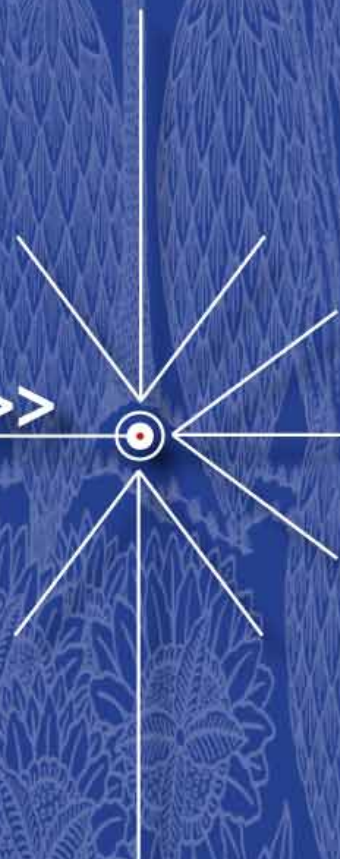




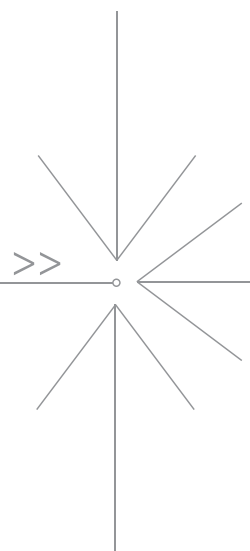
# MILLENNIUM >> DEVELOPMENT GOALS



PROGRESS REPORT  
2005  
**BHUTAN**



# MILLENNIUM DEVELOPMENT GOALS



PROGRESS REPORT  
2005  
**BHUTAN**

## **MILLENNIUM DEVELOPMENT GOALS PROGRESS REPORT 2005 BHUTAN**

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Department of Planning  
Ministry of Finance  
Royal Government of Bhutan

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*Photos :* Bhutan Media Services,  
DoT, IECH, PHE & PhotoWorld

### **Acknowledgements :**

*The Royal Government of Bhutan would like to thank all those who contributed to this report. In particular, special thanks are extended to the members of the National MDG Task Force for their guidance and supervision and UNDP Bhutan for its financial and technical assistance.*

## FOREWORD



དཔལ་ལྷན་འབྲུག་གཞིང་།

ROYAL GOVERNMENT OF BHUTAN

**T**he Millennium Development Goals (MDGs) now constitute a critical part of our national efforts to monitor progress towards the realization of the Millennium Declaration. This publication, the second MDG Report, seeks to reflect the prevailing situation in the achievement of the MDGs in Bhutan and highlights the numerous measures undertaken nationwide to address the core issues. It evaluates the critical challenges and gaps that could impede attainment of the goals, and identifies the key priorities for development support. As with the first MDG Report, the current Report is essentially intended as a means to widely promote, sensitize and popularize the MDGs and stimulate broader discussions of how Bhutan can sustain progress towards the full and complete realization of the MDGs.

The MDG Report 2005 reveals that Bhutan continues to make significant and sustained progress in achieving the MDGs. The country is potentially on track on all of them. For instance, the country has enjoyed great success in enhancing access to safe drinking water and sanitation, in protecting and managing the country's natural resources, and in ensuring improved basic health care and equitable primary education. However, there remain considerable challenging concerns for the country that could possibly impede sustained future progress towards the complete attainment of the MDGs by 2015. Some of these critical challenges include the emerging difficulties of providing decent and productive employment for Bhutanese youths; of ensuring more equitable participation of women in tertiary and technical education; and of the potential threat of HIV/AIDS. Additionally, even as extreme poverty and hunger are virtually unknown in Bhutan, around one third of the country's population still are classified as living below the national poverty line, the majority of whom live in rural Bhutan. The removal of relative disparities between urban and rural areas must therefore constitute a key component of the country's strategy in attaining the MDGs, and in particular, towards alleviating poverty.



The launch of the MDG Report 2005 not only provides the opportunity for stock taking of the progress, but gives a special opportunity to reaffirm and renew steadfast and full commitment towards fulfilling the noble aspirations of His Majesty King Jigme Singye Wangchuck and the ideals enshrined in the Millennium Declaration. Additionally, in reflecting on the progress towards the MDGs, we would also like to remember with deep gratitude, the unstinting support and cooperation of all our development partners who have helped us in our development endeavors to improve the lives of our people.

I would like to commend the National MDG Task Force for their valuable inputs and thank the UNDP country office for continuous support in preparing and bringing out this important report.

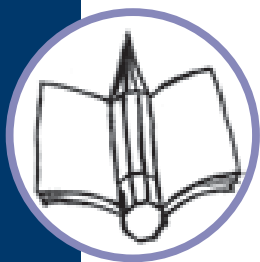
A handwritten signature in black ink, appearing to be 'Wangdi Norbu', written in a cursive style.

(Wangdi Norbu)  
Finance Minister  
1 December, 2005



## CONTENTS

<b>01</b>	<i>Title</i>
<b>02</b>	<i>Acknowledgements</i>
<b>03</b>	<i>Foreword</i>
<b>05</b>	<i>Contents</i>
<b>07</b>	<i>Introduction</i>
<b>12</b>	<i>MDG - Status at a Glance</i>
<b>15</b>	<i>MDG Monitoring and Evaluation Capacity</i>
<b>17</b>	<i>Goal 1</i> <i>Eradicate extreme poverty and hunger</i>
<b>31</b>	<i>Goal 2</i> <i>Achieve universal primary education</i>
<b>37</b>	<i>Goal 3</i> <i>Promote gender equality &amp; empower women</i>
<b>43</b>	<i>Goal 4</i> <i>Reduce child mortality</i>
<b>49</b>	<i>Goal 5</i> <i>Improve maternal health</i>
<b>55</b>	<i>Goal 6</i> <i>Combat HIV/AIDS, malaria &amp; other diseases</i>
<b>65</b>	<i>Goal 7</i> <i>Ensure environmental sustainability</i>
<b>79</b>	<i>Goal 8</i> <i>Develop a global partnership for development</i>
<b>88</b>	<i>Abbreviations</i>



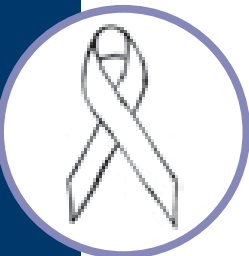
2

*Achieve universal  
primary education*



3

*Promote gender  
equality & empower  
women*



6

*Combat HIV/AIDS,  
malaria & other  
diseases*



1

*Eradicate extreme  
poverty and hunger*



4

*Reduce child mortality*



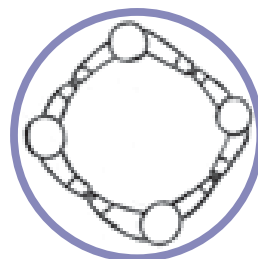
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*Ensure environmental  
sustainability*



5

*Improve maternal health*



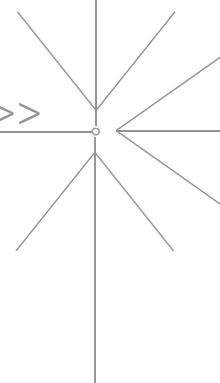
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*Develop a global  
partnership for  
development*



## INTRODUCTION

>>



This is the second progress report on the Millennium Development Goals (MDGs) for Bhutan. As with the first MDG Status Report published in 2002, the MDG Status Report for 2005 tracks the current state of progress in achieving the eight MDGs, highlights the important challenges and identifies the priority areas for development intervention. The assessments will notably help in engaging decision makers and development planners as well as in effectively mobilizing civil society, the general public and the media in supporting the attainment of the various targets. The periodic reporting on these MDGs will further be beneficial in providing a systematic and measurable national follow-up to the various international development conferences and global summits of the 1990s. However, the MDG report was never intended as an in-depth analytical study nor does it seek to make comprehensive policy suggestions. Rather, it is primarily intended to serve as a means for raising awareness, strengthening advocacy, forging partnerships and renewing political commitments towards achieving these hugely important development goals.

To recapitulate, at the start of the new millennium in 2000, Bhutan like all other member states of the United Nations, adopted the UN Millennium Declaration, which embodies eight specific goals and

eighteen targets. The eight MDGs, to be achieved by 2015, include the following goals:

- *Eradicating extreme poverty and hunger*
- *Achieving universal primary education*
- *Promoting gender equality*
- *Reducing child mortality*
- *Improving maternal health*
- *Combating HIV/AIDS, malaria and other diseases*
- *Ensuring environmental sustainability*
- *Developing a global partnership for development*

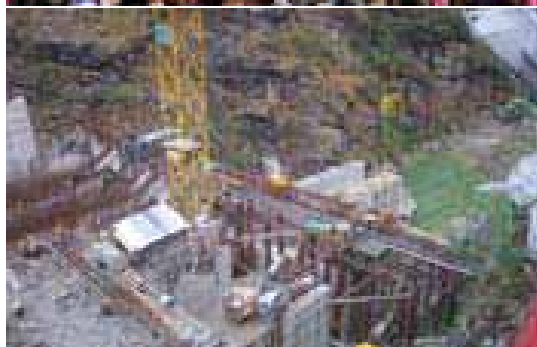
The report is organized into chapters based on each of the MDGs. The status and trends of progress toward goals are reviewed, the supportive environment assessed and the challenges and priorities identified. The status of the monitoring and evaluation environment is summarily assessed in table form at the beginning of the document along with the MDGs Status at a Glance.

For the most part, the monitoring and evaluation situation still remains weak for tracking most goals though recent initiatives reflect growing improvements.



On the basis of available information and current state of progress, Bhutan is on course to achieve most of the MDGs well ahead of 2015. While insufficient poverty data in the past does not permit tracking indicator progress in the reduction of poverty, indications from a national poverty study reflects that the goal of reducing poverty and completely eradicating extreme poverty and hunger are likely to be achieved well ahead of 2015. Malnutrition among children, which has been used as a proxy indicator for hunger, reflects steady progress with the indicator of reducing the proportion of under-five children suffering from under weight and under height already reduced by over half and by one third respectively. Universal access to primary school education is also likely to be achieved well in advance of 2015. In the context of gender parity for education, there is virtual gender equality in enrollment at the primary and secondary levels. While there is still a gender gap at the tertiary levels at present, given the near

parity at lower education levels and the better overall educational performance of girls, this is expected to close rapidly. Promoting gender equality in the workplace and at the highest national decision making levels though remains an area of critical importance requiring attention, even as great strides have been made in advancing women's participation in the social and political life. The country continues to make impressive progress in reducing child mortality and improving maternal health and is on track with regard to these goals. While the numbers of HIV/AIDS cases in the country has been steadily rising, the absolute numbers as of 2005 stands at 74 and the HIV prevalence is extremely low and can be effectively combated. The incidences of Malaria and Tuberculosis have also been drastically reduced and the mortality from these diseases greatly curtailed. The country's environment remains pristine with the total land area under forest cover exceeding 72% and with protected areas encompassing over 29%. The proportion





## HIGHLIGHTS

- *Summaries and fact sheets in Dzongkha, the national language, on the MDGs were distributed to all members of Parliament in 2003 to enhance their understanding of and support for the MDGs;*
- *Short and concise informative writeups on the MDG goals were published weekly in Kuensel, the national newspaper, over a nine week period in three languages;*
- *An MDG online campaign was placed on the website of the national newspaper, i.e on [www.kuenseonline.bt.com](http://www.kuenseonline.bt.com) for the general public's information*
- *An MDG Song in Dzongkha was produced for the national radio and television, which subsequently became extremely popular among young Bhutanese.*
- *A video on the MDGs incorporating the essence of the goals and its importance to the country was produced and used widely by the broadcast media in Bhutan.*
- *A nationwide basketball tournament was sponsored and organized with the theme "Lets all be MDG winners." Other successful sports activities included Fun Runs with "Race to the MDGs" themes.*
- *Inter-School Quiz competitions were held in remote districts with questions based on the MDG Report for Bhutan. Students also took part in an MDG poster competition envisioning Bhutan in 2015.*
- *Promotional items such as the MDG calendars 2003, 2004, MDG T-shirts, Note pads, etc have been distributed widely.*
- *A sports website, [www.bhutansport.bt](http://www.bhutansport.bt), carrying MDG messages was sponsored and launched coinciding with the 60th UN Anniversary.*

of the population without access to safe drinking water has been reduced by two thirds already and the target in this context achieve.

Two of the relevant targets of Goal 8 have been reported on in the current report. With regard to the target of developing and implementing strategies for providing decent and productive work for youths, there is insufficient data to assess the progress, as data for youth unemployment is only available for the last few years. However, on the basis of the numerous plans and programmes that are being pursued to tackle the emerging youth employment issue, it is assessed that the target of developing and implementing strategies is being adequately addressed and on track. The country is comfortably on track with regard to the indicators pertaining to the target of providing the benefits of new technologies, especially information and communication technology. Fixed line telephones have increased by over 750% in a little over a decade, and computer and internet users have likewise increased dramatically.

The overall status of progress towards meeting the MDGs are thus highly satisfactory and commendable, particularly in the light that Bhutan is still a poor country and a land locked LDC. The success factors for these achievements are attributable to the clear development vision and effective implementation of development policies, the rapid economic growth, sustained public investments in social services and the full commitment and support of the international donor community. While the assessment of

the situation is extremely positive and optimistic, there can be no room for complacency as there are enormous challenges that still exist and could well jeopardize progress towards the goals. The “last mile” effects are only too well known and will require enhanced levels of intervention and support.

The Royal Government of Bhutan is thus effectively implementing the Millennium Declaration in the full spirit of what was intended. The Royal Government is further systematically monitoring the MDGs within the context of national and sectoral development frameworks and the country’s donor development monitoring and evaluation systems. Following the Millennium Summit in 2000, an active MDG advocacy campaign was launched to mobilize the support of all Bhutanese. The MDGs were promoted in association with several dimensions of the Bhutanese concept of Gross National Happiness (GNH), notably, ensuring good governance, preservation and promotion of cultural heritage, balanced and equitable socio-economic development and environmental sustainability. In addition to integrating it closely with national development priorities, several other activities were carried out which are highlighted in the box. These advocacy efforts have helped familiarize and popularize the MDGs in Bhutanese society.

## Development Context

Bhutan continues to develop rapidly. The economy has undergone a major transformation from a very small subsistence one characterized by small-scale agriculture and petty trade to one with relatively modern production and income structures with growing linkages and integration with regional and global markets. The country’s social sector profile has shown marked progress with vast improvements in the quality of life for all Bhutanese. These changes have taken place in a short span of time over the last four decades, and have largely been made possible by sustained economic growth fueled primarily by hydro-power development, generous donor assistance and a sound development strategy that effectively invested available resources into the holistic socio-economic development of the country.

Bhutan’s development has been implemented through five-year plans (FYPs) and guided by the overarching development concept of Gross National Happiness. The country’s long term development is further soundly steered by a clear development vision as articulated in the policy document Bhutan 2020: A Vision for Peace, Prosperity and Happiness.

The country’s economic growth has been rapid and broad based. Bhutan has registered on average a 6% real annual



growth rate since 1990. The sustained increase in GDP growth has contributed to the rise in annual per capita income, which in 2003 was US\$ 834. Economic growth for at least the next decade is also expected to be maintained at current levels and possibly even be exceeded. As in the past, sustained growth will be primarily driven by large-scale investments into and returns from hydropower development.

The rapid pace of economic growth and the sustained levels of development assistance have permitted the Royal Government to continually increase investments into the social sector and provide free health and education services. Bhutan today, ranks among those countries with the highest share of public expenditure on education to GDP. The country also has high per capita health expenditure to GDP. Virtually, a quarter of all development expenditure, both capital and current, has been budgeted for health and education. As a result of these sustained investments into the social sector, the country's Human Development Index (HDI) has risen steadily and has grown from 0.427 to 0.583 in 2003. The country has thus moved from the category of low human development into that of a medium human development category, which is a commendable achievement.

