

Education for All: Mid Decade Assessment for Bhutan

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Abbreviations

| | |
|--------|---|
| AIDS | Acquired Immune Deficiency Syndrome |
| AIR | Apparent Intake Ratio |
| BHU | Basic Health Unit |
| CECD | Career Education and Counseling Division |
| CEDAW | Convention on the Elimination of All Forms of Discriminations Against Women |
| CRC | Convention on the Rights of the Child |
| CSHP | Comprehensive School Health Programme |
| DDA | Dzongkhag Development Authority |
| DEO | Dzongkhag Education Officer |
| DOP | Department of Planning |
| DRC | Department of Revenue and Customs |
| DYS | Department of Youth and Sports |
| DYT | Dzongkhag Yargye Tshogdue |
| ECCD | Early Childhood Care and Development |
| EFA | Education for All |
| GER | Gross Enrolment Ratio |
| GNH | Gross National Happiness |
| GPI | Gender Parity Index |
| GYT | Geog Yargye Tshogchung |
| HDI | Human Development Index |
| HIV | Human Immunodeficiency Virus |
| ICSC | Indian Council for Secondary Education |
| ICT | Information and Communication Technology |
| ILO | International Labour Organization |
| IT | Information Technology |
| MOE | Ministry of Education |
| NER | Net Enrolment Ratio |
| NFE | Non-Formal Education |
| NGO | Non-Governmental Organization |
| NID | National Institute for the Disabled |
| NSB | National Statistical Bureau |
| NWAB | National Women's Association of Bhutan |
| NYCED | Non-Formal and Continuing Education Division |
| ODA | Official Development Assistance |
| PP | Pre-Primary |
| PPD | Planning and Policy Division |
| RGOB | Royal Government of Bhutan |
| RUB | Royal University of Bhutan |
| SBPEAD | School based Parenting Education and Awareness programme |
| UNDP | United Nations Development Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children's Fund |
| WFP | World Food Programme |
| ZTC | Zhungkha Teaching Certificate |

Executive Summary

Despite the country's mountainous terrain and its dispersed population, the Royal Government of Bhutan has always been committed to the objective of providing a largely free education to all its children. Since the start of modern development in the nineteen-sixties, the education sector has always been given high priority within the government's development policy and its share in the allocation of the total budget has never been below 10 per cent. From 440 students in 11 primary schools in 1959, the education system in Bhutan has now grown to include over 169,776 students in 1,158 institutions, offering general and tertiary level education, vocational training and non-formal courses. The achievements and challenges are highlighted below:

Early Childhood Care and Development.

Until 2004, Bhutan did not have any Day Care Centres, but since then six privately managed institutions have opened. Simultaneously, the health care of the under-fives has improved significantly. The mortality rate for every 1000 live births had come down from 84 in 2000 to 61 in 2005. Immunization coverage had increased from 85 to 90 per cent over the same period, and the percentage of underweight children had dropped from 17 in 1999 to 9 in 2005. Most of the day Centres are located in the urban areas and the key challenge is to provide early childhood facilities in the rural areas where the participation of the private sector is not forthcoming.

Universal Primary Education

The net primary enrolment for primary education is 79.4 per cent, based on the new population figures of 2005. The gross enrolment had increased to 102.1 per cent in 2006 from an estimated 72 per cent in 2000. The target of achieving 100 per cent enrolment was originally set for 2015. In order to facilitate extra students, community and primary schools are being expanded and upgraded, and boarding facilities provided for those in the remote areas. To help alleviate the demand for education private schools have been established, and between 2000 and 2005 enrolment had doubled to over 2000 students in private schools.

It would seem that about 20 per cent of Bhutan's children are not attending school, although there are some in the monastic schools, where the others are, and the causes for their absence, need to be identified. Thereafter, an appropriate policy will have to be devised to address the relevant issues.

Life skills and Life Long Learning

In order to make education relevant to the real work situation, numerous activities are being organized for children at the school level. Schools are offering various opportunities for familiarizing students with different trades and agriculture practices at the higher secondary school level, and should they opt for full time careers along these lines, there are tertiary educational institutes offering advanced courses. Under the wholesome education initiative, the School Based Parenting Education and Awareness Programme, Career Counselling, Scouts Association, Comprehensive School Health Programme, Integrated Agricultural Programme and Sports have been promoted.

While lack of time seems to be a deterrent for many students and this imposes limitations on the implementation of some programmes, others, like the Scouts Association, have expanded rapidly to the point when it might be more suitable for a full time organization like an NGO to run them.

Literacy

With improved statistics, the adult (15 years and above) literacy rate was found to be 53 per cent in 2005, with females accounting for 39 per cent and males 65. It will be easier to measure future progress under the literacy programme. However, there is no doubt on the impact this has made on women, particularly rural women, in enabling them to read and participate in activities which were hitherto restricted to the literates. Currently, there are 18,550 learners under the Non-Formal Education Programme and there are challenges to meet in making the programme available to other unreached groups, including men, and also with reference to the issue of teaching English as an alternative language.

