB-IMNCI), Community-Based Newborn Care Package (CB-NCP), high rates of full child immunization, and the coverage of the exclusive breastfeeding of children under-six months. The CB-IMCI programme has covered all Nepal's 75 districts while the CB-NCP has covered 41 districts. With the implementation of these programmes, children are diagnosed early and treated appropriately for major childhood diseases at health facility and community levels. These programmes have been credited with reducing U5MR by improving the effective management of pneumonia.

To vaccinate every eligible child involves targeting marginalized and hard-to-reach children. Access to routine vaccination has improved in villages and municipalities. The National Immunization Programme (NIP) has helped to reduce the burden of vaccine preventable diseases and child mortality and has contributed to achieving MDG 4. The National

3 Nepal, Bangladesh, Cambodia, China, Egypt, Ethiopia, Lao People's Democratic Republic, Peru, Rwanda and Vietnam



Immunization Programme follows a comprehensive multi-year immunization plan with all its vaccines provided free of cost. Altogether, 976 VDCs, 37 municipalities and 10 districts have been declared fully child immunized (MoHP 2014). This helps to achieve full coverage. The government has a National Immunization Fund while the Immunization Bill was approved by the Council of Ministers on 1 December 2014.

The National Newborn Care Package combines local strategies with global evidence about the community-based management of newborn infections, the promotion of newborn care practices and birth-preparedness programmes. An important component of the package is the treatment of sick babies (aged 0-28 days) at health facilities and in communities. Neonatal health is an integral part of the Safe Motherhood Pro-

gramme, and provisions have been made to deliver appropriate neonatal care at all health facilities.

Nepal has also seen the rapid expansion of private health care, which has improved access to health care. For example, in 2011, 24 percent of all children with diarrhoea were treated at private pharmacies (MoHP et al. 2012).

Resource Allocation Trends

Although the allocation of budget for MDG 4 has increased six-fold from FY 2002/03 to 2014/15 it has decreased as a percentage of the total health ministry budget over the same period. Expenditure of the allocated MDG 4 budget has also decreased over the same period (Table 4.3).

Table 4.3: MDG Target 4 budget allocation and use patterns in Nepal, 1990–2014/15
(in NPR 1,000)

Indicators	1990	2002/03	2005/06	2010/11	2013/14	2014/15
Total allocated health ministry budget	na	4,872,416 ^a	7,555,431 ^c	23,813,993 ^e	30,432,196 ^g	33,517,102 ⁱ
Total budget allocated for MDG 4	na	442,439 ^a	503,025 ^c	1,698,897 ^e	1,831,106 ^g	2,490,902 ⁱ
Allocation for MDG 4 budget in health ministry's budget (%)	na	9.1	6.6	7.1	6	7.4
Total actual expenditure from the allocated MDG 4 budget	na	286,132 ^b	377,638 ^d	904,121 ^f	745,261 ^h	na
Total MDG 4 budget use (%)	na	64.7	75.1	53.2	40.7	na

Sources: ^aMoF (2002), ^bMoF (2004), ^cMoF (2005), ^dMoF (2007), ^eMoF (2010), ^fMoF (2012a), ^gMoF (2013a), ^hMoF (2015a), ⁱMoF (2014a)

Unfinished Business

As all the MDG 4 indicators have been achieved, new targets need to be set for each indicator. Also, the NMR (per 1,000 live births) indicator should be added for monitoring. Disaggregated targets also need to be set for U5MR, IMR and NMR indicators for population categories and eco-geographical regions including recent federal states. The emergence of new problems (birth defects, drowning, child violence, injuries and accidents) and climate change add new difficult challenges for child health care that need to be addressed.

Nepal recently developed its SDG document (NPC 2015a). The proposed specific SDG 3 targets include reducing the preventable death of newborns and children to less than one percent, reducing the annual incidence of diarrhoea (per 1,000 under 5 year old children) and reducing the average prevalence of soil transmitted helminthes (intestinal worms) among school children to zero by 2030.

MDG Implementation Lessons for SDG Implementation

The prioritization of newborn and child health by the government and the focused efforts

of external development partners have been central to improving child health in Nepal (Smith and Neupane 2011). Nepal's progressive policy environment has developed rapidly since the introduction of the first National Health Policy in 1991. A series of effective programmes have since been implemented at different levels of the health system.

In the absence of functioning vital registration systems, Nepal uses data from censuses, studies and surveys to monitor child mortality rates and inform programme design (Ban et al. 2012; MoHP 2009). The national Health Management Information System (HMIS) tracks service use in the public health system and enables the monitoring of results and shaping of priorities and plans. Disaggregated data is used to assess progress against targets. Areas of poor performance are flagged during annual reviews so that action can be taken. Maternal death reviews have also been used to understand the causes of institutional deaths in selected referral hospitals (Malla et al. 2011) and there are efforts to link findings to government policy decisions. Perinatal death reviews as well as an updated process for maternal death surveillance and review have also been implemented in some hospitals and are being scaled-up across the country.



The National Immunization Programme reduced the proportion of children aged under 12 months who did not receive any of the six basic immunizations to three percent by 2011 (MoHP et al. 2012), contributed to polio elimination, and helped eliminate neonatal tetanus by 2015 (Vandelaer et al. 2009).

Although all the MDG 4 indicators have been achieved, there is a wide gap in the IMR and U5MR between different socio-economic groups and eco-geographical regions including rural and urban settings (MoHP 2013). Programmes now need to prioritise addressing population groups and areas with a higher NMR. Neonatal health is affected by other health and non-health programmes (e.g. birth spacing through family planning, mother's education through literacy programmes, and the reduction of indoor air pollution through environment programmes). Neonatal care in health facilities needs to be strengthened and the impact of the CB-NCP should continue to be evaluated

periodically using an operational research framework.

Other lessons are as follows:

- Community-based child health programmes should further use local community workers for developing culturally appropriate 'networks of safety' to decrease neonatal mortality and morbidity in rural Nepal.
- Inventories of cold chain equipment, vaccines, syringes, diluents, cold chain spare parts must be updated every month and monitored daily at every health facility.
- Cold chain equipment should be maintained periodically and shortfalls of equipment and related parts demanded and supplied immediately.
- Annual maintenance plans should be prepared for cold chain equipment.
- Some health facilities have installed solar power to overcome the power outages and frequent fuel shortages. This needs to be scaled up throughout the country for the constant maintenance of the cold chain.

And overall, Nepal must carefully examine, re-define, and reset the new targets in light of its aim to graduate from least developed country status within the next decade.

New Challenges — Disasters and Externalities

The extensive progress made on achieving MDG 4 needs to be sustained and accelerated. A major challenge is to better target the population and the indicators across the forthcoming federal states. The change of federal structure is likely to create new assumptions for the country's overall child health indicators.

The earthquakes of April and May 2015 put 18,000 babies' lives at risk (UNOCHA 2015) as a total of 1,227 health facilities (1,147 public and 80 private health facilities) were completely or partially damaged (NPC 2015b). Seventy to ninety percent of Nepal's birthing centres across the 14 most affected districts were damaged or completely destroyed (UNICEF 2015) as 84 percent of the completely damaged health facilities are in the 14 most-affected districts. This creates a huge challenge for the delivery of child health services (NPC 2015b).

Following the earthquakes, children in Nepal are at a greater risk of violence and sexual abuse. Vulnerable newborns are in desperate need of resources. Moreover, thousands of children have been displaced and left without a family and now run the risk of becoming victims of human trafficking (UNICEF 2015). The delay to care has been exacerbated due to an overwhelmed health infrastructure system and there is the risk that the treatment of the many acute injuries took precedence over child health.

Conclusions and Recommendations

Nepal achieved all the MDG 4 indicators. It must now re-define and reset new targets to universalize access to child health services, further reducing child mortality rates and ensuring that all Nepalese children are fully immunized.

- 1) The government should continue and increase its focus on newborn health.
- 2) Appropriately link the CB-NCP with other child health initiatives and carefully monitoring this integration.

- 3) Carry out further research to better understand the immediate causes of neonatal deaths; and use the findings to focus programme efforts.
- 4) Although the government has started to declare fully immunized VDCs, still some children do not receive immunization services. The listing of un-immunized children should therefore be updated so that no child is left behind.
- 5) Make the declaration of fully immunized children VDCs annually.
- 6) As Nepal's immunization programme heavily depends on external support, the government needs to increase its immunization budget from general taxation to achieve sustainable immunization.
- 7) Strengthen the monitoring and supervision of data reporting for the Health Management Information System, with strong leadership and accountability at all levels. Data should be recalculated using revised population sizes based on population census for local areas for improving data accuracy on immunization coverage.
- 8) Reallocate existing immunization staff at different levels and fill vacant vaccinator posts immediately.
- 9) Link vaccination programmes in urban areas with urban health centres
- 10) Carry out a neo-natal death and surveillance review system to inform improved quality of care and to minimize avoidable neonatal deaths. The operational research on neonatal death surveillance system needs to be the integral part of the overall indicators.



GOAL 5

Improve Maternal Health

In Nepal, maternal health is considered important for the overall development and wellbeing of the society. Many Nepalese mothers used to lose their lives every year due to avoidable causes.

Target 5A — Reducing Maternal Mortality

Target 5A: Reduce the maternal mortality ratio by three-quarters between 1990 and 2015

Status and trends of Target 5A

Table 5.1: Achievements on reducing maternal mortality in Nepal, 1990–2015 (Target 5A)

Indicator	1990	2000	2005 ^c	2010	2015	2015 Target
5.1. Maternal mortality ratio (per 100,000 live births)	850 ^a	415 ^b	281	na	258 ^e	213
5.2. Proportion of births attended by skilled birth attendant (percent)	7 ^f	11 ^g	19	36 ^h	55.6 ⁱ	60

Sources: ^aUNDP (1992), ^bNPC (2002), ^cMoHP et al. (2007), ^dMoHP (2009), ^eWHO et al. (2015), ^fMoH (1996), ^gMoH et al. (2002), ^hMoHP et al. (2012), ⁱCBS (2014b)

Note : Data from the nearest available year is used where data for the exact year is not available.

Nepal's maternal mortality ratio (per 100,000 live births) (MMR) has declined significantly since 1990. The first country MMR report showed an MMR of 850 per 100,000 live births in Nepal in 1990 (Table 5.1). Based on this, the target of 213 was set for 2015, i.e. a three-quarters reduction in 15 years. Nepal almost achieved the MMR reduction target in 2015. The MMR declined from 539 in 1996 to 258 in 2014 (according to global estimates in WHO

et al. 2015). There was no credible national estimate of MMR for 2015 and therefore the 2014 estimate is used.

Since 1990 an increasing number of women have been giving birth with the help of a skilled birth attendant (SBA). The proportion has increased nearly eight-fold from 7 percent in 1990 to 55.6 percent in 2014 (Table 5.1). Nepal thus almost achieved its

MDG target of 60 percent SBA deliveries by 2015.

The MMR and the proportion of SBA-attended births shows that Nepal was close to achieving MDG 5 by 2015. As with the other MDGs, the achievements have not been uniform across rural and urban settings, eco-geographical and development regions, and social, economic and age groups.

Achievements compared to other countries

Nepal is one of the 10 fast track countries on the achievement of MDG Target 5A.⁴ In spite of the great achievement on lowering the MMR Nepal still has the highest rate of maternal deaths compared to the other four South Asian countries featured in Table 5.2. The proportion of births attended by an SBA in Nepal is slightly lower than in Bhutan and India but higher than in Bangladesh.

Policies, programmes and institutional changes

Three major strategies have been taken in Nepal to reduce the risks of maternal death:

- Raising awareness on pregnancy complication and promoting birth preparedness and improving the availability of funds and transport for women in labour.
- Encouraging women to give birth in a health facility, which is free of charge.
- The expansion of 24-hour emergency obstetric and Neonatal care services (basic and comprehensive) at public health facilities.

The number of birthing centres is increasing with many new birthing centres now providing delivery care. The number of deliveries occurring in public and private health institutions is growing year by year (MoHP et al. 2012).

The revised National Safe Motherhood Plan (MoHP 2006) envisages comprehensive emergency obstetric care (CEOC) services in most (80 percent) of Nepal's districts. The plan called for 80 percent of all primary health care centres (PHCCs) to provide basic emergency obstetric care (BEOC) and 70 percent of all health posts to provide delivery services.

The Safe Abortion Policy (MoH 2003) calls for safe abortion services that are accessible and affordable for all women. The implementa-

Table 5.2: Comparison of Nepal with other South Asian countries on the achievement of MDG 5A

Countries	MMR ^a (per 100,000 live births)	Percentage of births attended by an SBA ^a
Sri Lanka	35	99
Maldives	60	95
Bhutan	180	58
India	200	58
Bangladesh	240	27
Nepal	258 ^b	55.6 ^c

Sources: ^aWHO (2014), ^bWHO et al. (2015), ^cCBS (2014b)

4 Nepal, Bangladesh, Cambodia, China, Egypt, Ethiopia, Lao People's Democratic Republic, Peru, Rwanda and Vietnam



tion of the policy has made a large contribution to reducing Nepal's MMR (NPC 2013b) by ensuring quality abortion services by building up the skills of health personnel through in-service training on safe abortion care.

Nepal has aimed to provide delivery care and services to meet local needs. The government has adopted innovative, context-specific strategies and has fostered a culture of using evidence to inform programme design. Research and pilot studies have shaped the design of interventions and strategies such as the birth preparedness package (BPP), the community-based distribution of misoprostol for preventing post-partum haemorrhage in home deliveries, the use of chlorhexidine for newborn cord care, and the identification and treatment of newborn sepsis at the community level. These interventions focus on the

continuation of care from pregnancy through birth and the early post-partum period, including the care of newborns. Misoprostol is included in the national essential drug list.

Nepal has focused on strategies to improve the provision of emergency obstetric and neonatal care (EmONC) resulting in a near three fold increase in the number of comprehensive EmONC facilities between 2004/05 and 2010/11 (MoHP et al. 2012). Almost all Nepal's districts provide birth preparedness packages and maternal and neonatal health care services at community level (misoprostol for home deliveries, chlorhexidine for newborn cord care, and the identification and treatment of newborn sepsis). The Aama Suraksha (safe motherhood) programme provides free delivery care and financial incentives to pregnant women to access a variety of maternity

services. It also provides payments to health facilities for deliveries. In some places a transport services is available to transport women in labour including rickshaws in the Tarai and stretchers in the hills and mountains. In some serious cases, airlift services are also provided. The Equity and Access Programme, which is being implemented in 20 districts, is also increasing the demand for institutional deliveries.

The quality of care in maternity facilities has been improved by strengthening the logistics and supply chain systems, improving routine information systems, addressing staff retention and capacity, and expanding maternal death and surveillance reviews. Maternal death reviews have been used to understand the causes of institutional deaths in selected referral hospitals (Malla et al. 2011) and there are efforts to link findings to government policy decisions. Perinatal death reviews as well as an updated process for maternal death surveillance and review have also been implemented in some hospitals and are now being scaled up across the country.

There has also been substantial financial investment in this area from external development partners (EDPs), particularly since 2004 when a sector-wide approach (SWAp) was

adopted to finance health care and improve aid effectiveness. This increased coordination and alignment between EDPs and government health priorities and plans. In 2011, EDPs contributed 39 percent of MoHP's services budget (DoHS 2011). Nepal was one of the first countries to participate in the International Health Partnership which promotes donor harmonization and SWAps.

Resource allocation trends

There has been a very large increase in the amount allocated for maternal health — it increased by nearly 25 times between 2002/03 and 2013/14. However, the pattern of budget expenditure (use) shows a decreasing trend in percentage terms with only 39.2 percent of the allocated budget used in 2013/14 (Table 5.3). The government reduced the allocation by 18 folds in FY 2014/15 compared to 2013/14 (NPR 800 million to NPR 43 million). The percentage of budget allocated for MDG 5 has also been decreasing from 2010/11 to 2014/15.

Unfinished Business

New targets have been set for Nepal's MMR (per 100,000 live births) and the proportion

Table 5.3: Budget allocation and use for MDG Target 5A, Nepal 1990–2014/15 (in NPR 1000)

Indicators	1990	2002/03	2005/06	2010/11	2013/14	2014/15
Total allocated budget for health ministry	na	4,872,416 ^a	7,555,43 ^c	23,813,993 ^e	30,432,196 ^g	33,517,102 ⁱ
Total allocated budget for MDG 5	na	32,152 ^a	35,817 ^c	783,229 ^e	800,902 ^g	42,946 ⁱ
Allocation for MDG 5 budget in health ministry's budget (percent)	na	0.6	0.5	3.3	2.6	0.1
Total actual expenditure from allocated MDG 5 budget	na	21,089 ^b	26,280 ^d	474,689 ^f	314,328 ^h	na
Total MDG 5 budget utilization (percent)	na	65.6	73.4	60.6	39.2	na

Sources: ^aMoF (2002), ^bMoF (2004), ^cMoF (2005), ^dMoF (2007), ^eMoF (2010), ^fMoF (2012a), ^gMoF (2013a), ^hMoF (2015a), ⁱMoF (2014a)

of births attended by SBA under the SDG maternal health target, SDG 3 in the recently developed SDG document (NPC 2015a). The proposed specific SDG 3 targets include reducing the MMR to less than 70 per 100,000 live births, and raising the proportion of births attended by SBAs to 90 percent by 2030.

MDG Implementation lessons

The prioritization of maternal health by the Government of Nepal and the concentrated efforts of EDPs have been instrumental in the good progress made on MDG 5 (Bhandari et al. 2011). Nepal's policy environment has developed rapidly since the introduction of the first National Health Policy in 1991. A series of effective programmes have since been implemented at different levels of the maternal and reproductive health system. The financial barriers to maternal health care have been addressed through the removal of user fees for delivery care and the financial incentives for institutional deliveries under the Aama Programme.

Prior to the liberalization and roll-out of safe abortion services, deaths from unsafe abortions were increasing (MoH 1996 and MoHP 2009). The roll out of safe abortion services since 2003 has been a major breakthrough for maternal health and has contributed to a reduction in abortion-related morbidity and mortality (Samandari 2012). However, it is unlikely that this programme substantially contributed to the greatly reduced MMR reported by the 2006 NDHS (MoHP et al. 2007), since the NDHS data was collected for the seven years prior to the study when for most of this period safe abortions were not available in Nepal (Hussein et al. 2011).

Existing policy is discouraging health workers from attending home deliveries. However, such deliveries, as long as they are conducted by SBAs, should not be disregarded in Nepal,



especially due to the preference of pregnant mothers for female health worker's involvement during deliveries.

It has been argued that the accurate identification of the causes of maternal deaths is not always possible. It can be a challenge for medical certifiers to attribute correctly the cause of death to direct or indirect maternal causes, or to accidental or incidental events, particularly in settings where deliveries mostly occur at home. Although the National Safe Abortion Policy (2003) has been implemented in Nepal, normally male partners are the main decision-makers on whether to terminate a pregnancy.

Although designated birthing centres have been established with 24 hour and seven days a week delivery services, many challenges remain for institutional delivery. Frequent load shedding, security risks for female health staff to work at night, inadequate equipment and health commodities mean that many birthing centres cannot provide quality round-the-clock maternity services.

Maternal mortality is higher among women from mountain districts, rural areas, and in certain caste and ethnic groups (MoHP 2009). Measures to address these disparities (some of which are already being implemented) could include: limiting the extent to which terrain and distance impact on the uptake of care (e.g. by strengthening community based outreach services), addressing financial barriers to reduce out-of-pocket spending on transportation, and establishing more rationally located, 24 hours functional and fully staffed birthing centres.

Poor referral networks coupled with the overcrowding of tertiary care is a major constraint and contributory factor to many maternal deaths, with some women being referred too late to an appropriate health facility, and further delays being caused by the lack of transport and poor communications between health facilities (NPC 2013b).

Nepal needs to invest in expanding the skill base, size and equitable distribution of its health workforce (of midwives in particular). Staff shortages remain an obstacle to quality care. The quality of training, particularly for SBAs, needs to be improved and retention strategies tested. Although task-shifting has, to an extent, mitigated some of the impact of health workforce shortages, measures are also needed to ensure that female community health volunteers (FCHVs) are not overburdened. The new health sector SDG targets need to be carefully considered in light of Nepal's aim of graduating from Least Developed Country status by 2022.

New challenges — disasters and externalities

MDG 5A was close to being achieved in 2015. The challenge is now to sustain and accelerate the pace of progress. Another challenge is

to set better targets and indicators under the new federal structure. The change to a federal system of government is likely to create new assumptions regarding the overall maternal health indicators of the country.

The 2015 earthquakes set back maternal health care in Nepal. Following the earthquakes, women in earthquake-affected districts were at greater risk of violence and sexual abuse. Pregnant mothers were in desperate need of resources and an average of 90 women a day needed a caesarean section in the most affected parts of the country (UNICEF 2015b). The delay to care was exacerbated by the overwhelmed health care system dealing with injuries sustained due to the earthquakes. After disasters, women have to focus on securing food, water and shelter for their families and often neglect their own health care, thereby increasing the risk of life-threatening complications including poor maternal outcomes. The fact that between 70 and 90 percent of birthing centres were damaged or completely destroyed in the 14 most earthquake affected districts (UNICEF 2015b) provides a great challenge to institutional births.

Conclusions and recommendations

Nepal was close to achieving MDG 5A in 2015. It now needs to focus on the new SDG targets with a view to universalizing maternal health services so as to further reduce the MMR and to have all births attended by an SBA.

- 1) As the number of deliveries in institutions grows, it is crucial that the quality of care is closely monitored in private and public facilities to prevent avoidable deaths and debilitating morbidities.
- 2) The carrying out of a maternal death and surveillance review is important for improving the quality of maternal care.

- 3) Increase the number of SBAs and raise awareness in communities that deliveries should be conducted by SBAs. At the same time, further develop a cadre of midwives to support the regular availability of quality maternal and neonatal health services.
- 4) Logically locate new health facilities to improve the access of the maximum number of people to a facility.
- 5) Strengthen referral systems from communities to CEOC sites.
- 6) Make operational research on the maternal death surveillance system an integral part of the overall indicators.

Target 5B— Access to Reproductive Health

Target 5B: Achieve universal access to reproductive health by 2015

Status and Trends of MDG Target 5B

Nepal considers family planning services as an integral part of maternal health as their

use is known to reduce maternal deaths. Large reductions in the MMR around 2006 have partly been attributed to the increased use of family planning services. The contraceptive prevalence rate (CPR) is one of the main indicators for monitoring and evaluating the national family planning programme. The CPR doubled from 24 percent in 1990 to 49.6 percent in 2014 (Table 5.4) while the total fertility rate (TFR) decreased from 5.3 per woman of reproductive age in 1995 (MoH 1996) to 2.3 in 2014 (CBS 2014b). The CPR target of 67 percent coverage was partially achieved by 2015.