Key Indicators	Value	Year
Population	752,700	2004
Annual population growth rate	2.5%	2000
GDP per capita	US\$ 834	2003
Poverty headcount ratio (% of population below poverty line)	31.7%	2003
Unemployment Rate	2.5%	2004
Gross Primary Enrollment	84%	2004
Net Primary Enrollment	69%	2004
Ratio of girls to boys in primary education (%)	95%	2004
Adult Literacy	54%	2000
Access to safe drinking water (%)	84%	2003
Access to safe sanitation (%)	92%	2003
Life Expectancy at Birth (years)	66.1	2000
Maternal Mortality Rate ( per 1,000)	60.5	2000
Under-five Mortality Rate (per 1,000)	84	2000
Infant Mortality Rate (per 1,000)	2.55	2000
Forest cover	72.5%	2004
Human Development Index (HDI)	0.583	2003
Source: Statistical Yearbook of Bhutan 2004		

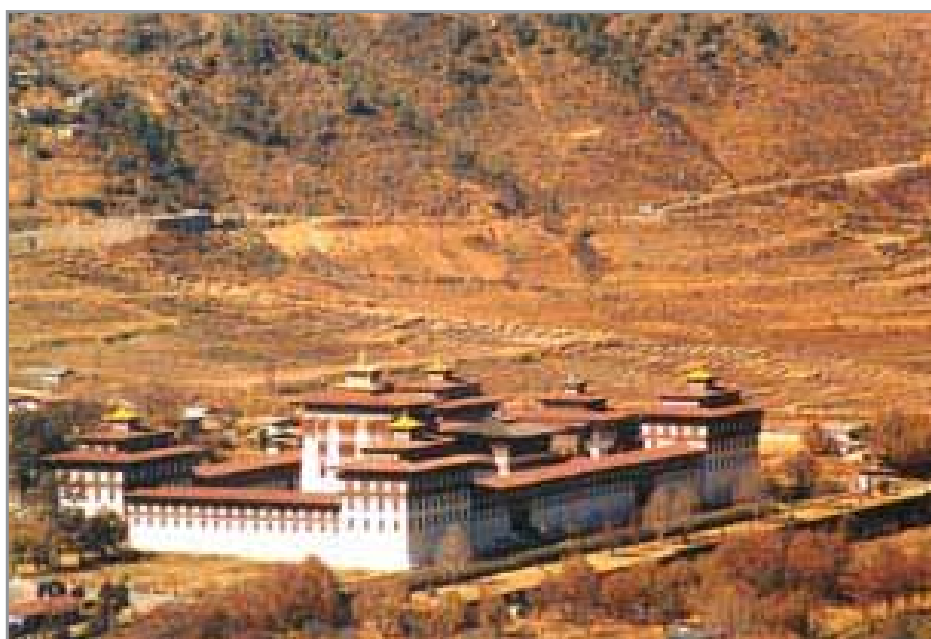
## MDG - Status at a glance

Goals, Targets and Indicators	1990	2000	2004	2015	State of Progress
<b>Goal 1: ERADICATE EXTREME POVERTY AND HUNGER</b>					
<b>Target 1: Halve by 2015, the proportion of people living below poverty line</b>					
<ul style="list-style-type: none"> <li>Proportion of population living below national poverty line (%)</li> <li>Human Poverty Index (HPI-1):</li> </ul>	-	36.3 %	31.7 %	20 %	On track
	-	33.34	33		Insufficient data
<b>Target 2: Halve by 2015, the proportion of people who suffer from hunger</b>					
<ul style="list-style-type: none"> <li>Percentage of population below minimum level of dietary energy consumption (2,124 Kcal)</li> <li>Percentage of under-weight under-five children</li> <li>Percentage of under-height under-five children</li> </ul>	-	-	3.8%	1.9 %	Insufficient data
	38 % ('89)	19 %	-	19 %	<b>Achieved</b>
	56 % ('89)	40 %	-	28 %	On track
<b>Goal 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION</b>					
<b>Target 3: Ensure by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary schooling</b>					
<ul style="list-style-type: none"> <li>Gross Primary Enrollment Ratios (%)</li> <li>Proportion of Pupils starting grade 1 who reach grade 5 (%)</li> <li>Proportion of pupils starting grade 1 who reach grade 7 (%)</li> </ul>	55 %	72 %	84 %	100 %	On track
	73 %	91 %	94 %	100 %	On track
	35 %	81 %	86 %	100 %	On track
<b>GOAL 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN</b>					
<b>Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005, and to all levels of education by 2015</b>					
<ul style="list-style-type: none"> <li>Ratio of girls to boys in primary schools (%)</li> <li>Ratio of girls to boys in secondary schools (%)</li> <li>Ratio of females to males in tertiary institutes (%)</li> </ul>	69 % ('91)	82 %	95 %	100 %	On track
	43 % ('91)	78 %	96 %	100 %	On track
	12 % ('91)	41 %	53 %	100 %	Needs Attention
<b>GOAL 4: REDUCE CHILD MORTALITY</b>					
<b>Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate</b>					
<ul style="list-style-type: none"> <li>Under-five mortality rates (per 1,000 live births)</li> <li>Infant mortality rates (per 1,000 live births)</li> <li>Proportion of children covered under immunization programme</li> </ul>	123	84	-	41	On track
	90	60.5	-	30	On track
	84 %	85 %	90 % (with card)	>95 %	On track
<b>GOAL 5: IMPROVE MATERNAL HEALTH</b>					
<b>Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio</b>					
<ul style="list-style-type: none"> <li>Maternal mortality rate (per 100,000 live births)</li> <li>Births attended by skilled health personnel</li> </ul>	560	255	-	140	On track
	15 %	24 %	32 %	100 %	On track



Goals, Targets and Indicators	1990	2000	2004	2015	State of Progress
<b>GOAL 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES</b>					
<b>Target 7: Halt and begin to reverse the spread of HIV/AIDS</b> <ul style="list-style-type: none"> <li>HIV cases detected</li> <li>Contraception prevalence rate</li> </ul>	0 18.8 % ( <sup>'94</sup> )	38 30.7 %	74 -	- 60 % (national target)	On track On track
<b>Target 8: Halt and begin to reverse the spread of Malaria and Other Major Diseases</b> <ul style="list-style-type: none"> <li>Number of malaria cases and incidences (cases per 100,000)</li> <li>Number of tuberculosis cases and incidences (cases per 100,000)</li> </ul>	22,126 ( <sup>'91</sup> ) 4,232	5,935 1,140	2,760 1,002	- -	On track On track
<b>GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY</b>					
<b>Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources</b> <ul style="list-style-type: none"> <li>Proportion of land area covered by forest</li> <li>Ratio of protected area to surface area for maintaining biological diversity</li> <li>CO<sub>2</sub> (per capita) emissions</li> <li>Proportion of population using solid fuels (i.e. wood, charcoal, dung)</li> </ul>	72.5 % 23 % -5.89 tons ( <sup>'94</sup> ) -	72.5 % 26 % - 75 %	72.5 % 29 % - 70 %	- - - -	On track On track On track Insufficient data
<b>Target 10: Halve by 2015, the proportion of people without sustainable access to safe drinking water and sanitation</b> <ul style="list-style-type: none"> <li>Proportion of population without sustainable access to an improved water source</li> <li>Proportion of population without access to improved sanitation</li> </ul>	55 % 33 %	22 % 12 %	16 % 7.4 % (of HHs)	27.5 % 17.5 %	Achieved Achieved
<b>GOAL 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT</b>					
<b>Target 14: In cooperation with developing countries, develop and implement strategies for decent and productive work for youth</b> <ul style="list-style-type: none"> <li>Youth unemployment rate</li> </ul>	-	2.6 % ( <sup>'98</sup> )	5.5 %	-	Insufficient data
<b>Target 18: In cooperation with the private sector make available the benefits of new technologies, especially information and communication technology</b> <ul style="list-style-type: none"> <li>Fixed Telephone Lines in Service</li> <li>Telephone density ( per 100 persons )</li> <li>Computers in use ( per 100 persons )</li> <li>Internet users ( per 100 persons )</li> </ul>	4,052 0.68 - -	16,580 2.4 0.58 ( <sup>'01</sup> ) 0.43 ( <sup>'01</sup> )	30,420 4 1.0 -	- - - -	On track On track On track Insufficient data







## MDG MONITORING AND EVALUATION CAPACITY\*

GOALS/ TARGETS		ELEMENTS OF MONITORING & EVALUATION ENVIRONMENT					
		Data Gathering Capacities	Quality of Recent Information	Statistical Tracking Capacities	Statistical analytical capacities	Capacity to incorporate Statistical analysis into Policy	Monitoring and Evaluation Mechanisms
<b>Eradicate Extreme Poverty &amp; Hunger</b>	<b>T: 1</b>	Fair	Weak but Improving	Weak but Improving	Weak but Improving	Fair	Weak but Improving
	<b>T: 2</b>	Fair	Fair	Weak but Improving	Fair	Weak but Improving	Weak but Improving
Achieve Universal Primary Education	<b>T: 3</b>	Fair	Fair	Weak but Improving	Fair	Fair	Fair
<b>Promote Gender Equality &amp; Empower Women</b>	<b>T: 4</b>	Weak but Improving	Fair	Weak but Improving	Fair	Fair	Weak but Improving
<b>Reduce Child Mortality</b>	<b>T: 5</b>	Weak but Improving	Weak but Improving	Weak but Improving	Fair	Fair	Weak but Improving
<b>Improve Maternal Health</b>	<b>T: 6</b>	Fair	Weak but Improving	Weak but Improving	Fair	Fair	Weak but Improving
<b>Combat HIV/AIDS &amp; Other Major Diseases</b>	<b>T: 7</b>	Fair	Fair	Weak but Improving	Weak but Improving	Fair	Fair
	<b>T: 8</b>	Weak but Improving	Weak but Improving	Weak but Improving	Fair	Fair	Weak but Improving
<b>Ensure Environmental Sustainability</b>	<b>T: 9</b>	Weak but Improving	Weak but Improving	Weak but Improving	Weak but Improving	Weak but Improving	Weak but Improving
	<b>T: 10</b>	Fair	Fair	Fair	Fair	Fair	Fair
<b>Develop a Global Partnership for Development</b>	<b>T: 14</b>	Weak but Improving	Weak but Improving	Weak	Fair	Fair	Weak but Improving
	<b>T: 18</b>	Fair	Fair	Weak	Fair	Fair	Fair

*\*The assessments of monitoring and evaluation capacity in the table reflect the subjective opinion of the MDG Task Force members*





## Eradicate Extreme Poverty and Hunger

## GOAL

# 1

Table 1.1

### TARGET 1

**Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day**

Indicators	1990	2000	2004	2015	Status of Progress	State of Supportive Environment
<i>Proportion of population living below national poverty line (%)</i>	-	36.3 <sup>1</sup>	31.7 (2003)	20	On track	Strong
<i>The Human Poverty Index (HPI-1)</i>	-	33.34	33	-	Insufficient data	Strong

Source: Pilot HIES 2000, PAR 2004

### Status and Trends

The country remains on track to achieve the goal of reducing poverty in half by 2015. Indications from the Poverty Analysis Report (PAR) 2004 would even suggest that the country could potentially eliminate poverty entirely in eight and half years' time (by around 2013) on the basis of sustained and equitable economic growth and the effective implementation of targeted poverty interventions. Nevertheless, significant constraints do exist that could impede progress toward achievement of the first MDG. These include the particular challenges of accelerating growth and investment in areas such

as agriculture that are important to the poor, improving access to and quality of essential rural social services, promoting rural employment and industry, mitigating rising income inequalities and strengthening the collection of poverty data for poverty monitoring and evaluation.

### Proportion of population living below national poverty line

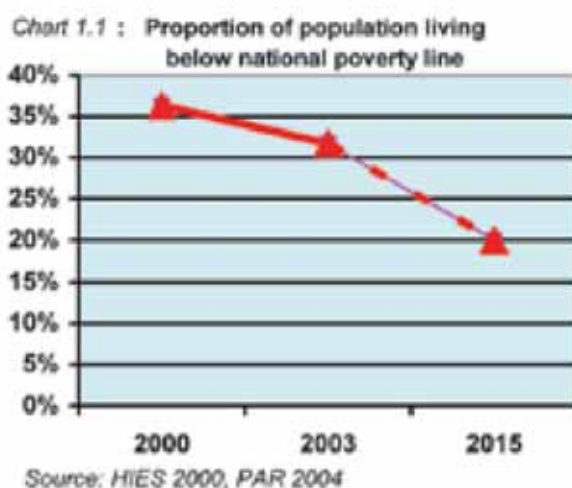
The proportion of Bhutanese living under the poverty line decreased by more than a percentage point a year from 36.3% in 2000 to 31.7% in 2003. The national poverty line, represented by the cost of certain essential non-food items and a food basket of 33 products accounting for 80% of the food consumption of the poorest 40% of the population, was established at Nu. 740.36 per capita per month. On the basis of household units, 24.7% of the households were poor in 2003 as compared to 27.1% in 2000.



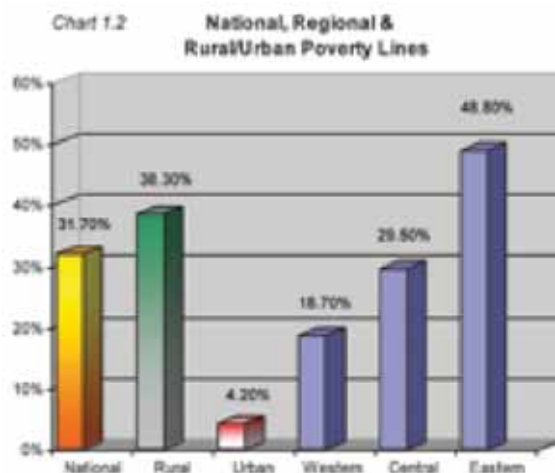
*Poverty in Bhutan is predominantly a rural phenomenon.*

*93% of the poor live in rural areas.*

Using the food poverty line as the measure of extreme poverty, the latter is virtually non-existent in the country and affects only 3.8% of the country's population. The target of reducing by half those suffering from poverty is thus regarded by the Royal Government as the more appropriate national target than that of halving extreme poverty, although efforts will continue towards eliminating any forms of extreme poverty.



Poverty in Bhutan has always been predominantly a rural phenomenon. According to the PAR 2004, poverty affects only 4.2% of the country's urban



Source: BLSS 2003

population in contrast to 38.3% of the rural population who are poor. From another perspective, 93% of the poor live in rural Bhutan and 95% of them depend on semi-subsistence agriculture for their livelihood.

The poverty incidence is generally higher in the eastern districts of Lhuentse, Mongar, Pemagatsel, Trashigang and Trashiyangtse. About 40% of the households and around half of the population in these districts are poor. The poverty incidence in the central districts of Wangduephodrang, Dagana, Tsirang, Sarpang, Zhemgang and Bumthang is marginally lower than the national average with 22.2% of all households and 29.5% of the population in these central districts being poor. The western districts of Thimphu, Paro, Haa, Samtse, Chhukha, Punakha and Gasa collectively reflected a lower incidence of poverty, where 12.7% of the households and 18.7% of the population are poor.

The regional level characteristics of the poorer districts in Bhutan pertained to their geographical isolation and limited access to road and other



physical infrastructure; weaker resource base and the generally lower levels of socio-economic development and economic activities. At the community level, the factors of road connectivity and access to markets stood out even more prominently. Remote and isolated communities, even in those districts with lower poverty incidences, were found to be more vulnerable to poverty while those communities with adequate road access and links to markets, even in the poorer districts, were better off.

At the household level, there appears to be a strong and clear correlation between poverty incidence and the level of educational attainment. Some of the key findings of the PAR 2004 are that school participation rates are considerably lower among the poor than the non-poor with 60% of children from poor households attending primary schools as compared to 80% of non-poor children. This becomes even more pronounced at the secondary level where only 40% of poor children attend secondary schools as compared to 77% of non-poor children. The report further indicates that a higher level of

educational attainment for the head of a household translated directly into lesser chances of the household being poor and that the completion of middle secondary education was generally sufficient for an individual to escape poverty in Bhutan. The generally lower levels of adult literacy and educational attainment among females can also be potentially linked to the finding in the PAR 2004 of a slightly higher incidence and severity of poverty among female-headed households.

Poverty incidence is also linked to household size. The PAR 2004 points out that poverty increases as the size of the household increases across all regions and in both rural and urban areas. The report indicates that on average non-poor households consist of 4.6 members while poor households have an average of 6.5 members. The age dependency ratio was also found to be higher for poor households than for non-poor households.

The PAR 2004 calculated the Gini coefficient for consumption at 0.416. This reflects the presence of relatively high inequality, wherein, the poorest quintile (poorest 20% of the population) accounts for only 6.5% of the national consumption while the richest quintile (richest 20% of the population) accounted for 48.7% or close to half of the total national consumption. The Pilot Household Income and Expenditure Survey (HIES) in 2000 assessed the Gini coefficient at 0.365. Even as the findings of the HIES survey were preliminary and to be interpreted with caution, the indications nevertheless suggest a rise in income inequality.





## The Human Poverty Index (HPI-1)

As poverty in Bhutan is treated as having more dimensions than just the income or consumption aspects, the human poverty index or HPI-1 developed by the UNDP, provides a useful measure to assess human deprivations in the three aspects of longevity, knowledge and standard of living. Bhutan's HPI-1 for 2003 was assessed at 33.00 as compared to 33.34 in 2000, the slight enhancement mainly deriving from the progress made in improving access to safe drinking water.

## Supportive Environment

The overarching goal of the Royal Government's socio-economic development policies has always been directed at maximizing Gross National Happiness. Although in the past no targeted poverty interventions were made, poverty concerns were broadly addressed through the expansion of social services, extensive rural development and measures to improve living standards. Public investment into social services has always enjoyed a large share of the national budget, including 24.5% of the total allocation over the current plan period. Similarly, large-scale investments have been consistently channeled into agriculture, the development of essential rural infrastructure and the promotion of rural livelihoods. In order to reduce spatial disparities, the Royal Government has also attached a high priority to balanced regional development and worked extremely hard at overcoming the "tyranny-of-distance" factors. As such, the country's develop-

ment approach has constantly been and remains deeply pro-poor in orientation, which provides a highly favorable and enabling environment for the achievement of the first MDG.

This national resolve to improve the quality of life for its people and particularly, the less fortunate and the poor is aptly reflected in the country's complete support for various related global compacts. Bhutan is a party to the multi-lateral consensus at the World Summit for Social Development (WSSD 1995) that among other important social goals, primarily sought to place the elimination of poverty at the center of all international and national agendas. As part of its commitment to meet the WSSD poverty reduction goals, the Royal Government has agreed to triple the rural per capita income by 2012. In 2004, the country also became a signatory to the SAARC Social Charter and under provisions of Article III, affirmed that it would accord the highest priority to poverty alleviation.





Until the first poverty publications in 2000 and the more recent Bhutan Living Standards Survey (BLSS) 2003 and PAR 2004, poverty specific quantitative data were not available. Efforts to assess, monitor and analyze are now being initiated through the establishment of a Poverty Monitoring and Evaluation Unit in the Department of Planning. The Royal Government has prepared the Poverty Reduction Strategy Paper (PRSP), which will improve policy responses to combat poverty and contribute towards the formulation of poverty alleviation programmes directly aimed at addressing the specific needs of the poor in Bhutan.