Gender

Bhutan has already made commendable progress when it comes to promoting gender parity. The gender parity for girls in primary education has reached 97 per cent and it is encouraging to note that the girls' annual enrolment growth rate has been higher than the boys' since 2000. The biggest challenge is to further girls' education in class XI and XII where they account for only 41.6 per cent of the class, and this figure falls further to 35 per cent by the time enrolment in the Royal university of Bhutan is reached.

Concerted efforts are required to ensure that gender parity is reached for higher and tertiary education, although it is foreseen that the current primary cohort will level off when it reaches the higher and tertiary level.

Quality Education

The Royal Government of Bhutan has been systematically enhancing the quality of education through the revision of the curriculum, providing pre- and in-service training for teachers and improving the educational infrastructure. Teaching allowances will soon be introduced for the teaching profession in order to attract the best candidates. Provision for upgrading teachers' qualifications is also available under the Continuing Education Programme.

Despite the satisfactory teacher student ratio on a national level, a further challenge remains in getting adequate teachers to the remote and difficult areas. The construction of new staff quarters in rural areas and improvement in the class room facilities, such as good libraries, computers and computer assisted teaching aids are needed to attract teachers and maintain the standard of education.

Lists of Officials Met

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Education for All: Mid Decade Assessment for Bhutan

I. Development Context of Bhutan

1.1 Introduction

The tiny Himalayan kingdom of Bhutan is situated between the two giant nations of China and India, bounded by the Shigatse and Lhoka prefectures of the Tibetan Autonomous Region of China in the north, and the Indian states of Sikkim, West Bengal, Assam and Arunachal Pradesh (formerly Northeast Frontier Agency) in the west, south and east. Bhutan is separated from Bangladesh by about one hundred and fifty kilometres of Indian territory as is Nepal to the west. It covers an approximate area of 38,394 square kilometres, and measures roughly 150 km north to south and 300 km east to west. Most of the country is mountainous and the land elevation ranges from 160 metres above sea level in the south to more than 7550 metres in the north.

The population of the country was 634,982 in 2005¹ when for the first time a nationwide population and housing census was conducted. The gender ratio of the resident population was 52.5 % males to 47.5 % females. Furthermore, 69.1 % of the population was living in the rural areas.

Bhutan has been an independent nation throughout its history, helped partly by being landlocked, with the absence of any nearby sea providing easy access to conquering powers, and also by the high Himalayan mountains acting as a natural barrier to potential invaders from the north. In the 17th century a great religious teacher from Tibet, Shabdrung Ngawang Namgyal (1594–1652) came to Bhutan and unified the country: one state under one rule. He established a theocracy in 1652 and gave Bhutan an administrative system and a code of law to govern the country. The theocracy established by Shabdrung ended in 1907 when Sir Ugyen Wangchuck (1862–1926) was elected by popular consensus as the first king of Bhutan. Since the establishment of the monarchy, the country has been ruled by four successive hereditary kings with the fifth successor due for enthronement in 2008.

The population can generally be divided into two major ethnic groups: the Drukpas², consisting of the Ngalongs and Sharchops,³ in the west and east respectively, and the Lhotsamps⁴ in the

¹ It excludes another 37,443 floating population, mainly immigrant workers in the country (RGOB 2005c)

² Derived from the word, 'Druk', meaning dragon in Dzongkha language. Sometimes called 'Drukpas' as well.

south. Due to increased numbers of inter-marriage and more migration occurring within the country, this distinction is becoming blurred. Smaller ethnic groups, with distinctive languages, also live in remote pockets of Bhutan. Buddhism and Hinduism are the two major religions.

Bhutan's development policy is uniquely guided by the Gross National Happiness (GNH) concept, the idea being that human beings have spiritual and emotional needs which are as important as material ones, but have been largely overlooked by the traditional development approach. The guiding principles towards maximising GNH are: '*unity and harmony, stability, self-reliance, sustainability and flexibility*' (RGOB 1999, p.43), and the main objectives are human development, maintenance of culture and heritage, balanced and equitable development, good governance and environmental conservation.

1.2 Economy

There are no detailed time series data on macroeconomic variables for Bhutan for the period before 1980. Between 1980 and 1998, however, the GDP grew at a steady average of 6.7 per cent per annum. In the 1980s, GDP grew at a higher average of 7.3 per cent per annum, with income almost doubling between 1980 and 1989.⁵ The GDP growth dropped to 5.5 per cent in 2000 (NSB 2004b), which is attributed to the heavy rains and floods in that year causing considerable damage to the infrastructure and industry. Thereafter, it increased to 10.0 per cent in 2002, boosted by reconstruction and rehabilitation, and in 2005 the growth was 6.5 per cent (NSB 2006). The construction of the three new hydro-power projects, Kurichu, Basuchu and Dala, has also contributed to the high growth rates in the construction, trade and transport sectors.