Antenatal care from a skilled provider is important to monitor pregnancies and reduce the risk of mortality for mothers and babies during pregnancy and delivery. At least four antenatal care (ANC) visits by pregnant women as per the specified protocol are recommended for antenatal care. The national average of the fulfilment of four ANC visit as per the protocol increased from 14 percent of pregnant women in 2000 to 59.5 percent in 2014. However, there are wide disparities in attending four ANC services largely related to women's educational status. This indicator was only partially achieved in 2015.

Table 5.4: Achievements on access to reproductive health in Nepal, 1990–2015 (Target 5B)

Indicator	1990	2000	2005	2010	2015 ^e	2015 target
5.3. Contraceptive prevalence rate (modern methods) (percent)	24 ^a	35.4 ^b	44.2 ^c	43.2 ^d	49.6	67
5.4. Adolescent birth rate (births per 1,000 women age 15-19 years)	na	110 ^f	98 ^f	81 ^d	71	70
5.5 Antenatal care coverage:						
At least one visit (percent)	na	48.5 ^b	73.7 ^c	89.9 ^g	68.3	100
At least four visits (percent)	na	14 ^b	29.4 ^c	50.1 ^d	59.5	80
5.6 Unmet need for family planning (percent)	na	26.5 ^b	24.6 ^c	27 ^d	25.2	15

Sources: ^aMoH (1996), ^bMoH et al. (2002), ^cMoHP (2006), ^dMoHP (2012a), ^eCBS (2014b), ^fMoHP (2010), ^gDoHS (2010a)

Note : Data from the nearest available year is used where data for the exact year is not available.

The unmet need for family planning is the indicator of the unfulfilled demand for contraception among women of reproductive age. Married women reporting an unmet need for family planning in Nepal decreased from 27 percent in 2010 to 25.2 percent in 2014. Also, large disparities exist in rates of modern contraceptive use, and levels of unmet need vary substantially by place of residence. This target was only partially achieved by 2015. The adolescent fertility rate among women aged 15-19 years dropped from 110 per 1,000 in 2000 to 71 per 1,000 in 2014 (Table 5.4) indicating that the MDG target for this indicator was partially achieved in 2015.

Achievements compared to other countries

Only the Maldives has a lower CPR rate than Nepal while Nepal had the highest unmet need for family planning in 2015 among six South Asian countries (Table 5.5). Nepal's MDG 5B status is relatively poor compared to the other South Asian countries.

Policies, programmes and institutional changes

The focused united efforts of the government and development partners and the large financial investments have been essential for improving reproductive and maternal health outcomes in Nepal (Bhandari et al. 2011).

There has been a successful focus on institutional delivery, antenatal care, post-natal care and family planning through financial incentive programmes. The Aama Programme provides incentives to mothers to access ANC and PNC services. The government has given priority to ensuring that women have access to at least four ANC visits during their pregnancies.

Nepal has a clear commitment to maternal and reproductive health and a willingness to apply local context specific approaches to addressing challenges as well as a progressive and flexible approach to the use of research to drive maternal health policy and address the challenges of reaching remote and marginalized populations.

The government has declared a policy on running the family planning programme according to the concept of a managed family (children by choice not by chance). The government has focused on making contraceptives available at all levels of health facilities, and at the community level through FCHVs. Also wage compensation has been given to family planning service users and a financial incentive is provided to service delivery teams to carry out vasectomies, minilabs and other methods.

The National Adolescent Sexual and Reproductive Health Program Implementation Guide (FHD 2011), as endorsed by the government,

Table 5.5: Comparison of Nepal with other South Asian countries on achievement of Target 5B

Countries	CPR ^a (modern methods) (percent)	Unmet need for family planning ^a (percent)
Sri Lanka	68	7.3
Bhutan	66	6.5
India	56.3	12.8
Bangladesh	55.5	16.8
Nepal	49.6 ^b	25.2 ^b
Maldives	34.7	na

Sources: ^aWHO (2014), ^bCBS (2014b)

includes reproductive rights of adolescents in the context of access to adolescent sexual and reproductive health (SRH) services along with education and treatment of sexual abuse. The guide calls for youth-friendly services in health facilities, and awareness-raising activities at the local level with support from schools and local organizations. MoH is committed to providing adolescent SRH activities.

National Adolescent Health and Development Strategy (FHD 2000) is in place to guide the government and its partners on improving access to and the coverage and quality of the adolescent health and development programme. MoH is taking the lead and started implementing a number of adolescent health activities.

The Nepal Health Sector Programme 2 (NHSP 2, 2010–2015) emphasized universal access to reproductive health, including modern contraception.

Unfinished Business

The MDG 5B indicator of the adolescent birth rate (births per 1,000 women aged 15-19 years) has been closely achieved and a new target needs to be set. The MDG “The unmet need for family planning” indicator should be revised to “The unmet need for family planning among those currently living with their husband or partner” for beyond 2015.

The proportion of deliveries in health facilities (percent), the percentage of ever-married women aged 15-49 years with a low body mass index (BMI <18.5), the total fertility rate (births per women), and family planning current users (all modern methods) should be added for beyond 2015 as Nepal’s SDG indicators. Targets for these indicators need to be set including disaggregated data for population categories and eco-geographical regions including the new federal states.

The following maternal and reproductive health concerns also need to be addressed beyond 2015: gender-based violence, the excessive use of emergency contraceptives, uterine prolapse, anaemia, HIV and AIDS, cancer (particularly breast, uterine, and cervical cancer) and other non-communicable diseases, and the effects of climate change.

Nepal recently developed its SDG preliminary document (NPC 2015a). Proposed SDG 3 targets for 2030 are a CPR (modern methods) of 75 percent, institutional deliveries for 90 percent of all deliveries, 90 percent of mothers undertaking 4 ANC visits and PNC, an adolescent fertility rate (births per 1,000 women aged 15-19) of 30, a TFR (births per women) of 2, unmet need for family planning of 10 percent, and a prevalence of uterine prolapse among women of reproductive age group (15-49 years) of 0.1 percent by 2030 (NPC 2015a).

Lessons from MDG Implementation

Nepal’s health sector has responded positively to the strong national mandate to improve gender equality and social inclusion. The engagement of communities with the public health sector improved through programmes such as the Equity and Access Programme, a women’s empowerment and rights-based community mobilization programme (Malla et al. 2011).

Spousal separation played a major role in the decline in fertility in Nepal between 2006 and 2011, followed by a decreasing proportion of married women (MoHP 2013). In addition, the increased provision of family planning services through NGOs and social marketing agencies expanded access to family planning services and commodities. Family planning programmes have contributed to improving the CPR, which is an important contributing factor to fertility decline and thus reduced mater-

nal mortality (Saifuddin et al. 2012). Although there is an implementation guide (FHD 2011) on the reproductive rights of young people related to access to information, education and services and the treatment of sexual abuse, the division of roles between district level partners and the functions of the Reproductive Health Coordination Committee is not clear. Although the monitoring of family planning services is considered important to track on-going activities, it is not working up to the satisfactory level.

To further reduce total fertility (which would help reduce maternal and child mortality) disparities in contraceptive use need to be addressed, and the reasons for the non-use of contraception and the factors associated with early childbearing need to be better understood (MoHP 2006). An improved mix of contraceptives, with less reliance on sterilization, is also needed. It has been observed that people are using safe abortion services and emergency contraceptive pills as an alternative to other more appropriate types of family planning.

The improvements in girls' levels of education had changed attitudes to teenage marriage and early pregnancy. The adolescent birth rate has dropped from 110 births per 1,000 women aged 15-19 years in 2001 to 71 in 2014. This important shift, mainly as a result of girls' education, has led to women becoming more empowered and aware about their own health.

Giving emphasis to the continuum of care (ANC, delivery care and PNC) to address the three delays (delay in seeking, reaching and receiving care) is highly recommended but difficult to implement. The proportion of women attending four ANC visits as per the protocol is below the desired level although ANC coverage has improved. Moreover, the functionality of outreach clinics located near to communities is sub-standard in many cases thus discouraging pregnant women from using ANC services. Moreover, they are not able to walk long distances to get ANC services from far away health facilities. Traditional cultural practices such as staying indoors for 12 days after delivery, and social norms including



menstrual separation (*chhaupadi*) limits their use of delivery, newborn care and PNC services for mothers and newborns (NPC 2013b). The new targets must be examined carefully, redefined, and localized in light of the national commitment to graduating from Least Developed Country by 2022.

New challenges — disasters and externalities

Nepal's reproductive health challenges are to accelerate progress, achieve the new targets and better target the population under the new federal structure.

The 2015 earthquakes set back reproductive health care in Nepal. When disasters strike, SRH issues are low priorities despite the clear demand for such services. After disasters, prenatal care declines rapidly as expectant mothers focus on securing food, water and shelter for their families. It is a great challenge to provide reproductive health services to earthquake affected people as 84 percent of Nepal's health facilities in the 14 most affected districts were completely damaged (NPC 2015b).

Conclusions and recommendations

Nepal partially achieved three of the four MDG 5B indicators. It must now redefine and localise the SDG targets to universalize access to quality reproductive health services and increase the number of skilled health service providers to reduce the unmet need for family planning and increase access to ANC and PNC.

- 1) Discourage the use of abortion as an alternative for family planning and encourage post-abortion family planning.
- 2) Raise awareness of appropriate family planning methods and on safe, accessible and legal abortions.

- 3) Future strategies should focus on integrating comprehensive sex education in schools.
- 4) Target family planning services to adolescents (especially newly married couples) and expand the range of available methods including implants and female condoms to delay early child bearing and maintain birth spacing.
- 5) Make high quality family planning services an integral part of maternal health by integrating family planning services into reproductive health services in private and public hospitals.
- 6) As many husbands and wives live away from their spouses, it is essential to gather disaggregated data to calculate the real unmet need for family planning. It is recommended to calculate the unmet need for family planning among women currently living with their husbands.
- 7) Address the unmet need for family planning through public-private partnerships.
- 8) As pregnant women are not able to walk far for ANC services, these services should be accessible closer to communities and the quality of services should be improved.
- 9) Improve the attitudes of communities and families on the gender and reproductive roles of women and their rights. Encourage a rights-based approach to health that empowers women to understand and claim their health rights. To effectively claim these rights women must be able to access sound information on reproductive health and understand it through discussions, then raise their voices for change and to obtain redress.
- 10) Make evidence based research (preferably operational research) on accessing reproductive health services an integral part of the overall SDG indicators.



GOAL 6

Combat HIV/AIDS, Malaria and Other Diseases

Targets 6A and 6B — HIV/AIDS

Target 6A: Have halted and begun to reverse the spread of HIV/AIDS by 2015

Target 6B: Achieve universal access to treatment for HIV/AIDS for all those who need it by 2015

The prevalence of the human immunodeficiency virus (HIV) has drastically declined in Nepal among 15-24 year olds from 0.15 percent in 2005 to 0.03 percent in 2014, an 80 percent drop in new HIV infections over 10 years. HIV prevalence in Nepal (15-49 year olds) has halted and began to reverse, as it was 0.3 in 2005 and 0.2 in 2015. New infections among 15-24 year olds have reduced by 80 percent. The epidemic is driven by sexual transmission (85 percent of cases) with most infections coming from low risk populations and men who have sex with men (MSM). However, the latest data shows that only 65.8 percent of 15-24 year olds used a condom during their last sexual encounter and only 36.4 percent of them have comprehensive knowledge of HIV and AIDS (Table 6.1). Out of all the estimated people living with HIV, only 26.5 percent were enrolled in antiretroviral therapy (ART) as per the latest data. The HIV response is underfunded with the Government of Nepal funding only 8 per-

cent of the response. The national response to HIV has, however, been institutionalized in national policy and there is a National HIV/AIDS Strategy (2011-2016), which was built on the achievements, lessons learned and experiences gained in implementing HIV/AIDS strategy 2006 to 2011 (NCASC 2011).

Most of the MDG tuberculosis (TB) targets have been met and the status of most of the indicators is improving. Despite these improvements TB remains a public health concern that demands long-term investment to achieve the related SDG target.

Nepal stands at the malaria pre-elimination phase following a substantial reduction in malaria incidence and zero death rates. Still, there are concerns about the gradual reduction of indigenous *Plasmodium vivax* cases, the inconsistency of much data, lack of information on some indicators, growing drug resistance, and the spread of malaria beyond the plain areas.

Status and trends of Targets 6A and 6B

Table 6.1: Achievements on reducing the spread and treating HIV/AIDS in Nepal, 1990–2015 (Targets 6A and 6B)

Indicator	1990	2000	2005	2010	2013	2015	2015 target
6.1 HIV prevalence among men and women aged 15–24 years (percent)	na	na	0.15 ^a	na	0.12 ^b	0.03 ^c	Halt and reverse the trend
6.2 Condom use at last high-risk sexual encounter among 15–24 year olds	na	na	71.2 ^a 15-49 year old males	na	65.8 ^d	65.8 ^d	
6.3 Percentage of population aged 15–24 years with comprehensive knowledge of HIV/AIDS	na	na	35.6 ^a	na	29.8	36.4 ^e	M: 50 F: 40
6.4 Proportion of population with advanced HIV infection receiving antiretroviral combination therapy (percent)	na	na	na	21 ^d	28.7 ^f	26.5 ^c	80

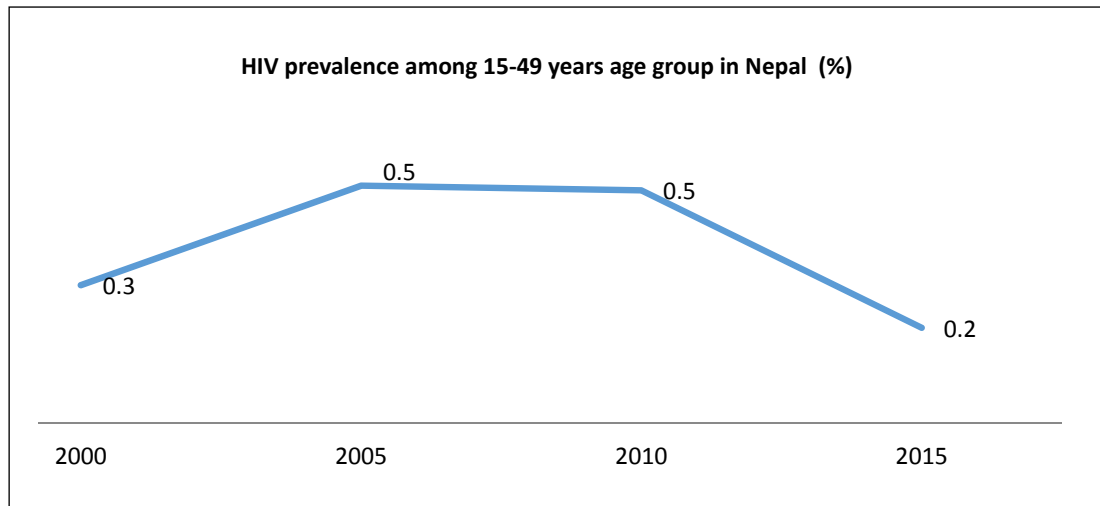
Sources: ^aNCASC (2006), ^bNCASC (2011), ^cNCASC (2014a), ^dMoHP et al. (2012), ^eNCASC (2009), ^fCBS (2015b), ^gNCASC (2012)

The estimated HIV prevalence among Nepal's adults (15-49 year olds) decreased slightly from 0.3 percent in 2000 (UNAIDS 2000) to 0.2 percent in 2014 (NCASC 2014a). However, the HIV infection rate was increasing until 2005

and remained almost the same for the following five years when it decreased significantly from 0.5 percent to 0.2, an almost 60 percent drop from the 2010 estimate (Figure 6.1). Since 2010 it has remained within the range of



Figure 6.1: Prevalence of HIV among 15-49 years of people in Nepal



Sources: UNAIDS (2000) and NCASC (2014a)

0.2–0.3 percent. It is estimated that the number of people living with HIV has decreased from 60,808 in 2007 to 39,249 in 2014. There were only an estimated 1,493 new cases in 2014, and the number is expected to decrease to 899 by 2020.

The HIV epidemic is largely driven by sexual transmission, which accounts for more than 85 percent of total HIV new infections (NCASC 2015a). The AIDS Epidemic Model for Nepal (NCASC 2015b) highlighted that most infections come from low risk populations and MSM. Of total new adult infections in 2014, 34 percent come from low risk husband–wife transmissions, 41 percent from low risk males (external infections and migrant sexual intercourse) and 8 percent from male to male sex. Thus, only 25 percent of total infections come from key population groups like people who inject drugs (PWID) (8 percent), male sex workers (MSWs) (2 percent), the clients of MSWs (6 percent), MSM (8 percent), and female sex workers (FSWs) (1 percent). The overall prevalence of HIV among FSWs during the MDG period remained within 2 percent with an increasing trend of HIV infection among street-based FSWs, while prevalence among PWIDs

decreased drastically — it decreased among Kathmandu PWIDs from 68 percent in 2002 to 6.3 percent in 2011 (NCASC 2012). Likewise, prevalence among MSM remained unchanged at around 3.8 percent but among MSWs it increased from 4.8 percent in 2004 to 6.8 percent in 2012 (NCASC 2012). This shows that current interventions are not adequately tailored to prevent the so-called low risk husband to wife transmissions compared to the interventions for the key populations who have improving sexual and injecting behaviours.

Although nearly 66 percent of youths aged 15–24 used a condom at their last high risk sexual encounter, only 36 percent of the same age group had comprehensive knowledge of HIV/AIDS (MoHP et al. 2012). By the end of 2014, there were 10,407 people on ART (26.5 percent of total estimated cases), which is a very low proportion against the 2015 MDG target of 80 percent. However, the number of HIV infected people taking ART has increased from 7,719 in 2012 to 10,407 in 2014.

Among the four South Asian countries featured in Table 6.2 only India has a higher rate of HIV prevalence than Nepal.

Table 6.2: Levels of HIV prevalence in Nepal and three other South Asian countries

Indicator	India	Nepal	Sri Lanka	Bangladesh
People living with HIV (15-49 years old, percentage)	0.26	0.2	0.02	0.01

Sources: <http://mdgs.un.org/unsd/mdg/Data.aspx>

Policies, programmes and institutional changes

One and a half decades ago, the National AIDS Policy, 1995 (MoH 1995) was adopted with 12 key policy statements that focused on multi-sectoral efforts, coordination and cooperation to stem the HIV epidemic in Nepal. The policy created an enabling environment for mobilizing resources and addressing the HIV epidemic. Three strategic plans (2002-2006, 2006-2011, 2011-2016) were subsequently implemented (NCASC 2011). This resulted in the control of the infection rate among some high-risk groups and the meeting of the HIV MDG. Similarly, the Nepal Health Sector Implementation Plans 1 and 2 and the Nepal Health Sector Strategy (2015-2020) had have

HIV prevention and control as Priority 1 programmes. Considering the changed situation the National Policy on AIDS and STD control (1995) was revised in 2011.

The National Strategy Plan 2011-2016, is the key document to implement the 2011 revised policy. It provides a guiding framework for the national response, whilst the Nepal HIV Investment Plan 2014-2016 (NHIP) is a yearly action plan for 2014-2016. Various national HIV testing and treatment guidelines have been produced, revised and compiled into the National Consolidated Guidelines for Treating and Preventing HIV in Nepal (NCASC 2014b). Similarly, new comprehensive guidelines have been produced that encompass clinical recommendations on treatment, care, the elimination



of vertical transmission (eVT), as well as HIV testing and counselling (HTC) services as per World Health Organization standards. Community-based HIV testing and counselling has been adopted to reach out to the most affected key populations with community-led initiatives to support the 'Test, Treat and Retain' strategy.

Apart from the National Consolidated Guidelines for Treating and Preventing HIV in Nepal, the Ministry of Home Affairs (MoHA) has endorsed the National Guidelines on Opioid Substitution Therapy (OST) (2014), which call for scaling-up OST programmes, and maintaining the quality and retaining users of OST (that includes methadone and buprenorphine) in the programmes. Likewise, the National Strategy on HIV Drug Resistance Monitoring and Surveillance (2014-2020) has been endorsed as a strategic framework for the monitoring and surveillance of the emergence and transmission of HIV drug resistance (HIVDR). The National Public Health Laboratory and NCASC prepared an HIV Viral Load Testing Scale-up Plan (2014-2018) in 2014. An assessment of the Legal and Policy Environment in Response to HIV in Nepal was carried out in 2014 and recommended an HIV bill and the amendment on existing acts and bylaws to ensure the rights of people living with HIV (PLHIV) (NCASC 2015a). These achievements indicate a congenial policy environment for the national response to HIV. Over the MDG period Nepal has mobilized resources from domestic and international sources including the Global Fund to Fight AIDS, Tuberculosis and Malaria, USAID, DFID and other development partners as well as from various I/NGOs (NCASC 2015b).

As of July 2015, there are 61 ART centres spread across the country to provide antiretroviral therapy free of cost as per the national

guideline (NCASC 2015a). There are 28 CD-4 counting centres in Nepal to monitor the HIV status of patients that help to start and monitor the therapy. The National Centre for AIDS and STD Control (NCASC) has helped enhance the capacity of stakeholder organizations by developing training guidelines and protocols and by supplying goods for the prevention, care and treatment of HIV/AIDS. There are 263 HIV counselling and testing (HCT) sites in the country which provide counselling and testing services as well as linkages to ART, TB and for eVT. These centres have only tested an estimated 61 percent of PLHIV and have linked only 26 percent of cases to ART. The number of sites offering eVT services has increased to 95 across 45 districts. However, eVT coverage had reached only 32.5 percent in 2014 (NCASC 2015b)

Resource allocation trends

Exact figures on the allocation of resources for HIV in Nepal are difficult to ascertain because of the numerous funding sources for HIV programmes. However, the government has invested around 10 percent of the total HIV-related budget while about 90 percent of funding has come from EDPs in the last three fiscal years (DoHS 2015a). The HIV budget amounts to about three percent of the total health budget (Table 6.3). The AIDS Epidemic Model (AEM) (NCASC 2015b) reports that in 2014, Nepal spent \$20-22 million on HIV and AIDS whereas the estimated resources needed to implement the Nepal HIV Investment Plan (2011-2016) were about \$45 million. Of the money spent, about 60 percent went on prevention and treatment for key affected populations. The 2015 model clearly shows that the country needs continued investments in the HIV response to prevent a resurgence of the epidemic and to end AIDS by 2030 (NCASC 2015b).