## Major Challenges and Priorities for Development Assistance

The country's real GDP is expected to grow at a sustained rate between 7-8% a year over the decade. There are expectations that this rapid growth of the economy could even be surpassed, driven strongly on account of hydropower projects. While this is expected to greatly help improve prospects for poverty reduction and ensure the long-term sustainability of poverty alleviation and critical social programmes, a key challenge will be to ensure equitable income distribution and that growth is pro-poor and stimulates quality employment.

With regard to the latter, it is highly essential that adequate levels of growth need to also take place in sectors that are important to the poor, primarily in agriculture and rural industry. The



growth rates in these sectors have been relatively much slower. More specifically, the country is faced with the important task of strengthening agriculture growth and promoting rural income generation through the following:

- *raising agricultural productivity*
- *diversification into cash crops*
- *export of high value niche agriculture commodities*
- *continued strengthening of animal husbandry and horticulture support*
- *creating an enabling environment to attract and retain young people in rural areas*

- *expanding and intensifying rural development, including promotion of small, medium and micro-enterprise development*

Another aspect of the economic growth pattern is that it is highly capital intensive. The growth areas of the economy and the formal sector have not and will probably not generate sufficient levels of employment, which is critical for poverty alleviation. Enhancing prospects of self-employment in the rural sector significantly and catalyzing a more dynamic private sector thereby constitute some of the strategic elements in designing solutions to reduce and eliminate poverty.

The other key challenges for poverty alleviation relate to the need to continue working towards balanced regional development and removing existing disparities in access to social services and market opportunities between rural and urban areas. With the devolution of major decision-making powers to the local governments under the decentralization policy, the quality of local governance will be critical to ensure the effective ownership and management of local development and economic activities as these evidently have a significant bearing and impact on poverty alleviation. Understanding more clearly the nature, causes and dimensions of poverty in the country is key to addressing the poverty concerns. However, this has been severely challenged by the lack of reliable data and analytical information and the weak poverty monitoring and evaluation institutional capacity.

In an effort to address the above challenges, the priorities for action are to:

- *further develop rural road and communication infrastructure and access to markets*
- *enhance and improve access to financial services*
- *improve access to and quality of social services, particularly education*
- *develop a coherent poverty policy framework*
- *adequately sequence and initiate targeted poverty interventions*
- *strengthen institutional capacity for disaggregated poverty data collection, monitoring and evaluation*
- *strengthen farmer organizations, self help groups and cooperatives*
- *support rural industrial development through promotion of small, medium and micro-enterprises*







## Eradicate Extreme Poverty and Hunger

# GOAL 1

Table 1.2 TARGET 2						
Halve, between 1990 and 2015, the proportion of people who suffer from hunger						
Indicators	1990	2000	2003	2015	Status of Progress	State of Supportive Environment
Percentage of population below minimum level of dietary energy consumption (2,124 Kcal)	-	-	3.8	1.9	Insufficient data	Strong
Percentage of under-weight under-five children	38 (1989)	19	-	19	Achieved	Good
Percentage of under height under-five children	56 (1989)	40	-	28	On track	Strong

Source: PAR 2004, BLSS 2003

### Status and Trends

As reported in the first MDG Report, there is no evidence of widespread hunger in Bhutan but certain pockets of the country do experience transient food insecurity and seasonal hunger. While there is insufficient data to assess progress in halving the percentage of population suffering from food energy deficit, the country is extremely well placed to do so. Child nutrition has improved steadily over the last decade as has the national situation on micro-nutrients.



### Percentage of population below minimum level of dietary energy consumption

On the basis of the caloric intake, Bhutan does not suffer from lack of food for its population. It is adjudged that only 3.8% of the population currently does not meet the required caloric intake of 2,124 Kcal per day, but this is not due to the lack of food. As figures for previous years were not estimated, progress toward halving this figure from 1990 cannot be assessed. However, estimating progress toward the goal using an even more ambitious target, i.e. of halving the existing 2003 figure down to 1.9% by 2015, still remains comfortably achievable. Furthermore, the PAR 2004 report estimates that bringing the percentage of people living below 2,124 Kcal to 0% could potentially



be achieved within the MDG timeframe of 2015 or probably by 2020. All these would strongly suggest an excellent rate of progress toward attainment of the target on the basis of this indicator.

## Household Food Security

Certain areas in the country such as Pemagatsel and Lhuentse encounter seasonal food shortages, principally grain deficit that usually are between the months of May and July. Ironically, these food deficit periods often coincide with periods of intense agricultural operations when the food needs of farmers are higher than normal.

Poor road access, remoteness and the relative distance from either rice growing areas and markets often characterize these areas though households in urban and peri-urban areas are also known to face occasional food shortages. Household factors that exacerbate the food security conditions are small land holdings, low productivity, inadequate storage facilities, poor irrigation, and localized disasters such as inclement weather and damage by wild animals and birds, pests and fungal diseases. Among these, the small sizes



of landholdings appear to have the most critical impact on household food security. Agronomic surveys reveal that 58% of all farming households owned less than two hectares and that 27% owned less than a hectare. The limited availability of arable land, compounded by population growth and accompanied by increased land fragmentation, can have a severe impact on the household food security situation unless mitigated by significant increases in productivity and output. The poor utilization of food has also been known to contribute to household food insecurity.

## Nutrition

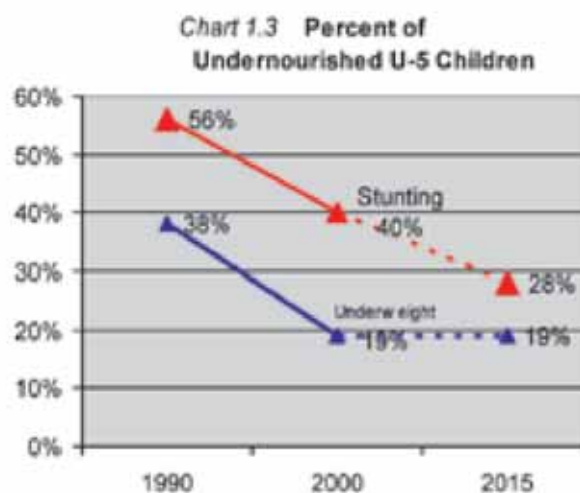
The incidence of food deficiency is closely associated with malnutrition, particularly among children. The trends in the nutritional status of children in Bhutan are positive and have shown marked improvements.

The levels of mild malnutrition among children have declined steeply from 32% to 18% between 1993 and 1997. Severe malnutrition is rare though not entirely absent. The percentage of under-five children who are underweight has been halved from 38% in 1989 to 19%



in 2000 and the MDG target in regard to this acute under-nutrition indicator has been achieved. There has also been rapid progress in reducing the incidence of stunting or the height deficits in relation to age for under-five children. Stunting has been reduced from 56% in 1990 to 40% in 2000. The country currently remains on track in regard to this indicator too but further reductions are expected to be more difficult to come by due to the well-known constraints of the last mile effect and hence will require sustained efforts. No major gender differences exist in the nutritional status of children and where small differences exist, girls are usually better off.

The country has witnessed remarkable improvements in the micronutrient deficiency situation. Iodine Deficiency Disorders (IDD) which were once widely prevalent in the country have been effectively brought under control with goitre occurrence declining from 65.4%



Source: NHS 1990, 2000

in 1983 down to less than 5% at present. In 2003, the country attained the status of a 'Normal Iodine Nutrition Country' and was the first South Asian country to do so. Additionally, the micronutrient deficiency of Vitamin A is no longer regarded as a public health problem, though iron deficiency resulting in anaemia still remains a concern among pregnant women.

## Supportive Environment

As reflected in the Ninth Five Year Plan, the Royal Government is strongly committed to enhancing food security, reducing the proportion of people who encounter seasonal hunger and food energy deficits and improving the people's nutritional status, particularly for women and children. A critical aspect of bolstering food security is being addressed through the country's innovative strategic three point approach referred to as the "Triple Gem" which emphasizes the importance of increasing agricultural production, improving accessibility (to resources such as land, water and financial) and strengthening agricultural marketing.

Some of the initiatives being implemented include activities to enhance food crop outputs and livestock production and increasing access to food through widespread distribution and supply of essential commodities through fair price shops. Nutrition gaps are also addressed through various activities under the nutrition policy and programmes. This has been accompanied with active advocacy to promote healthy nutritional practices, including the promoting of breast-feeding, etc. The nutrition programme in communities, includes the promotion of school agriculture and kitchen gardening, and is linked to childcare initiatives and has been more effectively integrated with agrarian development and income generating policies.

### Challenges and Priorities for Development Assistance

Food security at the national level is constrained by the small percentage of arable land for cultivation, subsistence cultivation and low productivity and generally the small size of land holdings. Bhutan is not self-sufficient in terms of food production and has been a net food importer, particularly of grains. The long-term challenge is how Bhutan can progress towards greater food security - at a time when farming populations are increasingly shrinking due to outbound migration to urban areas and there is the ready availability of cheaper grain imports that make rice and other food grain cultivation less and less economically feasible.



Other challenges relating to household food security concern the rapid fragmentation of land holdings, high vulnerability to natural disasters, crop depredation by wild animals, birds and pests, poor food storage facilities and low food stocks. Rural farming communities also are faced with limited off-farm income that heightens their vulnerability to food insecurity. Socially, the poor or inefficient utilization of food stocks such as the diversion of food grains for the brewing of alcohol, exacerbate the food deficits that communities face. Addressing these constraints effectively will greatly consolidate progress toward the target of reducing to zero, the proportion of the population with the minimum dietary energy consumption of 2,124 Kcal per day.



The malnourishment of women and children remains a key challenge. Malnutrition not only affects child morbidity and mortality but is known to have significant long-term effects on the health of an individual. The poor nutritional status of pregnant women too manifests in the relatively high prevalence of anemia. Furthermore, there is the challenge of addressing spatial disparities in the context of the nutritional status and food security situation. Communities from the eastern region and from rural areas notably experience higher levels of malnutrition and food poverty than other regions and the urban areas.

The improvement of the nutritional status of the people will depend on how better nutritional practices and knowledge are effectively conveyed to and assimilated by them. For instance, the use of milk substitutes is on the rise. Countering such practices that have a negative impact on an infant's nutrition and health will constitute a challenge that will require innovative and creative solutions.

The priorities for development assistance in working towards the goal of eliminating hunger and malnutrition are:

- *Enhancing grain and livestock production and productivity*
- *Expansion into horticulture and high value niche product cultivation to augment income*
- *Constructing food storage/processing/marketing infrastructure and facilities*
- *Strengthening education and awareness on better nutrition practices*
- *Continuing school feeding programmes*
- *Strengthening active community engagement in nutrition interventions*
- *Targeting household food security and nutrition interventions for vulnerable groups and regions*







## Eradicate Extreme Poverty and Hunger

## GOAL

# 1

Table 1.1

### TARGET 1

**Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day**

Indicators	1990	2000	2004	2015	Status of Progress	State of Supportive Environment
<i>Proportion of population living below national poverty line (%)</i>	-	36.3 <sup>1</sup>	31.7 (2003)	20	On track	Strong
<i>The Human Poverty Index (HPI-1)</i>	-	33.34	33	-	Insufficient data	Strong

Source: Pilot HIES 2000, PAR 2004

### Status and Trends

The country remains on track to achieve the goal of reducing poverty in half by 2015. Indications from the Poverty Analysis Report (PAR) 2004 would even suggest that the country could potentially eliminate poverty entirely in eight and half years' time (by around 2013) on the basis of sustained and equitable economic growth and the effective implementation of targeted poverty interventions. Nevertheless, significant constraints do exist that could impede progress toward achievement of the first MDG. These include the particular challenges of accelerating growth and investment in areas such

as agriculture that are important to the poor, improving access to and quality of essential rural social services, promoting rural employment and industry, mitigating rising income inequalities and strengthening the collection of poverty data for poverty monitoring and evaluation.

### Proportion of population living below national poverty line

The proportion of Bhutanese living under the poverty line decreased by more than a percentage point a year from 36.3% in 2000 to 31.7% in 2003. The national poverty line, represented by the cost of certain essential non-food items and a food basket of 33 products accounting for 80% of the food consumption of the poorest 40% of the population, was established at Nu. 740.36 per capita per month. On the basis of household units, 24.7% of the households were poor in 2003 as compared to 27.1% in 2000.

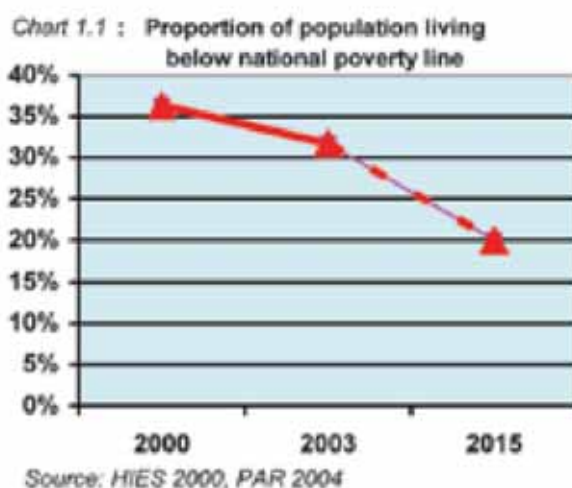




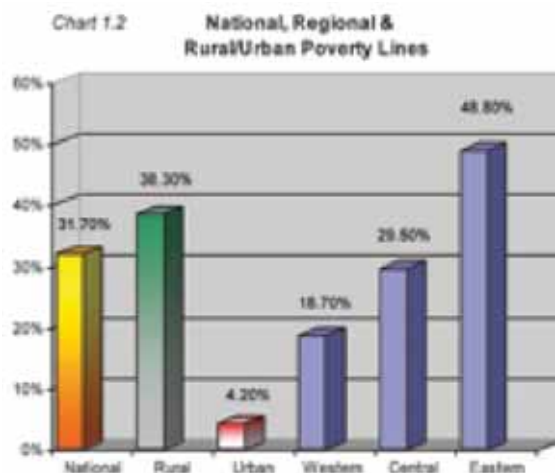
*Poverty in Bhutan is predominantly a rural phenomenon.*

*93% of the poor live in rural areas.*

Using the food poverty line as the measure of extreme poverty, the latter is virtually non-existent in the country and affects only 3.8% of the country's population. The target of reducing by half those suffering from poverty is thus regarded by the Royal Government as the more appropriate national target than that of halving extreme poverty, although efforts will continue towards eliminating any forms of extreme poverty.



Poverty in Bhutan has always been predominantly a rural phenomenon. According to the PAR 2004, poverty affects only 4.2% of the country's urban



Source: BLSS 2003

population in contrast to 38.3% of the rural population who are poor. From another perspective, 93% of the poor live in rural Bhutan and 95% of them depend on semi-subsistence agriculture for their livelihood.

The poverty incidence is generally higher in the eastern districts of Lhuentse, Mongar, Pemagatsel, Trashigang and Trashiyangtse. About 40% of the households and around half of the population in these districts are poor. The poverty incidence in the central districts of Wangduephodrang, Dagana, Tsirang, Sarpang, Zhemgang and Bumthang is marginally lower than the national average with 22.2% of all households and 29.5% of the population in these central districts being poor. The western districts of Thimphu, Paro, Haa, Samtse, Chhukha, Punakha and Gasa collectively reflected a lower incidence of poverty, where 12.7% of the households and 18.7% of the population are poor.

The regional level characteristics of the poorer districts in Bhutan pertained to their geographical isolation and limited access to road and other



physical infrastructure; weaker resource base and the generally lower levels of socio-economic development and economic activities. At the community level, the factors of road connectivity and access to markets stood out even more prominently. Remote and isolated communities, even in those districts with lower poverty incidences, were found to be more vulnerable to poverty while those communities with adequate road access and links to markets, even in the poorer districts, were better off.

At the household level, there appears to be a strong and clear correlation between poverty incidence and the level of educational attainment. Some of the key findings of the PAR 2004 are that school participation rates are considerably lower among the poor than the non-poor with 60% of children from poor households attending primary schools as compared to 80% of non-poor children. This becomes even more pronounced at the secondary level where only 40% of poor children attend secondary schools as compared to 77% of non-poor children. The report further indicates that a higher level of

educational attainment for the head of a household translated directly into lesser chances of the household being poor and that the completion of middle secondary education was generally sufficient for an individual to escape poverty in Bhutan. The generally lower levels of adult literacy and educational attainment among females can also be potentially linked to the finding in the PAR 2004 of a slightly higher incidence and severity of poverty among female-headed households.

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growth rates in these sectors have been relatively much slower. More specifically, the country is faced with the important task of strengthening agriculture growth and promoting rural income generation through the following:

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## Eradicate Extreme Poverty and Hunger

# GOAL 1

Table 1.2

### TARGET 2

Halve, between 1990 and 2015, the proportion of people who suffer from hunger						
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Percentage of under-weight under-five children	38 (1989)	19	-	19	Achieved	Good
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### Percentage of population below minimum level of dietary energy consumption

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## Nutrition

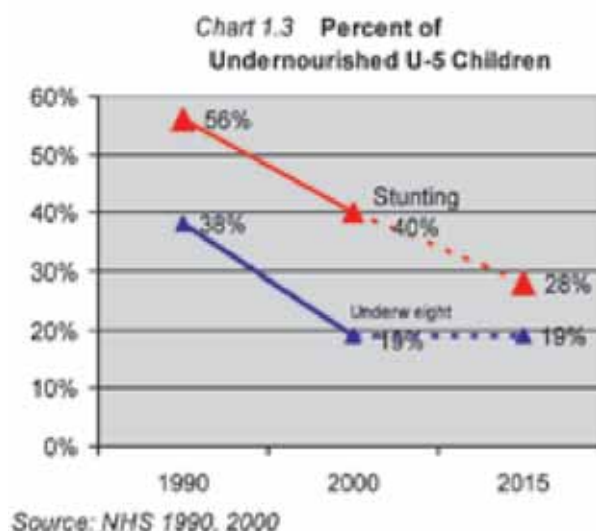
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### Challenges and Priorities for Development Assistance

Food security at the national level is constrained by the small percentage of arable land for cultivation, subsistence cultivation and low productivity and generally the small size of land holdings. Bhutan is not self-sufficient in terms of food production and has been a net food importer, particularly of grains. The long-term challenge is how Bhutan can progress towards greater food security - at a time when farming populations are increasingly shrinking due to outbound migration to urban areas and there is the ready availability of cheaper grain imports that make rice and other food grain cultivation less and less economically feasible.