The economy is driven by the export of hydro-power to India and in the financial year the sale of electricity accounted for 31.9 per cent of the government revenue (DRC 2005). This is expected to increase with the commissioning of Chukha Hydro-project phase 2 and Puna Tsangchu, which is currently under consideration. While electricity is an environmentally friendly source of energy, the market is one of monopsony, with India being the sole buyer apart from the small domestic market. The fact that both India, Tibet (China) and Nepal have vast potential which have yet to be tapped makes Bhutanese energy profitable in the short run.

³ In Dzongkha language, "Shar" means east, while "chog" means direction and therefore literally means people from the east.

⁴ Similarly in Dzongkha, "Lho" means south while "Tsam" means border or literally people living in the southern border with India and primarily refers to the people of Nepali ethnic.

⁵ The per capita income in 2001 was US\$ 27 a month but was based on population of 2.1 million in the same year (UNDP 2003). Therefore, the real income is expected to be much higher.

Therefore, Bhutan would do well to broaden its market in the region as well as to step up other economic activities, such as trade, so as to avoid over dependence on a single commodity.

In the past Bhutan was able to get grants from donors to fund its development activities, but following the decline in ODA and increase of internal revenue, primarily from the sale of electricity, Bhutan has been able to meet its current expenditure but still has to depend on donors to fund its capital expenditures. For several years the public expenditure on health and education has been high, resulting in a budget deficit of Nu.3,532 million in 2004 and 2005, causing Bhutan to resort to borrowing from India, the World Bank, the Asian Development Bank (ADB) and the Government of Austria. The debt reached \$ 529 million in 2003-2004, about half of this being owed to the Government of India for the Dala project in non-convertible currency, and the rest, in convertible currency, owed to the ADB, the World Bank and the Government of Austria. Due to its high level of debt, the World Bank has classified Bhutan as a debt ridden poor country and that makes the country eligible for some grants.

There has been a significant change in the composition of GDP. In the early 1980s, agriculture, livestock, forestry and fishing, along with trade, were the main sectors, accounting for more than two thirds of the country's GDP. By 1990, their share had declined to 42.7 per cent of the country's GDP, which further dropped to 22.4 per cent in 2005 (NSB 2006). Agriculture and allied activities recorded the slowest annual growth of 0.4 per cent in 2005, down from the average 2 per cent growth between 2002-2004. During the 1980s, Bhutan began to develop its enormous hydropower projects, which not only boosted the export of energy to India, but also induced a number of energy-intensive industries to be set up. The result has been that the share of mining, manufacturing and electricity increased from 4 per cent of the GDP in 1980 to 28 per cent in 2005(NSB 2006). Similarly, the contribution of the finance, insurance and real estate rose from 3.8 per cent in 1996 to 6.1 per cent in 2000 (CSO 2001) and stood at 18.6 per cent in 2005 (NSB 2006).

1.3 Overview of Development

Despite the rapid growth of Bhutan's economy in recent years, poverty still remains a real issue. A Household Income and Expenditure Survey in 2000 (RGOB 2004a), based on the minimum consumption of 2124 calories (kcal) per person, found that 29 per cent of the population in rural areas and 2.4 per cent in the urban areas were found to be poor. It was reported that 36.3 per cent of the population were living under the poverty line in 2000, which was reduced to 31.7 per cent four years later as per the 2004 Poverty Analysis Report (NSB

2004a). The finding showed the income poverty line to be Nu. 740 per capita per month with 97 per cent of the poor concentrated in the rural areas and more than half of them in the eastern regions (DOP 2005).

Bhutan has been ranked 135th out of the 177 countries surveyed in the UNDP Human Development Report 2006, with a human development index (HDI) of 0.538.⁶ The main criteria for the HDI computation are based on longevity, life expectancy and education rather than on the conventional measurements using the level of industrialization and the size of economy. The fact that Bhutan has moved from the category of 'low' human development to 'medium' signifies that its development efforts are having a positive impact on its citizens and its policy of investment in the social sector is beginning to bear fruit.

Like other member countries of the UN, Bhutan has participated in the Millennium Development Goals (MDG), with poverty elimination being the chief objective along with the achievement of universal primary education, gender equality, child and maternal care, prevention of HIV and other communicable diseases, protection of the environment and developing global partnerships.⁷ In 2005, Bhutan was largely on track in terms of implementing the action plans that contribute towards the MDG.