Table 6.3: Resource allocation on Nepal's HIV programme, (NPR in 1000)

Fiscal year	Govt. budget		Donor budget		Total HIV Budget	% of total health budget	% of total national budget	Total health budget	Total national budget
	NPR	Percent	NPR	Percent	NPR	Percent	Percent	NPR	NPR
2011/12	49,442	7.5	610,512	92.5	659,954	2.7	0.2	24,657,885	384,900,000
2012/13	102,821	15.3	569,786	84.7	672,607	3.3	0.2	20,240,361	404,824,700
2013/14	48,004	5.9	765,867	94.1	813,871	2.7	0.2	30,432,196	517,240,000

Sources: Annual Reports of Department of Health Services [FY 2011/12, FY 2012/13, FY 2013/14]

Policy and institutional changes

Although the HIV prevention coverage (number of HTC sites) in Nepal is increasing, the use of HIV testing and sexually transmitted infection (STI) services is low as is ART coverage. Although Nepal's HIV epidemic is largely driven by unsafe sexual behaviour, condom use at last high-risk sexual encounter is not at 100 per cent. The evidence shows that prejudice and discriminatory attitudes towards MSM, third gender persons and MSWs exists at health service delivery points, which hinders their access to health care services, especially for STI treatment. The roll out of community based testing (CBT) for HIV and STI is expected to expand the coverage range of HTC and ART. In addition to underfunding, the timely disbursement of funds remains a serious challenge in targeted interventions for MSM, third gender, third gender sex workers, MSWs and their clients, that hampers the uptake of HIV prevention services. The clinical services for FSWs and mobile populations are another challenge as such people are often not able to come for regular follow up. Moreover, FSWs' access can be disrupted by law enforcing agencies acting against them which leads to them moving elsewhere. The targeted interventions for key populations were effective; however, as the HIV epidemic has shifted to low risk male and female populations in communities, and community interventions for safe sexual behaviour

have yet to be implemented, there is a high chance of the resurgence of the HIV epidemic. The implementation of the OST programme is also not speeding up as expected due to the limited available sites, lack of strategic communication, inadequate unified medical and social services, insufficient incentives for retention, and the absence of female-friendly services.

One of the significant achievements during the MDG period was the remarkable decrease in HIV prevalence among PWID, but these people have a high prevalence of viral hepatitis. Likewise, addressing diagnostic challenges has also become a major issue in the management of TB-HIV co-infections. Co-infections of viral hepatitis among PWID living with HIV and the co-infection of TB among people living with HIV in general, have yet to be systematically addressed (NCASC 2015a).

Unfinished business

SDG 3 is dedicated to ensuring healthy lives and promoting wellbeing for all at all ages. One target of this goal is to end the AIDS epidemic. There needs to be a steady and consistent decline in HIV infection for ending AIDS. The AIDS Epidemic Model shows that Nepal's HIV response is underfunded. The country needs continued investment on the HIV response to prevent a resurgence of the epidemic. A total of \$30 million per year

needs to be invested to test and treat all HIV infected people. The country needs to scale up HIV testing and treatment for key populations with innovative approaches such as decentralizing testing to communities and expanding the use of rapid tests (CBT) to increase HIV testing and link positive people immediately to HIV care. Evidence-based prevention interventions for key affected populations, such as community-led interventions, behaviour change communication, condom programmes (for MSM) and harm reduction for PWID should be continuously enforced. Targeted interventions for low risk couples and MSM need strengthening as these groups are the main lines of transmission. The country should apply 'Test, Treat and Retain' options to all as a significant number of infections are being carried by returning migrants. The HIV response needs to be a vertical programme integrated into existing SRH programmes. The government should increase its financing of ART services.

MDG implementation lessons

Lessons for SDG implementation — Nepal's HIV response has been underfunded by the government. Although the government identifies HIV as a Priority 1 programme it only allocates around 10 percent of the needed budget. This calls into question the sustainability of Nepal's HIV response.

Although the National Policy on HIV and STI (2011) called for a national AIDS Council (a high level committee chaired by the prime-minister) and an HIV/AIDS and STI Control Board (HSCB), neither are adequately functional. The HIV prevention and control programme needs to be fully integrated into the national health system. Health workers and systems should be empowered to diagnose, treat and care for HIV infected people. This will accelerate access to ART to reach all people

with advanced HIV infection requiring ART.

Lessons for LDC graduation by 2022 — The HIV prevention and control programme has mobilized significant external funds but has not mobilized internal funds especially from the government. As a result, there is a large risk of resource deficiency and the possible discontinuation of current interventions. This could contribute to a resurgence of the HIV epidemic. However, there is a well-coordinated mechanism and programme that has been consolidated and achieved good results continuation which helps the achievement of the LDC graduation goal.

The HIV prevention and control programme has been designed as a one programme, one institution and one monitoring mechanism programme. A strategic plan and programme document have been developed and implemented with the participation of all major stakeholders.

New challenges — disasters and externalities

It's always a challenge to continue providing regular health care services in the aftermath of major disasters. Considering the lessons learned from the 2015 earthquakes, a separate plan and mechanism need developing to address the ART needs of HIV positive people during disasters.

The HIV response largely relies on external funding, which may not be reliable as donor's priority keeps on changing.

Conclusions and recommendations

Conclusions

HIV prevalence in Nepal has halted and begun to reverse. HIV among men and women aged

15–24 years has reduced by 80 percent and the concentrated HIV epidemic is largely driven by sexual transmission with the most infections coming from low risk populations and MSM. HIV prevalence among injecting drug users drastically reduced from 68 percent to 6.3 percent in Kathmandu during the MDG period, but only 66 percent of young people used a condom during their last sexual encounter and only 36 percent of them had comprehensive knowledge of HIV and AIDS. Of the estimated people living with HIV, very few people are enrolled in ART. The HIV response is underfunded and the government contributes only 8 percent. The national response to HIV has been institutionalized along with a policy and strategic plan to end the AIDS epidemic by 2030.

Recommendations

- 1) Expand the national response to HIV prevention and control to expand HIV testing and the new and continued treatment of PLHIV with ART.
- 2) As the HIV epidemic is largely driven by unsafe sexual practices, encourage safer

practices through comprehensive sex education in and out of schools.

- 3) Gradually increase government funding of the HIV response and mobilise resources from different sources as per the Nepal HIV investment plan and policies.

Target 6C — Malaria

Target 6C: Have halted and begun to reverse the incidence of malaria and other major diseases by 2015

Status and Trends of MDG Target 6C — Malaria

According to the micro-stratification report (DoHS 2013), 13.02 million (47.9 percent of the population) Nepalis reside in malaria endemic village development committee areas (VDCs), of which, one million (3.6 percent) dwell in the 54 high risk VDCs. The overall national clinical malaria incidence (CMI) and annual parasite incidence (API) rates stood at 1.7 and 0.11 respectively in 2015 (Table 6.4) (DoHS

Table 6.4: Achievements of MDG Target 6C on reducing incidence of malaria in Nepal, 1990–2015 (Target 6C)

Indicator	1990	2000	2005	2010	2013	2015	2015 target
6.5 Clinical malaria incidence (per 1,000 people)	na	na	3.3 ^a	5.7 ^b	3.3 ^c	1.7 ⁱ	Halt and reverse the trend
6.6 Annual parasite incidence (per 1,000 people)	na	0.55 ^d	0.28 ^a	0.11 ^b	0.08 ^e	0.11 ⁱ	0.06
6.7 Death rate associated with malaria (per 100,000 people at risk)	na	na	0.05 ^f	0.04 ^b	0.00 ^e	0 ⁱ	Halt and reverse the trend
6.8 Percentage of children under five with fever who are treated with appropriate anti-malarial drugs	na	na	3.2 ^f	2.8 ^b	na	na	2.5
6.9 Percentage of children under five who sleep under a long-lasting insecticide-treated bed net	na	na	48.2 ^f	94.2 ^g	96.8 ^h	na	100

Sources: ^aDoHS (2007), ^bDoHS (2010b), ^cDoHS (2011), ^dDoHS (2001), ^eDoHS (2012a), ^fDoHS (2006), ^gPSIT Study (2010), ^hDoHS (2012b), ⁱDoHS (2015b).



2015b). Nepal has witnessed a remarkable decline in the CMI since 2010, although the rate increased between 2000 and 2005. The API rate has also declined over the last 13 years, although in 2015 it went slightly up (DoHS 2015b). The official statistics reveal malaria deaths in the last two years (DoHS 2012b and 2015b). About 2.8 percent of children under five with fever were treated with appropriate anti-malarial drugs in 2010, a 12 percent decrease from 3.2 percent treated five years earlier (DoHS 2011). The percent of children under five sleeping under long-lasting insecticide-treated bed nets (LLINs) doubled from 48.2 percent in 2005 to 96.8 percent in 2012 (DoHS 2012b) putting the 2015 target of full coverage well within reach.

A remarkable reduction in malaria incidence has been achieved since the beginning of the MDG period. Another major accomplishment is the constant drop in deaths due to malaria from 2005 to 2015, with no recorded deaths in

the last three years (DoHS 2007, DoHS 2010b, DoHS 2012b and 2015b).

Despite the continuous fall in the API rate between 2000 and 2013 (DoHS 2007, DoHS 2010a, DoHS 2011, DoHS 2012b) a slight increase occurred in the rate in 2015 with the rate standing at 0.11 (DoHS 2015b). This indicator is on the way to achieve the target of 0.06 incidences per 1,000 people. The CMI rate did not lessen between 2005 and 2010 although significant declines of 42 percent between 2010 and 2011 and a 47 percent reduction between 2013 and 2015 occurred, thus enabling the country to achieve the MDG of halting and reversing the CMI rate.

The target of treating under-5 year old children with fever with appropriate anti-malarial drugs, was reached very early in 2005, although the rate of treatment dropped off in 2010 (DoHS 2010b). The percentage of children under 5 years who slept under LLINs

Table 6.5: Nepal's achievement compared to two other South Asian countries, 2015 (Goal 6C, malaria)

Indicators	Nepal	India	Sri Lanka
Deaths associated with malaria (per 100,000 people at risk)	0	4	0

Sources: ^aMoHP (2012b), <http://mdgs.un.org/unsd/mdg/Data.aspx>

doubled from 48.2 percent in 2005 to 96.8 percent in 2012, putting the 2015 target of full coverage within reach (DoHS 2007; DoHS 2012b). Provided that the trend continues, it is expected that 100 percent of children under 5 years will sleep under LLINs by 2015.

The improvements signify the noteworthy achievements of Nepal's malaria control programmes. The achievement of two major targets and the considerable reduction in malaria incidence means that Nepal has achieved MDG Goal 6 - Malaria. The vision of a malaria-free Nepal in 2025 may not be too far off. Nepal now has a lower death rate from malaria than India (Table 6.5)

Policies, programmes and institutional changes

Nepal's malaria control programme dates to 1954 when it principally focused on the Tarai belt in central Nepal. It was followed in 1958 by the National Malaria Eradication Programme, which was transformed into a control programme in 1978. The World Health Organization initiated the Roll Back Malaria (RBM) in 1998 in Nepal to control malaria transmission in Tarai forests, foothills, the inner Tarai and hill river valleys.

This programme is a Priority 1 programme of the government's essential health care package (DoHS 2012b). MoHP is implementing a strong malaria control programme in line with the Nepal Malaria Strategic Plan, 2011–2016. The major strategies have been to improve the coverage and quality of indoor residual spraying, extend the use of LLINs, increase access to rapid malaria diagnosis, and pro-

vide powerful artemisinin-based combination treatments (DoHS 2014).

National and international partners, principally The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), have supported the achievement of the MDG malaria targets. The substantial progress made can be attributed to this support and improved social determinants of health, increasing access to diagnostic tools, the availability of powerful anti-malarial medicines and the very high coverage of LLINs in targeted endemic areas (DoHS 2014).

A notable achievement is the strong institutional mechanism, with institutional activities operating in endemic sites in accordance with the national guidelines. The following have all contributed to reducing malaria incidence and deaths in endemic area: malaria microscopy services, case-based surveillance, the escalating coverage and quality of indoor residual spraying, the extensive coverage of LLINs, the growing accessibility of rapid diagnostic tests, artemisinin-based combination treatments and the improved microscopy capacity resulting from training courses run by the Vector Borne Disease and Research Training Centre.

Trends in resource allocation

It is difficult to arrive at a reliable figure on resource allocation for Nepal's malaria control programme. The Global Fund has been the major source of funding since 2004 (DoHS 2014). The available data shows that only one percent of the total health budget has been allocated for malaria control most of which comes from external development partners (Table 6.6)

Table 6.6: Resource allocation for Nepal's malaria programme, 2011/12–2013/14 (NPR in 1000)

Fiscal year	Govt budget		Donor budget		Total (malaria budget)	% of total health budget	% of total national budget	Total health budget	Total national budget
	NPR	%	NPR	%					
2011/12	44,810	46.0	52,577	54.0	97,387	0.4	0.0	24,657,885	384,900,000
2012/13	25,050	9.5	239,923	90.5	264,973	1.3	0.1	20,240,361	404,824,700
2013/14	59,626	16.5	301,043	83.5	360,669	1.2	0.1	30,432,196	517,240,000

Sources: DoHS (2012), DoHS (2013), DoHS (2014)

Unfinished business

A number of agendas need attention under the SDGs to sustain the current achievements and enter the elimination stage. These agendas are malaria interventions in hill areas in light of the influence of global warming, strategies to eliminate indigenous *Plasmodium vivax* cases, capacity building on data management, and the revision of treatment protocols to address drug resistance.

MDG Implementation lessons

Lessons for SDG implementation — Interventions and the capacity building of health workers has reduced malaria cases and achieved the zero death rate. But this achievement is limited to 25 districts and 1,254 VDCs (DoHS 2014). In recent years, due to global warming and climate change, malaria cases are emerging in higher altitude areas outside these 1,254 VDCs. Also, the slow rate of decline of indigenous *Plasmodium vivax* cases poses a challenge for eliminating malaria (DoHS 2014). There is wide variation in district level achievements probably due to differences in geography and ecology and to population movement trends (DoHS 2013/14). The reliability and precision of some data is questionable while information is lacking on some MDG indicators.

The significant progress in the fight against malaria in Nepal has been possible due to the

commitment from partners and vibrant partnerships among all stakeholders with increasing resources that have been mobilized in a coordinated way. It has also been due to innovations in treatment and the programmes' integration in community and health systems. The benefits of multi-sectoral involvement and the ownership of malaria prevention and control by community and health systems have been key lessons for sustainable development.

Nepal's malaria control programme has mostly been implemented through the government's health service delivery system involving multiple partners and stakeholders and the building of institutional capacity. However, the information management system needs strengthening. And as the incidence of malaria is spreading continuous scrutiny is needed of the incidence of malaria. Special attention should go to the effects of climate change, drug resistance, and indigenous *Plasmodium vivax* cases.

Lessons for LDC graduation by 2022 — No malaria-related deaths have been reported in Nepal over the past few years. This has contributed to the achievement of other MDG goals such as under five-child mortality, which is one of the criteria of the Human Assets Index (HAI). Moreover, the malaria eradication programme has had a positive effect on health status, and has built confidence among health workers that partnership and multi-sectoral involvement can bring health care successes. This lesson can contribute to Nepal's LDC graduation.

New challenges — disasters and externalities

The changeover to a federal system of government entails major challenges in efficient and effective resource allocation for malaria programmes across the new provinces (states). A greater concern is to build the capacity of local bodies to deal with disease like malaria. The widespread damage to health facilities by the April and May 2015 earthquakes could also be an obstacle to sustain the progress made in malaria control programme. Other major challenges include the effects of global warming and migration on the spread of malaria, and the development of drug resistance by *Plasmodium* species.

Conclusions and recommendations

Nepal's entering of the malaria pre-elimination phase, makes the SDG target reachable with the aid of evidence-based interventions, a strong institutional mechanism, effective information management, and public-private partnerships. Global warming, drug resistance, and the slow decline in

indigenous *Plasmodium vivax* cases are the main remaining challenges that need more attention. The main recommendations are as follows:

- 1) Introduce innovative treatments for malaria.
- 2) Strengthen malaria prevention.
- 3) Strengthen the political commitment for mobilizing resources and evidence-based programming on malaria.

MDG Target 6C — Tuberculosis

Target 6C: Have halted and begun to reverse the incidence of malaria and other major diseases by 2015

Status and trends of MDG Target 6C

The overall MDG target of halting and reversing TB incidence by 2015 has been achieved with the estimated incidence rate falling by an average of 1.6 percent per year from 2010 to 2014. There was a large reduction in the prevalence of TB cases between 2000 and 2014 with the death rate associated with TB

Table 6.7: Achievements on reducing the incidence of tuberculosis in Nepal, 1990–2015 (Target 6C)

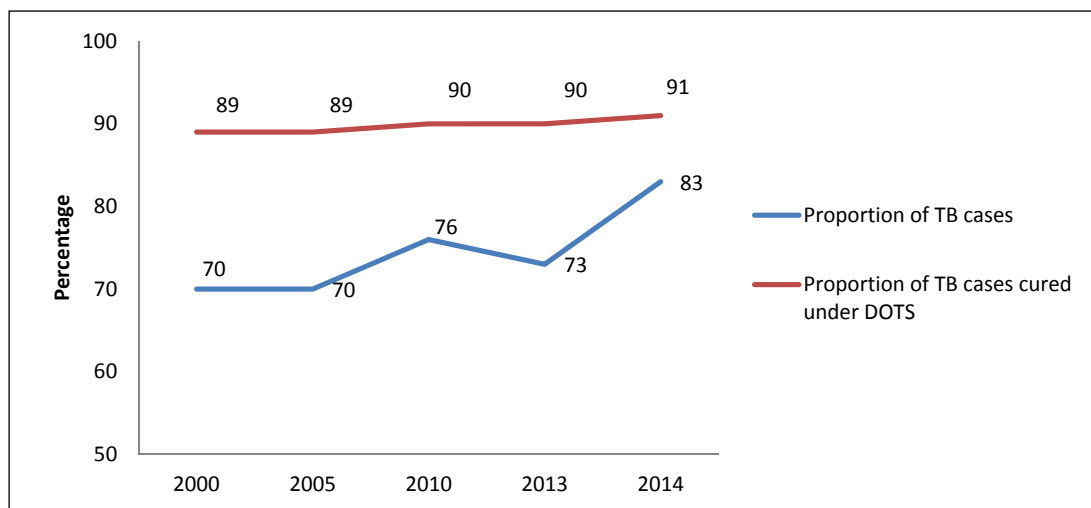
Indicator	1990	2000	2005	2010	2013	2015	2015 target
6.10 Prevalence rate associated with TB (per 100,000 population)	460 ^a	310 ^b	280 ^c	244 ^d	238 ^e	211 ^j	Halt and reverse the trend
6.11 Death rate associated with TB (per 100,000)	43 ^a	23 ^b	22 ^c	22 ^d	21 ^e	20 ^j	Halt and reverse the trend
6.12 Proportion of TB cases detected	na	70 ^f	70 ^g	76 ^h	73 ⁱ	83 ^k	85
6.13 Proportion of TB cases cured under DOTS	40 ^a	89 ^f	89 ^g	90 ^h	90 ⁱ	91 ^j	91

Sources : ^aNTC (1990), ^bNTC (2000), ^cNTC (2005), ^dNTC (2010), ^eWHO (2011), ^fDoHS (2002), ^gDoHS (2007), ^hDoHS (2010b), ⁱDoHS (2011), ^jNTC (2014), ^kDoHS (2014), WHO (2014)

DOTS : Directly Observed Treatment Short course

Note : Data from the nearest available year is used where data for the exact year is not available.

Figure 6.2: Proportion of TB cases and cured TB cases, 2015



Sources: NTC (2000), NTC (2005), NTC (2010), NTC (2014); DoHS (2002), DoHS (2007), DoHS (2010b), DoHS (2011), DoHS (2013), DoHS ((2014)

also reducing (Table 6.7). There has also been a significant improvement in the case finding rate in the MDG period although the target has not been achieved. Another major indicator of TB is the cure rate under the Directly Observed Treatment Short course (DOTS), which was achieved in 2014 (Table 6.7).

About 45 percent of Nepal's population is infected with TB, and of them 60 percent are adults (DoHS 2011). Every year, 40,000 people develop active TB, and of them half are infectious and can spread the disease. The prevalence and death rates associated with TB per 100,000 people declined markedly between 1990 and 2014, from 460 to 211 and 43 to 20 respectively. (DoHS 2011), while the

proportion of TB cases detected increased slightly from 70 percent in 2000 to 83 percent in 2014. Thus the MDG target of halting and reversing TB incidence by 2015 has been achieved as the estimated incidence rate fell by an average of 1.6 percent per year between 2010 and 2014 (NTC 2014). The proportion of TB cases cured under DOTS has been commendably maintained at around 90 percent since 2000 (Figure 6.2). The overall achievements have been remarkable as the prevalence and death rates have declined and the proportion of TB cases cured has increased by more than hundred percent since 1990 (Table 6.7). Nepal's achievements are comparable to those of India and Sri Lanka (Table 6.8).

Table 6.8: Comparison of Nepal's TB achievements with two other South Asian countries (Target 6C)

Indicators	Nepal	India	Sri Lanka
Tuberculosis death rate per year per 100,000 population	17	19	5.9
Tuberculosis detection rate under DOTS, percentage	78	58	66
Tuberculosis treatment success rate under DOTS, percentage	91	88	86
Tuberculosis prevalence rate per 100,000 population	211	211	283

Sources: <http://mdgs.un.org/unsd/mdg/Data.aspx?cr=524> (2015)

Policies, programmes and institutional changes

The global target defined by the World Health Organisation to diagnose at least 70 percent of the estimated number of sputum smear positive new cases of TB and successfully treat at least 85 percent of registered TB cases has been met in Nepal since 2002/03 through partnerships with the private sector, medical colleges and communities. In 2006, the Nepal Tuberculosis Programme (NTP) endorsed the New Stop TB Strategy (MoHP 2010) as a national policy for enhancing public private partnerships. The NTP started to engage private, public and co-operate health providers in programmes and activities. The urban TB control programme has helped control TB in urban areas.

In 2006, a Practical Approach to Lungs programme was developed to achieve the objectives of the NTP, particularly in terms of detecting TB cases. This contributed significantly to meeting the MDG target.

The adoption of the TB/HIV strategy and policy (2008) by NTP contributed to the prevention and control of TB–HIV co-infection. Also, several programmes and activities are ongoing which have supported the achievement of MDG 6C including the programme against multi-drug resistant TB and extremely drug resistant TB that has been running since 2005.

The formulation of a comprehensive national strategy for 2010 to 2015 to stop TB has also contributed to tackling the TB epidemic.

Resource allocation trends

It is difficult to ascertain the actual national resource allocation for TB prevention and treatment as this may not match the figures given in the annual DoHS reports. A little over 4 percent of the annual health budget is allocated for the national TB programme of which about 90 percent comes from external development partners (Table 6.9).

Policy and institutional changes

The implementation of the DOTS strategy, the New Stop strategy, the public-private provision strategy, the TB/HIV strategy, the urban TB related programme and the multi-drug resistant TB programme have helped achieve the MDG TB targets. The establishment of DOTS centres in collaboration with public health facilities has also been an important factor for the sustainability of TB related interventions.

However, policy and programme lacunas remain. The inconsistency in TB cure data demonstrates problems with the information management system while the emergence of multi-drug resistant TB cases is a serious concern.