Other challenges relating to household food security concern the rapid fragmentation of land holdings, high vulnerability to natural disasters, crop depredation by wild animals, birds and pests, poor food storage facilities and low food stocks. Rural farming communities also are faced with limited off-farm income that heightens their vulnerability to food insecurity. Socially, the poor or inefficient utilization of food stocks such as the diversion of food grains for the brewing of alcohol, exacerbate the food deficits that communities face. Addressing these constraints effectively will greatly consolidate progress toward the target of reducing to zero, the proportion of the population with the minimum dietary energy consumption of 2,124 Kcal per day.





The malnourishment of women and children remains a key challenge. Malnutrition not only affects child morbidity and mortality but is known to have significant long-term effects on the health of an individual. The poor nutritional status of pregnant women too manifests in the relatively high prevalence of anemia. Furthermore, there is the challenge of addressing spatial disparities in the context of the nutritional status and food security situation. Communities from the eastern region and from rural areas notably experience higher levels of malnutrition and food poverty than other regions and the urban areas.

The improvement of the nutritional status of the people will depend on how better nutritional practices and knowledge are effectively conveyed to and assimilated by them. For instance, the use of milk substitutes is on the rise. Countering such practices that have a negative impact on an infant's nutrition and health will constitute a challenge that will require innovative and creative solutions.

The priorities for development assistance in working towards the goal of eliminating hunger and malnutrition are:

- *Enhancing grain and livestock production and productivity*
- *Expansion into horticulture and high value niche product cultivation to augment income*
- *Constructing food storage/processing/marketing infrastructure and facilities*
- *Strengthening education and awareness on better nutrition practices*
- *Continuing school feeding programmes*
- *Strengthening active community engagement in nutrition interventions*
- *Targeting household food security and nutrition interventions for vulnerable groups and regions*







## Achieve Universal Primary Education

# GOAL 2

Table 2.1

### TARGET 3

**Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling**

Indicators	1990	2000	2004	2015	Status of Progress	State of Supportive Environment
Gross Primary Enrollment Ratio	55%	72%	84%	100%	On track	Strong
Proportion of pupils starting grade 1 who reach grade 5	73%	91%	94%	100%	On track	Strong
Proportion of pupils starting grade 1 who reach grade 7	35%	81%	86%	100%	On track	Strong

Source: General Statistics, Ministry of Education (MoE), RGoB

### Status and Trends

Bhutan is on track towards achieving this second MDG of ensuring universal primary education. Additionally, significant disparities in enrollment and other education indicators continue to exist between rural and urban areas of the country and will require serious attention, if progress towards the goal is to be maintained and consolidated. Furthermore, the Royal Government does not perceive the goal of achieving universal primary education merely in terms of numbers but one that needs to actively consider the quality of basic education available as an equally important objective. Improving the

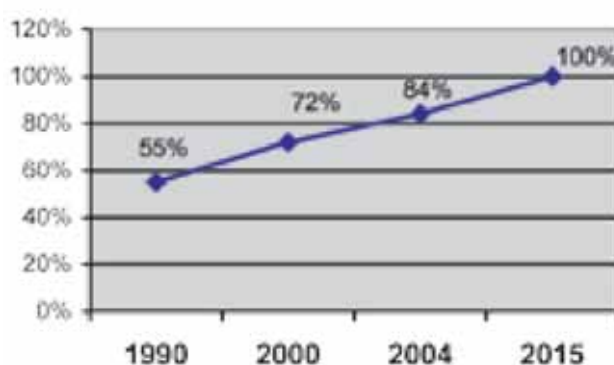


quality of primary education thus constitutes an important challenge that the Royal Government will be addressing on a priority basis as it simultaneously pursues the realization of this second MDG.

### Enrollment Rates

Access to primary education has grown rapidly over the years and the country will soon achieve universal access to primary education. In 1990, the gross

Chart 2.1 Gross Primary Enrollment Rate



Source: General Statistics, MoE.

*Bhutan maintains very high levels of investment into education. At over 7% percentage of GDP, this is among the highest in the world.*

primary enrollment rate was 55%, but this has risen impressively to 84% in 2004.

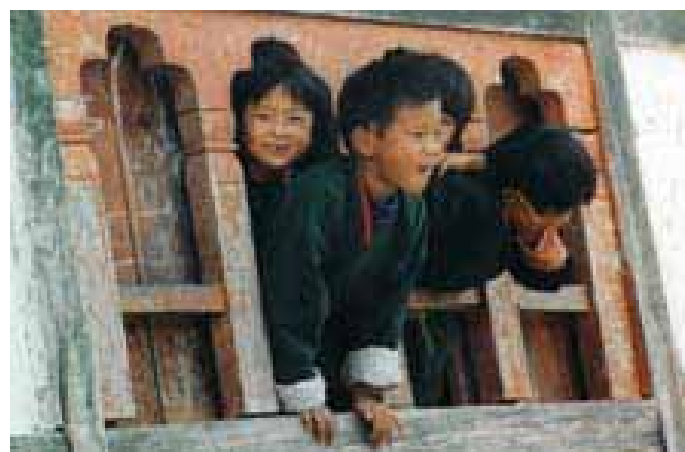
There are significant differences in the primary school enrollment levels between rural schools and urban schools and those in different income groups. The PAR 2004 points out that the gross primary enrollment rate for rural areas (65.3%), was considerably lower than for urban areas (88.9%), and that the poor had lower enrollment rate (57.7%) as compared to the non-poor (76.8%). The PAR 2004 further highlights regional variations in the school participation rates.

### Survival Rates

The proportion of students starting grade 1 who reach grade 5 has increased steadily from 73% in 1990 to 91% in 2000 and 96% in 2004. As the full primary cycle in Bhutan starts from grade 1 through to grade 7, this indicator has also been included. The proportion of students starting grade 1 who reach grade 7 more than doubled from 35% in 1990 to 81% in 2000 and was reported at 86% in 2004. Additionally, since 1996-97, girls have consistently had a better survival record than boys. In 2004, 90% of all enrolled girls who had started grade 1 reached grade 7, whereas only 82% of boys were able to complete a full course of primary schooling.

### Public Expenditure on Education and as Percentage of GDP

Public expenditure for education has always been among the highest recipients of the national budgetary



allocation. Under the 9th Five Year Plan (FYP, 2002-2007) budget, the education sector has been provided about 14.6% of the total outlay, the single largest sectoral allocation. A major portion of this allocation is invested in primary education. In terms of the ratio of annual public education expenditure to GDP, this amounts to over 7.15% of GDP in 2003. This high percentage would not only compare favorably with many developed countries, but place Bhutan among those countries with the highest ratio of public expenditure on education to GDP.

### Supportive Environment

The Royal Government has always attached an extremely high priority to education ever since the inception of planned development in the country. Free basic education has been the privilege of every Bhutanese and has been envisioned as an "inalienable right" for all Bhutanese in the country's national vision as articulated in the Bhutan 2020 Vision document. The latter further deems education as both a noble end in itself and as a critical means for realizing all of the other important development objectives, including the overarching goal of Gross National Happiness (GNH).



In practice, the sustained levels of public investment for education provide a clear and unambiguous indication of the Royal Government's unswerving commitment and support for universalizing basic education in the country.

Bhutan has undertaken numerous initiatives to actualize the Education for All (EFA) goals and targets that the country committed to do so at Jomtien in 1990 and Dakar in 2000. Important elements of these commitments have moreover been incorporated into the national education policy and programmes. The Education Sector Strategy formulated in 2003 provides a comprehensive strategy for educational development at all levels and notably emphasizes the relevance of maintaining education quality standards while enhancing access. This important policy document also provides a useful road map for achieving the national EFA goals and other critical education objectives articulated in the country's Bhutan 2020 Vision document.

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## Challenges and Priorities for Development Assistance

The country still faces several critical challenges as it seeks to consolidate its rapid gains in education. One of these includes enhancing the outreach of primary education to children in rural and remote communities and others who are unable to enroll in schools. A related challenge is the apparent



spatial disparity in the levels of participation in education, comparably lower educational attainments and quality of education between urban and rural areas of the country. In a recent study that analyzed factors of rural-urban migration, education was the overwhelmingly major factor that attracted rural residents to urban centers around the country. National efforts in expanding access to education in rural Bhutan are considerably constrained by the difficult terrain and scattered nature of settlements.

There is also the challenge of adopting a more inclusive approach to improve educational access to and the special needs of those with physical disabilities and learning impediments. This will entail incorporating special provisions for facilities and curriculum. The



retention of children and reducing early dropouts constitutes another important challenge and critical area for policy attention.

Support measures such as the school feeding programmes that promote the retention of children in schools, will have to be continued as such support is seen to be one of the key elements in ensuring the participation of school going children, particularly in the remote areas. The school feeding programme in Bhutan has been very successful in supporting those children from the poorer segments of the society, who could not afford basic education, either due to their economic conditions or distance from the nearest school. Additionally, such support has encouraged the participation of girls, which is clearly evidenced by the increased enrollment of girls in those schools, which have been receiving support through the school feeding programme.

The need to expand secondary education has been particularly acute as the number of those completing the primary cycle continues to swell and adds increasing admission pressures on existing lower secondary and middle secondary schools. Admissions into tertiary education institutes are similarly





becoming more competitive each year and many Bhutanese students have to pursue self-financed education outside of the country. This option though is often unavailable for many students who do not have the required financial resources. Expanding access to tertiary level in-country education is thus an emerging challenge.

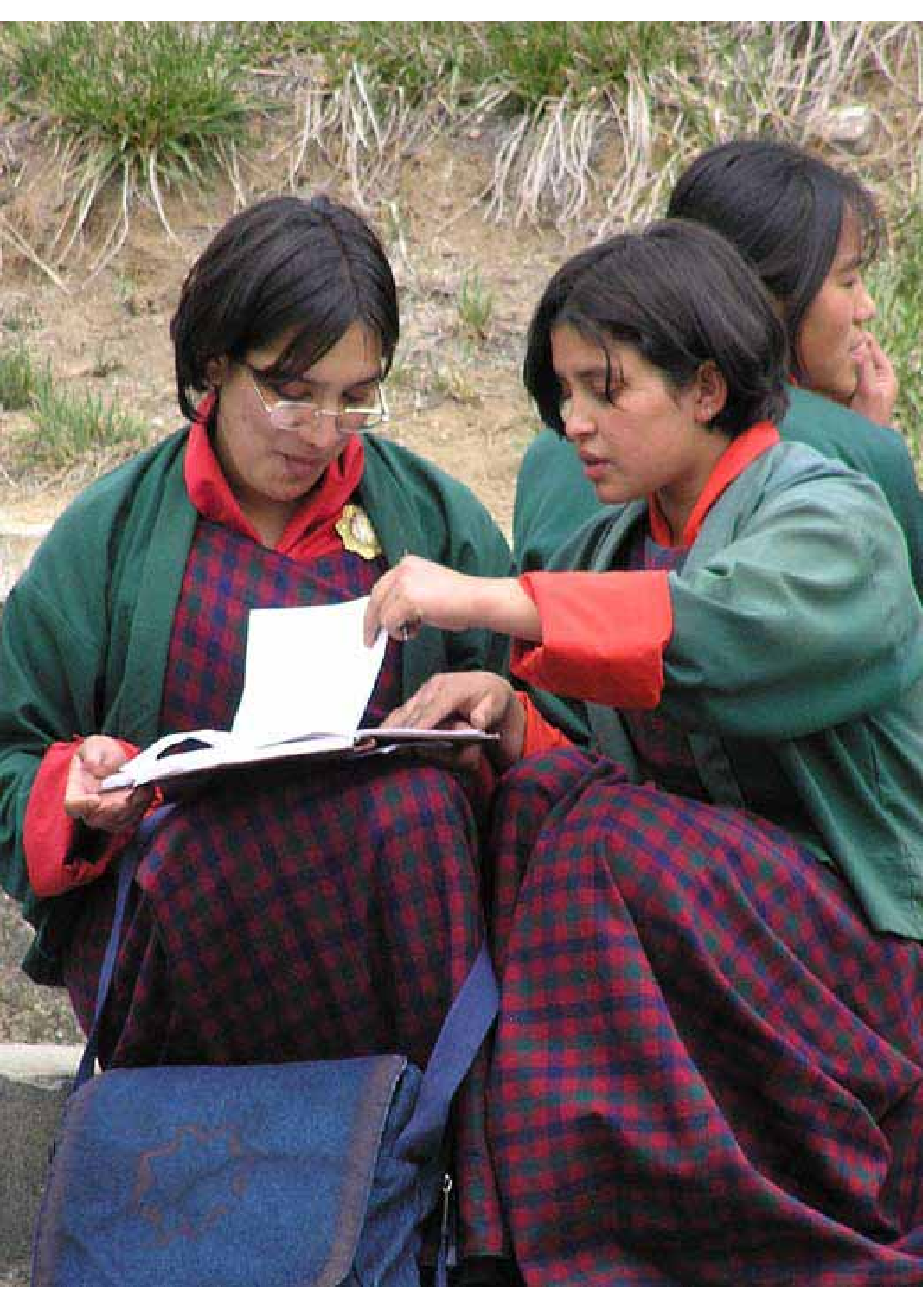
Improving the quality of education is another major consideration that cannot be overlooked while striving to enhance access at all levels. Overcrowding of classrooms, shortage of qualified teachers, especially in the remote schools, and inadequate learning resources are some of the challenging factors that strongly affect the quality of learning in schools. With increasing demands on the school system, the capacity of educational institutes to deliver quality education will be even more severely tested. Some integral aspects of quality improvement that will require attention, relate to the need to make the school curriculum at all levels more relevant and interesting; to improve the aptitude, skills, motivation, qualification and number of teachers; and to create a conducive, engaging and positive learning environment.

The important priority areas for development assistance for achieving universal primary education and other important education goals are

highlighted below:

- *Enhancing the enrollment rates in schools*
- *Improving the quality and relevance of education and the internal efficiency of the educational system*
- *Continuous and regular external assessment of the quality of basic education*
- *Encouraging private sector participation in education delivery with quality control*
- *Strengthening skills development and vocational programmes in secondary schools*
- *Reducing the incidental costs of sending children to schools in rural communities and continue supporting the ongoing school feeding programme*
- *Pilot testing and implementing alternative learning schemes and innovative delivery systems for hard to reach communities such as the school-on-yak & multi-grade options*
- *Improving curriculum development and learning facilities for vulnerable and handicapped students*







## Promote Gender Equality and Empower Women

# GOAL 3

Table 3.1

### TARGET 4

**Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015**

Indicators	1990	2000	2004	2015	Status of Progress	State of Supportive Environment
Ratio of girls to boys in primary education (%)	69 (1991)	82	95	100	On track	Strong
Ratio of girls to boys in secondary education (%)	43 (1991)	78	96	100	On track	Strong
Ratio of females to males in tertiary institutes (%)	12 (1991)	41	53	100	Needs attention	Good

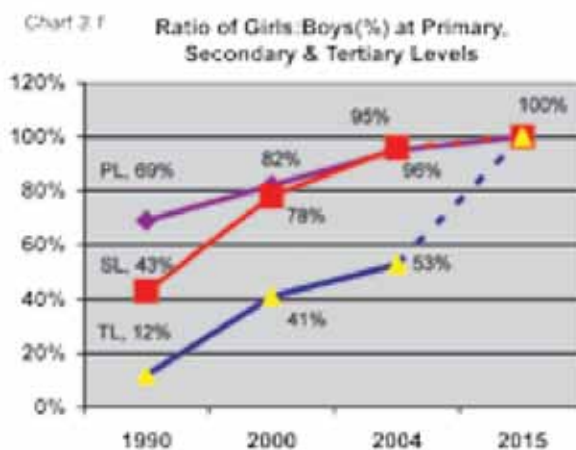
Source: General Statistics, Ministry of Education (MoE), RGoB

### Status and Trends

Bhutan has made impressive progress towards ensuring gender equity in education. The number of girls to boys at the primary and secondary education levels are now virtually at par. The achievement of complete gender parity at these levels is well on track and the target for these levels is most likely to be achieved by 2005. Attainment of gender parity at the tertiary education levels by 2015, however, presents a more serious challenge, even as the long-term prospects for this are extremely bright. Concerted efforts will be needed to address the particular challenges of easing the transition of females from the secondary to tertiary levels, reducing their dropout after the completion of secondary education and promoting greater female enrollment into technical, professional and vocational institutions.

### Gender Equity in Education

The ratio of girls to boys has been steadily rising from 69 girls to every 100 boys in 1990 to 95 girls to every 100 boys at the primary level. This represents only a very small gender gap that remains to be covered. This achievement has largely been on account that female



Source: General Statistics, MoE, 1991, 2000, 2004

enrollment in primary schools has been growing faster by an average of 2.4 % each year over male enrollment during the last decade. The student survival rate for girls up to the end of the primary cycle has also been consistently higher with the rate climbing each year. In 2003, the student survival rate for boys was at 73.2% as compared to 85.5% for girls.

Gender parity at the secondary education level has now reached a level where there are 96 girls for every 100 boys. Given the current higher enrollment rates and better efficiency indicators for girls at the primary levels, gender parity at the secondary level is likely to be attained very quickly and way ahead of 2015.