The proportion of people living in poverty in Bhutan is to be reduced to 20 per cent, rather than the global target of 50 per cent, by 2015. By 2004, the poverty level had been reduced to 31.7 per cent of the population. The objectives of achieving universal primary education, gender equality, reduction of child mortality and improvement of maternal care are on track and will be discussed in detail below. The prevalence rate of contraceptive use was 30.7 per cent in 2000 and the target is to increase it to 60 per cent by 2015. The incidence of malaria per 100,000 was 5,935 in 2000 and this had been reduced to 2,760 by 2004. Similarly, the incidence of tuberculosis per 100,000 was 1,140 in 2000 and had been reduced to 1,002 in 2004. The government has been able to maintain the proportion of forest coverage at 72.5 per cent and the ratio of protected area to surface area for preservation of bio-diversity, which was 26 per cent in 2000, had increased to 29 per cent in 2004. The proportion of people using solid fuel was 75 per cent in 2000 and by 2004 it had declined to 70 per cent. The proportion of people without access to an improved water source was 22 per cent in 2000 and had been reduced to 16 per cent by 2004. Similarly, the proportion of people without access to improved sanitation was 12 per cent at the turn of the millennium and had come down to 7.4 by 2004.

⁶ It is ranked ahead of Nepal (138) and Bangladesh (137) but is behind Pakistan (134), India (126), Maldives (98) and Sri Lanka (930 in the South Asian region).

⁷ There are 8 goals under the MDG programme.

The rate of youth unemployment, which stood at 2.6 per cent in 1998, had increased to 5.5 per cent in 2004 and at the same time the use of ICT is also gaining momentum and is on track with the goals set. Some data with regard to human poverty index, dietary energy consumption, and youth unemployment needs to be strengthened in order to gauge progress in these areas.

Like education, the health sector has also been a priority area for the Royal Government of Bhutan, which has made great improvements in the health of the people. There are 29 hospitals, most of them in district headquarters, 176 basic health units (BHUs) and 485 outreach clinics (ORCs) spread around the 205 Geogs (blocks) in the country (RGOB 2006a). Staffing consists of 145 medical doctors, 463 health workers, 529 nurses, 438 technicians, 66 indigenous physicians and, in addition, there are 1200 active village health workers (VHWs) delivering the health services. Currently, the doctor ratio per 10,000 of the population is 2.3 and the hospital bed ratio per 10,000 people is 17.

The basic health services have, for the most part, been free and essential drugs have been well distributed through the basic health units. The most common diseases are lung diseases, including pneumonia, cardiovascular and blood disorders. Among the children acute respiratory infections and diarrhoea are common (UNICEF 2006).

Life expectancy had risen from 37 years in 1960 to 66 years in 2000 (UNICEF 2006, RGOB 2006a). The infant mortality rate for under fives per 1000 live births had come down from 84 in 2000 to 61.5 in 2005, and infant mortality rate per 1000 live births had also come down from 60.5 in 2000 to 40.1 in 2005 (RGOB 2006a). The proportion of children covered under the immunization programme had also increased from 85 per cent in 2000 to 90 in 2004. As for mothers, the mortality ratio per 100,000 live births had been reduced from 560 in 1990 to 255 in 2000 (DOP 2005). The proportion of births attended by skilled personnel had more than doubled from 15 to 32 per cent between 1990 and 2003.

1.4 Education and Development

In the context of Bhutan, education has been considered the *raison d'être* for development and for this reason the first five year plans overwhelmingly stressed the promotion of education and other related infrastructure. Education is viewed as one of the basic needs (as well as a right) required to achieve the overarching philosophy of development, namely, Gross National Happiness (GNH). For this reason the value of education needs to transcend all costs

and reach every person within the kingdom. Education has also been seen as the panacea for alleviating poverty, meeting the critical shortage of human resources and for producing responsible citizens, who perhaps are easier to teach but more difficult to lead. It opens up more opportunities and, above all, empowers vulnerable people such as women and children, enhancing their capacity to make appropriate choices for their livelihood. Cognizant of these facts, the Royal Government of Bhutan has consistently pursued education as being an important vehicle for change and, indeed, has continually been able to allocate around 13 per cent of the government resources to this field.

Bhutan has spelt out sustainable and equitable economic development as being one of the pillars of GNH and, if this is the case, then it is compatible with the principle of MDG, where the primary focus is not only on eliminating inequality resulting from poverty but also on addressing the issues that cause it. Human beings have become the focus of development plans for both the national government of Bhutan and for the MDG, whether the objective is to reduce mortality and morbidity or to develop a person's capability. While the problem of poverty is generic from the UN point of view, the remedy for it is country specific. Therefore, the issues of MDG have always figured highly on Bhutan's development agenda, in the past as well as in the present.

II. Introduction to the National Educational System

2.1 Genesis of Education

Historically, the educational system in Bhutan has two major components, the ecclesiastical oriented institutions and the state led general or secular education. The third component is the non-formal education, which is an offshoot from the secular branch.