Table 6.9: Resource allocation for Nepal’s tuberculosis programme, 2011/12–2013/14 (NPR in 1000)

Fiscal year	Govt budget		Donor budget		Total TB budget	% total health budget	% of total national budget	Total health budget	Total national budget
	NPR	%	NPR	%	NPR	percent	percent	NPR	NPR
2011/12	123,251	11.6	936,867	88.4	1,060,118	4.3	0.3	24,657,885	384,900,000
2012/13	61,382	8.1	692,888	91.9	754,270	3.7	0.2	20,240,361	404,824,700
2013/14	164,370	11.8	1,225,040	88.2	1,389,410	4.6	0.3	30,432,196	517,240,000

Sources: DoHS (2012a), DoHS (2013), DoHS (2014)

Unfinished business

Despite the achievement of the MDG targets, TB remains a public health problem in Nepal. The SDGs need to focus on increasing government ownership of the TB programme, tackling the problem of multi-drug resistant TB and improving information management.

MDG implementation lessons

Lesson for SDG implementation — The TB programme extensively involves the government system alongside the significant involvement of non-state sectors. The further involvement of government facilities is needed for the sustainability of the TB programme. Also, the management information system needs further attention. The institutional and human resource capacity for diagnosing TB using advanced technology needs to be further enhanced to increase accuracy and the timely diagnosis and treatment of TB cases. Also, the proper follow up of cases for adherence to treatment is needed to minimize the risk of multi drug resistance.

Lesson for LDC graduation by 2022 — This goal might not contribute directly to LDC graduation. However, while implementing the National TB programme, health systems has been strengthened through a collaborative approach and public and private partnership that will be continued and sustained. The experiences that have been learnt from the implementation of the programme might be useful to adopt for the government's LDC graduation initiatives.

Tuberculosis mostly affects poor people. The National TB programme had successfully reached communities with a high prevalence of TB and has targeted TB patients.

TB cases have been detected and treated by health workers in local health facilities. The national programme has built the national capacity that will be instrumental in ending the TB epidemic in Nepal.

New challenges — disasters and externalities

The achievement of most of the TB related MDG targets is remarkable given the chronic political instability and inadequate resources; but the sustainability of these achievements is questionable. It will be a major challenge to maintain the same level of priority and resources (financial and human) under the new federal setup and to tackle multi-drug resistant TB. Also, the 2015 earthquakes led to many people dropping below the poverty line, which puts them more at risk of contracting TB.

Conclusions and recommendations

Nepal has made major achievements against the MDG TB targets. The country has increased the institutional capacity, health worker capacity and the level of awareness of TB among the population, although TB remains a public health concern. The main challenges under the SDGs are to maintain achievements, tackle multi-drug resistant TB and incorporate the programme in the changed administrative setup.

Tuberculosis is a public health problem that is compounded by the emergence of multi-drug resistance. The main recommendation is to increase government funding to deal with the emergence of multi-drug resistance and sustain the achievements of the TB programme as most such funding comes from external sources.



GOAL 7

Ensure Environmental Sustainability

MDG 7 addresses the concern for sustainable development to reverse environment degradation and loss with a focus on improving and monitoring energy and climate change, forests and biodiversity, water and sanitation and slums. The four sub-goals cover sustainable development, reducing biodiversity loss, drinking water and sanitation and the living standards of slum dwellers.

Target 7A — Sustainable Development

Target 7A: Integrate the principle of sustainable development into country policies and reverse the loss of environmental resources

Status and trends

Table 7.1: Achievements on CO₂ emissions and energy consumption in Nepal, 1990 to 2015 (Target 7A)

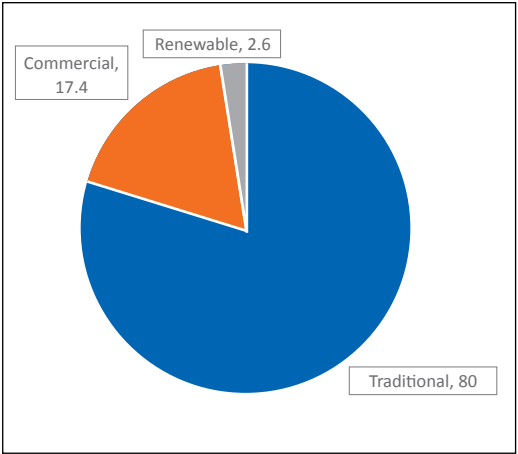
Indicators	1990	2000	2005	2010	2015	Remarks
7.1 CO ₂ (annual) emission per capita (tonnes)	na	na	0.2 ^a	0.14 ^l	0.1 ^m	Very low level of emissions
7.2 Consumption of all ozone-depleting substances (tonnes) ^b	25.0 ^{b1}	99.2	0.9 ^{b2}	na	1.2 ^j	Meets Montreal protocol
7.3 Energy consumption (ToE) K	6,847	7,759	8,616	9,876 ^h	11,232 ^k	Very slow increasing trend
7.4 Commercial energy use per unit of GDP (toe/mRs)	1.4 ^c	3.9 ^c	3.6 ^c	3.7 ^d	3.2 ⁱ	Almost constantly declining since 2000
7.5 Proportion of people using wood as their main fuel	75 ^c	67.7 ^c	69.1 ^c	68.4 ^g	53.8 ^l	Declining
7.6 Proportion of people using LPG as their main fuel	na	7.7 ^e	8.2 ^f	12.3 ^g	28.7 ^l	Increasing

Sources : ^aUNDP (2005), ^bindexmundi.com/Nepal (b1:1991 data, b2: 2004 data), ^cNPC (2005), ^dMoF (2008), ^eCBS (2002), ^fWECS (2006), ^gCBS (2009) (2007 data), ^hUNDP (2013) (2009 status), ⁱDWSS (2011) (2010 status), ^jwww.indexmundi.com (status 2009), ^kMoF (2015b) (2013/14 data), ^lCBS (2015b), ^mNPC (2015a)

Note : Data from the nearest available year is used where data for the exact year is not available.

Energy is fundamental to living and sustainable socioeconomic development. Energy intensity, defined as the energy inputs associated with a unit of gross domestic product (GDP), is a measure of the energy efficiency of a nation's economy. Nepal's energy status in Nepal is given in Table 7.1.

Figure 7.1: Share of energy use (percent) in Nepal (2013/14)



Sources: MoF (2015b)

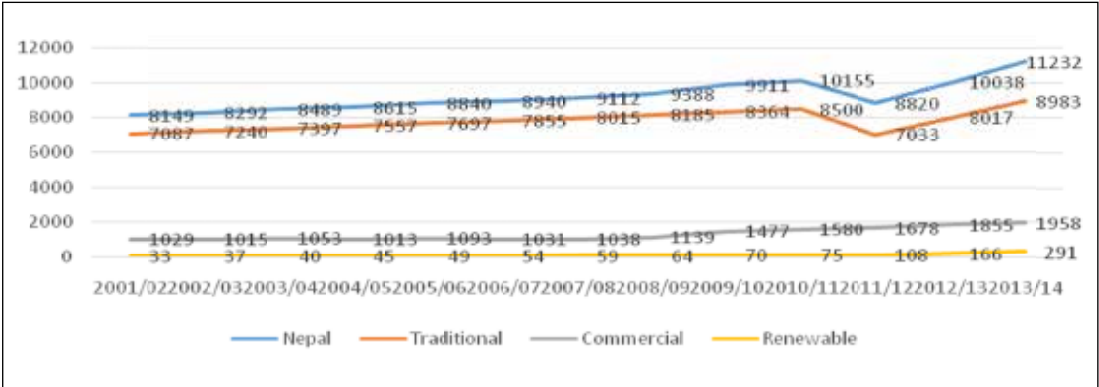
There has been limited analysis on greenhouse gas (GHG) emissions in Nepal. The World Resources Institute (WRI 2015) reported

that Nepal emitted 37.37 metric tonnes of CO₂ in 2010 (excluding land use and forestry), which amounted to 0.1 percent of the global total. In Nepal, the agricultural sector is the largest greenhouse gas emitter (68 percent), followed by the transport and industrial sectors (each 12 percent), and 5 percent by the commercial sector (NPC 2015a). Nepal's annual CO₂ emissions were 0.1 tonnes per capita in 2011/12, which is negligible compared to the global average of 4.5 tonnes per capita (UNDP 2013). The annual emissions of CO₂ per capita in Nepal reduced from 0.2 tonnes in 2005 to only 0.14 tonnes in 2010. This amounts to only 0.01 percent of the global total amount.

Nepal consumed only 99.12 tonnes of ozone-depleting substances in 2000. Nepal became a party to the Montreal Protocol in 1989 and has since been successfully implementing programmes for reducing the consumption of ozone depleting substances, which have now been virtually eliminated from the country.

The share of energy consumption in 2013/14 was as follows: traditional 80 percent, commercial 17.4 percent, and renewable 2.6 percent (Figure 7.1).

Figure 7.2: Energy consumption by main sector (2013/14)



Sources: MoF (2015b)

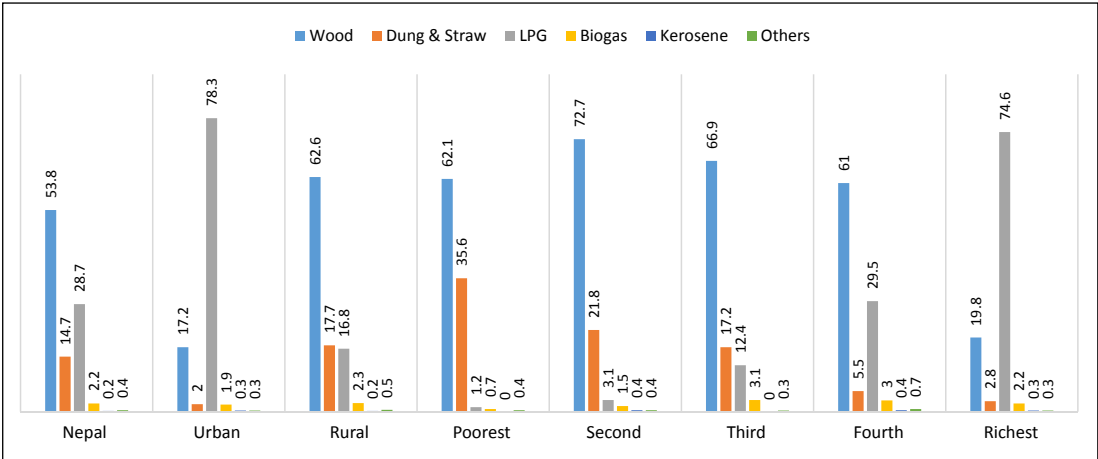


The overall energy consumption per unit of GDP in Nepal shows a slow increasing trend of about 2 percent per annum from 7,759 tonnes of oil equivalent (ToE) in 2000 to 11,232 ToE in 2013/14 (CBS 2013, MoF 2015b) (Figure 7.2), which is not a satisfactory energy efficiency growth. Commercial energy use per unit of GDP (ToE/mRs) increased more than 2.5 times between 1990 and 2000, after which it has fluctuated between 3 and 4 ToE/mRs, and then remained almost constant or declined (NPC and UNCTN 2013).

Firewood has declined from being the major cooking fuel for 67.7 percent of sample households in 2000 to 53.8 percent in 2015 — a 14 point reduction. However, firewood accounted for the main source of cooking fuel of 62.6 percent of rural households in 2013/14 (Figure 7.3). In 2015 liquid petroleum gas (LPG) was the second main source of cooking fuel increasing from being the

main cooking fuel of 7.7 percent of households in 2000 to 28.7 percent of households in 2015, a four times increase. In urban areas, nearly four out of five (78.3 percent) households use LPG for cooking compared to only 16.8 percent of rural households. The use of LPG has increased rapidly in urban and rural households and in the commercial sector. Leaves, straw and cow dung are the main cooking fuel for 14.7 percent of the population (mainly poor rural households). Biogas and kerosene are the main fuel of a few households (CBS 2015a). Firewood is the main cooking fuel of lower economic quintile households (more than 60 percent) while it is the main cooking fuel of only 19.8 percent of highest quintile households. Households in the mountains and the Far-Western Development Region rely heavily on firewood for cooking. Thus, the nation remains heavily reliant on traditional energy sources for cooking (MoF 2015b).

Figure 7.3: Main fuel used for cooking by consumption quintile (in percent)



Sources: CBS (2015a)

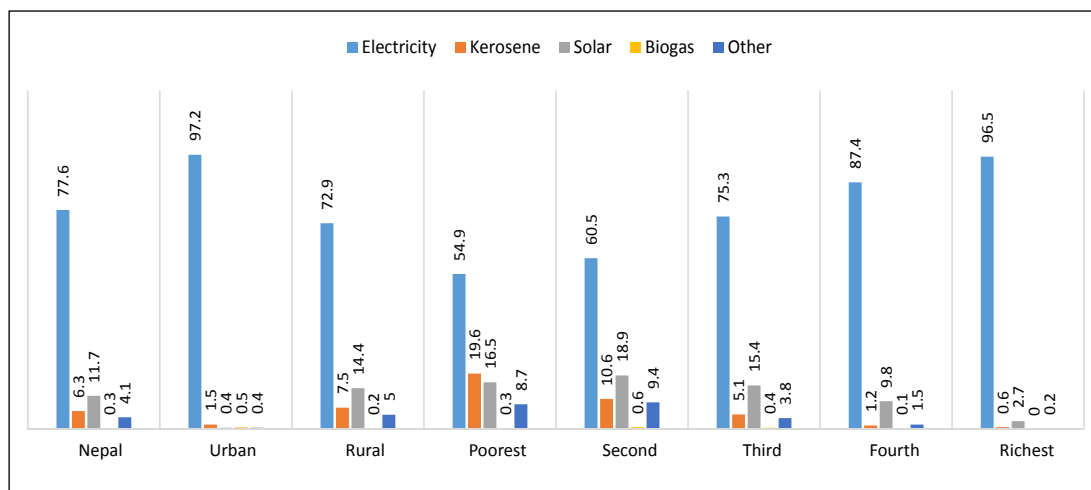
Electricity has become the prime source of lighting for Nepalese households as 77.6 percent of them reported electricity as the source of lighting in 2013/14 (CBS 2015a) (Figure 7.4). The percentage of households using electricity as their main source of lighting was 97.2 percent in urban and 72.9 percent in rural areas. The number of households using solar energy is gradually increasing. Almost 11.7 percent of households reported solar energy as their main source of lighting. Kerosene is

the main source of lighting for 6.3 percent of households. Nearly, 97 percent of the richest and only 54.9 percent of the poorest households use electricity as their main source of lighting. Solar energy is also becoming popular among lower quintile and rural households (Figure 7.4).

Although access to grid electricity is increasing the supply is unreliable with many hours of daily power cuts in the dry season.



Figure 7.4: Main source of lighting by households consumption quintile, Nepal, 2013/14 (in percent)



Sources: CBS (2015a)

The government has prioritized renewable energy and there has been good progress on the use of renewable energy technologies. Between 2010 and mid-2015 the installation of micro hydropower and biogas plants increased by 50 percent, of solar photovoltaic home systems by 150 percent, and of improved cooking stoves by 200 percent (Table 7.2). The Alternative Energy Promotion Centre (AEPCC), with support from the European Union under the Energy Sector Assistance Programme (ESPA), made important contributions to improved health, better education and reduction of poverty of the country by supporting the increased use of hydro, solar, improved cook stoves and biomass energy to rural populations as well as building AEPCC's capacity as the national resource centre for alternative energy promotion.

Note that Nepal has the lowest per capita electricity consumption in Asia at only 93 units compared to an average of 806 units for other Asian countries (Baral and Kim 2014).

Policy, programmes and institutional changes

The Constitution of Nepal (2015) recognizes the 'right to live in a clean environment'. Nepal has formulated policies and strategies to create an enabling environment for generating and expanding energy services using hydropower and other renewable resources. The Water Resources Act 1992, Water Resources Strategy 2002 and National Water Plan 2005 and the task force reports for Generating 10,000 MW hydropower in 10 years are

Table 7.2: Status of renewable energy in Nepal

Technology	Unit	2010	2014-2015	Potential
Micro hydropower plants	kW	15,621	24,440	>100,000
Solar photovoltaic home systems	No.	221,152	553,308	4.5 kWh/m ² /day
Biogas plants	No.	221,286	338,473	1,900,000
Improved cooking stoves	No.	415,649	1,262,594	>2,500,000

Sources: AEPCC (2010), AEPCC (2015)

some of these policies and plans (NPC 2015a). The Approach Paper for the Thirteenth Plan (2013/14-2015/16) (NPC 2013a) focuses on public–private partnerships for developing hydropower, renewable energy and transmission lines, particularly climate change-friendly developments (NPC 2013a). The Water and Energy Commission Secretariat (WECS) is developing plans to embrace Integrated Water Resource Management (IWRM).

However, the subsidy policy for Renewable Energy (2013) has not successfully mobilized people and communities in remote and very remote areas, and poor households are mostly deprived of such energy services due to the high costs of installing renewable energy technology and the low capacity of the institutions involved in developing renewable energy services at the local level.

The Climate Change Vulnerability Index (CCVI) 2011, reported that Nepal was the fourth most vulnerable country to climate change (Maplecroft 2011), and one of the few pioneer

countries to promote a clean and renewable energy path for low carbon emissions. In early 2011, Nepal announced its climate change policy. The Ministry of Science, Technology and Environment (MoSTE) has begun implementing the most urgent and immediately needed actions under the National Adaptation Programme of Action (MoEn 2010) through local agencies for activities as well as leadership and community-based management of Local Adaptation Plans of Action (MoEn 2011). The country agreed to the Cancun Adaptation Framework of 2010 and advocates a country-led process in instruments such as REDD+ and the Clean Development Mechanism (CDM). The country is in the process of preparing methodologies, mechanisms and programmes for REDD (NPC 2015a). The Ministry of Federal Affairs and Local Development (MoFALD) issued an Environment Friendly Local Governance Framework (MoFALD 2013b), for environment friendly local development by encouraging environmental protection activities by local bodies. However, environmental issues are not given a high priority by the

Target 7B — Reduce Biodiversity Loss

Target 7B: Reduce biodiversity loss, achieving by 2010, a significant reduction in the rate of loss.

Status and trends of MDG 7B (biodiversity)

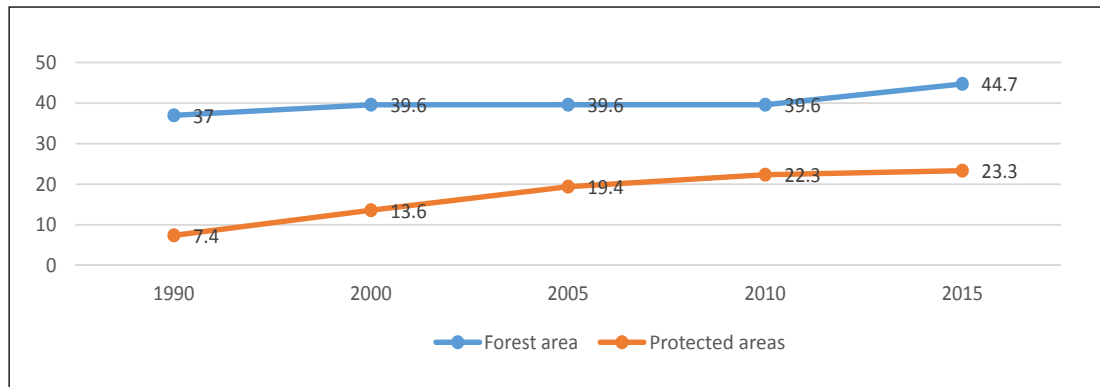
Table 7.3: Achievements on reducing biodiversity loss in Nepal, 1990 to 2015 (Target 7B)

Indicators	1990	2000	2005	2010	2015	Remarks
7.7 Proportion of land area covered by forest (percent)	37 ^a	39.6 ^b	39.6 ^b	39.6 ^{b*}	44.7 ^h	Increasing trend
7.8 Proportion of fish stocks within safe biological limits	na	na	na	na	na	Lack of data
7.9 Proportion of total water resource used (percent)	na	na	6.7 ^d	na	10 ^g	Lack of data
7.10 Proportion of terrestrial area protected (percent)	7.4 ^c	13.6 ^c	19.4 ^c	22.3 ^e	23.3 ^f	Impressive
7.11 Proportion of species threatened with extinction (percent)	na	na	na	na	0.4 ⁱ	Lack of data
7.12 Area of forest managed under community forests (million ha) ^c	0.01	1.0	1.2	1.2	1.8 ^c	Impressive

Sources: ^aMoFSC et al. (1988), ^bDFRS (1999), ^cMoFSC (2015, unpublished), ^dWECS (2005), ^eDNPWC (2010), ^fDNPWC (2012), ^gNPC (2015b), ^hDFRS (2015), ⁱCBS (2013)

* UNDP (2013) reported a forest area of 25.4 percent in 2010.

Figure 7.5: Proportion of forest and terrestrial area, Nepal, 1990–2015 (percent)



Sources: MoFSC et al. (1988), DFRS (2015)

government due to the lack of inter-agency coordination (NPC 2007). Another reason for weak implementation is the inadequate investment in environmental sectors.

Development activities undertaken to improve the living standard of people often adversely affect the natural environment and severely threaten biodiversity. Significant progress has been made on reducing the rate of biodiversity loss mainly by increasing the area under forests, protected areas and community forestry (Table 7.3).

In 2015 forests occupied 40.4 percent (5.96 million ha) and other wooded land 4.4 percent (0.65 million ha) together representing 44.7 percent of Nepal's total land area (DFRS 2015) (Figure 7.5). The country maintained 39.6 percent of forest area (29 percent forest cover plus 10.6 percent under shrubs) from 2000 till 2010. It is community forest management, particularly in the Midhills, that has most contributed to maintaining forest coverage.

The protected area system has also significantly contributed to forest and wildlife conservation in Nepal. These areas covers 34,356.62 square kilometres or 23.3 percent of the country's area (CBS 2014a), almost twice the global average of 12 percent (UN 2009), and more than 17 percent of terrestrial areas as suggested by the Convention on Biological

Diversity (UN, 1992). Nepal has 20 protected area including 10 national parks, 3 wildlife reserves, 1 hunting reserve, 6 conservation areas as well as 12 buffer zone areas (CBS 2013). The protected area almost doubled between 2000 and 2013.

Nepal's Himalayan Mountains are one of 34 global biodiversity hotspots. Given its relatively small size, Nepal has high species richness, especially for birds, angiosperms and medicinal and aromatic plants (MoFSC 2014). A total of 12,480 plant and 11,706 animal species have been described from Nepal. By taxonomic group 0.4 percent of all species in Nepal are threatened (86 faunal and 9 floral species) (CBS 2014a). The degradation and loss of habitat, poaching and illegal wildlife trade, human-wildlife conflicts, invasion by alien plant species, and climate change are the major drivers of the threat to biodiversity. The government has put 39 faunal and 17 floral species on its protection list and the SDG target is to protect 95 faunal and 60 floral species by 2030 (NPC 2015a). No data is available for the country's fish stocks and threatened species. Nepal has 225 billion cubic metres of water available annually; although only 10 percent of this is used for human purposes (NPC 2015a).