Table 3.2

	Share of Women and Men in Employment			
	1998		2003	
	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>
<b>LFPR</b>	62.8%	76.7%	54%	72.5%
<b>Unemployment Rate</b>	1.2%	1.6%	2%	1.6%
<b>Rate of Employment</b>	45.5%	54.5%	44%	56%

Source: NLFS 1998/1999, 2001, 2004

Likewise, there has been significant progress in reducing the gender parity at the tertiary education level. However, as the figures for the base year were extremely low at 12 girls for every 100 boys, there is enormous ground to be covered to arrive at full parity. Progress toward the goal has been satisfactory, but needs to be accelerated considerably through targeted interventions on facilitating the transition of girls into



tertiary education, including technical and vocational education.

## Gender Equity in Economic, Social and Political Life

In general, women in Bhutanese society enjoy substantive freedom and equality and enjoy equal opportunities, entitlements and legal status. There is also no overt discrimination against them in Bhutanese society. However, there are areas where Bhutanese women are at a disadvantage and gender gaps are apparent. There is thus ample scope to further improve the socio-economic advancement of Bhutanese women and their empowerment.

Female participation in the labor force has traditionally been lower for Bhutanese women on account that a significant number of them are engaged in family responsibilities. In 2003, female labor force participation stood at 54% as compared to 72.5% for men. Women also have a slightly higher unemployment rate (2%) as compared to men (1.6%).

The annual labor force surveys further reveal that a much larger number of women work primarily in the agricultural



sector than men. For instance, in 2003, 87% of all employed women worked primarily in the agricultural sector as compared to 69.9% of men. The unemployment rates for females on the whole have notably been higher than for males and appear to be even more accentuated than before. The percentage of women in private business though presents a much more positive picture with virtual parity in the numbers of trade and hotel establishments run and operated by women. Notably, some of the most successful entrepreneurs and business leaders in the country are women. Additionally, a gender study in 2001 revealed that in terms of equality in property distribution, women owned 60% of the land in rural areas, while in urban areas they owned 45% of all assets such as shares, properties and business establishments.

Bhutanese women in the National Assembly, in public administration, and in decision-making positions though are under-represented. In the National Assembly, the percentage of elected people's representatives increased from less than 1% to 13% between 1996 and 2004, but this still remains low. The number of women in civil service now stands at 23% as compared to 19% in 2000 and 12% in 1990. As



underscored in a Royal Decree issued in 1998, women's participation in these areas can and must be significantly enhanced. With the rapidly improving education and literacy attainments for women, this situation is expected to change quickly as women will expect and want to participate more fully and actively in all areas and levels of socio-economic and political life. However, this deserves serious and focused attention and possible affirmative action, if the country is to achieve the full measure of gender equity in these areas.

## Supportive Environment

Women enjoy full equality under the law of the land and are afforded protection from any kind of discrimination on the basis of their gender. The various marriage and family domestic laws such as the Inheritance Act of 1980, the Marriage Act of 1980 and its 1996 amendment, the Rape Act of 1996, ensure that women have adequate legal protection from being exploited.

The country further has affirmed its commitment to the principles of full equality for women by ratifying the





Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1981. The country has unconditionally accepted all of the terms and conditions of the convention and has never raised any reservations on any of the provisions. It has also sought to harmonize national law and policy in accordance with the provisions of the Convention and adopted numerous follow-up measures to close the existing gender gaps and remove any shortcomings.

The promotion of gender equity and empowerment of women has always been highlighted as an important crosscutting theme in the country's development plans, policies and vision. The Royal Government, however, has never felt it necessary to institute any parallel projects especially for women. Neither has any preferential treatment nor affirmative action been advocated in favour of women. While national policies in general, including education policy, are gender neutral, they are not insensitive to gender issues. Rather, the approach has been and will be to mainstream gender issues into all development activities and programmes and to achieve this more effectively, a Gender Master Plan is being drafted.

The Royal Government has also recently established the National Commission for Women and Children (NCWC) as an agency that will monitor and ensure that gender sensitivity and concerns are adequately integrated into development policies and activities.

In the specific context of the supportive environment for achieving gender equality in education, women enjoy equal access to educational opportunities at all levels. This is further guaranteed under the rights of the girl child under the Convention on the Rights of the Child (CRC) and CEDAW, both of which Bhutan is party to. Socially, Bhutanese parents, do not show any particular gender preference and children of both sexes are brought up and treated equally.

### Challenges and Priorities for Development Assistance

With the ongoing decentralization and devolution of central government functions to local governments and democratization processes being formally instituted, this represents the most opportune moment to effect necessary gender reforms that will engender a favorable outcome for women.

Greater levels of participation of women in the national economy and in decision-making will depend on how effective national policies are in increasing the access of women into tertiary level education and vocational training programmes. The gender parities at the primary and secondary education levels need to be translated into a





greater proportion of females enrolling in institutions of higher education. It is widely known and assumed that family responsibilities, traditional stereotyping of gender roles and individual household impediments can dampen the entry of more women going onto higher education, even as many of them have the requisite qualifications to do so.

The prevailing low levels of adult literacy among women constitute a major barrier that must be overcome to ensure substantive progress towards this MDG of promoting gender equality and women's empowerment. Estimates put female adult literacy rates at less than 30%, which is about half that of men and extremely low. Literacy shortcomings are known to be particularly acute among rural women.

Other notable challenges include overcoming the more subtle and indirect forms of gender bias that Bhutanese women encounter; enhancing levels of female participation in the labor force and employment; and promoting women's full participation in public administration and management and higher echelons of decision-making. The lacuna on gender-segregated data in the country has also proved to be a major constraint in formulating appropriate policy responses to promote all-round gender equality and the empowerment of women.

The following are the specific priority areas in which cooperation with development partners would be particularly beneficial to achieve gender

equality and women's empowerment in Bhutan:

- *Promoting greater women's participation at higher management and decision-making levels, including the national parliament;*
- *Strengthening the capacity of the NCWC to promote/implement gender related concerns;*
- *Expansion of non-formal education and implementing other relevant measures to raise illiteracy rates among women, particularly in rural areas;*
- *Analyzing the situation and causes of the low transition of females from higher secondary to tertiary levels, particularly, technical, professional and vocational education;*
- *Advocating and promoting appropriate proactive measures to enhance female enrollment in higher education;*
- *Improving gathering and analysis of gender-disaggregated data at national/local levels;*
- *Formulation of clear and measurable outcomes/indicators for tracking gender progress in various sectoral activities and programmes;*
- *Formulation of a national plan of action and specific measures to promote women's participation; and*
- *Continue strengthening gender awareness and education among all sections of society.*







## Reduce Child Mortality

## GOAL

# 4

Table 4.1

### TARGET 5

**Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate**

Indicators	1990	2000	2004	2015	Status of Progress	State of Supportive Environment
Under-Five mortality Rate (per 1,000 live births)	123	84	-	41	On track	Strong
Infant Mortality Rate (per 1,000 live births)	90	60.5	-	30	On track	Strong
Proportion of Children covered under immunization programme	84%	85%	90% (with card)	>95%	On track	Strong

Source: NHS, 1990, 1994, 2000, Bhutan National EPI Coverage Evaluation Survey 2002

### Status and Trends

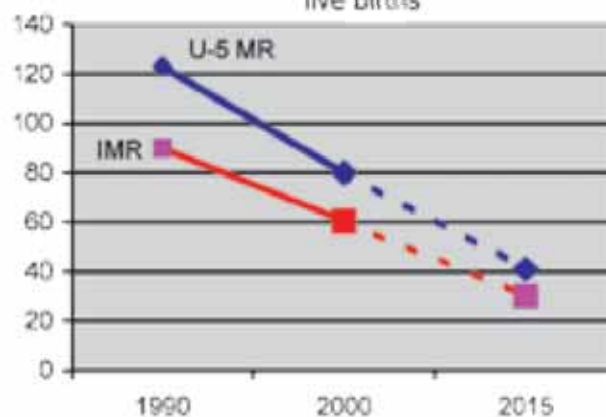
A lot of achievements have been made for all the above three indicators. Based on this performance, Bhutan will definitely attain the goal of reducing child mortality much earlier than 2015. There is sustained levels of support and intensification of efforts to improve access to child health care services for hard-to-reach communities. As appropriate, many new interventions will be required in the light of emerging diseases that threaten infant and child health.

However, utilizing data for the period 1990-2000 the country remains on track to achieve the target of reducing under-five mortality rate by two thirds. Being well aware that maintaining similar rates of rapid declines in child mortality at the later stages are often more difficult, the Royal Government is committed to sustaining previous levels of progress and have renewed commitment and redoubled efforts.

### Under-Five Mortality

Since 1990, Bhutan has witnessed a steep drop in under-five mortality rates. Between 1990 and 2000, mortality of under-five children has been reduced by one third. The last national health survey was conducted in 2000. More data will be available when the next health survey is conducted soon.

Chart 4.1 U-5 MR & IMR per 1,000 live births



Source: AHB, 1989, NHS 2000

## *Infant and Under-five Mortality Rates in Bhutan have both fallen by one third between 1990 and 2000*

The major causes of under-five deaths and morbidity in the country are due to acute respiratory infections (ARI), diarrhoea and worm infestation. ARIs, including pneumonia, are most evident during the winter months and are primarily due to the harsh climatic conditions, crowded and poorly ventilated rooms and poor hygiene. Although the incidence of diarrhoea has been reduced, it still remains high, particularly during the summer months.

### **Infant Mortality**

There has been a significant decline in the infant mortality rate (IMR) between 1990 and 2000. The IMR was reduced by a third from 90 deaths per 1,000 live births to 60.5 per 1,000 live births within that period. The country is currently on track to reduce IMR by two thirds even before the target year of 2015. With further strengthening of institutional deliveries and emphasis on all births being attended by skilled personnel, both neonatal and infant deaths are going to reduce significantly. Infant deaths in the country are generally attributed to infectious diseases such as diarrhoea, respiratory infections and malnutrition. The high incidence of low-



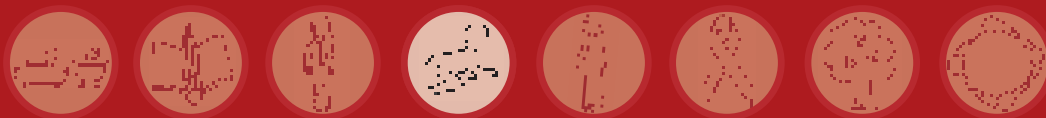
birth-weight in the country is also seen to be an important underlying factor affecting the survival of infants. The low levels of adult female literacy, poor hygiene and nutrition, limited access to emergency obstetric care and skilled birth attendance are some of the other contributing factors to child mortality.

### **Immunization**

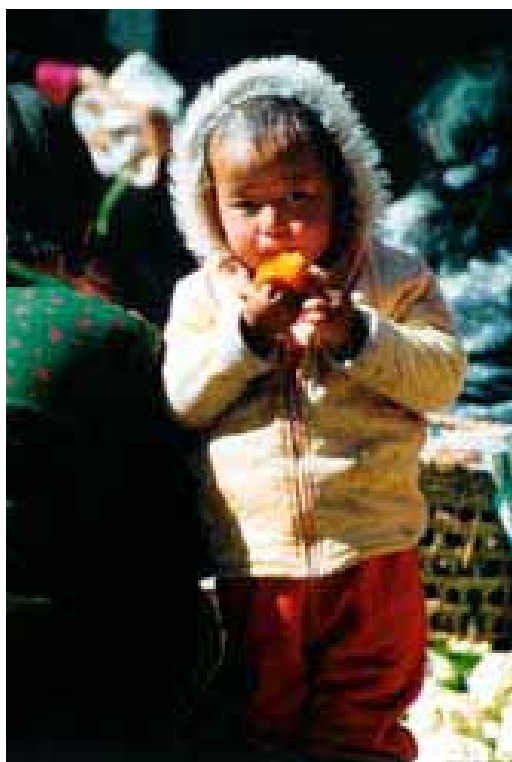
A major factor responsible for the sharp decline in child mortality in the country has been attributed to the successful expanded programme of immunization (EPI). Following the launch of the EPI in 1979, the country achieved universal child immunization (UCI) about a decade later in 1991. The national immunization levels are based on coverage for BCG, diphtheria, tetanus, pertussis, poliomyelitis, measles and hepatitis B. The average coverage levels for these antigens for children with proper immunization cards showed that 90% of all children were fully vaccinated while 10% were partially vaccinated. To further increase the coverage of immunization, the Royal Government is strengthening advocacy and awareness of the importance of immunization, especially in the un-reached populations. Sustaining UCI gains and expanding immunization coverage, introducing new vaccines, and strengthening surveillance are some of the activities to be implemented under the Immunization Plus programme. Rubella and Haemophilus Influenza B (Hib) vaccines will be introduced soon.

### **Supportive Environment**

The reduction of child mortality and improvement in child health has been



and remains an important social and national development goal. Additionally, many relevant policies, institutional mechanisms and comprehensive child health programmes are in place. These include the EPI, Maternal and Child Health, Nutrition, ARI and Diarrhoeal Disease Control programmes and measures such as promoting breast feeding, designation and equipping of baby-friendly hospitals and establishing “well child” clinics. In recognition of the cross-sectoral nature of the causes of child mortality, the above programmes and initiatives are effectively coordinated and managed within the Ministry of Health under the Integrated Management of Childhood Illnesses (IMCI) umbrella strategy. In addition to the free child health care services, medicines and vaccines continue to be provided free. All of these essential child health services are to be further intensified, improved upon and the coverage expanded within the 9th FYP.



The Royal Government is scaling up support for institutional deliveries and having all births attended by skilled health personnel. This will have a great impact on reducing neonatal, infant and under-five mortality.

In order to consolidate the financial sustainability of the rising recurrent costs for the procurement of vaccines and drugs, the Bhutan Health Trust Fund (BHTF) was launched in 1997. The fund became operational in 2003 with US\$ 18 million in the trust.

## Challenges and Priorities for Development Assistance

The primary challenge is the expansion of child health services and access to it, particularly for remote rural communities. More specifically, the child health challenges relate to the poor nutritional and hygiene situation in rural communities for mothers and children; the lower levels of rural coverage for basic health services and safe drinking water and sanitation; the limited access

to child disease control programmes; and inferior levels of educational attainments and literacy in rural areas.

There are also the associated significant costs in developing and upgrading appropriate expertise and skills; introducing new and more effective vaccines and drugs; and acquiring appropriate equipment and facilities. The availability of financial resources to pay for these, thus remains a challenge. Further, the geographical factors add up to the cost of extending and maintaining basic health services in hard-to-reach rural communities.

To achieve the target of reducing child mortality, the priority is to continue support for key areas outlined below:

- *Sustaining immunization coverage levels to above 95%*
- *Increasing institutional deliveries*
- *Increasing proportion of births attended by skilled health personnel*
- *Mobilizing funds for supporting the Bhutan Health Trust Fund*
- *Improving and sustaining the quality of child health services*
- *Continuing provision of child health services including inter-partum and post-natal care and immunization services*









## Improve Maternal Health

## GOAL

# 5

Table 5.1

### TARGET 6

**Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio**

Indicators	1990	2000	2003	2015	Status of Progress	State of Supportive Environment
Maternal mortality ratio (per 100,000 live births)	560	255	-	140	On track	Strong
Births attended by skilled health personnel (%)	15%	24%	32%	100%	Needs attention	Strong

Source: NHS, 1990, 1994, 2000 Annual Health Bulletins 2003

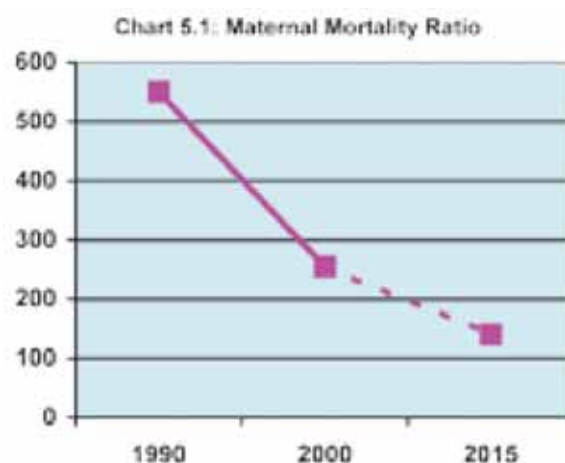
### Status and Trends

Bhutan has gained enormous ground in improving the health of mothers in the country. This is broadly attributable to general developments such as the enhanced socio-economic well-being of the population, improved health standards and better access to and quality of reproductive health services, including prenatal care. The country is currently on track towards achieving the MDG target of reducing the Maternal Mortality Ratio (MMR) by three quarters to 140 or less per 100,000 live births.

Medical investigations into maternal deaths in Bhutan between 2004 and 2005, point to postpartum haemorrhage, pulmonary oedema, obstructed labour, sepsis, and eclampsia as the direct causes for maternal mortality, most of which can be prevented. To tackle this, the Royal Government has already established 20 basic EmOC centers and 9 CEmOC centers. These facilities are being further strengthened. Other such policies aimed at increasing institutional deliveries are expected to lower maternal mortality significantly.

### Maternal Mortality

Significant progress has been achieved in reducing the maternal mortality rate in the country. Between 1990 and 2000, the MMR per 100,000 live births was reduced from 560 to 255. The halving of MMR in that relatively short span of time represents a phenomenal achievement. However, MMR is still very high.



Source: NHS 1990, 2000, AHB 2003

## Births Attended by Skilled Health Personnel

The proportion of births attended by skilled health personnel has more than doubled from 15% to 32% between 1990 and 2003. The policy is to drastically increase the proportion of births attended by skilled health personnel. A major hurdle to this is the highly dispersed nature of settlements and the walking distance from households to the local health units. As providing full skilled attendance at birth in homes will remain an enormous constraint, the Royal Government encourages women to deliver in adequately staffed and equipped obstetric centers to minimize both child and maternal deaths.