Although the pre-modal religion of Bhutan, Bonism ⁸ has claimed to have its own scriptures, it is generally recognized that this was only the case after Buddhism had been firmly established in Tibet and Bhutan. ⁹ The Tibetan writings, from which Dzongkha is derived, were created by a Tibetan Buddhist scholar, Thume Sambota, based on the *Brahmi* script from India. As such, both scriptures and other literature came to be associated with Lamaism or Tibetan Buddhism and, if the current practice of Bonism is any reflection of the past, this religion is devoid of complex philosophies and is very down to earth. Therefore, it has to be assumed that any form of education before the establishment of Buddhism, if it existed at all, would have been informal, home based, oral, and ritualistic.

Since the 8th century, with the advent of Buddhism into Bhutan, monastic education has come to play a dominant role in the lives of the people as continues to this day. It is estimated that there are about 5,000 monks registered in the government funded monasteries and another 10, 000 students in private village monasteries (UNICEF 2006).

A reference to the first secular education in Bhutan was made in 1914, when the first school was opened in Haa ¹⁰ (Collister 1987), and then followed a small number of students being sent to study in Hindi-medium schools in India. These first crops of students who passed out came to be known popularly as ‘Babus’, a title term denoting respect for the learned, both in the Indian and Bhutanese contexts. However, it was only when the kingdom officially ended its isolation, with the start of the first five year plan in 1961 that concerted efforts were made to establish a proper education system. From 440 students in 11 primary schools in 1959 (RGOB 2000a), the education system in Bhutan has now grown to include over 169,776 students in 1,158 institutions, offering general and tertiary level education, vocational training and non-formal courses (RGOB 2006b).

⁸ Chenrab Miboche is credited with being the founder of Bonism.

⁹ Gyalwa Changchub, the Bon scholar was responsible for translating Buddhist scriptures into Bon text and for this was charged and sentenced to death in Tibet.

¹⁰ Forty six boys were sent to Kalimpong to study for six months and the next half of the year was in spent in Haa with teachers provided by the Church of Scotland. A year later, a second school was opened in Bumthang with English and Tibetan as the main subjects (Collister, 1987).

2.2 Non-Formal Education

The combined effort of the Dzongkha Development Authority (DDA) and the National Women's Association of Bhutan (NWAB) gave birth to the Non-Formal Education programme in 1992. The programme was taken over by the Ministry of Education in 1994 and since then has grown to over 646 centres with over 18,550 learners (RGOB 2006b).

As long as there are a minimum of 20 learners, the government has been willing to provide a teacher and books to start a NFE centre.

Perhaps one of the biggest advances in the empowerment of women has been the NFE. People who have missed out on primary education or dropped out for other reasons can catch up. Classes are generally held in the mornings or evenings for two hours each day, when people have more time and the formal school buildings can be used as classrooms. Where there are no schools, the alternative places have been community buildings, health clinics or the village monasteries. Around two thirds of the learners have been women and although the classes are designed for people over 15 years, it is not uncommon to get children as young as seven attending the courses (UNICEF 2006).

Most of the instructors are people who have passed class X and XII or are part time teachers in the area. The government is encouraging instructors to be from the locality so that they can help at home or do other productive work when the lessons are not being held. Often the instructors are expected to be mobile and to move on to new centres upon completion of the course in one area. For this reason, and with the emoluments being only Nu.3,000 per month, these posts have not appealed to potential employment seekers and it has been difficult to get instructors.

The NFE consists of three levels with the first year being devoted to a basic literacy and numeracy course. This is followed by a post-literacy programme, which lasts from six to twelve months and enables learners to enhance their skills and gain knowledge on health, farming and other useful enterprises. Finally, there are opportunities for these students to advance their learning by self study at the local schools or community learning centres.

2.3 Continuing Education Programme

In 2006, the Ministry of Education piloted a Continuing Education programme in one of the private schools in the capital, Thimphu. This programme has now been extended to Paro and Phuntsholing. The classes are held in private schools that also provide the teachers and get paid a sum of Nu.8,500 per student per annum as tuition fees, while the books are supplied free by the Ministry of Education. Adults who have missed out on class X and XII now have