The expansion of Nepal's protected areas since the 1990s is due to the application of community-based participatory resource management.

Similarly, as of the end of September 2015, under the community forestry programme, about 1.8 million ha of forests (51.4 percent of potential community forestry area) had been handed over to 18,960 community forest user groups involving 2.4 million households or almost 44 percent of all Nepal's households (MoFSC 2015, unpublished).

Policies, programmes and institutional changes

The Constitution of Nepal, 2015 calls for keeping necessary landmass as forests in order to strike an environmental balance and to facilitate the sustainable use of biodiversity through the conservation and management of forests, fauna and flora. The government has formulated an array of progressive legislation and regulations for environmental conservation, although implementation and enforcement tend to be weak.

The Ministry of Forests and Soil Conservation, as the focal point for National Convention on Biological Diversity (2013), has pursued policies and strategies for implementing its Herbs and Non-Timber Forest Products Policy, 2006; National Wetland Policy, 2013; National Biodiversity Strategy and Action Plan, 2014 and its Forest Policy, 2015.

The community forestry programme successfully empowers rural women and poor and disadvantaged people, promotes income generation and community development and improves the livelihoods of rural people (NPC and UNCTN 2013). Despite its many successes, community forestry in Nepal needs to become more inclusive and participatory. Leasehold forestry is another innovative approach where patches of government-owned forest are leased to groups of poor people on the basis of 40-year lease agreements. They have to practice agroforestry growing trees and food

crops to halt forest degradation and address poverty (Chaudhary et al. 2015). The Ministry of Forests and Soil Conservation started the Rastrapati Chure-Tarai-Madhesh Conservation and Development Programme in 27 districts in 2010. The ten-year Multi-Stakeholder Forestry Programme (MSFP) began in 2011 and is implemented through a multi-stakeholder process to contribute to poverty reduction and tackling climate change. The main beneficiaries of these programmes are rural communities, especially poor and disadvantaged households and those vulnerable to climate change.

The implementation of the Land Use Policy (MoLRM 2012) has established a link between the conservation of resources and the increasing levels of unplanned development. Besides, the National Adaptation Programme of Action (NAPA), 2010 stresses forests and biodiversity conservation at the watershed and landscape levels.

The institutional gaps in the biodiversity sector include the lack of holistic and integrated approaches, a limited focus on sustainable development, the lack of effective multi-stakeholder mechanisms and limited multi-stakeholder participation.

Target 7C — Drinking Water and Sanitation

Target 7C: Halve the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015

Status and trends

Access to safe drinking water and sanitation (MDG 7C) have wide significance for ensuring hygienic and healthy living and are an important indicator of quality of life. The tar-

Table 7.4: Achievements on drinking water and sanitation in Nepal, 1990–2015 (Target 7C)

Indicator	1990 ^a	2000 ^a	2005 ^b	2010 ^c	2015	2015 targets	Status
7.13 Proportion of population using an improved drinking water source (percent)	46	73	81	80.4	83.6 ^d	73	MDG target met
7.14 Proportion of population using minimum sanitation facility (percent)	6	30	39	43	81.0 ^e	80	MDG target met

Sources: ^aNPC (2005), ^bCBS (2004), ^cNPC and UNCT (2010), ^dNPC (2016), ^eMoWSS (2016)

get of the proportion of population using an improved drinking water source has been achieved in the year 2015. The proportion of population using sanitation facility has drastically improved since 1990 (Table 7.4).

Access to safe drinking water

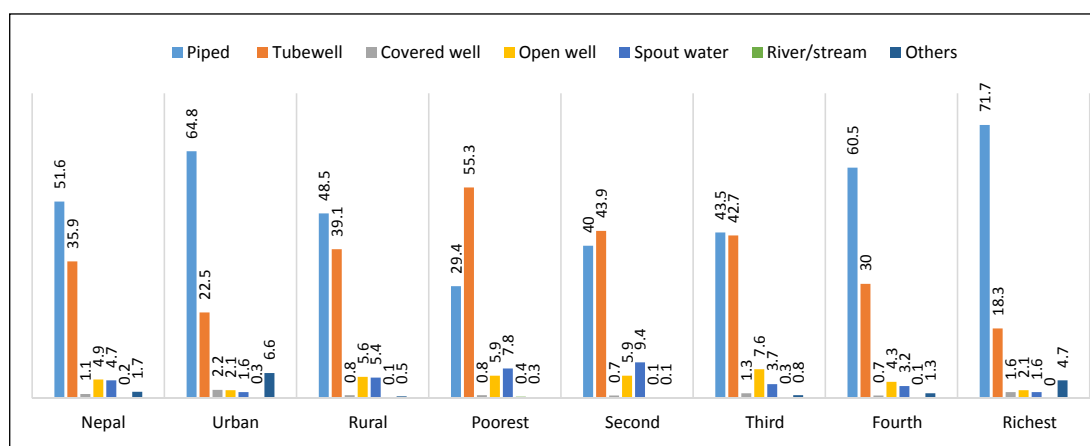
According to CBS (2015b), a little over half (51.6 percent) of Nepal's households have access to piped water supplies with 64.8 percent of urban households and 48.5 percent of rural households having access.

Hand pumps and tube wells are a major source of drinking water for 35.9 percent of households and 22.5 percent of urban and 39.1 percent of rural households. Nearly, 13 percent of Nepal's households use covered or open wells, spring water, rivers and other sources as their main source of drinking water. Almost 72 percent of the richest households (fifth quintile) have access to piped water supply while only 29.4 percent of the poorest households have such access (Figure 7.6). Overall, 83.6 percent population in Nepal has access to basic water source.





Figure 7.6: Source of drinking water by household consumption quintile (in percentage)



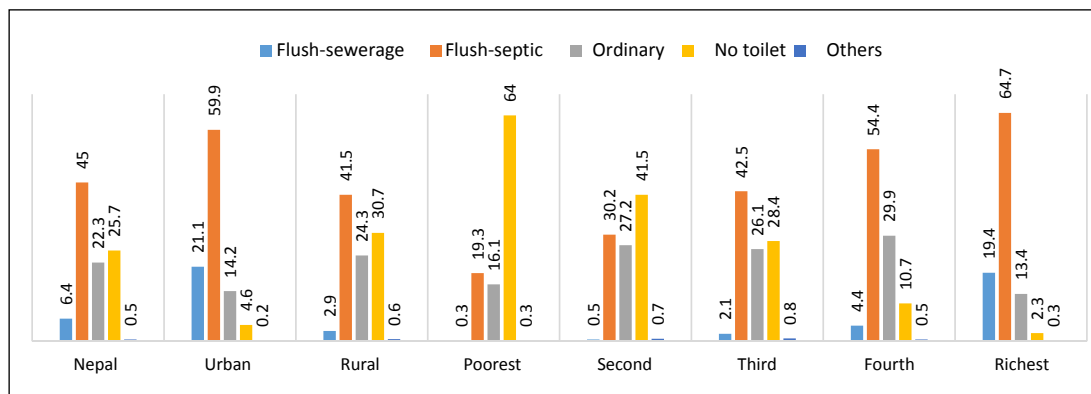
Sources: CBS (2015a)

Access to sanitation facilities

The number of households with access to sanitation facilities (toilets) increased from 30 percent in 2000 to 81 percent in 2015 (NPC 2016), indicating the achievement of MDG target 7C (Figure 7.7). According to CBS (2015a), less than half of the sample households (45 percent) in 2013/14 were using flush toilets connected to septic tanks. The

proportion of households using such toilets is 59.9 percent in urban and 41.5 percent in rural areas. Ordinary toilets (Pitch Latrine) are the second most used type of toilet, being used by 22.3 percent of households. A quarter (25.7 percent) of households did not have toilets in their houses in 2013/14. Nearly, two-thirds (64 percent) of the poorest quintile and 2.3 percent of the wealthiest quintile households did not have toilets.

Figure 7.7: Sanitation facility by households' consumption quintile (in percent)



Sources: CBS (2015a)

Access to improved drinking water and improved sanitation facilities (such as toilets), varies across physiographic and development regions. Of Nepal's three physiographic zones, the Tarai has the least access to piped water (19.3 percent) with about 72.3 percent of households drawing their drinking water from covered wells. By development region, the western region has the highest proportion (64.3 percent), and far-eastern region the least (36.1 percent) access to piped drinking water. Among physiographic regions, sanitation coverage is highest in the hills (37 percent) and lowest in the mountains (26.7 percent). Sanitation coverage is highest in the Western Development Region (51.7 percent), and lowest in the Far-Western region (30 percent). Unlike safe drinking water coverage, which exceeds 70 percent among all social groups, sanitation coverage varies dramatically by caste and ethnicity with Newars having the highest rate (71.6 percent) and Madheshi Dalits the lowest (4.6 percent) (NPC and UNDP 2012). Access to piped drinking water and sanitation coverage is positively associated with household wealth (NPC and UNCTN 2013).

The supply of water and sanitation is increasing in many schools which helped to reduce school drop-out of adolescent girls. (NPC and

UNDP 2012). Also, only about half of all water supply schemes are fully functional. The lack of sanitation leads to diarrheal diseases (NPC and UNCT 2010). The harmful *Escherichia coli* have been found at very high concentrations in household drinking water (82.2 percent), and in source water (71.1 percent) (CBS 2015b).

The 16.4 percent of the population who lack access to safe drinking water, and 19 percent who lack access to basic sanitation facilities stand as major challenges to achieving universal access to improved drinking water and improved sanitation by 2017.

Nepal's access to improved drinking water (83.6 percent) is less than in several SAARC countries, but better than in Afghanistan (48 percent) and Pakistan (59 percent). Access to sanitation facilities in Nepal (81 percent) is better than in Afghanistan (37 percent) and India (47.8 percent).

Policies, programmes and institutional changes

The constitution of Nepal (2015) provides access to drinking water as a fundamental right. The government has set the target of achieving universal access to basic water supply and

sanitation services by 2017 (GoN 2011). The government has promulgated several policies, strategies and plans on drinking water and sanitation (NPC and UNCTN 2010 and 2013; NPC and UNDP 2012).

Innovative programmes, including social and poverty mapping, have helped to improve access to water supply and sanitation facilities. The affirmative action policies and efforts by projects and programmes such as the Rural Water Supply and Sanitation Fund Development Board (RWSSFDB), the Community Based Water Supply and Sanitation Programme (CBWSSP), the Small Town Water Supply and Sanitation Sector Project (STWSSSP) and Nepal Water for Health (NEWAH) have assisted marginalized communities (including women, the poor and excluded groups) to access services, including paid jobs and training opportunities (ADB 2010, NPC 2015a). On water and sanitation, the government introduced a Sanitation and Hygiene Master Plan (GoN 2011) in 2011 to maintain uniformity and standards in programme approaches focusing on open defecation free areas as the bottom line for sanitation interventions (NPC 2015a), and will continue its efforts under the SDGs. The existing strong community organizations like water resource user groups, forestry user groups, and local infrastructure user groups will continue as important local institutions to implement the SDGs at the local level (NPC 2015a).

Despite continuous policy and programme interventions, especially during the Ninth Plan

period (1997–2002) and thereafter, the drinking water and sanitation infrastructure is still largely inadequate and wide variations exist with respect to the level of socioeconomic development, between rural and urban areas, among development regions, and between ethnic and caste groups (NPC 2014b). The government needs to commit to investing more in safe drinking water and sanitation and hygiene so that Nepal can reduce the currently high incidence of diarrheal diseases. Subsidies should be extended to ultra-poor and targeted people including disadvantaged ethnic people (NPC and UNDP 2012).

Target 7D — Slum Dweller Living Standards

Target 7D: By 2020, to have achieved a significant improvement in the lives of slum dwellers

Status and trends

MDG target 7D calls for improving the living condition of slum dwellers for urban poverty alleviation. Slums are highly populated urban areas characterized by one or more of the following characteristics: (i) poor (structural) housing quality, (ii) overcrowding, (iii) inadequate access to safe drinking water, (iv) inadequate access to sanitation and other infrastructure, and (v) insecure residential status. Squatters are slum dwellers settled on land without legal rights as tenants or own-

Table 7.5: Achievements on status of slum dwellers and squatters in Nepal, 1990–2015 (Target 7D)

Indicator	1990	2000	2005 ^a	2010 ^b	2015 ^c	Remarks
7.15 Population living in slums and squatter settlements	na	11,850	18,000	50,000 (2009)	500,000 (2010)	Lack of reliable data

Sources: ^awww.sdinet.org/documents/doc4.htm, ^bIRIN (2007), ^cNPC (2015a)

ers. Overcrowding is a characteristic of slums with poor basic infrastructure such as water and sanitation.

Slum dwellers and squatters are an emerging phenomenon in Nepal's urban areas. However, there is only limited data on slums, slum dwellers and squatters in Nepal. It is estimated that there were about 500,000 slum dwellers and squatters in the Kathmandu Valley in 2014 (NPC 2015a) (Table 7.5). The Kathmandu Valley is Nepal's largest urban area and is home to over 2.5 million people. The number of squatter settlements in the valley has increased from 17 in 1985 to over 66. These settlements are mostly located along the banks of rivers and most are in unhygienic and unsanitary areas.

Squatter migrants have been moving to Nepal's urban and semi-urban areas from their food-deficit rural villages in the hills since the 1950s (Fears 2012). The in-migration of squatters tends to increase for a decade after natural disasters. Nepal is undergoing rapid urbanization, increasing from 13 percent of the population in 2001 to 17 percent in 2011 (CBS 2012).

To date, over 26,000 bonded labourer (*Mukta Kamaiya*) families of the total 27,579 such freed families and 254 freed land tiller (Haliya) families have been resettled (MoF 2015a).

The government's intervention in managing slums is a political issue as some economically well-off people also live in slum areas. Slums and squatters are seen as a local problem and local level initiatives have been taken by I/NGOs to improve the lives of slum dwellers and squatters, often with support from donor agencies. However, such efforts have been sporadic and have not been institutionalized, and as a result, they have failed to produce many tangible changes (Shrestha 2013), be-

cause, the root cause of their situation is a national level issue.

South Asia as a whole has a poor track record of improving the lives of slum dwellers and squatters. In particular, Bangladesh, Nepal and Pakistan continued to lag behind, while India has performed better in managing its slums, with a slum growth rate of only 1.7 per cent. Following decades of social investment, Sri Lanka ranks among the top performers globally on this issue (UN 2006).

Policies, programmes and institutional changes

The Constitution of Nepal (2015) stipulates various arrangements for education, health, housing, land and social security for landless people, squatters and marginalized communities. The Ministry of Urban Development through its departments, management board, development authority, programmes and projects is yet to resolve such issues and problems.

The government has taken several measures to tackle slum-related problems, particularly in Kathmandu, but with little success. Nepal sought to resolve the issues of slum dwellers and squatters by establishing a Central-level Squatter Problem-Solving Commission on 6 December 2011 (it started work in January 2012) and 25 district-level squatter problem-solving committees that introduced immediate relief programmes in 2011 (MoF 2012a). The National Shelter Policy of 1996 (DHUD 1996), the National Urban Policy of 2007 (DUDBC 2007), and the government's periodic plans raise the issues of slum dwellers and squatters in terms of the welfare of low income groups and call for activities to support, mobilize, develop and expand housing facilities. The National Shelter Policy (revised in 2012) aims

to address the new challenges of slums, rental housing and housing for internally displaced and economically weak people. However, none of these policies have addressed the issue of land tenure, which is the crux of the problem, particularly in the case of squatters.

Resource Allocation Trends

The amount allocated by the government for environmental sustainability is not available. Different sectors contribute to achieving MDG 7, thus the trends in resource allocation can be seen from the allocations made by the Ministry of Forests and Soil Conservation (MoFSC), the Ministry of Energy (MoE), the Ministry of Science, Technology and Environment (MoSTE), the Ministry of Environment (MoE), and a part of the Ministry of Urban Development (previously under the Ministry of Physical Planning and Works [MPPW]), particularly related to the budget allocated for drinking water (Figure 7.8).

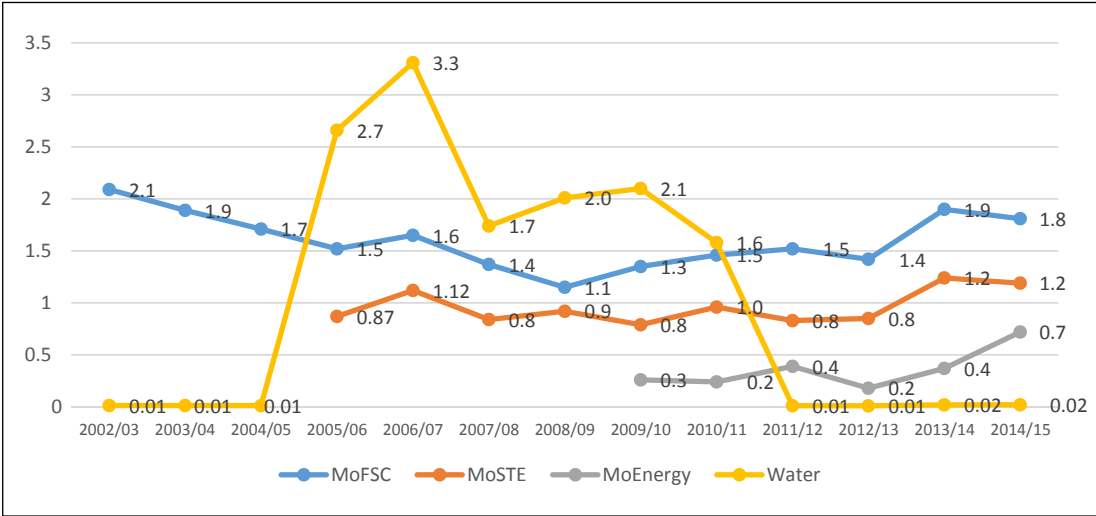
MoSTE and the recently established Ministry of Energy are important institutions that support environmental sustainability. The share

of the total budget allocated to MoSTE has varied between 0.8 and 1.2 percent between 2005/06 and 2014/15. However, this budget heavily relies on donor support. The budget allocated to the Ministry of Energy after its establishment in 2009/2010, although inadequate (up to 0.7 percent of the total) is increasing. About 37 percent of MoSTE’s budget comes from the government with the rest from external development partners, while the government is the main contributor to the Ministry of Energy’s budget (about 76 percent on average).

MoFSC’s share of the national budget has varied from 2.1 percent in 2002/03 to 1.1 percent in 2008/09. Over the years an average of 83 percent of this budget was committed by the government and the remainder by foreign donors as grants or loans.

Widely fluctuating amounts have been allocated for drinking water and sewerage. The proportion was very low to 2004 increasing to 3.2 percent in 2006 (due to foreign aid) and has since declined. In the initial phase, the drinking water project was fully supported by

Figure 7.8: Budget allocation trend (in percent) compared with total national budget for the environmental sustainability MDG (MDG 7)



Sources: MoF (2002–2014), Red Books

GoN. Foreign aid up to 71 percent of the total budget was added from 2005/06 to 2010/11; whereas the government has fully funded the programme from 2011/12.

No separate budget is allocated for managing slum dwellers and squatters. MoFALD supports small scale activities related to the environment.

Sustainable budget allocation, proper use and coordination are needed in all sectors to stop or reverse environmental degradation in the SDG period.

Unfinished Business

Ensuring environmental sustainability will be instrumental to the achievements of the SDGs for Nepal in the 2016–2030 period.

In the energy sector, to reach the SDG target of 99 percent of households having access to electricity and only 10 percent of households using firewood for cooking, entails generating at least 10 thousand megawatts of electricity and a decrease in energy intensity by 0.8 percent per annum (NPC 2015a) is needed. Nepal has abundant water resources and a huge potential for generating hydropower. Similarly, substantially increasing the share of renewable energy and doubling the global rate of improvement in energy efficiency comes under SDG 7 and partly under SDG 12 (NPC 2015a).

Developments in the biodiversity, forestry and natural resource sectors will depend on the effective implementation of policies and plans including the Nepal Biodiversity Strategy and Action Plan (MoFSC 2014) and the Forest Policy of 2015 that commit Nepal to fulfilling international obligations as a signatory to the Convention on Biological Diversity. These sectors provide both environmental protection and have huge potential for job creation, in-

come generation and tourism. Nepal has yet to fully use the potential of its forest resources. Nepal's forestry sector should be considered as a productive sector for the creation of jobs and enterprises (NPC 2015a).

Access to safe drinking water is a basic human right. The 2015 MDG target focuses on improving the quality of the sources of water collection and on reducing the amount of time spent collecting water. Under the SDGs Nepal needs to aim for safe drinking water and improved sanitation being universally accessible nearby including in schools and homes, and especially those located in slums and squatter settlements (NPC and UNCTN 2010 and 2013).

The political transition in Nepal had led to the rapid growth of unmanaged slum and squatter settlements that could be a major threat to society if not tackled (NPC and UNCTN 2013). As recommended in Nepal's MDG Progress Report for 2013 (NPC and UNCTN 2013), slum dwellers and squatter settlement at both national and local level need to be classified based on detailed analysis. Policy needs to be made to relocate and empower households who are genuine and vulnerable. Another necessary measure is that local institutions and development partners need to work in coordination with national organizations to provide safe, adequate and affordable housing as a key intervention for alleviating poverty.

MDG Implementation Lessons

MDG implementation Lessons

Nepal has made significant progress on attaining MDG 7 despite the long period of political instability and the long absence of elected representatives at sub-national and local levels (NPC 2015a). MDG 7 has made

the government accountable for the commitments it made on environmental sustainability in the Millennium Declaration. However, the MDG 7 targets are aggregative and so do not reveal the disparities in development outcomes by gender, social group and geographical location.

Access to energy is essential for the country's economic development. Many households' energy comes primarily from biomass (fuel wood, and agricultural wastes), and secondly from fossil fuels. The extraction of fuelwood contributes to deforestation and forest degradation. Hydropower production is a national priority, but its large potential has only been tapped to a limited extent. An integrated water resource management plan needs to be developed that sustains the multiple use of water for hydropower generation, irrigation, and drinking purposes while buffering climate change and ensuring ecosystem services and regular environmental flows.

Community based organizations have played a key role in reducing biodiversity loss. There is a need for multi-stakeholder accountability and responsibilities among national, sub-national and local level government for reducing biodiversity loss. Similarly, coordination among institutions also plays a key role in the achievements of the indicators. People should be empowered to participate in decision making processes at all levels of governance. The targets on the supply of water and sustainable sanitation focus on access to drinking water and sanitation facilities. The quality aspect was not covered and data deficiencies on biodiversity loss, the use of water resources, slum and squatter populations made it difficult to assess progress against the MDGs targets. The SDGs should account for the quality as well as the quantity of the basic social services to be achieved (NPC 2015a).