## Supportive Environment

Reproductive health services are a vital component of the country's primary health care system. The various programmes to improve maternal health have always been accorded high priority. Additionally, the popular advocacy of these vital reproductive health goals have always been actively promoted at the highest levels, notably by His Majesty the King, His Holiness the Je Khenpo, and Her Majesty the Queen, Ashi Sangay Choden Wangchuck, the UNFPA Goodwill Ambassador.

Bhutan's national policies and programmes to reduce maternal mortality are through increasing institutional deliveries and increasing the proportion of births attended by skilled health personnel. Services like antenatal, intra-partum and post-natal care are being continuously provided.



Emergency Obstetric Care Services are also being expanded and strengthened. The country is also a signatory of CEDAW that upholds the right of women to receive appropriate health services during their pregnancy, period of confinement and access to adequate natal care.

Under the 9th FYP (2002-2007), the intensification of reproductive health services remains a core area of focus. The national maternal health targets set for the plan period include reducing the maternal mortality rate to below 163 per 100,000 live births, the achievement of which would indicate a progress rate sufficient to achieve the MDG target by 2015. Some of the other national maternal health targets for the 9th FYP include increasing the proportion of births attended by skilled health personnel to at least 50%; halving anemia in pregnant women to below 30%; ensuring full attendance of ante-natal and post-natal visits; and reducing the total fertility rate to below 3 and



population growth to less than 2%. Progress in realizing these concrete and specific national targets by 2007 will offer a useful gauge in tracking the country's interim progress in realizing the fifth millennium development goal of improving maternal health.

Bhutan's first MDG Progress Report 2002 highlighted the particular challenge of expanding and further strengthening the EmOC facilities in the country and the need to strengthen monitoring and evaluation of maternal mortality. Notable developments since then include the rapid expansion of EmOC facilities. Additionally, in order to improve the monitoring and evaluation environment on maternal mortality, the Maternal Mortality Committee, has been formed. This technical committee reviews all cases of maternal mortality and provides a more accurate insight into the causes, age and area profiles, and other relevant details of maternal mortality in the country while maintaining more accurate records.



## Challenges and Priorities for Development Assistance

Many of the maternal health challenges highlighted in the country's MDG Progress Report of 2002 still remain as valid and relevant presently. To reiterate, these include the shortage of trained health personnel; lack of adequate obstetric equipment and facilities; enormous difficulties of rural access to local health units due to terrain conditions and the dispersed nature of settlements; deeply rooted cultural barriers; and the lack of adequate information and awareness on important reproductive health issues. The priorities for health authorities will be to continue working on and stepping up efforts to remove these constraints. In particular, the further expansion and strengthening of EmOC facilities and their effective utilization by communities will prove critical in reducing maternal mortality.

Another significant challenge that remains for reducing maternal mortality is the low levels of births attended by skilled health personnel. The Royal Government views the promotion of institutional deliveries as the most effective strategic measure to raise the proportion of attended births and thereby improve the survival chances of mothers and babies. To facilitate this, trained female health workers are being posted to all the health centers in the country. Health centers are being better equipped and delivery rooms are being made more women friendly and comfortable. Despite these efforts, the response has not been very satisfactory. Overcoming cultural preferences to deliver at home is a challenge that can

and must be adequately addressed through popular advocacy, awareness and education campaigns and even possibly, discouraging outcalls.

Cultural factors and lack of awareness further limits the utilization of ante-natal, post-natal and other maternal health services. Increasing the wider acceptability and awareness of modern maternal health services among women will be crucial. The low levels of female adult literacy and educational attainment are related challenges that must be simultaneously tackled as they have an indirect but powerful effect on improving maternal health and attaining significant declines in maternal mortality.

To help remove the above constraints and keep the country on track to achieve the MDG of improving maternal health and reducing maternal mortality, development assistance will be required to continue support in the following key areas:

- *Increasing institutional deliveries*
- *Increase proportion of births attended by skilled health personnel*
- *Continuation of Ante-natal, Intra-partum and Post-natal Services*
- *Expansion of the training of birth attendants and reproductive health skilled specialists*
- *Expansion of further EmOC facilities and adequately equipping existing ones*



- *Strengthening mother and child health care services*
- *Promoting and advocating increased utilization of ante natal and post natal care*
- *Intensification of safe motherhood initiatives and promoting proper nutrition and lifestyle*
- *Reducing the prevalence of anaemia in pregnant women*
- *Raising contraceptive usage levels*
- *Strengthening of maternal death investigation and monitoring*
- *Increasing IEC and screening activities for the prevention and detection of cervical cancer in women*
- *Supporting literacy and non-formal education programmes*









## Combat HIV/AIDS, Malaria and Other Diseases

## GOAL

# 6

Table 6.1

### TARGET 7

#### Halt and begin to reverse the spread of HIV/AIDS ratio

Indicators	1990	2000	2004	2015	Will the target be achieved by 2015?	State of Supportive Environment
<i>HIV cases detected</i>	0	38	74 (Oct 2005)	-	On track	Strong
<i>Contraception Prevalence Rate</i>	18.8% (1994)	30.7%	-	60% (national target)	On track	Strong

Source: NHS, 1990, 1994, 2000 Annual Health Bulletins 2003

## Status and Trends

### HIV/AIDS

The HIV/AIDS infection in Bhutan remains at a relatively low level. Crude projections based on various scenarios of the situation indicate that with adequate prevention controls in place, the HIV infection would peak by 2012 and subsequently be reversed. As the supportive policy framework and environment is extremely strong, it is reasonable to expect that this MDG target of halting and reversing the spread of HIV/AIDS can be achieved.

The number of detected HIV positive cases in Bhutan has risen significantly from 38 in 2000 to 74 as of October 2005. Currently 36% of those detected with HIV/AIDS are below the age of 26 years. 7% of the total detected cases acquired the infection through vertical transmission from mothers. The proportion of infection is almost equal in both sexes (39 males and 35 females). On

the basis of available evidence, the HIV/AIDS epidemic in the country appears to be in an early phase with an overall prevalence rate of about 0.01%. However, there are lots of risk factors including proximity to population groups in the region with high HIV prevalence rates, the presence of sex workers in border towns, the high mobility across borders, the relatively common incidence of sexually transmitted diseases, the emerging issue of substance abuse and the country's young demographic profile.



## Contraceptive Prevalence Rate and Condom Usage

The Contraceptive Prevalence Rate (CPR) has increased from 18.8% in 1994 to 30.7% in 2000. Looking specifically at available data for condom usage against other contraceptive methods, the 1994 Annual Health Bulletin indicates that only 4% of those utilizing contraceptives reported using condoms. This has, however, increased three fold to 13% in 2000. Even as there has been a rapid increase in the number of those using condoms, there is considerable scope for expanding the usage rates. Family planning activities are being sustained through effective advocacy and adequate supply of cafeteria services. Emergency Contraceptive services have recently been included in the family planning services. Therefore, it is likely that the target will be achieved.

## Supportive Environment

The Royal Government initiated a National HIV/AIDS and STD Control Programme in 1988, a few years prior to the detection of the first two HIV positive cases in 1993. The country has since continued to respond vigorously and proactively to this emerging health concern. Political commitment on this issue is very high. The advocacy on HIV/AIDS and the indispensable efforts to reach out and communicate to all sections of Bhutanese society on this issue have been led by Her Majesty, Ashi Sangay Choden Wangchuck, in her role as the UNFPA Goodwill Ambassador. A royal edict issued by His Majesty the King in May 2004, stresses the need to extend to all HIV patients the utmost compassion and care, and to avoid any

kind of discrimination against them. This has become the guiding principle for prevention of HIV/AIDS and for care and treatment of people living with HIV/AIDS.

The National AIDS Committee has been reconstituted as the National HIV/AIDS Commission (NHAC) and is leading in formulating and reviewing policy matters related to HIV/AIDS. For a more effective coordination and implementation of HIV/AIDS prevention and control activities at the community level, Multi-sectoral Task Forces (MSTF) comprising of all stakeholders were created in all 20 districts. The MSTF operates as an essential mechanism to effectively mobilize local communities and resources to ensure appropriate and adequate responses at the local level in combating the spread of HIV infection. Line ministries, NGOs and civil society are actively taking part in prevention activities.

The prevention programme is coordinated and managed by the Ministry of Health through the National HIV/AIDS and STD programme.

Provision of free anti retro viral (ARV) treatment to HIV/AIDS infected people and care and counseling services have





been initiated. These moves reinforce the efforts to prevent the spread of HIV/AIDS.

## Challenges and Priorities for Development Assistance

Condom usage in the country is still relatively low and can be enhanced significantly. Promoting enhanced condom usage is a critical challenge deserving urgent attention in view of the high incidence of transmission through unprotected sex. Knowledge of the importance of using condoms for prevention of HIV/AIDS is very high but this has not been accompanied by any perceptible positive changes in behavior. Understanding the reasons for this and bridging the gap between knowledge and practice remains a key challenge.

The cost of providing treatment remains another major challenge as ARV and drugs for treatment of opportunistic infections are expensive. The long duration for which the treatment has to be provided further increases the cost.

HIV/Tuberculosis (TB) co-infection is on the rise and this could adversely affect the success of the National TB control programme.

Other important challenges include the high level of stigma towards HIV/AIDS.

Addressing all of the above challenges will require the full support of the Royal Government and its development partners for continuing work in the following priority areas:

- *Focus on prevention as the main strategy through services such as condom promotion, increasing Information, Education and Communication (IEC) etc.*
- *Strengthening of counseling, comprehensive care and support*
- *Provision of proper treatment to those already infected*
- *Institutional strengthening and capacity building – particularly for human resources*
- *Improving data collection and analysis and detailed information on AIDS/HIV issues*
- *Carrying out targeted interventions for population at risk such as sex workers, youths, and other groups*







## Combat HIV/AIDS, Malaria & Other Diseases

## GOAL

# 6

Table 6.2 TARGET 8						
Halt and begin to reverse the spread of Malaria and Other Major Diseases						
Indicators	1990	2000	2004	2015	Status of Progress	State of Supportive Environment
No of malaria cases and incidence [cases per 100,000]	22,126 (1991) [3,687 per 100,000]	5,935	2,760 [366 per 100,000]	-	On track	Strong
Tuberculosis cases & incidence [cases per 100,000]	4,232 [720 per 100,00]	1,140 [168 per 100,000]	1,002 [133 per 100,00]	-	On track	Strong

Source: NHS, 1990, 1994, 2000 Annual Health Bulletins 2003

### Status and Trends

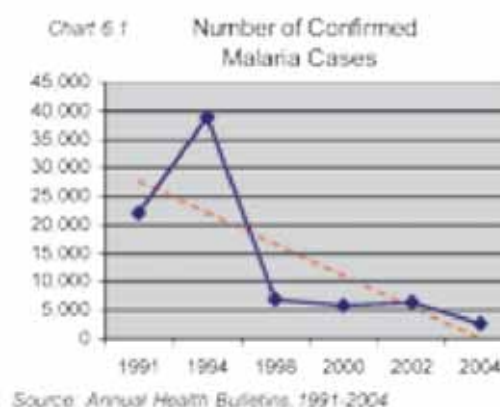
Malaria and Tuberculosis (TB) remain major public health concerns for Bhutan. Rapid progress has been made in reducing the incidence of both diseases and the goals to halt and reverse their spread are potentially achievable.

### Malaria

Environmental management, prevention through use of bed nets, and early diagnosis and proper treatment along with information and communication to the public are the key strategies being employed to combat malaria. This strategy appears to be successful judging from recent trends. In 1991 there were 22,126 cases per annum, which reduced to 5,935 cases per annum by 2000 and further reduced to 2,760 cases in 2004. The incidence of malaria has reduced from 3687 per 100,000 in 1991 to 366 per 100,000 in 2004. Along

with the decline in malarial morbidity, mortality from malaria too shows a general decrease. From 63 deaths caused by malaria in 1993, only 15 deaths were recorded in 2000 and five in 2004. Most deaths occurred among those who sought treatment late after the onset of symptoms.

From these trends it would appear that the incidence of malaria has been reversed and the goal of halting it is potentially achievable. However, this should be viewed within the light of





the complexity of the epidemiology of the disease and possible resurgences, recurrence of outbreaks and emergence of new variants. Hence, there is every need to strengthen and sustain ongoing efforts at controlling and containing malaria.

## Tuberculosis

The main strategy to reduce mortality from TB has been early diagnosis and proper treatment with Directly Observed Treatment Short course (DOTS) and this has been largely successful. The incidence of TB has declined significantly from 720 cases per 100,000 in 1990 down to 168 in 2000 and 143 in 2004. On the basis of this steep decline, it is highly probable that the goal of halting and reversing

the spread is achievable. As reflected in table 6.3, TB related deaths were erratic and averaged 45 deaths a year.

At 133 cases per 100,000, Bhutan still has a high tuberculosis burden in the region. In 2004, the country reported 1,002 cases out of which 598 were pulmonary TB. Even though the number of TB cases is small, it still poses a serious public health concern for two reasons; firstly, most of the pulmonary cases were highly infectious cases and secondly, TB is the most opportunistic infection among HIV/AIDS cases.

## Supportive Environment

The malaria control programme is fully integrated into the general health care delivery system. Malaria control programme in Bhutan is one of the oldest programmes and has been accorded high priority ever since its inception in 1964. The high commitment to the health sector is reflected in an average allocation of 10-12% of Government expenditures mainly for recurrent expenditures. In the 9th FYP period, out of the total outlay for health sector (USD 3.06 million) about USD 0.2 million are allocated to the malaria programme. The Roll Back Malaria global initiative aims to reduce morbidity and mortality from malaria by more than 90% by the

Table 6.3

TB CASES

	1990	1992	1995	1998	2000	2002	2004
No of TB cases	4323	4405	1308	1292	1140	1051	1002
Pulmonary TB cases	-	-	1038	924	777	874	598
Deaths	46	40	62	55	25	41	-

Source: Annual Health Bulletins 1990-2002, Annual TB Report 2004



year 2010 from the baseline level of 2001. The World Health Organization provides technical and logistic support to the programme.

TB programme has been fully integrated with the general health services in Bhutan since its inception in 1976. Treatment of patients with DOTS has been implemented all over the country since 1997 and TB care and treatment is available free of cost in all the health centers in Bhutan. Better recording and reporting system has also been introduced.

## Challenges and Priorities for Development Assistance

The constantly changing scenario of malaria requires the adoption of a stratified approach and intensification of surveillance for control. Global warming and natural disasters may lead to an environment conducive to vector introduction and proliferation in the non-malaria districts and cause areas of new focal epidemics. Movement of people with little immunity to high-risk areas due to better communication facilities, free trade and business opportunities near the border towns



pose some challenge in reversal of malaria morbidity and mortality.

There has been some reverse in the trend compared to the mid 90's and the main challenge now is sustaining these achievements in future. These include overcoming the dangers of complacency, maintaining active surveillance and early warning systems and ensuring early detection and effective management of malaria epidemics.

Resistance to the insecticides is an emerging problem in other parts of the world and dealing with insecticide resistance is a major challenge.

A challenging issue for containing and reversing the spread of TB is HIV/TB co-infection since TB is the commonest opportunistic infection in HIV and HIV has the potential to increase the TB case load, lead to under diagnosis of TB, high default rate and accelerated emergence of drug resistant TB. There is a need for expanding DOTS coverage, broadening the spectrum of DOTS providers and intensify IEC. Human Resource Development and knowledge

enhancement on TB at all levels is important to sustain TB control.

Although the number of multi drug resistant (MDR) cases is not alarming at this point of time in Bhutan it is crucial to keep the check on increase in MDR cases by assuring quality DOTS and effective and timely treatment of existing MDR cases.

Addressing all of the above challenges will require the full support of the Royal Government and its development partners in the priority areas listed below. The priorities for development assistance in relation to the control of malaria are to continue the following:

- *Early diagnosis and prompt and proper treatment of malaria cases*
- *Enhancing Insecticide Treated Bed Nets (ITBN) coverage*
- *Supporting measures to monitor and control Dengue, Japanese encephalitis and other emerging vector borne diseases*
- *Provisioning of microscopy diagnostic facilities and anti-malarial drugs in health centers for malaria endemic areas*
- *Decentralization of malarial microscopy and case management refresher courses*
- *Intensifying IEC efforts to strengthen awareness on primary control and prevention of malaria*
- *Strengthening the capacity of the national health information*



*system and district level health-authorities for disease surveillance, morbidity and mortality recording and reporting, data collection and analysis, data compilation*

- *Strengthening of the management and technical capacity at the National Program and the district level to address the surveillance and outbreak response*
- *Improve research capacity to tackle emerging issues like drug resistance, insecticide resistance, migration and global warming effects on malaria.*
- *Improve community awareness on prevention of malaria through their active participation in environmental management to prevent breeding sites, use of insecticide treated bed nets, early health seeking behaviour for malaria through behavioral change communications*

The priorities for development assistance in relation to the control and eradication of TB are:

- *Strengthening decentralized diagnostic and follow-up capa-*





*bilities through establishment of laboratory facilities at all the health centers.*

- *Early diagnosis and proper treatment with DOTS*
- *Laboratory quality assurance at all levels*
- *Strengthening culture sensitivity facilities at the national and regional referral hospitals and*

*supranational linkages for quality assurance.*

- *Further expansion of DOTS coverage and utilization by broadening spectrum of DOTS providers through active community participation.*
- *Reinforcing IEC on TB and TB/HIV co-infection*





## Ensure Environmental Sustainability

## GOAL

# 7

Table 7.1

### TARGET 9

#### Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

Indicators	1990	2000	2003	2015	Status of Progress	State of Supportive Environment
<i>Proportion of land area covered by forest</i>	72.5%	72.5%	72.5%	-	On track	Strong
<i>Ratio of protected area to surface area for maintaining biological diversity</i>	23%	26%	29%	-	On track	Strong
<i>CO<sub>2</sub>(per capita) Emissions</i>	- 5.89 tons (1994)	-	-	-	On track	Strong
<i>Proportion of population using solid fuels (i.e.wood, charcoal, dung)</i>	-	75%	70%	-	Insufficient data	Strong

Source: Pilot HIES 2000, PAR 2004

### Status and Trends

Ensuring the long-term sustainability of the environment has consistently enjoyed a very high policy priority and remains a core objective within the country's development framework. Bhutan's environmental conservation efforts have received wide global acclaim and recognition, including most recently United Nations Environment Programme's (UNEP) "Champion of the Earth" inaugural award that was conferred on His Majesty the King and the Bhutanese people for the dedication and commitment in maintaining the country's "excellent environmental track record." According to the 2005 Environmental Sustainability Index (ESI) compiled by the Yale Centre

for Environmental Law and Policy in conjunction with the World Economic Forum, Bhutan was ranked fourth among the Asian countries in its environmental performance.