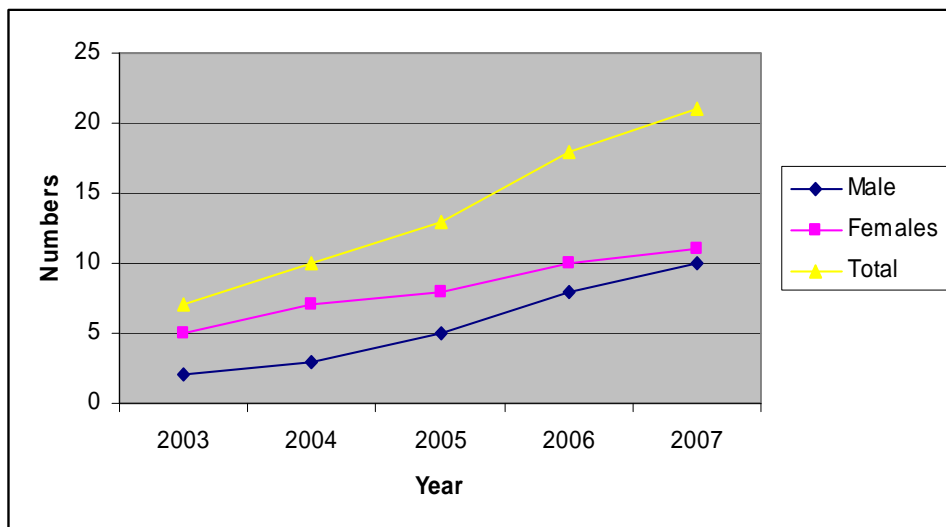
the opportunity to finish their schooling under this programme. Starting with classes IX and XI, the programme prepares students for classes X and XII over a two year period. Although classes are held in the evenings and at week ends, a minimum attendance rate has to be met in order for students to be eligible to sit for the examination set by the government. Most of the students in the pilot programme have been in-service people.

2.4 Special Education

The National Institute for the Disabled (NID) in Khaling was established in 1973 and caters to visually impaired children by providing instruction in reading and writing in Braille. In 2006 the institute had an enrolment of 45 students and 12 teachers for classes PP to VI. From class VII they move up to the lower secondary school across the road in Khaling, although they continue to use the hostel facilities at NID.

An education centre for the deaf was established in Drukgyel Lower Secondary School in Paro in 2003 although the classes only commenced in 2004. It started with 7 students (5 males and 2 females) and currently has 21 students and 7 faculty members, complemented by three deaf adults. The growth in the number of students is shown in the Table below.

Figure 2. 1. Details of Students at the Deaf Education Unit 2003-2007



A special education facility has been built in Changangkha Lower Secondary School in Thimphu to facilitate the education of some physically and mentally challenged children.

Finally, under the aegis of the Youth Development Fund, the Draktsho Vocational Training Centre for Disabled in Thimphu and Bhutan Souvenir Production and Training Centre in Punakha are training out of school youths in different skills such as handicrafts, paintings, etc.

2.5 Development in Education Since Dakar (2000)

Although resources, financial and human, were stretched to meet the goals of Jomtien (1990) and Dakar (2000), some notable achievements have been made and yet at the same time new challenges have arisen. The government has tried to improve the quality of the education sector by improving the teacher remuneration and expanding their training opportunities, as well as by appointing temporary teachers. Simultaneously, however, the achievement of expanded primary education is putting enormous pressure on the secondary and post – secondary levels, with an increasing number of students moving up in the system. This has resulted in a shortage of secondary education places as well as an inadequate number of qualified teachers. Related to this is the mismatch between the number of school graduates, whose first preference is to opt for civil service jobs, and the slow development of the private sector, exacerbating the problem of absorption of school graduates.

As the country has developed, Bhutan has, over the years, begun to develop its own curriculum to make it more relevant to and in accordance with the country's aspirations and needs. The basic level education has been increased to class X (from VIII). The Bhutan Board of Examinations has started conducting both class X and class XII examinations, which hitherto were done in affiliation with the Indian Council of Secondary Examination (ICSC).

Also, since 2003, Bhutan has established the Royal University of Bhutan, with nine publicly funded tertiary educational institutes accredited to it, as shown below. Currently, there are 3,553 full time students (35 per cent females) and 521 part-time students (24 per cent females) studying at the different institutes.

Table 2. 1. Institutes affiliated to the Royal University of Bhutan

| Sl.No. | Institute | Teaching | Non-Teaching | Total Staff |
|--------|---|------------|--------------|-------------|
| 1. | Institute of Language and Culture Studies | 26 | 24 | 50 |
| 2. | National Institute of Education (Paro)* | 46 | 27 | 73 |
| 3. | National Institute of Education (Samtse)** | 41 | 39 | 80 |
| 4. | National Institute of Indigenous and Traditional Medicine | 5 | 6 | 11 |
| 5. | Natural Resources Training Institute*** | 27 | 38 | 65 |
| 6. | Royal Bhutan Institute of Technology**** | 59 | 34 | 93 |
| 7. | Royal Institute of Health Sciences | 22 | 20 | 42 |
| 8. | Royal Institute of Management | 33 | 45 | 78 |
| 9. | Sherubtse College | 78 | 62 | 140 |
| | Total | 337 | 295 | 632 |

- * Renamed Paro College of Education
- ** Renamed Samtse College of Education
- *** Renamed College of Natural Resources
- **** Renamed College of Science and Technology

2.6 ICT and Education

Since the introduction of internet into the country in 1999, the use of ICT has seen a phenomenal growth among the various organizations in the country. New technologies have offered vast opportunities both as educational tools and as a means to knowledge and learning. Therefore, all Higher and Middle Secondary Schools have a computer laboratory with a minimum of 15 to 20 computers each. In addition, some of the Lower Secondary Schools and Community and Primary Schools have also been supplied with computers. Teachers and students who finish the Basic Education (class X) are expected to be IT literate. Free internet access has been given to all schools in the week ends and 50 per cent discount for the rest of the week.