Lessons for implementing the SDGs

The MDG targets provide the foundation of the SDG targets. Nepal, despite only minimally contributing to climate change, has begun to suffer its effects. The country urgently needs to strengthen its resilience and adaptive capacity to climate-related hazards and natural disasters. SDG 13 calls for taking urgent action to combat climate change and strengthen resilience and adaptive capacity to climate related hazards and natural disasters. There is a need to ensure access to sustainable energy for all (SDG 7) by 2030 through universal access to affordable, reliable and modern energy services.

The adoption of community based forest management in Nepal has halted forest degradation and deforestation, and the loss of biodiversity. SDG 15 is also linked with livelihoods and strongly focuses on the sustainable use of natural terrestrial ecosystems and the sustainable management of forests.

Access to safe, good quality water is fundamental to the sustenance of human life. Therefore, the government and its citizens need to concern themselves not just with access to an adequate supply of water but also access to good-quality water (NPC 2015a).

Lessons for LDC graduation by 2022

Nepal is moving ahead with a new federal system of governance and is committed to graduating from the LDC category of countries. The government needs to provide targeted financial and technical support on environmental sustainability to enable graduation by 2022 (NPC 2015a).

The government has presented its plan for clean energy in its periodic plans and sectoral strategic documents, and there is a growing

possibility of achieving significant progress by 2022. However, the unequal distribution of energy could result in the further marginalization of poor people.

Investments in the energy sector need to increase substantially. It is estimated that expenditure on the energy sector needs to increase at an average annual rate of 26.5 percent for the initial five consecutive years (2014–2019, at 2012/13 constant prices) and at 19.4 percent per year for the remaining periods to meet the energy demand (NPC 2014a).

Nepal needs access to new technology, new institutional responses and above all, global support for ensuring environmental sustainability. This will require the transfer of innovation and technology from developed countries (NPC 2014a). The government has also made efforts to develop water and sanitation facilities, especially providing more separate toilets for girls in schools. These facilities need to be extended to all households that lack such facilities (NPC and UNCTN 2013).

There is only weak cooperation between the organizations with stakes in urbanization and local governance. In-depth consultations and coordination with municipalities is essential among agencies such as the Department of Urban Development and Building Construction and organizations responsible for drinking water, real estate and sewerage plan development.

The focus for energy access needs to better capture the quantity and quality of electricity supplied, as well as the efficiency, safety and convenience of household energy supplies. South Asia as a whole can benefit from the supply of clean energy if global and regional cooperation is in place to harness the huge potential (NPC 2011 and 2015a).

It is necessary to share best practices in forest conservation and management at the global and regional levels; and this is one area where Nepal can demonstrate its best practices to the global community.

The proposed targets for 2030 include 95 percent of households with access to piped water and improved sanitation, all communities free of open defecation, and all urban households connected to a sewage system (NPC 2015a). Integrated programmes are needed to improve access to sanitation in general and by all socioeconomic groups in particular. Another challenge is to make open defecation socially unacceptable.

Most slum dwellers and squatters have poor living conditions. The achievement of the national target of reducing the population living in slums and squatter settlements from 500,000 in 2014 to 125,000 by 2030; and the urban population living in squatter settlements from 7 percent in 2014 to 0.1 percent by 2030 (NPC, 2015a) needs the initial classification of slum dwellers and squatters followed by an effective local government initiative.

New Challenges — Disasters and Externalities

Access to energy is essential for achieving all the development goals. Nepal is prone to natural disasters and especially to floods, landslides, drought and earthquake due to lack of awareness, illiteracy, poverty, unplanned urbanization, and poor institutional and legal frameworks for disaster risk management. The Nepali people, their property and the country's infrastructure are highly vulnerable to natural hazards. The damage and losses to Nepal's environment and forests entails the destruction of forests and

damage to protected areas, the destruction of environmentally-friendly technologies, and the destruction of community-based natural resource management institutions (NPC 2015a).

The 2015 earthquakes affected almost one third of Nepal's population. The five-month long economic blockade of fuel and other supplies from September 2015 led to an acute shortage of diesel, petrol, kerosene and LPG. These concurrent crises have added enormous pressure on forest resources for energy and for the reconstruction of damaged houses. The demand for firewood for cooking increased as a substitute for LPG and by people living in temporary shelters to cook with and keep warm.

This put enormous pressure on Nepal's forests in 2015/16. MoFSC has estimated that 51.8 million cubic feet of timber is needed for reconstruction. MoFSC proposes to meet this demand over the next five years from the country's private, community and national forests, particularly from fallen trees in the Churia and Tarai forests. However, valuable timber species, including slow growing sal (*Shorea robusta*) have been cut at pole size prior to maturity (NPC 2015b and 2015c). There was also an increase in illegal logging as the authorities have been unable to patrol the forests, mainly areas near the Indian border, due to fuel shortages. The sharp increase in demand for timber and firewood could jeopardise the progress made on extending forest cover and minimising Nepal's carbon emissions.

A rapid assessment by AEPC and its partner network revealed that around 146,767 number (about 12 percent) of improved cookstoves, 16,721 of domestic biogas plants (about 5 percent), and 70,000 solar installations (about 13 percent) were destroyed by

the earthquakes (NPC 2015b). The installation of renewable energy technology, including improved cooking stoves and biogas plants needs to be promoted to save energy and improve the health of women (NPC 2015b).

More support is needed for community forestry user groups to rehabilitate and restore their forests, including short-term targeted livelihood support to restore environmental goods and services from forest and natural resources (NPC 2015b).

Of the 11,288 water supply systems in the 14 earthquake most-affected districts, 1,570 sustained major damage, 3,663 partial damage, and approximately 220,000 toilets were damaged or destroyed. Strong efforts are needed to rebuild, maintain and monitor water supply services (NPC 2015a and 2015c).

Conclusions and Recommendations

Conclusions

Nepal's performance has been mixed on the environmental targets. The water supply, reducing CO₂ emissions and consumption of ozone depleting substance targets have been met. The trend shows that Nepal is likely to achieve the biodiversity and forest cover targets and the energy consumption and sanitation targets.

More reliable data is needed on the biodiversity loss and slum-related targets. However, the earthquakes and the economic blockade have posed serious challenge to meet the Goal 7 targets.

There has been very slow growth in Nepal's energy sector. Nepal's energy target for 2015 is partially achieved. The recent increased use

of fuelwood and timber put added pressure on the country's forest resources, and have increased carbon emissions. The government aims to increase hydroelectricity generation by at least 10 times in the next 15 years to meet basic needs and fuel economic growth.

Nepal has developed innovative conservation policies and institutional reforms. It has successfully implemented forest and biodiversity conservation programmes including ecosystem and landscape conservation through community forestry, protected area conservation and buffer zone area management. Since the 1990s, the country has strengthened participatory and decentralized forest and biodiversity management and conservation alongside strategies that have positively contributed to poverty alleviation and climate change. However, the target has been partially achieved.

The target related to access to drinking water has been achieved. However, concerns on water quality, the availability of water, unequal access to water, and the sustainability of water resources remain. The implementation of the integrated water resources management policy has been very weak. An institutional set up and regulatory mechanisms are lacking.

The sanitation target is achieved, the proportion of the population using improved sanitation is progressing. The main challenge is to end open defecation.

Issues related to the slum dwellers and squatters target is unclear. There are definitional and assessment issues as to what a squatter settlement is in Nepal's context and how the target should be measured. But the issue is very important given the rapid urbanization. The government needs to come up with a special focus on planning and developing urban areas in the next decade. It is very likely

that the current estimated 7 percent of people living in squatter settlements will increase bringing the issues of urban housing, drinking water and sanitation to prominence. The achievement of this target is difficult to assess due to lack of consistent data.

The government has formulated a wide range of legislation and regulation for environment conservation although implementation and enforcement are weak.

Recommendations

- 1) Bridge the gaps in access to sustainable energy and other basic infrastructure to ensure access to sustainable energy for all.
- 2) Promote renewable energy technology, including improved cooking stoves and biogas plants to meet energy demands and improve health, especially of women.
- 3) Implement an integrated approach of fresh water, energy and agricultural productivity.
- 4) Encourage the transfer of technology and financial support from neighbouring and other countries to provide access to affordable and modern energy for all.
- 5) Consider the forestry sector as a productive sector enabling creation of jobs, enterprises and growth. Note that SDG 15 promotes the linking of the forestry sector with sustainable use, combating desertification, and halting and reversing land degradation and biodiversity loss.
- 6) Develop a clear and common vision on access to water as a fundamental right of all citizens. Clear state level planning is needed to reach the national goals and

- enable federal state involvement in this.
- 7) SDG 5 must ensure that safe drinking water and improved sanitation is accessible in all schools (including having separate toilets for girls), homes, slums and squatter settlements.
 - 8) The government and citizens should not only concern themselves with access to adequate supplies of water but also the round-the-clock availability of good quality water.
 - 9) The government should develop water and sanitation facilities as a special package for achieving access to adequate quality water and equitable sanitation and hygiene for all, and to end open defecation.
 - 10) Develop a clear classification of slum dwellers and squatter settlements.
 - 11) Produce and implement a slum upgrading strategy with UN leadership and national ownership.

GOAL 8

Develop a Global Partnership for Development

Nepal's Development Cooperation Policy (MoF 2014b) recognises the importance of foreign assistance and enhancing national ownership of such assistance. This policy spells out priorities, established thresholds for development cooperation to mitigate fragmentation and internalizes the global commitments of the Busan Outcome Documents, (OECD 2011) such as South-South cooperation, support to the private sector, aid for trade and the division of works by development partners guided by comparative advantages.

The MDGs have been a path breaking approach to the transformation of the world economy and especially the economies of developing and least developed countries to uplift their levels of human development. The poverty of developing and least developed countries called for a global agreement between developed and developing countries to create an environment conducive to development and the elimination of poverty (UNSD 2003). The strategy called for poor countries to mobilize and manage resources more effectively and equitably through improved governance and rich countries to increase aid, debt relief, market access and technology transfer (UNDP 2003). Commitments

have been made on official development assistance (ODA), trade, external debt, essential medicines and technology.

These commitments have been reinforced in international forums such as the Doha Round of multilateral trade negotiations (2001), the World Summit on HIV/AIDS (2001), the Brussels Plan of Action for the Least Developed Countries (2001), the International Conference on Financing for Development (2002), the World Summit on the Information Society (2003 and 2005), the 2005 World Summit, the Paris Declaration on Aid Effectiveness (2005), the World Trade Organization (WTO) Hong Kong Ministerial Meeting (2005), Istanbul Plan of Action for LDCs (2011) and various G8 summits.

The MDG needs assessments conducted across the world clearly exhibited the huge gap between the potential and needed resources. For Nepal, the needs assessment of 2005 identified a resource gap of NPR 552.1 billion while the 2010 assessment for 2011–15 identified a gap of NPR 451.4 billion (NPC and UNDP 2010).

The special needs of LDCs include tariff and quota-free access for their goods, enhanced

debt relief, the cancellation of official bilateral debt, and more generous official development assistance.

Target 8A— Market Access

Target 8A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system

Status and trends

The emphasis by the MDGs on improving market access was an encouraging sign, while donor assistance should be regarded as a short term measure. Improving market access will aid developing countries to attain long term sustainability in attaining the MDGs and their overall development efforts.

The overall export market conditions, as measured by the World Bank's trade tariff restrictiveness index, is restrictive with significant non-tariff barriers (Table 8.1). The export market is more restrictive for agricultural than non-agricultural products. A bilateral trade agreement with India granted Nepal preferential access to Indian markets; but the arrangement is governed by stringent rules

of origin, tariff rate quotas, and safeguard clauses. Nepal also enjoys preferential market access to the European Union and USA markets through the Generalised System of Preferences (GSP) scheme. Such preferences, however, have not significantly contributed to export expansion indicating supply-side constraints and other barriers. Commensurate with WTO commitments, average tariff rates faced by Nepalese exports have declined over the MDG period but Nepalese products have become less and less competitive as they still face high tariffs on certain products like agricultural products. Further, while African, Latin American and Caribbean countries have enjoyed preferential access to the US market for a long time, Nepal has had to compete on equal terms since 2005, seriously affecting its ability to export to the USA.

The large concentration of Nepal's trade with only one country (India) means that market access as a result of membership of the WTO in 2004 and during the MDGs period has been discouraging (Table 8.2). The major reasons for this are the declining competitiveness of Nepal's goods, rising costs particularly of labour, decline in manufacturing and productivity, eroding preferences, increased non-tariff barriers and increasing transit and

Table 8.1: Market access situation for Nepal (Target 8A)

Indicators	2000-04	2005-07
8.1 Overall trade restrictiveness Index (including preferences and non-tariff measures) (percent)	-	28.4
8.2 Rest-of-the-world applied tariffs (including preferences/weighted average) (percent)	10.7	7.5
8.3 Agriculture (percent)	36.9	24.9
8.4 Non-agriculture (percent)	9.1	5.1
8.5 Most-favoured-nation (MFN) zero-duty exports (percent)	3.7	14.9
8.6 Preference utilization rate (EU and US) (percent)	-	94.6
8.7 Share of preferential exports in total exports (percent)	-	2.8

Sources: World Bank (2008a)

Table 8.2: Trend of Nepal's international trade in percentage

Particulars	1999/00		2004/05		2009/10		2014/15	
	India	Third countries	India	Third countries	India	Third countries	India	Third countries
Exports	42.6	57.4	66.3	33.7	65.8	34.2	65.5	34.5
Imports	36.6	63.4	59.3	40.7	58.0	42.0	63.5	36.5
Total trade	38.5	61.5	61.3	38.7	59.1	49.9	63.7	36.3

Sources: MoF (2015b)

transport costs. Despite the opening of markets, Nepal's performance has been less than desirable on market access.

Recommendations

1) The principle of special and differential treatment is essential in all aspects of market access and rule-making negotiations particularly for LDCs. The major reasons for the low level of integration with the global economy of most developing countries, and in particular LDCs like Nepal, are insufficient productive supply capacities and low competitiveness; the lack of supportive infrastructure, an enabling policy environment, and market access; and entry barriers to agricultural exports, manufactured goods and services. Aid for trade is a crucial strategy to address these challenges, but so far Nepal has benefitted little from aid for trade meaning that more liberal aid for trade assistance is needed. Commitments alone are inadequate and the pace of disbursement should be increased. There is a need for meaningful commitment at both domestic and international levels to initiate an Enhanced Integrated Framework on trade. A package of aid for trade with the elements of transparency, predictability, stability and credibility is a must. Further there should be more liberalization of movement of human resources (Mode 4) under service negotiations to enhance service trade as

this is an increasingly area of advantage for LDCs like Nepal.

2) Agreements already reached to address the concerns of LDCs, such as duty-free quota-free market access and aid for trade, should be immediately implemented. The rights of farmers to use, reuse and exchange seeds, along with the rights of indigenous and local communities on the use of genetic resources, should be protected, and the Agreement on Trade Related Aspects of Intellectual Property Rights (1994) should be made compatible with the Convention on Biological Diversity (2010), in particular, the provision on access to and fair benefit-sharing of the use of genetic resources. Similarly, issues of non-tariff measures, including issues of rules of origin in preferential schemes, should be addressed to make them transparent, simple and predictable.

Target 8B— Official Development Assistance

Target 8B: Address the special needs of least developed countries

Status and trends

The flow of foreign assistance (official development assistance) to Nepal, inclusive of all bilateral and multilateral loans, grants and technical assistance, more than tripled between

Table 8.3: Develop a global partnership for development (Target 8B)

Indicators	1999/00	2004/05	2009/10	2014/15
8.8 Total actual foreign assistance (NPR billion)	17.5	23.7	49.8	55.4
8.9 Share of ODA in GDP (%)	4.8	4.2	4.2	2.6
8.10 Share of foreign aid of total government expenditure (%)	26.4	23.1	19.2	12.9
8.11 Share of foreign assistance in development expenditure (%)	68.8	86.5	55.1	62.5

Sources: MoF (2015b)

Table 8.4: Per capita foreign assistance of six LDC countries

Countries	2001–05	2006–10	2011–15
Afghanistan	237	226	172
Bhutan	195	217	179
Haiti	170	125	113
Lesotho	130	138	154
Tuvalu	3,991	2,484	2,703
Nepal	33	28	31

Sources: worldbank.org/indicator/DT.ODA.ODAT.PC.ZS

1999/00 and 2014/15, while the increase was more than six times if commitments only are considered. This means that Nepal's foreign assistance has increased as envisaged in the MDGs, although it has declined in proportionate terms; for example, from 4.8 percent of GDP in 1999/00 to 2.6 percent of GDP in 2014/15 (Table 8.3). The share of foreign assistance of total government expenditure, however, has been declining in proportionate terms though increase was noted in 2004/05 in respect to development expenditure. Nepal receives a comparatively low level of development assistance at \$31 per capita in 2011–15 in spite of being an LDC (Table 8.4).

The share of foreign aid in Nepal's social sector almost doubled between 1999/00 and 2009/10 although this was at the cost of foundational and productive sectors. The share of foreign aid for infrastructure development has declined significantly indicating a policy and priority shift of the government and its development partners. This may affect the overall development of the country and social sec-

tor development may be unsustainable in the longer run without basic infrastructure to support development.

The proportion of foreign assistance to the social sector has declined in recent years due to increased expenditure in this area by the government and the enhanced allocation of resources in other areas. The assistance to the social sector made a great contribution to the achievements of MDGs 2 to 7. However, the declining emphasis on funding the productive and enabling environment (as shown by declines in the proportion for agriculture, industry and infrastructure) may hinder the country's growth that will have implications on sustaining the MDGs achievements.

Foreign assistance to the trade and industry sector stood at only 0.7 percent in 2009/10 meaning that Nepal, despite joining the multilateral trading arrangements and MDGs, has not been able to benefit to build its trade sector, which has a direct impact on market access (Table 8.5).

Table 8.5: Sectoral distribution of foreign aid in percentage

Particulars	1999/00	2004/05	2009/10	2014/15
Agriculture, forestry and irrigation	18.3	10.1	6.2	9.1
Transport, electricity and communications	46.6	41.7	23.7	13.3
Trade and industry	1.7	0.5	0.7	6.5
Social sector	33.1	45.4	66.5	35.6
Other sectors	0.2	1.4	3.0	35.5

Sources: MoF (2015b), OCG (2015)

The flow of foreign resources for building trade capacity, represented by aid for trade, shows that commitments increased by about 38.6 per cent between 2006 and 2009; however, there are large discrepancies between the amount committed and actual disbursements with disbursements reaching 59.3 per cent in 2009 (Table 8.6). Such discrepancies are particularly high for trade development, where the disbursement was only 33.8 per cent of the commitment in 2009. Overall, aid for trade is still very small at \$6 per capita

reflecting Nepal's very limited access to markets and to develop its trade on a competitive basis.

The total foreign aid disbursement as a proportion of foreign aid commitment has decreased from 85.7 per cent in 2000 to 55.4 per cent in 2015. Similarly, multilateral aid disbursement has also decreased from 137.6 per cent in 2000 to 45 per cent in 2010. However, bilateral aid increased from 43.6 per cent in 2000 to 85.1 per cent in 2010 (Table 8.7).

Table 8.6: Aid for trade flows (in thousands USD)

Particulars	2002-05 average	2006		2009	
		Commitments	Disbursements	Commitments	Disbursements
Trade policy and regulations	84 (0.05)	2,982 (1.4)	44 (0.04)	2,366 (8.1)	494 (0.3)
Economic infrastructure	76,347 (44.8)	130,689 (61.9)	76,992 (68.7)	227,273 (77.7)	118,959 (968.5)
Building productive capacity	93,930 (55.1)	77,324 (36.6)	35,022 (31.3)	62,963 (21.5)	54,100 (31.2)
Focus on trade development				32,540 (11.1)	11,008 (6.3)
Others	-	-	-	-	
Total aid for trade	170,361	210,995	112,058	292,501	173,553 (59.33)
Per capita aid for trade	6			10	6

Sources: WTO and OECD (2009)

Table 8.7: Foreign aid disbursement as proportion of foreign aid commitment (in percentage)

Particulars	1999/00	2004/05	2009/10	2014/15
Total aid	85.7	62.0	51.5	55.4
Multilateral aid	137.6	85.2	45.0	na
Bilateral aid	43.6	43.5	85.1	na

Sources: MoF (2015b)

Table 8.8: Share of loans in capital expenditure in percentage

Type of loan	1999/00	2004/05	2009/10	2014/15
Total loans	54.5	48.1	45.5	80.6
External loans	37.2	27.9	12.4	32.3
Domestic loans	17.3	20.5	33.1	47.9

Sources: MoF (2015a), OCG (2015).

Table 8.9: Aid effectiveness in Nepal (2010/11–2013/14)

Particulars	2010/11	2011/12	2013/14
Aid in budget (percent)	70	77	71
Share of grants and loans (percent)	81.3	85	84
Use of country public financial management system (percent)	54	58	-
Share of national projects (percent)	50	59	-
Disbursement (percent)			
1. Project support	63.1	55	60
2. Sector-wide approach	21.1	22	19
3. Programme support	12.9	18	13
4. Humanitarian assistance	2.9	4	1
5. Other	-	1	5
Alignment of aid with the Thirteenth Plan (percent)			
1. Social development	40	40	36
2. Infrastructural development	23	29.9	26
3. Macro- and micro-economic development	27	19.3	25

Sources: MoF (2012b), MoF (2013b), MoF (2015b)

The Share of total loans in capital expenditure has increased from 54.5 percent in 2000 to 80.6 percent in 2015. But, the share of external loans decreased from 37.2 percent in 2000 to 32.3 percent in 2015 (Table 8.8). However, internal loans have increased from 17.3 percent in 2000 to 47.9 percent in 2015.

There were no significant changes in the trends of aid effectiveness between 2010/11

and 2013/14 (Table 8.9). Resource use by INGOs and other agencies increased in 2013/14 (MoF 2015b). Allocations through the sector approach and programme support actually marginally declined (Table 8.9) while it should have increased in line with the international commitment on aid effectiveness. The total sectoral allocation, however, is consistent with the allocations planned by the government.

Table 8.10: Performance of official development assistance in Nepal, 2015 (percentage of gross national income)

Particulars	Commitment	Actual	
		2008	2013
Total assistance	0.7	0.3	0.3
Assistance to LDCs	0.2	0.1	0.1

Sources: OECD (2015)

It is pertinent to assess the contribution of official development assistance (ODA) to the attainment of the MDGs. ODA accounted for only 0.3 percent of gross national income (GNI) against the international commitment of 0.7 percent, and there has been a decreasing trend (Table 8.10). Similarly, assistance to LDCs promised at 0.1 percent of GNI, which was increased to 0.2 percent during the 2003 MDG campaign and recommitted at 0.1 percent during the Istanbul Programme of Actions (2011), has only reached 0.1 percent. One argument posed here is receiving nations' lack of absorptive capacity. But there is a clear case for improving the efforts of development partners, if the SDGs are to be achieved.