Even as the country's state of environment and the natural resource base remains enviably pristine and intact as the above indicators reflect, no effort has been spared to continue strengthening and integrating the principles of sustainable development into national policies and programmes. Given this hugely supportive situation to contain and minimize any potential loss or degradation of the country's environmental resources and the existing favourable state of the environment,

Bhutan remains comfortably on track towards realizing this seventh MDG target.

### Proportion of land area covered by forest

The proportion of land area covered by forest in Bhutan has been maintained at 72.5% and spreads over 29,045 square km. Much of the forest cover comprises broad leafed and coniferous trees with a small amount of degraded forest. The success in maintaining this high level of forest cover may be primarily attributed to the self-imposed and strict limitations on the commercial exploitation of wood resources, including the ban on the export of timber and semi-finished wood products; the uncompromising protection of forest resources through implementation of critical environment regulations; more scientific and better forest management techniques; the curtailment of unsustainable forms of agriculture practices such as shifting cultivation; and active afforestation and reforestation programmes.

### Ratio of protected area to surface area for maintaining biological diversity

In order to maintain the country's rich bio-diversity endowment, the Royal Government has designated 29% of its total land area as protected areas. This increased from 23% in 1993 but the increment does not represent an actual physical increase and is merely due to a revision to include all eco-system

types in the country and a reduction in the total land area of the country. The protected area system in the country comprises four national parks, three wildlife sanctuaries and a strict nature reserve that covers an area of 10,513 sq. km. To facilitate the free and uninhibited movement of animals and birds within a wide natural range, the nature reserves, parks and wildlife sanctuaries are connected through biological corridors that take up an additional 9% of the country's territory.

### Carbon dioxide emission and consumption of ozone-depleting chlorofluorocarbons

According to the first Green House Gas (GHG) Inventory 2000 carried out by the National Environment Commission, the main source of GHG emissions in the country derives from industrial processes (58%) and fuel combustion in the transport (19%), residential/commercial (12%), and manufacturing





& construction (7%) sectors. Collectively the emissions amounted to 0.404 tons per capita in 1994, which by global standards is very low. Additionally, as Bhutan is among those countries with significant GHG sequestration capacity, the overall net emissions was estimated at – 5.89 tons per capita. Even as the country has an overall negative GHG impact, sustained efforts are still being made to actively control the major sources of CO<sub>2</sub> emissions in order to mitigate the country's impact on global climate.

Bhutan's annual consumption of Ozone Depleting Substances (ODS) was assessed at 0.172 tons in 2003, which places it in the category of countries with low volume consumption of ODS. With the ratification of the Vienna Convention and the Montreal Protocol in 2004 by the National Assembly, the country has committed to initially halve the consumption of ODS, then reduce it by 85% and finally, entirely eliminate it by 2010. This is to be primarily done through effecting a licensing system

to ban the imports of ODS containing products and the retrofitting of products containing ODS that are already in use in the country.

### **Proportion of population using solid fuels**

Fuel wood, utilized mainly for cooking and heating, accounts for 70% of the total national energy consumption. This has come down marginally from 75% in 1995. A single Bhutanese on average consumes 1.27 cu.m of fuel wood a year, which is regarded to be among the highest in the world and is explained by the fact that it is more accessible and affordable than other sources of energy. Extensive rural electrification activities are underway to extend the reach of electricity to rural households and this is expected to significantly reduce fuel wood consumption and accompanying air pollution. The goal of electricity for all by 2020 thus remains an important development objective as it will not only help improve the socio-economic





conditions of people in rural Bhutan, but will contribute to improving the air quality and the reduction in use of wood resources.

## Supportive Environment

The country has in place a legally enshrined commitment passed by the National Assembly to maintain at least 60% of the total area of the country under forest cover for perpetuity. The development vision of the country as articulated in the country's Vision 2020 document places environmental sustainability among the core development objectives to be achieved in meeting the overall goal of maximizing GNH. All of the other important policy documents of the Royal Government likewise reflect the enormous importance and priority attached to sustainable development and maintaining the quality of the country's environment.

Bhutan is currently party to 10 multilateral environmental agreements, including the Convention on Biological Diversity and the UN Framework Convention for Climate Change and remains fully committed to meeting all of their provisions. In addition, the country has entered into a unique multilateral partnership with Benin, Costa Rica, and the Netherlands under the Sustainable Development Agreement to finance innovative sustainable development and climate change projects and activities. Numerous domestic environmental legislation and policies have also been enacted and implemented, including the Environmental Assessment Act, Biodiversity Act, the National Environment Strategy and

the National Biodiversity Action Plan. The National Environmental Protection Act is under preparation and will serve as a much needed umbrella law to facilitate a holistic approach to environmental conservation and management. This is likely to be enacted by 2007.

Additionally, wide ranges of activities are being implemented to ensure environmental sustainability in the country. These include numerous activities to protect and manage the country's watershed areas, enhance solid waste management, improve water and air quality and promote and instill greater awareness and understanding of environmental issues among the public. Compliance to Environmental Impact Assessment (EIA) criteria for all development and industrial projects constitutes an important aspect of the national environment strategy. EIA guidelines for development and industrial projects have been prepared and are being enforced actively. Efforts





and approaches to promote cleaner and more environment friendly technology to attain the goal of zero discharge from industries, reduce vehicular emissions and decrease the high level of fuel wood consumption among Bhutanese households are also being vigorously pursued. The EIA evaluation and approval procedures have also been devolved to the districts.

## Challenges and Priorities for Development Assistance

Notwithstanding the favorable state of the environment and that development processes have been effectively managed and conscientiously kept well within the carrying capacity of the environment, the rapid pace of socio-economic development and population growth pressures continue to place

significant stress on the country's environment. There are numerous environmental challenges that are extant and emerging that need to be addressed proactively to ensure long-term environmental sustainability.

A key environmental challenge that the country faces pertains to land degradation arising from both human and natural factors. Ever increasing levels of human activities have induced soil erosion, diminished soil fertility and degraded forestland mainly caused by infrastructure development, increased urbanization, the high demand for and consumption of fuel wood, shifting cultivation, overgrazing by livestock and other unsustainable farming practices. Frequent forest fires, often caused through human carelessness, have also been a major cause of forestland degradation.

Forestland degradation and decline in forest cover and vegetation also potentially threaten a diminution in the country's rich biodiversity through the loss, disturbance and fragmentation of plant and animal habitat. The potential loss of biodiversity thus represents an associated critical environmental challenge for the country. Bhutan is among the top ten percent of countries with the highest species densities in the world and has been listed as among the ten global "hotspots" for the conservation of biodiversity. The designation of hot spot not only refers to the presence of high species density but points to the potentially grave threats to biodiversity from habitat changes or loss. While no known species have as yet become extinct in the country,



many are highly threatened and remain endangered. Many of the above human causes of forestland degradation and deforestation are factors that likewise threaten Bhutan's biodiversity. In addition, the factors of poaching and loss of agro-biodiversity from monocropping, conversion to cash crops and leaving land fallow remain some of the other underlying causes of biodiversity loss.

Urban environmental degradation is another major challenge that the country faces. The rapid pace of urbanization has already imposed severe strains on available urban services and environmental health. With urban population growing at more than twice the population growth rate due to extensive rural-urban migration, the urban environmental situation and health is likely to come under even more stress. Air and water pollution in and around urban and semi-urban areas have deteriorated over the years, even though air and water quality standards still remain well above globally accepted standards. The burning of fuelwood for heating and vehicular emissions remain the principal causes of urban air pollution, the latter being aggravated by the poor quality of available fuel. Water pollution mainly derives from

solid waste, wastewater discharge and effluents from automobile workshops and small industries. Another growing concern is the problem of increased production of garbage and its disposal in urban areas.

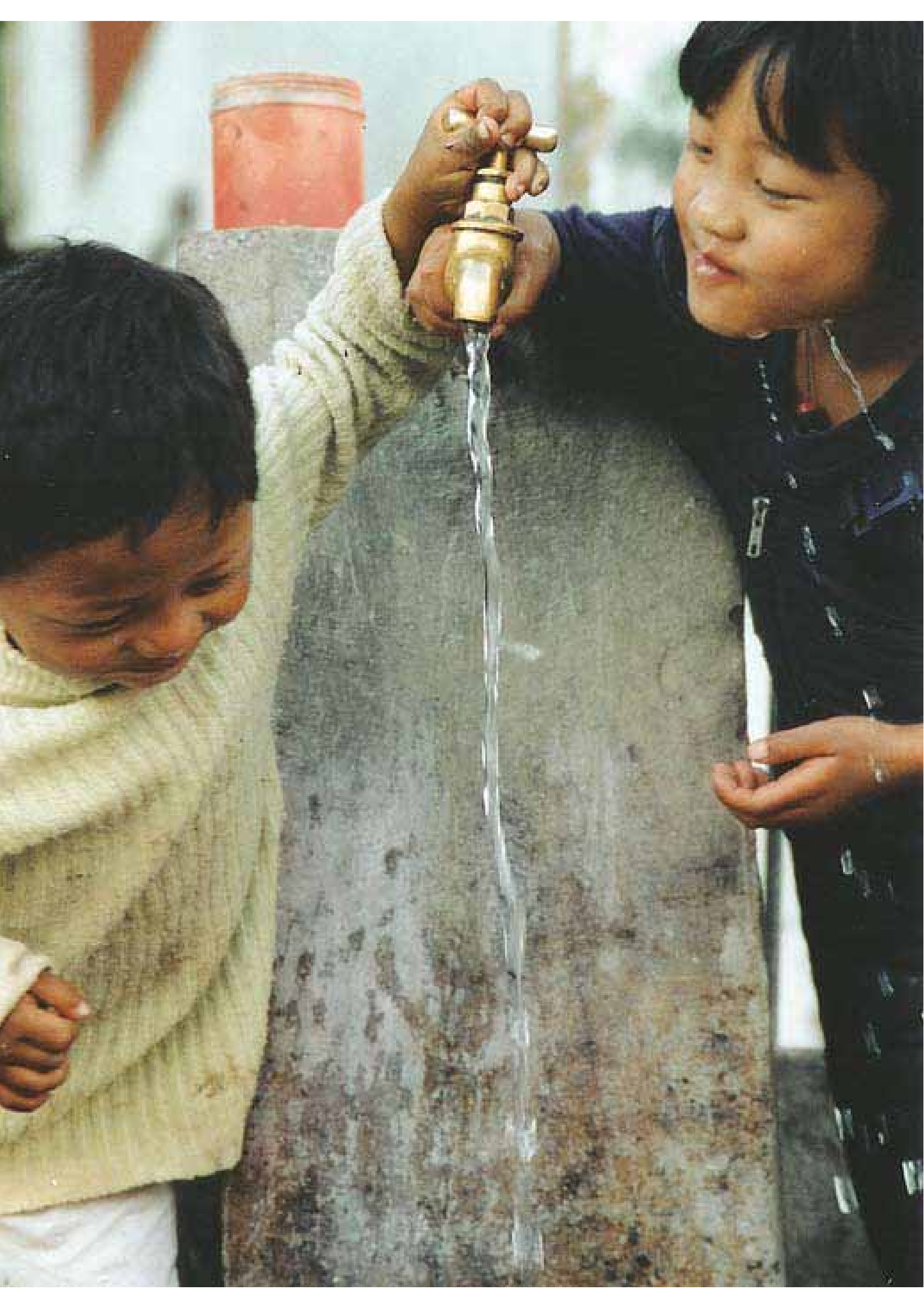
Working toward ensuring environmental sustainability is further constrained by the shortage of trained environmental personnel and the limited facilities, data, capacity and capabilities for monitoring and assessing environmental impact. The low level of environmental awareness among the general public is one of the additional constraints that limit proper environmental management.

In addressing these key environmental challenges, the critical priorities for action are highlighted below:

- *Encouraging sustainable use of resources from the natural ecosystem and improved land use practices*
- *Promoting greater participation and capacity development of stakeholders in natural resource management through appropriate institutions*
- *Improving rural livelihoods and living standards through increased productivity and greater access to social and economic services, resources and opportunities*
- *Strengthening environment monitoring mechanisms, enforcement procedures and awareness among the general public and institutions*



- *Upgrading environmental information management, quality standards and indicators, and developing capacity to collect and analyze baseline data for environmental planning*
- *Promoting use of energy sources that are environment friendly, such as hydropower – and energy efficient technology*
- *Implementing the provisions of the urban master plans including activities to improve solid waste management*







## Ensure Environmental Sustainability

## GOAL

# 7

Table 7.2

### TARGET 10

**Halve, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation**

Indicators	1990	2000	2003	2015	Status of Progress	State of Supportive Environment
<i>Proportion of population without sustainable access to an improved water source</i>	55%	22%	16%	27.5%	Achieved	Strong
<i>Proportion of population without access to improved sanitation</i>	33%	12%	7.4% (Of house-holds)	17.5%	Achieved	Strong

Source: BLSS 2003, PAR 2004, CSO Statistical Yearbooks

### Status and Trends

Bhutan has progressed rapidly in improving the supply of safe drinking water and sanitation and the MDG targets for the two indicators have already been achieved. However sustained efforts to further improve access and upgrade the quality of drinking water and sanitation facilities are being made. Spatial disparities still exist but are being given adequate attention and closed rapidly. There are also issues of

quality and hygiene, access difficulties to water sources and seasonal variations that mark the essential differences between rural and urban water supply and sanitation facilities.

### Access to safe drinking water

The situation of access to safe drinking water has improved considerably since 1990. 84% of the country's population now has access to safe drinking water.

Table 7.3

### ACCESS TO SAFE DRINKING WATER SOURCES BY HOUSEHOLDS

	Pipe in dwelling	Neighbour	Public Outdoor Tap	Well and Spring	Others (River/Lake /Pond)
<i>National</i>	52.5 %	6%	23.4%	13.8%	4.1%
<i>Urban</i>	80.5%	4.4%	13.7%	0.8%	0.5%
<i>Rural</i>	44.3%	6.6%	26.3%	17.7%	5.2%

Source: BLSS 2003

The proportion of population without access to safe drinking water declined from 55% in 1990 to 22% in 2000 and to 16% in 2003. Safe drinking water is understood to mean piped water from a protected spring or well source. The target of reducing by half those without access to safe drinking water has thus already been achieved.

### Access to basic sanitation

Access to basic sanitation, the latter being defined and understood to mean access to a minimum facility of a pit latrine, has likewise improved substantially in the country. In 1990, 33% of the country's population did not have access to basic sanitation, which improved considerably by 2000

during which only 12% did not have basic sanitation facilities. The target has accordingly been achieved well in time. Currently, there is no headcount data on population access to basic sanitation. BLSS 2003, however, reflects that 92.5% of all households in the country have access to basic sanitation. Urban residents have relatively better access to basic sanitation than rural residents.

### Supportive Environment

With strong donor support, Bhutan initiated the Rural Water Supply and Sanitation (RWSS) programme in 1974 to improve the health of rural population. Under the initiative, rural communities have constructed around 4,400 rural water supply schemes and 5,000 pit latrines, which have been responsible for the rapid improvements in extending safe water and sanitation coverage to rural population. Plans for building many more of these water supply schemes and pit latrines are underway to help attain the goal of full safe water coverage and sanitation by as early as 2007.

The Public Health Engineering Division of the Ministry of Health is now implementing the construction of the rural water supply schemes and building of pit latrines as these schemes are closely linked to public health issues. In rural communities, numerous water caretakers are being trained to manage and maintain the rural water and sanitation schemes. The Community Planning and Management Workshop and Community Development for Health Workshop approaches have been developed and instituted in an effort to

Table 7.4

OPERATIONAL TYPE OF TOILETS BY HOUSEHOLD

	Flush toilet	Pit Latrine with septic tank	Pit Latrine without septic tank	Others	None
<i>National</i>	15%	16.3%	61%	0.3%	7.4%
<i>Urban</i>	55%	24.6%	16.4%	0%	4%
<i>Rural</i>	3%	14%	74%	0.36%	8.4%

Source: BLSS 2003



## Challenges and Priorities for Development Assistance

Access to safe drinking water and basic sanitation, is limited and inferior in quality for rural population as compared to access and quality for urban residents. As in the past, improving the coverage and quality levels of water and sanitation in rural areas requires more attention. Many rural households still have to walk considerable distances to fetch water from springs and streams. Furthermore, the protection of water sources from contamination in rural areas is weak and can be bolstered considerably. The seasonality and irregularity of the supply of safe drinking water is another constraint that many rural communities face.

manage and effectively use the water and sanitation facilities by the rural communities. Over a period of time, the schemes are to be fully implemented by local communities themselves with necessary technical backstopping and material resources from the Royal Government. Further, alternative technologies, such as Roof Rain Water Harvesting System, are being instituted for those places left without alternative sources other than rainwater.