2.7 Unreached Groups

Considering that 79.4 per cent was the net enrolment rate (NER) in 2006, it is assumed that approximately 20 per cent of the children in Bhutan between ages 6 and 12 are not attending primary schools. While the Population & Housing Census of Bhutan 2005 has recently

greatly improved the information on population, there is still room for improvement on disaggregated data. In considering the groups with the greatest potential for being missed out, it is worth mentioning that there is no caste or class system in Bhutan, although there is a perception that the gap between the few rich and the poor is widening. Theoretically, everybody has access to primary education in Bhutan, including those from the economically backward groups. The number of HIV/AIDS cases has been on the rise (74 people in 2005 from 38 cases in 2000) and a few small children have been affected, but there have been no cases of discrimination reported against children of HIV/AIDS parents or those born with it. It is suspected that there are some working children of poor parents, and orphans, but this again is acknowledged to be a small minority. Apart from these vulnerable children, the following groups are significant and with an improved data base in due course, a better analysis of the situation can be expected.

(i) Monastic Students

The number of students enrolled in the monastic schools has been estimated at about 15 per cent of the total school enrolment (UNICEF 2006). In 2007 the number is estimated to be 14,436 students in the monastic schools with about 0.6 per cent comprising females.¹¹ Even if, by a rough rule of thumb, we assume that 15 per cent of the total enrolment in the monastery is in the primary school going age, then we have accounted for about 2,165 students.

(ii) Nomadic and Remote Settlement Children

In 2004 a study was carried out by the Ministry of Education to find out an innovative approach to accelerate enrolment, particularly of children in remote settings, such as nomads or scattered settlements. Samples from 12 remote settlements were taken from 9 districts located in different parts of the country. The study showed that only 18 per cent of the girls attended school from Phungsing¹² village in Monger district while boys fared slightly better with 57 per cent. Chipung¹³ village in Pemagatsel district similarly had only 24 per cent of girls attending school, while the boys' enrolment was 30 per cent. Among the nomads, at the Lungu village in Gasa district, only 23 per cent of the girls and 70 per cent of the boys attended school.

From the above samples, it is clear that where settlements are remote the education of children is affected, but it is the girls who miss out the most. The settlements are often small

¹¹ This figure has not been validated by the Population & Housing Census of Bhutan 2005.

¹² It is day's walk from the nearest road point.

¹³ It is four days walk from the road.

in size, the number of children ranging from 20 to 40, and the dispersed location of these children would not allow for an economy of scale unless boarding facilities were arranged at an appropriate place. The samples taken are not exhaustive and, therefore, there will be other areas where children are missing out. The only way to ascertain their actual numbers is to carry out a comprehensive survey.

(iii) Disabled Children

Recognizing that the term, 'disability' is subjective, the Population & Housing Census 2005 has defined it as being deficient in sight, speech, hearing, physical movement or mental abilities and by that definition there were 21,894 disabled people, or 3.4 per cent of the population, in 2005. Of all the disabled people, most were deaf or dumb and this accounted for 35.5 and 30.3 per cent respectively. If we take children falling between the age 6 and 12 years, which was 102,597 as per the census in 2005, and take the same proportion of disabled (3.4%) from the total population, the number of disabled people in the age group 6 to 12 years (primary school going age) would be about 3,488. Since there were 34 students at the National Institute for the Disabled and 13 at the unit for the deaf in Paro, this leaves about 99 per cent (3,441 children) of primary school going age disabled children not accounted for. However, it is possible that some of the disabled children may be going to the regular schools.

2.8 Educational Policy and Legislation

The children in Bhutan have traditionally relied on their parents and relatives for protection¹⁴ but with new risks brought about by modernization the need to enact legislation on issues concerning children is becoming important. After joining the United Nations in 1971, Bhutan has acceded to several human rights conventions. The first one signed was the Convention on the Elimination of all forms of Discrimination against Women (CEDAW) in 1980 and it was acceded without reservation in 1981. This instrument is important, as any improvement for women is likely to benefit children as well. Bhutan was also signatory to the Convention on the Rights of the Child (CRC) in 1990 although it has yet to become a member of the International Labour Organization (ILO).