Recommendations

- 1) The achievements in Nepal of the Paris Declaration on Aid Effectiveness are poor. Both donors and the government need to increase efforts to improve aid effectiveness. Donors should channel resources in a more harmonized way through the national budgetary system and use existing institutions and systems, including financial and procurement systems, if need be, by strengthening these systems through implementation. The government must improve its institutional and absorptive capacities as well as eliminate or mitigate obstacles emanating from political and other instabilities and legal and institutional weaknesses.
- 2) Improvements are also needed on financial management, safeguarding accountability and transparency in resource utilization, and ensuring effective project planning and implementation. Specific improvements are needed on making budget allocation and release criteria transparent, on linking financial disbursement to expenditure reporting by spending units (including indicators of physical progress), by further strengthening and implementing the Public Expenditure and Financial Accountability (PEFA) Framework (MoF 2008c) and Action Plan, consolidating the enforcement of social and public audits, and adopting results frameworks.
- 3) An in-depth study is needed on the perspective of the goal of LDC graduation to develop a strategy to mobilize added resources in the short run to mitigate aid dependency in the longer run.
- 4) The following main development partner concerns need to be addressed:
 - Lack of government ownership, internalization and institutionalization of donor-funded programmes and projects.
 - Lack of government leadership and direction, particularly on expenditure prioritization but also in taking the required responsibility for designing, preparing and implementing programmes and projects.
 - The often limited involvement of stakeholders, including local institutions, community groups and beneficiaries, in budgeting and programme preparation and implementation processes.
 - Pressure to increase development programmes and projects beyond a level that can be effectively handled within the limited institutional and implementation capacity.
 - Poorly functioning institutions, particularly the inadequately trained and motivated civil service, with low innovation and service orientation.
 - Weak public financial management.
 - The too frequent transfer of decision makers.

- ⇒ Poor programme supervision and monitoring systems.
 - ⇒ Weak governance and lack of political commitment.
- 5) There is also a need to reduce operating costs to make donor assistance more cost effective. The effectiveness of aid in the social sector is evident, but requisite resources are needed for infrastructure and the productive sectors to sustain overall development as the decline of resources in these sectors is detrimental to sustainably reducing income poverty. Therefore, there is a need for resource allocation for developing supply-side capacity, including the agriculture, processing, services and infrastructure sectors. Resources should also be allocated to different geographical areas and federal states in a balanced way.

not been as envisaged. The 2002 Monterrey Consensus of the International Conference on Financing for Development underlined the need for full and speedy implementation of the HIPC Initiative as an important contribution to achieving the MDGs. As part of this process, the HIPC Initiative was complemented in 2005 by the Multilateral Debt Relief Initiative (MDRI). The MDRI, by providing full relief on eligible debt, was designed to free up additional resources to help HIPC countries achieve the MDGs (UN 2009).

Nepal, however, has not been able to benefit from the HIPC Initiative mainly due to the lack of policy stability commensurate to deteriorating credit worthiness of the nation mainly due to the armed conflict (1996–2006). Also, low resource mobilization at less than 15 per cent of GDP during the armed conflict period also hindered Nepal in claiming a stake in these initiatives.

Nepal's outstanding external debt was estimated at 25.6 per cent of GDP in 2014/15 (Table 8.11), of which a substantial portion was owed to multilateral institutions, mostly the International Development Association (IDA) and the Asian Development Bank. Nepal is estimated to have little bilateral debt stock, mainly with Japan. The debt to GDP ratio has declined over the period as a result of relatively low external loan disbursements and rising GDP. Domestic debt stock accounted for around 9.5 per cent of GDP in 2014/15 (Table 8.11).

Target 8D— Debt Sustainability

Target 8D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term

Status and trends

The Heavily Indebted Poor Countries (HIPC) Initiative was launched by the International Monetary Fund (IMF) and the World Bank in 1996 and enhanced in 1998; but progress has

Table 8.11: External debt situation of Nepal in percentage (Target 8D)

Particulars	1999/00	2004/05	2009/10	2014/15
8.12 Total outstanding debt to GDP	65.6	54.2	36.9	25.6
8.13 Outstanding domestic debt to GDP	13.6	15.5	15.4	9.5
8.14 Outstanding foreign debt to GDP	52.1	38.8	21.5	16.1
8.15 Debt servicing ratio	1.4	2.4	2.4	3.5

Sources: MoF (2015b)

The financing of capital expenditure by external debt is significant although it is declining with the increasing mobilization of domestic resources reaching 45.5 percent in 2009/10. The decline was also due to Nepal receiving more grants after 2004 due to deteriorating macro-economic indicators while multilateral agencies shifted to loans after 2013 resulting in a huge jump to loans accounting for 80.6 percent of capital expenditure in 2014/15. The reliance on domestic debt, which has surpassed external debt since 2009/10, indicates the increasing reliance on domestic resources for financing development. The total outstanding debt, both domestic and foreign, is declining, which however is mainly due to the increased GDP rather than an actual decline in debt.

Recommendations

A programme for debt relief without any conditions on the use of the resources should be initiated outside the HIPC Initiative and MDRI, and the debt relief programme should be additional to regular ODA. Nepal in view of its

improvements in domestic resource mobilization surpassing the threshold, must be made eligible for debt relief that will generate added resources to gear up development efforts to attain graduation from LDC status by 2022. In view of the development scenario of the nation, with moderate growth and almost stagnant exports, there is a good case for a temporary moratorium on debt payments.

Target 8F— Connectivity and Communication

Target 8F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

Status and trends

There has been massive improvement in the areas of information and technologies. Telephone lines per 100 people have increased from 1.1 in 2000 to 3.02 in 2015. Similarly, mo-

Table 8.12: Achievements on connectivity through information technology in Nepal, 2000–2015

Indicators	2000	2007	2015
Access			
Telephone lines (per 100 people)	1.1	2.5	3.02
Mobile cellular subscriptions (per 100 people)	0.01	1.6	94.5
Other telephony (per 100 people)	na	na	3.0
Internet subscribers (per 100 people)	0.0	0.3	37.8
Personal computers (per 100 people)	0.3	0.5	na
Households with television set (percent)	3	13	na
Usage			
International voice traffic (minutes/person/month)	0.2	0.5	na
Internet users (per 100 people)	0.2	1.4	na
Quality			
Population covered by mobile cellular network (percent)	-	10	na
Fixed broadband subscribers (percent total internet subscribers)	0.0	12.5	na
International internet bandwidth (bits/second/person)	0.0	0.5	na

Sources: ITU (2009), World Bank (2008b), NTA (2015), CBS (2015a)

Table 8.13: Private sector participation in communications

Companies	Telephone Lines	Percentage
Nepal Doorsanchar Company Limited	12,981,942	46.2
Ncell Ltd	12,905,513	46.1
Smart Telecom Ltd	1,322,556	4.7
United Telecom Limited (UTL)	524,768	1.9
Nepal Satellite Telecom	366,463	1.3
STM Telecom Sanchar	2,987	0.01
Others	1,742	0.01
Total	28,105,971	100.00

Sources: NTA (2015)

mobile cellular subscriptions per 100 people has increased from 0.01 in 2000 to 94.5 in 2015 (Table 8.12).

Nepal has seen a transformation in the communications sector with telephone penetration increasing from less than 2 percent in 1999/00 to 106.1 percent in 2014/15, mainly due to the spread of mobile telephone services (Table 8.12). Internet services have reached 37.8 percent of people. The private contribution in telephone connectivity has increased to 53.8 percent of all lines due to increased participation by the private sector and conducive policies (Table 8.13).

Recommendations

- 1) Telecentre initiatives should be strengthened and intensified.
- 2) The potential of ICT to bring social and economic benefits depends on many factors that go beyond access and connectivity. Proper use is also important in attaining an 'all-inclusive' information society.
- 3) The quality and quantity of the telecommunications infrastructure needs to be upgraded to serve the rapidly expand-

ing market as the quality of services is questionable. External partnerships and support can play a significant role in providing the needed human and financial resources.

MDG Implementation Lessons

From MDG implementation — The major lessons learned while implementing the MDGs include that development can usher growth and attain human development goals, but it requires enhancing the strategic, absorption and implementation capacities of receiving nations. Cost sensitivity, national ownership and management, unification in resource flows as well as commonalities in modalities and approaches are equally important. Foreign assistance has clearly contributed to the attainment of the MDGs especially in the social sector. However, improving market access will be more rewarding than aid. Also, the overall ODA and multilateral debt relief initiative need to be enhanced towards the attainment of the SDGs, which are more all encompassing as developing countries and particularly LDCs alone will not be able to attain them on their own.

Lessons for SDG implementation — The SDGs include goals and strategies for accelerated human development and the role of development partners have been clearly defined. Attaining the SDGs therefore requires better commitment and improved disbursement with enhanced national ownership. Further, receiving nations must improve their institutional capacities, and procurement and monitoring systems. Additionally, efforts are needed by both partners to curb the costs of development while sustaining achievements.

Lessons for LDC graduation by 2022 — Nepal has adopted an ambitious target of graduating from LDC status by 2022. Since valuable time was lost in 2013-15, the growth rate will have to be further accelerated to around 8 percent against the previous estimate of 7 percent, requiring an estimated NPR 6,000 billion investment at 2015 constant prices. The estimated revenue will only amount to NPR 2,100 billion giving a substantial gap of almost NPR 4000 billion, which will have to be met through accelerated ODA. This is going to be a gigantic task and serious efforts will be needed on the part of Nepal and its development partners to attain this difficult but noble goal.

Conclusions and Recommendations

Conclusions

Market access — The major challenges faced during the MDG period were preference erosion, lack of special safeguard mechanisms for agriculture products, and the lack of policy space for poorer countries particularly LDCs. The multilateral trading system, hence, has fallen short of its original intention of being development focused and of benefiting developing and least developed countries.

In 2005, WTO members agreed that

“developed country members shall, and developing countries declaring themselves in a position to do so should, provide duty-free quota-free market access on a lasting basis, for all products originating from all LDCs by 2008 or no later than the start of the implementation period in a manner that ensures stability, security and predictability” (WTO 2009).

Developed country members, however, added that for

“members facing difficulties at this time, to provide duty-free market access for at least 97 per cent of products originating from LDCs defined at the tariff line levels” (WTO 2009).

The achievement of 100 percent coverage is still uncertain and making rules of origin transparent and simple is elusive. In most developed-countries, three percent of tariff lines cover between 90 and 98 percent of exports from LDCs (Pandey 2007, Labourde 2008) meaning that unless full access is extended, LDCs actually may not enjoy the benefits as is evident from Nepal’s experiences. The situation is further aggravated by domestic supply-side constraints, including trade facilitation measures, the prevalence of non-tariff barriers in destination markets, and the high costs of trading and transit particularly for landlocked developing countries. Nepal ranked 100 out of 144 countries in the World Competitiveness Index in 2015 (WEF 2015), an improvement from 125th out of 133 countries in 2008. The improvement was, however, only marginal, meaning that market access remains a distant dream for Nepal.

Development assistance — The gap between the aid committed by development partners and actual receipt is wide, and is becoming wider. In 1999/00, 85.7 percent

of committed aid was disbursed but the proportion had gone down to less than half (44.9 percent) in 2014/15. This widening gap implies that Nepal's absorptive capacity has declined due to the political instability and that access to foreign resources has become increasingly difficult due to procedural and other complications. About a quarter of ODA does not come through government financial systems and a substantial part falls outside the government's planning and budgetary processes, limiting the effectiveness of fiscal and monetary policies. Technical cooperation is still supply-led, being mostly dictated by donors, and constitutes about 16 percent of total ODA. Much technical assistance is fragmented, with donors having a great variety of approaches, modalities and priorities, and the absence of coordination between donors sometimes leads to the duplication of activities (MoF 2008b). Donors frequently establish separate units for implementing projects, which apply the donors' own procedures for operations, procurement, hiring consultants, and environmental impact assessments.

Multilateral aid is untied; however, bilateral aid is often tied to procuring donor country goods and services. Aid fragmentation is high (MoF 2015a) requiring high efforts for separate negotiation, management and reporting. It therefore seems that donors are yet to comply with the commitments they made in the Paris Declaration to move towards the use of common arrangements and procedures under recipient country leadership. In a bid to fulfil commitments towards achieving the MDGs, Nepal introduced various strategies and approaches albeit in some cases donor-driven like the Poverty Reduction Strategy Paper (PRSP), medium-term expenditure frameworks (MTEF), Immediate Action Plan (IAP), the Poverty Monitoring and Analysis System (PMAS), district poverty monitoring and analysis systems (DPMAS), and sectoral business

plans for Managing for Development Results (MfDR). Policy institutions and development ministries have taken lead roles in adopting a results-based approach to public sector management. The need for developing national institutions and capacities to improve aid effectiveness continues.

The International Monetary Fund (IMF) has observed that Nepal's external debt dynamics are subject to only a moderate risk of distress. Challenges remain on prioritizing the need and effective use of debt.

Information and communications technology— The major ICT challenge is to close the digital divide that persists especially between urban and rural areas. For this, increased access to ICT for different regions and income groups is crucial. Nepal also needs to:

- increase awareness of the potential uses of ICT for income generation, and invest in the development of human capital capable of absorbing and using technology;
- strengthen the regulatory system for efficient monitoring, supervising and regulation; and
- finance infrastructure and invest in hardware in this dynamic and fast changing sector.

Foreign assistance, if properly used and channelled, can transform nation states. Efforts must be made to mobilise resources for LDC and developing nations to bridge the gap in the human indicators in a short period. Aid dependency should be gradually removed through meaningful partnerships. The need for increased assistance is also due to the recent earthquakes and the trade embargo that seriously disrupted millions of livelihoods. But receiving nations must shoulder the responsibility of creating conducive environments. Ultimately, the focus should be on Nepal gain-

ing market access without barriers bringing all LDCs and developing countries together in the market with enhanced competitiveness.

Recommendations

- 1) Provide more liberal aid for trade assistance as aid for trade is crucial to address the challenges of integrating least developed countries into the global economy and for them to reap the benefits of increased trading opportunities. And commitments alone are inadequate and the pace of disbursement needs increasing.
- 2) Ensure more meaningful commitment at domestic and international level for initiatives like the Enhanced Integrated Framework.
- 3) Allow for the more liberal movement of natural persons (Mode 4) under service negotiations to enhance service trade (as this is increasingly becoming an area of advantage for LDCs like Nepal).
- 4) Implement agreements on duty-free quota-free market access and aid for trade.
- 5) Protect the rights of farmers to use, reuse and exchange seeds, along with the rights of indigenous and local communities on the use of genetic resources.
- 6) Make the Agreement on Trade Related Aspects of Intellectual Property Rights compatible with the Convention on Biological Diversity, and in particular the provision on access to and fair benefit-sharing of the use of genetic resources.
- 7) Donors and the government should increase efforts to improve aid effectiveness. Donors should channel more resources in a harmonized way through national budgetary systems and use existing institutions and systems, including financial and procurement systems.
- 8) Recipient country governments must improve their absorptive capacities, mitigate obstacles emanating from political and other instabilities, eliminate legal and institutional weaknesses, and improve financial management, accountability and transparency in resource use, and project planning and implementation.
- 9) Make budget allocation and release criteria transparent including by the improved tracking of financial disbursement, and the more comprehensive reporting of expenditure by spending units, including indicators of physical progress.
- 10) Carry out an in-depth study from the perspective of LDC graduation to develop a strategy to mobilize more resources in the short run to mitigate aid dependency in the longer run.
- 11) Allocate more resources for developing supply-side capacity, including in the agriculture, processing, services and infrastructure sectors.
- 12) Allocate resources to different geographical areas and federal states in a balanced way as per needs and development status gap.
- 13) Initiate a programme of debt relief (without any conditions on the use of resources) outside the Heavily Indebted Poor Countries (HIPC) Initiative and Multilateral Debt Relief Initiative (MDRI). Make this programme additional to regular ODA.
- 14) Make Nepal eligible for debt relief to help the country generate additional resources to gear up development efforts to attain graduation from LDCs by 2022.

- 15) Strengthen and intensify telecentre initiatives.
- 16) Improve the quality and extend the quantity of the telecoms infrastructure. Exter-

nal partnerships and support can play a large role in providing the needed human and financial resources. Nepal Telecom is searching for a strategic partner towards this end.

Conclusions and Recommendations

Conclusions

The eight MDGs

Poverty reduction — Reducing poverty and hunger is the priority of Nepal's development agenda. Progress against the poverty SDG will need more disaggregated data and more inclusive programmes. Reaching hard-to-reach populations, marginalized populations and specific geographical areas requires localized planning and programming and a framework for implementing poverty reduction programmes.

Increased production and mechanization in agriculture, increased access to markets and more inclusive growth should improve access to decent employment.

Nepal's large achievements on reducing stunting, the growth in dietary energy intake, and the drop in the number of underweight children are greater than other South Asian countries, although there are disparities by social groups and geographic regions.

Nepal's economic indicators are discouraging with post-earthquakes GDP growth dropping

by over 1.5 percentage points from the estimated 6 percent beforehand. This is impacting Nepal's poor households and rural sectors, which are already deprived of basic facilities. In addition, the five-month long blockade of fuel and essential supplies on southern border in 2015 pushed many people further into poverty.

Universal primary education — Nepal has made remarkable progress with the net enrolment rate now standing at 96.6 percent. A major challenge is the lack of disaggregated data on Janajati and Dalit students, which is needed to monitor the enrolment and retention of hard-to-reach students (many from these groups). Gender parity has been achieved in primary education, which should positively impact poverty, health, early marriage and child mortality.

The 2015 earthquakes forced school closures while the 2015/16 blockade affected education achievements and could hinder sustaining the MDG achievements.

The government's policies and programmes have been key to the education improvements. The shift to sector wide support from development partners, the large increase in access to pre-primary education, welcome to

school campaigns, incentive schemes and literacy programmes have all improved survival rates. However, challenges related to equity, access, quality and efficiency remain especially in rural areas and among certain ethnic and caste groups.

It is necessary to monitor the achievement of compulsory primary education to further narrow the gap in NER and improve the survival rate and sustain achievements. There are still many out-of-school children. There is a big gap to bridge to reach the survival targets, which points to the need to improve the quality of primary education. And attention needs to focus on achieving the literacy target.

Gender equality and women's empowerment — Nepal achieved most of the MDG 3 targets. There has been a large improvement in gender mainstreaming related to the enactment of various acts and regulations, policies, plans and programmes. Institutional frameworks and mechanisms have been established, although they need strengthening and improved coordination is needed. The largest achievement has been on female access to education, although participation and the quality of education, learning outcomes and pass rates and transition to higher education need addressing. Policy reforms and targeted programmes and resources are needed to encourage women's participation in well-paid jobs in the domestic and international labour force. Targeted programmes are needed to address gender inequalities and gaps among various caste and ethnic groups and for strengthening institutional mechanisms. More commitment is needed from senior political, social leaders and government officers. Finally, coordinated efforts are needed from sectoral agencies, communities, families, men and women for the holistic development of women and gender equality.

Child health — Nepal has made great progress on reducing child mortality and achieving all the MDG 4 targets. New targets have been set to universalize access to child health care, to further reduce child mortality and to fully immunize all Nepal's children. The challenge is to sustain the current achievements and to better target the population under the forthcoming federal system of governance.

Maternal health — Both maternal health MDG targets have been partially met. The way forward is to universalize access to maternal health care to further reduce the MMR and ensure that all births are attended by an SBA. The main challenges are to accelerate progress and better target the population under the forthcoming autonomous federal states. The 2015 earthquakes destroyed or seriously damaged many birthing centres in the 14 most-affected districts and undermined access to health care for thousands of pregnant women and their babies. Large efforts need making by the government and its development partners to reinstate access to health care in these areas.

HIV/AIDS, malaria and tuberculosis — The increase in HIV prevalence in Nepal has halted and began to reverse — from 0.3 percent in 2000 to 0.2 percent in 2015 among men and women aged 15-49 years. And new infections among 15-24 year olds have reduced by 80 percent.

The overall national clinical malaria incidence (CMI) and annual parasite incidence (API) rates for 2015 are 1.7 and 0.1. Nepal has witnessed a remarkable decline in the CMI since 2010. With the nation already entering the pre-elimination phase, the government's vision to end malaria by 2030 could be reachable with the aid of evidence-based interventions, strong institutions, effective information management, public-private partnerships

and accounting for relevant socio-cultural factors. Global warming, drug resistance, and the slowly declining number of *Plasmodium vivax* cases need seriously addressing.

There was a 31.2 percent reduction in TB cases between 2000 and 2014, while the death rate associated with TB reduced by 13 percent. There was also a large improvement in the case finding rate in the MDG period and the MDG target was partially achieved. The country has increased the capacity of its institutions and health workers and the level of awareness about TB among the general public. But TB remains a public health concern.

Environmental sustainability — The slow growth in access to energy challenges the growth of agriculture, industry and trade. The energy crisis and political instability have stymied progress. Achieving the energy SDG depends on Nepal accelerating its generation of hydroelectricity.

Nepal's successful environmental conservation programmes in community forestry, buffer zone management, farmer-managed irrigation and integrated watershed management need to be strengthened and expanded by making user groups more inclusive, integrated and enterprising. There are opportunities for harmonizing policies to holistically address issues of food security, forest and water conservation, and climate change.

Nepal's successes in forest and biodiversity conservation have been due to the implementation of policies for decentralized, people oriented management of natural resources. There has been a twin focus on biodiversity conservation and poverty alleviation. Government agencies have promoted community-based landscape conservation to account for the impacts of climate change on biodiversity and livelihoods. Some efforts to conserve nat-

ural resources, such as integrated water management, have however been less successful.

The MDG target for increasing access to improved drinking water and sanitation facilities have been achieved. Community-based sanitary surveillance should be prioritized so that the current status of sanitation can be assessed and areas of intervention identified. Community-friendly and low-cost technology should be applied to avoid alienating local people and to foster public-private partnerships.

Improving the lives of slum dwellers (Target 7D) is challenged by definitional and measurement issues. But the issue is very important given the fast pace of urbanization and the government's commitments to planning and developing cities. Given that Nepal's population is young, mobile and eager to move to urban centres, it is likely that the proportion of the population living in slums will increase, bringing the issues of urban housing, drinking water and sanitation to prominence.

Global Partnership for Development — Official development assistance (ODA) is crucial to help developing nations improve living standards. However, aid dependency needs to be minimised and receiving nations must shoulder the responsibility of creating conducive environments for development. Ultimately, the focus should be on improving market access for Nepalese goods and services. The telecommunications revolution provides huge opportunities for networking and market development.

Overview

Nepal's large development achievements amidst the ten years of armed conflict and the chronic political instability can be credited to the open, liberal and participatory macro-economic policies and the space given to civil

society and community groups to lead local development and resource management. The triangular relationship between state, civil society and the private sector has worked well. The momentum for social and economic development slowed after the year 2000 due to political conflict, but social sector achievements were sustained as the safety net at the grassroots level demonstrated resilience when the State's outreach dwindled.