To create an enabling policy and legal framework for water supply and related rights, legislations and policy instruments are in the process of being drafted. These include the Bhutan Water Vision, Water Act, Water Policy and the National Watershed Management Strategy.

To attain the national target of achieving complete safe water coverage, more water supply schemes need to be built and many of the existing and older schemes repaired and maintained. These are constrained by the shortage of labor in rural areas, the lack of capacity and a weak sense of ownership by rural communities. Additionally, as there are rural communities that are very distant from their water sources, the challenge will be to adapt alternative technologies



and develop simple treatment facilities that are durable and easy to manage. The coverage of safe drinking water and sanitation to rural institutions such as schools, basic health units and religious establishments are below the national average and can be enhanced.

As a safe sanitation standard, pit latrines in urban areas, particularly those without septic tanks, are increasingly being viewed as unacceptable. Excluding urban households with pit latrines, access to safe sanitation levels in urban areas declines to a mere 55%. Upgrading the levels of improved category of sanitation for urban communities thus constitutes a key challenge. While the supply and quality of safe drinking water in urban areas is regarded to be reliable and good, maintaining these standards of supply and quality in the light of the rapidly growing urban population will prove a critical challenge in the future. The effective implementation of water resource management and conservation and the sustainable utilization of urban water resources will thus have an important bearing on dealing with this emerging challenge. Additionally, planning and providing for urban water supply for the new urban

growth centers and emerging satellite towns is an important challenge and a high priority for development action.

In the context of these above constraints and challenges, the important priorities for development assistance are to further support the continuation of the following key activities:

- *Increasing access levels and quality of water supply to rural communities through the ongoing RWSS programme*
- *Repairing and rehabilitating old rural water supply schemes*
- *Strengthening community ownership & participation and capacity to plan, operate and maintain rural water supply schemes*
- *Adopting alternative clean water source technologies that are cost effective, durable and simple*
- *Strengthening advocacy for conservation and safe utilization of water resources*
- *Planning and implementing urban water supply for new urban growth centers/satellite towns*









## Develop a Global Partnership for Development

# GOAL

# 8

Table 8.1 TARGET 14						
In cooperation with developing countries, develop and implement strategies for decent and productive work for youth						
Indicators	1990	2000	2004	2015	Status of Progress	State of Supportive Environment
Unemployment rate (15-24)	-	2.6% (1998)	5.5%	-	Insufficient data	Strong
Source: NLFS, 1998, 2004						

### Status and Trends

Providing productive work for Bhutanese youth has emerged as a matter of deep concern in Bhutan. Even as the unemployment figures for youth are presently not alarming, ensuring productive work for the exponentially growing numbers of youth entering the labor market is emerging as a serious challenge for the country. Efforts to develop and implement strategies are being initiated with a focus on skills development of youth through

vocational education. These ongoing efforts need to be complemented by a holistic and comprehensive strategy that focuses adequately on employment creation and promoting strong and sustained growth in sectors that have potential to generate quality employment for Bhutanese youth.

Even with the comparably low levels of youth unemployment in relation to most countries, there is an extremely high policy priority and supportive

Table 8.2 YOUTH LFPR AND UNEMPLOYMENT TRENDS					
	1998	1999	2001	2003	2004
LFPR (15-24)	46.6%	58%	36%	47.6%	35.2%
Unemployment Rate (15-24)	2.6%	2.5%	5.4%	3%	5.5%
Unemployment Rate (15-19)	2.5%	2.1%	8.4%	4%	7.2%
Unemployment Rate (20-24)	2.7%	2.9%	3.8%	2.3%	4%
Percent of Youth Unemployed to Total Unemployed	45.5%	49.4%	60%	42.5%	41%
Source: NLFS, 1998-2004					

environment to tackle the issue of providing gainful employment for youth. While there is insufficient data to measure the state of progress towards the MDG target through the indicator of youth unemployment, subjectively assessed, the country is extremely well placed and on track to achieve the overall target of developing and implementing strategies for decent and productive employment for youth.

## Youth Employment

The labor force participation ratio (LFPR) for youths has fluctuated between 58% and 35% over the last several years and overall shows a declining trend that is broadly attributed to improved enrollments and retention in schools. The LFPR was at 46.6% and 58% in 1998 and 1999 and was estimated at 47.6% and 35.2% in 2003 and 2004. The youth unemployment rate has doubled from 2.6% in 1998 to 5.5% in 2004 and has generally been twice as high as the general unemployment levels. Moreover, youth have normally constituted around half of all those unemployed. The data from the National Labor Force Surveys (NLFS) clearly reveal that the unemployment situation in Bhutan affects youth disproportionately and that it is essentially a youth issue. Most of the unemployed are young school leavers. Among youths, those between the ages of 15 to 19 are much more vulnerable to unemployment than the older youths and it is particularly young urban girls in the 15-19 age cohort who seem to have the highest unemployment rate (21.4% in 2003).

Some of the major causes of growing employment difficulties among youth are attributed to the young demographic

profile of the country, limited absorption capacity in the formal sector, slow growth of sectors with employment potential, the mismatch between skills demand and supply in the labor market, rural-urban migration and the high wage reservations and job expectations of youths.

## Supportive Environment

Bhutan's economy has grown very rapidly at over 6-7% over the last decade and this strong growth pattern is anticipated to continue. Even as the growth pattern has been and is likely to be highly capital intensive in the future with limited employment generation, this positive macro-economic setting, with the appropriate adjustments, can provide a firm and solid basis for enhancing the employment prospects for youths.

Currently, much of the employment difficulties that young people face have been attributed to the lack of appropriate skills that are in demand by the labour market. In response, the Royal Government specifically established the Ministry of Labour and Human Resources in 2003 and through this ministerial agency, has initiated numerous skills development programmes and activities. The expansion of vocational education and training has been at the core of these efforts and has been accorded a very high priority under the 9<sup>th</sup> FYP. Some of the notable activities being implemented include the creation and operationalization of a comprehensive vocational qualification framework system, adopting a vocational and education policy, and enhancing access to and improving the quality of



vocational training. Other activities to enhance the employability of youth include providing apprenticeship training, village skills development and entrepreneurial training.

Additionally, in schools, the curricula are being improved to make education more relevant to the workplace, career counseling introduced, life skills education imparted and vocational clubs organized. To help facilitate youth transition into the workplace and shorten their period of job searching, job fairs are regularly organized and a job portal has been created. Temporary work schemes for students are also available to help them gain valuable work experience.

## Challenges and Priorities for Development Assistance

The challenges that the country faces in addressing youth employment are complex and multi-faceted and are only likely to become incrementally more difficult to deal with as the number of youths entering the labour market grows exponentially. Rough projections indicate that the number of youths seeking jobs by 2020 will effectively quintuple as compared to the present

levels. This represents a major challenge that is compounded by several other demanding constraints.

Employment growth has not kept pace with the strong levels of growth that the economy has exhibited, principally as the latter has been highly capital intensive and driven by large-scale hydropower development. On the other hand, employment intensive sectors, such as agriculture, have grown slower and the trend is likely to persist. Formal employment, particularly in the government sector, which traditionally was the preferred work choice for young job seekers, has limited absorption capacity and offers limited scope for expanding employment. Although the private sector in Bhutan remains small and relatively underdeveloped and deeply constrained by its own competitive needs, it still represents the brightest hope for generating paid and self-employment for youth.

In addition to the above demand side challenges, there are also several supply side challenges that affect the employability of Bhutanese youth. Most youths entering the labour market are unskilled and have low educational attainments. This is compounded by their high wage reservations and job expectations that often cannot be met by the labour market, which has alternative access to relatively lower cost and skilled expatriate labour.

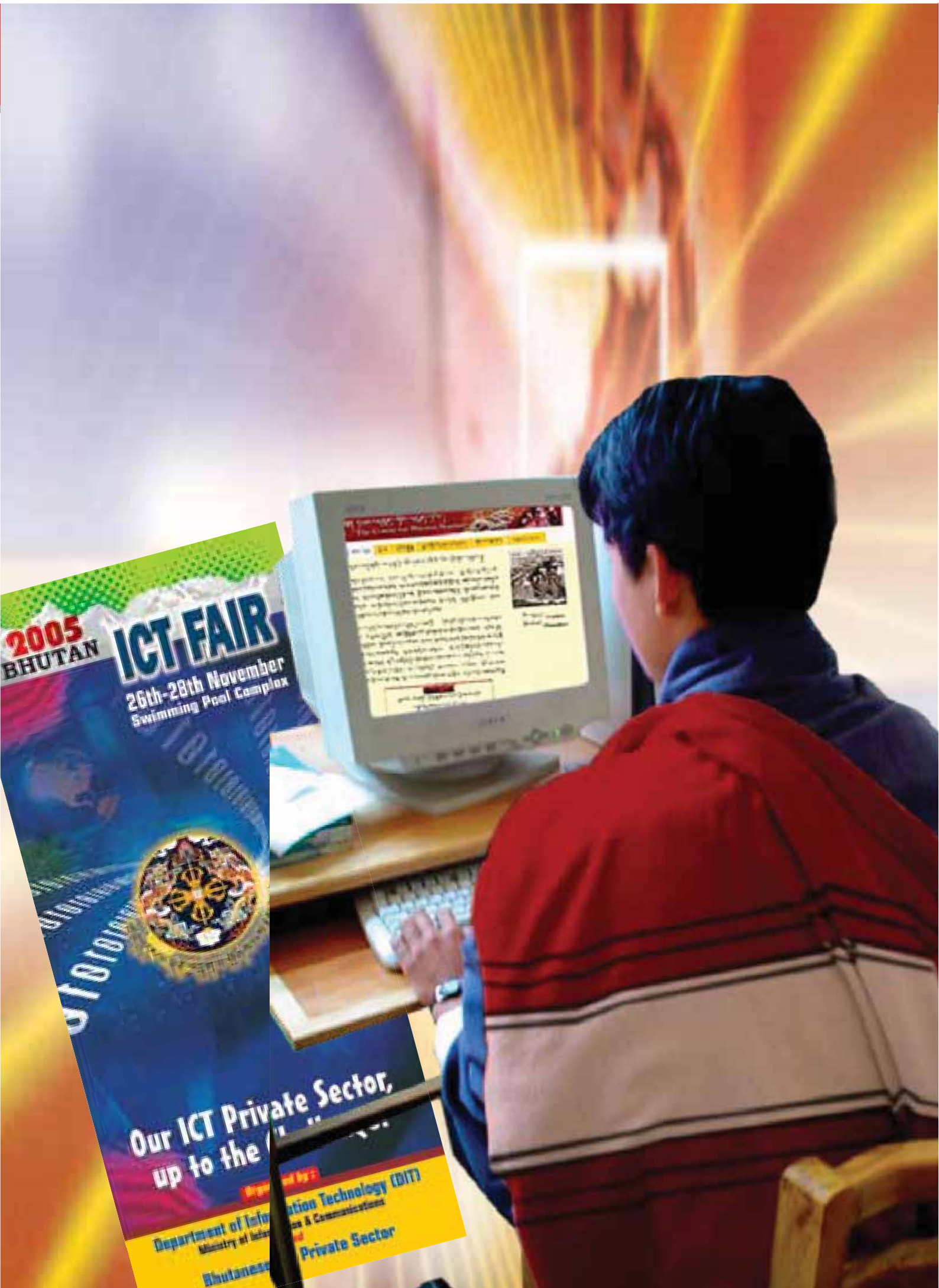


Meeting the considerable challenge of increasing the youth employment will require sustained development interventions. The particular areas that require development intervention and assistance are enumerated below:

- *Ensuring pro-poor growth and sustained investments into employment intensive sectors*
- *Improving the quality of basic education and reducing drop-out rates*
- *Supporting life skills development and career education in schools*
- *Strengthening skills development in schools, particularly at the secondary levels*
- *Increasing access to and quality of vocational education and training*
- *Enhancing support for entrepreneurial, apprenticeship, and village skills development*
- *training programmes*
- *Promoting the rapid expansion and growth of the private sector*
- *Formulating a comprehensive youth employment strategy*
- *Strengthening the labour market information system and supporting research and data collection on the participation of youth in the labour market.*







**2005 BHUTAN ICT FAIR**  
26th-28th November  
Swimming Pool Complex

**Our ICT Private Sector, up to the**

Department of Information & Communications  
Ministry of Information & Communications  
Private Sector



## Develop a Global Partnership for Development

## GOAL

# 8

Table 8.3

**TARGET 18**

**In cooperation with the private sector make available the benefits of new technologies, especially information and communication technology**

Indicators	1990	2000	2004	2015	Status of Progress	State of Supportive Environment
<i>Fixed Telephone Lines in Service</i>	4,052	16,580	30,420	-	On track	Strong
<i>Telephone density (per 100 persons)</i>	0.68	2.4	4	-	On track	Strong
<i>Computers in use (per 100 persons)</i>	-	0.58 (2001)	1.0	-	On track	Strong
<i>Internet users (per 100 persons)</i>	-	0.43 (2001)	-	-	Insufficient data	

Source: National Statistical Bureau, 1990,2000,2003, ICT Annual Report 2004-2005, ICT Survey 2001

### Status and Trends

There has been substantial progress in making available the benefits of new technologies, especially Information and Communications Technology (ICT), to the Bhutanese public. Moreover, the rapid spread of ICT services and the upgrading of ICT human resources have been achieved with the active and dynamic cooperation of the private sector. The main challenges relate to the financial sustainability of establishing and maintaining rural telecom and other ICT services and a dire lack of sufficient numbers of skilled ICT human resources. The country, however, remains on track in spreading widely the benefits of ICT and enjoys a strongly supportive environment for achieving this target.

### Information and Communications Technology

Over the last decade, Bhutan's ICT sector has witnessed impressive technological changes and rapid growth. The number of telephone lines in service has witnessed a 750% growth between 1990 and 2004. Tele-density as such has grown from less than one telephone line per 100 persons in 1990 to four in 2004. Cellular mobile services introduced in November 2003 has similarly witnessed an enormous growth in the number of users rising from less than 5,000 at the end of 2003 to 19,000 by the end of 2004, vastly exceeding projected growth targets.



The ICT Annual Report 2004-2005 estimates that there are 8,000 computers in use in the country, which means a density of one computer for every 100 persons. Internet usage introduced in June 1999 has also gained rapid acceptance. In 2001, it was estimated that 47% of all computers had internet connections and that there were 3,000 internet users in the country or 0.43 internet users for every 100 persons. No current assessment is available on the number of internet users but judging by the fact that the number of dial-up services has tripled from 1,013 in 2001 to 2,989 in 2004 and internet cafés have proliferated, the number of internet users would have increased vastly. IT businesses too, excluding internet café's, have doubled from around 16 firms in 2000 to 30 at present. Related user costs on the other hand have become much more affordable and popular than before, with steady and significant reductions in the tariff for telecommunication and internet services.

The completion of the ongoing Rural Telecommunication Project in 2006 will significantly enhance rural ICT connectivity and introduce a wide range of new telecom services to rural areas including voice telephony and internet services to an additional 88 *Geogs* or blocks in the country. This will greatly limit the growth of a digital divide between rural and urban communities.

## Supportive Environment

The promotion, development and utilization of new technologies are strategic national priorities, particularly in the context of ICT. With regard to the latter, Bhutan has a clear vision to become a world-class user of ICT as the Royal Government has recognized its vast potential as a developmental tool and for developing related ICT industries to generate income and employment opportunities. To achieve these national ICT objectives, the private sector is regarded as an important strategic partner.

In line with the Bhutan Telecommunications Act 1999, the Bhutan Telecom Corporation Limited was established as a corporate entity in 2000 to help improve the management, operation and delivery of telecom services. To coordinate ICT development in Bhutan, a separate ministry, the Ministry of Information and Communications, was established in July 2003. More recently, a comprehensive policy framework, the Bhutan ICT Policy and Strategies, was formulated that provides a clear road map for implementing ICT development activities in the country. The ICT strategic policy envisions establishing a reliable, sustainable and affordable ICT infrastructure to achieve universal access and global connectivity; putting in place the appropriate legislative framework; strengthening of ICT human capacity to propagate ICT skills and knowledge at all levels ranging from the professional to basic ICT literacy; supporting ICT business and knowledge industries; and promoting widespread creation of content and applications.

Additionally, an Information, Communications and Media Bill has been drafted





and is likely to be enacted soon. This will strengthen the enabling legal framework for ICT and media development in Bhutan. An innovative proposal under the bill includes setting up a universal service obligation fund that will help financially support activities to ensure that all Bhutanese have a minimum level of access to ICT and media services irrespective of where they reside.

## Challenges and Priorities for Development Assistance

A critical objective of the Royal Government is to expand the coverage of telecommunication services to all the *Geogs* in the country. However, efforts to prevent the widening of a digital divide is significantly challenged by the short and medium-term financial viability of establishing, operating and maintaining rural ICT services in view of the low economies of scale and associated high unit costs. Measures to reduce capital and recurrent costs, principally through the appropriate choice of technology,

will have a major bearing on the long-term sustainability of expanding and maintaining rural telecom and related ICT services.

Bhutan's ICT development and the opportunities for promoting knowledge-based industries are significantly constrained by the shortage of skilled human resources in ICT. The country presently has few professional IT personnel, particularly with more advanced qualifications. Raising the quantity and quality of ICT human resources in the country is thus a critical challenge that needs to be addressed if the country's ICT vision and goals are to be achieved.

Addressing all of these challenges will require development interventions in the following priority areas that are listed below:

- *Ensuring equitable access to ICT services across the country*
- *Promoting and expanding E-governance*
- *Supporting private sector participation in ICT development*
- *Promoting E-commerce solutions and innovations*
- *Encouraging the development of knowledge-based industries*
- *Strengthening of ICT training and human resource development*
- *Strengthening ICT infrastructure and enhanced connectivity*
- *Promoting computer awareness, literacy and proficiency*