Nepal's performance on reducing poverty and hunger, maternal mortality, child mortality and increasing literacy, enrolment in primary schools, parity between girls and boys in access to education have been achieved. These aggregate achievements, however mask the underlying challenges. The achievements are unevenly distributed among caste and ethnic groups, geographic regions and economic status. Disadvantaged Janajatis, Dalits and people in remote areas lag behind the national averages. Disparities persist and need to be the focus of the SDG period (2016–2030).

Nepal's MDG implementation experiences provide valuable lessons for the planning and implementation of the SDGs and to achieve the country's target to graduate from LDC to developing country status by 2022. A key lesson is that understanding and addressing the country's diversity has been key to achieving the MDG targets. More decentralized planning, targeted programmes, implementation and close monitoring is needed to close gaps. The new federal system will facilitate more decentralized and appropriate development.

Achievements on poverty, education and health will have a multiplier effect for achieving other development targets. Therefore, for example, providing and sustaining the quality of education will be key for achieving the SDGs.

The participation of multiple actors has helped achieve the MDG targets, and this diverse engagement needs to continue in the SDG period. Partnerships need to be cultivated between national governments, international and national NGOs and the private sector.

More local resources need to be generated and mobilised to fund local programmes. Nepal's experiences with community forest user groups, saving groups and cooperatives have shown how this can be done.

The incorporation of local knowledge, new technologies like biogas production, increasing the local ownership of resources, the participation of local stakeholders in raising awareness and eradicating diseases have contributed to the MDG achievements. Competitive and constituency-oriented politics have also helped communities gain control of local resources. As the success of political representatives is mostly measured by how much resources they manage to bring to their constituents, this trend is likely to grow.

The post-2015 development agenda must pick up where the MDGs left off. The remaining gaps must be filled in order to eradicate poverty and hunger and promote sustained economic growth, allowing people to prosper inclusively. The unequal outcomes between regions, gender and social groups in all the MDG indicators demands more disaggregated target setting, and a more comprehensive understanding of poverty.

Recommendations

Overall, Nepal needs to build on its rich experiences of the role that the State, civil society and the private sector can play in national and local development. More detailed versions of the following recommendations are given at the end of the MDG goal chapters.

Poverty

- 1) Expand the measurement of poverty beyond income and consumption to capture other important influencing factors along the lines of the Multidimensional Poverty Indicator.
 - 2) Focus on the structural transformation of Nepal towards a modern diversified economy that builds upon higher value-added sectors and more knowledge-intensive activities.
 - 3) Complement employment generation schemes with skill development programmes.
 - 4) Poverty reduction programmes should focus on the poorest areas of the country
 - 5) Prioritize increased agricultural production, trade and marketing with a particular focus on hill and mountain market systems to address Nepal's low level of agriculture production and to help achieve food security.
 - 6) Mechanize agriculture, install large-scale irrigation systems and promote smart labour technology to sustain agricultural growth.
 - 7) Create more off-farm employment, enhance community involvement in financing agriculture, and enable cooperatives to finance farm-based and off-farm income generation.
- existing facilities and opening new schools, by mainstreaming religious schools and by implementing standard regulatory practices in private schools.
 - 3) Introduce one-year of compulsory pre-primary education for all children.
 - 4) Overhaul the curriculum and teaching methods to improve civic behaviour and teach soft skills from the early grades.
 - 5) Install the five priority minimum enabling conditions in all schools.
 - 6) Link the enrolment of children from poorer households with an economic safety-net programme that covers the opportunity costs poor parents face sending their children to school.
 - 7) Integrate literacy programmes and skill training initiatives and implement all strategies that facilitate skills learning opportunities.
 - 8) Improve classroom instruction by developing the capacity of head-teachers, giving head-teachers adequate authority, ensuring the timely availability of textbooks and building the capacity of school management committees and parent teacher associations.
 - 9) Align the new education plan and envisaged programmes and projects with the SDGs and contextualize and localize the SDG targets.

Universal primary education

- 1) Introduce further incentives to cover opportunity and programme costs and implement compulsory education to enable the achievement of 100 percent NER.
- 2) Provide more equitable access to ECED and basic and secondary schooling by merging

Gender equality and women's empowerment

- 1) Enforce related acts and policies and implement targeted programmes to address gender inequality and gaps in various caste and ethnic groups and strengthen

existing institutional mechanisms to sustain the achievements made so far.

- 2) Strengthen the institutionalization of the gender-responsive budgeting process, enhance the capacity of MWCSW and the National Women's Commission and ensure that gender equality and women's empowerment continue as key government priorities.
- 3) Expand and implement affirmative action and targeted programmes. Make the existing quota systems an important means of giving women more decision-making power in civil and political spheres.
- 4) Make technical and vocational training more widely available for women entering overseas employment.
- 5) Enforce compensatory measures for violations of women workers' rights.
- 6) Review macro-economic policies and address gender inequality in subsidies, taxation and trade to expand economic empowerment opportunities for women.
- 7) Make necessary arrangements for the specific needs of girls and women in earthquake reconstruction and rehabilitation packages.

Child health

- 1) Appropriately link the Community Based-Newborn Care Programme with other child health initiatives and carefully monitor its integration.
- 2) Carry out more research to better understand the immediate causes of neonatal deaths, and use the findings to focus programme efforts.
- 3) Update the line-listing of unimmunized children so that no child is left behind.

- 4) Make the declaration of fully immunized children VDCs annually.
- 5) The government should increase its immunization budget from general taxation.
- 6) Strengthen the monitoring and supervision of data reporting to the HMIS.
- 7) Reallocate existing immunization staff and fill vacant vaccinator posts.
- 8) Link vaccination programmes in urban areas with urban health centres
- 9) Institute neo-natal death and surveillance reviews to inform the improved quality of care and to minimize avoidable neonatal deaths.

Maternal health

- 1) Improve the monitoring of the quality of delivery care at public and private facilities and carry out maternal death and surveillance reviews.
- 2) Increase the number of SBAs and raise awareness that deliveries should be conducted by SBAs.
- 3) More logically locate new health facilities to meet needs and strengthen referral systems from communities to CEOC sites.
- 4) Discourage the use of abortion for family planning, raise awareness of appropriate family planning methods and provide comprehensive sex education to students.
- 5) Target family planning services to adolescents (especially newly married couples) and make high quality family planning services an integral part of maternal health.

- 6) Calculate the unmet need for family planning by calculating it among women currently living with their husbands.
 - 7) Address the unmet need for family planning through public-private partnerships.
 - 8) Make ANC services more accessible in rural areas.
 - 9) Improve the attitudes of communities and families on the gender and reproductive roles of women and their rights.
- 3) Encourage the transfer of energy technology and financial support from other countries to Nepal.
 - 4) Consider the forestry sector as a productive sector for job and enterprise creation.
 - 5) Make access to water a fundamental right of all citizens.
 - 6) Ensure round the-clock access to good quality water and ensure that safe drinking water and improved sanitation is accessible in all schools (including separate toilets for girls), homes, slums and squatter settlements.

Combat HIV/AIDS, malaria and other diseases

- 1) Expand the national response to HIV prevention and control to expand HIV testing and new and continued ART treatment.
- 2) Encourage safer sex through comprehensive sex education in and out of schools.
- 3) Increase government funding of the HIV response and mobilise resources from different sources.
- 4) Introduce malaria treatment innovations, strengthen malaria prevention and strengthen political commitment for mobilizing resources and evidence-based programming on malaria.
- 5) Increase government funding to sustain the achievements of the TB programme and address multi-drug resistance.

Environmental sustainability

- 1) Promote renewable energy technology, including improved cooking stoves and biogas plants, to meet energy demands and improve health.
- 2) Implement an integrated approach to fresh water, energy and agricultural productivity.

- 7) End open defecation.
- 8) Classify slum and squatter settlements and their inhabitants and produce and implement a slum upgradation strategy.

Global partnership for development:

- 1) Developed countries to provide more aid-for-trade to developing countries.
- 2) Ensure more commitment at domestic and international levels for initiatives like the Enhanced Integrated Framework.
- 3) Allow the more liberal movement of persons under service negotiations to enhance service trade.
- 4) Implement agreements on duty-free and quota free market access and aid for trade.
- 5) Initiate a programme of debt relief outside the Heavily Indebted Poor Countries initiative and Multilateral Debt Relief Initiative.
- 6) Make Nepal eligible for debt relief to generate additional resources to gear up its development efforts to attain graduation from the LDC category by 2022.

- 7) Protect the rights of farmers to use, reuse and exchange seeds. make budget allocation and release criteria more transparent.
- 8) Make the Agreement on Trade Related Aspects of Intellectual Property Rights compatible with the Convention on Biological Diversity, in particular on access to and fair benefit-sharing of the use of genetic resources. 11) Develop a strategy to mobilize more resources in the short run to mitigate aid dependency.
- 9) Donors should channel more resources through national budgetary systems and use existing institutions and systems, including financial and procurement systems. 12) Allocate more resources for developing supply-side capacity, including in the agriculture, processing, services and infrastructure sectors.
- 10) Recipient country governments such as Nepal must improve their absorptive capacities, mitigate obstacles, eliminate legal and institutional weaknesses, and 13) Allocate resources to different geographical areas and federal states in a more balanced way.
- 14) Improve the quality and extend the quantity of Nepal's telecommunications infrastructure.

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Annex

1

Millennium Development Goals and Indicators

Goal 1 Eradicate extreme poverty and hunger

Target 1A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

- ⇒ 1.1 Proportion of population below \$1 (PPP) per day
- ⇒ 1.2 Proportion of population below national poverty line
- ⇒ 1.3 Poverty gap ratio
- ⇒ 1.4 Share of poorest quintile in national consumption

Target 1B: Achieve full and productive employment and decent work for all, including women and young people

- ⇒ 1.5 Growth rate of GDP per person employed
- ⇒ 1.6 Employment-to-population ratio
- ⇒ 1.7 Proportion of employed people living below \$1 (PPP) per day
- ⇒ 1.8 Proportion of own-account and contributing family workers in total employment

Target 1C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

- ⇒ 1.9 Prevalence of underweight children under five years of age
- ⇒ 1.10 Proportion of population below minimum level of dietary energy consumption
- ⇒ 1.11 Proportion of stunted children aged 6-59 months

Goal 2 Achieve universal primary education

Target 2A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

- ⇒ 2.1 Net enrolment ratio in primary education

- ⇒ 2.2 Proportion of pupils starting grade 1 who reach last grade of primary
- ⇒ 2.3 Literacy rate of 15-24 year-olds, women and men

Goal 3 Promote gender equality and empower women

Target 3A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015

- ⇒ 3.1 Ratio of girls to boys in primary education
- ⇒ 3.2 Ratio of girls to boys in secondary education
- ⇒ 3.3 Ratio of girls to boys in tertiary education
- ⇒ 3.4 Ratio of literate women aged 15-24 years to literate men aged 15-24 years
- ⇒ 3.5 Share of women in wage employment in the non-agricultural sector
- ⇒ 3.6 Proportion of seats held by women in national parliament

Goal 4 Reduce child mortality

Target 4A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

- ⇒ 4.1 Infant mortality rate
- ⇒ 4.2 Under-five mortality rate
- ⇒ 4.3 Proportion of 1 year-old children immunised against measles

Goal 5 Improve maternal health

Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio

- ⇒ 5.1 Maternal mortality ratio
- ⇒ 5.2 Proportion of births attended by skilled health personnel

Target 5B: Achieve, by 2015, universal access to reproductive health

- ⇒ 5.3 Contraceptive prevalence rate
- ⇒ 5.4 Adolescent birth rate
- ⇒ 5.5 Antenatal care coverage (at least one visit and at least four visits)
- ⇒ 5.6 Unmet need for family planning

Goal 6 Combat HIV/AIDS, malaria and other diseases

Target 6A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

- ⇒ 6.1 HIV prevalence among population aged 15-24 years
- ⇒ 6.2 Condom use at last high-risk sex
- ⇒ 6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS

Target 6B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it

- ⇒ 6.4 Proportion of population with advanced HIV infection with access to antiretroviral drugs

Target 6C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

- ⇒ 6.5 Clinical malaria incidence death rates associated with malaria
- ⇒ 6.6 Annual parasite incidence
- ⇒ 6.7 Death rate associated with malaria
- ⇒ 6.8 Proportion of children under 5 with fever who are treated with anti-malarial drugs
- ⇒ 6.9 Proportion of children under 5 who sleep under a long-lasting insecticide treated bed net
- ⇒ 6.10 Prevalence of tuberculosis per 100,000 population
- ⇒ 6.11 Death rate associated with tuberculosis
- ⇒ 6.12 Proportion of tuberculosis cases detected
- ⇒ 6.13 Proportion of tuberculosis cases cured under Directly Observed Treatment Short course

Goal 7 Ensure environmental sustainability

Target 7A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

Target 7B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss

- ⇒ 7.1 CO₂ emissions, total, per capita and per \$1 GDP (PPP)
- ⇒ 7.2 Consumption of ozone-depleting substances
- ⇒ 7.3 Energy consumption
- ⇒ 7.4 Commercial energy use per unit of GDP
- ⇒ 7.5 Proportion of people using wood as their main fuel
- ⇒ 7.6 Proportion of people using LPG as their main fuel
- ⇒ 7.7 Proportion of land area covered by forest
- ⇒ 7.8 Proportion of fish stocks within safe biological limits
- ⇒ 7.9 Proportion of total water resources used
- ⇒ 7.10 Proportion of terrestrial and marine areas protected
- ⇒ 7.11 Proportion of species threatened with extinction

(**Note:** Targets 7A and 7B share the above indicators)

Target 7C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

- ⇒ 7.12 Proportion of population using an improved drinking water source
- ⇒ 7.13 Proportion of population using an improved sanitation facility

Target 7D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

- ⇒ 7.15 Proportion of urban population living in slums and squatter settlements

Goal 8 Develop a global partnership for development

Target 8A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system

Target 8B: Address the special needs of the least developed countries

Target 8C: Address the special needs of landlocked developing countries and small island developing States

Target 8D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term

- ⇒ 8.1 Net ODA, total and to the least developed countries, as percentage of OECD DAC donors' gross national income
- ⇒ 8.2 Proportion of total bilateral, sector-allocable ODA of OECD DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation)
- ⇒ 8.3 Proportion of bilateral official development assistance of OECD DAC donors that is untied
- ⇒ 8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes
- ⇒ 8.5 ODA received in small island developing states as a proportion of their gross national incomes
- ⇒ 8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty
- ⇒ 8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries
- ⇒ 8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product
- ⇒ 8.9 Proportion of ODA provided to help build trade capacity
- ⇒ 8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative)
- ⇒ 8.11 Debt relief committed under HIPC and MDRI Initiatives
- ⇒ 8.12 Debt service as a percentage of exports of goods and services

Target 8E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

- ⇒ 8.13 Proportion of population with access to affordable essential drugs on a sustainable basis

Target 8F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

- ⇒ 8.14 Fixed-telephone subscriptions per 100 inhabitants
- ⇒ 8.15 Mobile cellular subscriptions per 100 inhabitants
- ⇒ 8.16 Internet users per 100 inhabitants

Annex

2

Summary of MDG Status, Suggested Action and Link with SDGs

MDGs achievements linked with SDGs targets are briefly analyzed below:

Millennium Development Goals (2000-2015)	Fully Achieved	Partially Achieved	Key underlying issues and unfinished business	Recommendations on major SDGs (NPC 2015a)	Related SDGs
Poverty alleviation Goal 1 Eradicate extreme poverty and hunger Target 1A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day Target 1C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger.	✓		The use of more holistic indicators is important to help reduce poverty and hunger. Eliminating the remaining extreme poverty and hunger, and regional disparities.	Consolidate the gains in poverty and make them sustainable. Employment is the key to poverty reduction and empowerment. Invest in human capital. Redouble efforts to reach the excluded and hardest to reach people who remain in chronic poverty. Social and geographical exclusion can be corrected with socioeconomically transformational interventions.	Goal 1: End poverty in all its form everywhere Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Millennium Development Goals (2000-2015)	Fully Achieved	Partially Achieved	Key underlying issues and unfinished business	Recommendations on major SDGs (NPC 2015a)	Related SDGs
Health Goal 4 Reduce child mortality Target 4A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	✓		<p>The neonatal mortality rate (NMR) (per 1,000 live births) indicator should be added for beyond 2015. Targets for U5MR, IMR and NMR indicators need to be set considering disaggregated population categories and eco-geographical regions including the new federal states.</p> <p>The increasing priority given to birth defects, drowning, child violence, injuries, and accidents and climate change adds new and difficult child health issues.</p>	<p>The neonatal mortality rate (NMR) (per 1,000 live births) indicator should be added for beyond 2015. Targets for U5MR, IMR and NMR indicators need to be set considering disaggregated population categories and eco-geographical regions including the new federal states.</p> <p>The increasing priority given to birth defects, drowning, child violence, injuries, and accidents and climate change adds new and difficult child health issues.</p>	Goal 3 Ensure healthy lives and promote well-being for all at all ages

Millennium Development Goals (2000-2015)	Fully Achieved	Partially Achieved	Key underlying issues and unfinished business	Recommendations on major SDGs (NPC 2015a)	Related SDGs
<p>Goal 5 Improve maternal health</p> <p>Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio</p> <p>Target 5B: Achieve, by 2015, universal access to reproductive health</p>		<p>✓</p> <p>✓</p>	<p>The MDG 5A indicators of the MMR (per 100,000 live births) and proportion of births attended by SBA are partially achieved, new targets need to be set for these indicators.</p> <p>As the MDG 5B indicator of the adolescent birth rate (births per 1,000 women age 15-19 years) was almost achieved, a new target needs setting for this indicator. The unmet need for family planning indicator should be revised for beyond 2015 to, "unmet need of family planning among those currently living with their husband or partner".</p>	<p>The MMR (per 100,000 live births) indicator should be continued beyond 2015.</p> <p>The proportion of deliveries in health facilities, percentage of ever-married women aged 15-49 years with a low body mass index (BMI < 18.5), total fertility rate (births per woman), and family planning current users (all modern methods) should be added for beyond 2015. Targets for these indicators need to be set including disaggregated population categories and by eco-geographical regions including the new federal states.</p> <p>The emerging recognition of gender-based violence, the excessive use of emergency contraception, the large number of women with prolapsed uteruses, anaemia, cancer (particularly breast, uterine, and cervical) and other non-communicable diseases, and climate change add new and difficult dimensions to address by maternal and reproductive health services. They need to be addressed after 2015.</p> <p>Financing by the government sector needs to be increased, particularly for ART services to sustain the achievement as HIV has been halted and reversed.</p>	

Millennium Development Goals (2000-2015)	Fully Achieved	Partially Achieved	Key underlying issues and unfinished business	Recommendations on major SDGs (NPC 2015a)	Related SDGs
Education Goal 2 Achieve universal primary education Target 2A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling		✓	Given the current low achievement of student survival, retention at the primary level is a serious problem. Unless this is addressed, the current achievements on NER and survival may be under threat. To make the education system more inclusive (especially considering reaching children with disabilities).	Increase resources and put innovative interventions in practice for enrolment saturation. Define the quality of early childhood education and development (ECEd) to ensure that all girls and boys have access to quality ECEd. Develop indicators at family, community and school levels. Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments.	Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 3 Promote gender equality and empower women Target 3A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	✓		The significant disparities in outcomes that remain across regions, by gender and specific social groups.	Need an improved mechanism for collecting desegregated information. The gender goal should include sexual health and rights and gender aspects of financing for development. Focus interventions on nationwide inclusive achievements.	Goal 5: Achieve gender equity and empower all women and girls

Millennium Development Goals (2000-2015)	Fully Achieved	Partially Achieved	Key underlying issues and unfinished business	Recommendations on major SDGs (NPC 2015a)	Related SDGs
Environment					
Goal 7: Ensure environmental sustainability					Goal 12: Ensure sustainable consumption and production patterns Goal 13: Take urgent action to combat climate change and strengthen resilience and adaptive capacity to climate related hazards and natural disasters
Target 7A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources			Access to electricity. The generation of 10,000 megawatts of electricity. A reduction in the use of fuelwood.	The generation of sustainable renewable energy.	Goal 7: Ensure access to affordable and modern energy for all
Target 7B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss			Develop forestry as a productive sector. Maintain forest cover and the extent of protected areas.	Enhance the conservation of biodiversity through communities' participation	Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Target 7C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	✓		Provide universal access to safe drinking water and improved sanitation.	Enhance the quality of water and sanitation.	Goal 6: Ensure availability and sustainable management of water and sanitation for all
Target 7D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers			Generate data and identify genuine slums dwellers and squatters.	Upgrade and empower those that are genuine slum dwellers and squatters.	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Millennium Development Goals (2000-2015)	Fully Achieved	Partially Achieved	Key underlying issues and unfinished business	Recommendations on major SDGs (NPC 2015a)	Related SDGs
<p>Growth and employment</p> <p>Target 1B: Achieve full and productive employment and decent work for all, including women and young people</p>				<p>Achieve higher levels of economic productivity through diversification, technological upgrading and innovation. Increase labour productivity through skill enhancement</p> <p>Focus financial services on supporting agriculture, tourism, hydropower and the development of small and medium sized enterprises</p> <p>Fix and enforce minimum wages and formalize the labour market to transform the working poor into reasonably paid workers.</p> <p>Channel external and internal resources towards infrastructure improvement to unlock the infrastructure bottleneck</p> <p>Intervene to uplift marginalized people including through progressive taxation and subsidies.</p> <p>End violence against women, children and those related to social institutions.</p>	<p>Goal 8 Promote sustained inclusive and sustainable economic growth, full and productive employment and decent work for all.</p> <p>Goal 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.</p> <p>Goal 10 Reduce inequality within and among countries</p> <p>Goal 16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p>

Millennium Development Goals (2000-2015)	Fully Achieved	Partially Achieved	Key underlying issues and unfinished business	Recommendations on major SDGs (NPC 2015a)	Related SDGs
Global partnership for development					
<p>Goal 8 Develop a global partnership for development</p> <p>Target 8A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system</p> <p>Target 8B: Address the special needs of the least developed countries</p> <p>Target 8C: Address the special needs of landlocked developing countries and small island developing states</p> <p>Target 8D: Deal comprehensively with the debt problems of developing countries through national and international measures to make debt sustainable in the long term</p> <p>Target 8E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries</p> <p>Target 8F: In cooperation with the private sector, make available the benefits of new technologies, especially ICT</p>			<p>Developed countries have not met their pledge to provide 0.7 percent of their gross national incomes as ODA to developing countries.</p>	<p>Developed countries should comply with their commitments particularly given the huge investments needed to finance the SDGs and the aspiration of countries like Nepal to graduate from the LDC category.</p>	<p>Goal 17 Strengthen the means of implementation and revitalize the global partnership for sustainable development.</p>



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