Bhutan has no formal education act and any new educational issues that emerge are mainstreamed into the general legislation, or are dealt within the framework of the development plans. However, there are a number of organizations and activities that are pro-child in orientation. The Department of Human Resources¹⁵, through its

¹⁴ For this reason, there has been no need for establishment of children's home or institutions.

¹⁵ Earlier known as the national Technical Training Authority (NTTA).

formal and informal training courses, helps children to acquire relevant skills that match the demand in the market, which otherwise increases the unemployment problem for the youth. The Department of Youth and Sports (DYS) provides career guidance, counseling on adolescent problems such as drug abuse, and promotes sports and scout programmes to channel the interests of children into productive use. The Tarayana Foundation, an NGO, which supports disadvantaged children and the establishment of special need schools for the disabled by the Ministry of Education is another example of these child centred activities. The National Commission for Women and Children formed in 2004 coordinates activities that help address the issues of women and children and promote their wellbeing.

The draft constitution, which will be enacted in 2008, clearly highlights the responsibility of the government vis-à-vis education. Article 9, Principles of State Policy, 15, of the constitution states, “ *The State shall endeavour to provide education for the purpose of improving and increasing knowledge, values and skills of the entire population with education being directed towards the full development of the human personality.*” and 16 has, “*The State shall provide free education to all children of school going age to tenth standard and ensure that technical and professional education is made generally available and that higher education is equally accessible to all on basis of merit.*” From these clauses it would imply that education will be “right” based, though this principle is applied already (RGOB 2003). Although education is termed to be free, a better clarification may be to describe it as being highly subsidized. The government provides free tuition, textbooks, sports equipment, meals and boarding, and free stationery to the rural schools. However, there are nominal fees, such as Nu. 5 charged for every child enrolling in PP. Parents are also required to contribute Nu. 30 per child annually to the school development fund at the primary level. The school development fund contribution is Nu.100 each for the lower secondary and Nu.200 for the middle and higher secondary school levels.

The Ministry of Education publishes “Education and Policy Guidelines & Instructions” annually, which outlines the priority of the education sector and informs of any policy changes.¹⁶ This publication is distributed to the various government officials involved with education issues.

¹⁶ The 2006 issue was the 25th issue.

Lastly, closely aligned to the Ninth Year Plan, the Education Sector Strategy, Realizing Vision 2020, Policy and Strategy, succinctly lays down the road map for the education sector and how its goals should be achieved.

In so far as advocacy is concerned, there are now one government owned and two private newspapers, which have sections targeting children. Any incident of violence or other abuse, when it occurs, gets a mention. A series of workshops has also been convened to raise the awareness of the rights of the child. A workshop to familiarize the CRC was held for the government, NGOs and other stakeholders in 1990. Training on the preparation of CRC report was conducted for officials of the multi-sector task force. Similar workshops on juvenile delinquents and adolescent health education have been convened by UN and other donor agencies. Moreover, with the creation of the National Commission for Women and Children (NCWC), advocacy on rights of the child as well as training workshops are being held regularly in the country.

2.9 Education Structure

(i) Monastic Schools

Strictly speaking there is no age limit set for joining the monastic schools, although in the past it was a common practice for families to send at least one son, as young as 6 to 10 years old, to the monasteries. To be enrolled into the monastic school is a life long calling and it is not uncommon to see monks as old as fifty or sixty along with their younger counterparts in the same monastery. Younger students used to be attached as a 'tho-zey' (novice), especially if they had an elder relative in the monastery, and were inducted into the official order after the completion of a probationary period of up to a year. These days there are some instances of secular students who opt for monastic schools after completing their high schools.

Children in monastic schools are taught to read and write though quite differently from secular education. Considerable time is spent in rote learning the prayers and scriptures and in practical courses, including the arts and crafts that are needed for performing rituals.

Because monks are held in great respect, there is still a demand for monastic schools, particularly from poor families. Apart from the benefit of free food and lodging in the monasteries, the monastic students perform a number of rituals for the community and get paid for their services, which income contributes towards the support for their parents and

relatives. Whereas monasteries have served as a sanctuary for orphans and children in crises, their reputation as reformatory institutions is well known. Due to the strict code of conduct and the liberal use of corporal punishment, some parents of children with behavioral problems prefer to send their children to the monastic schools. This is changing, and these days monks can withdraw from monasteries by paying a nominal fine, whereas in the past withdrawal was only possible by being expelled for gross indiscipline, or if one married.

Even with improvements in health care and hygiene, the facilities in the monasteries are basic and the frugal living conditions may not be as attractive as a secular school. There is an absence of leisure activities, the argument being that these trappings of the ascetic life are to enable the subjugation of one's will and to help in the quest for enlightenment.

(ii) General Education

The general or secular education has the largest enrolment of students and perhaps is the most widely known. It has three segments: basic education of 11 years, higher secondary education of 2 years and the tertiary education of 3 years or more.

Basic education level includes primary (PP- VI), lower secondary (class VII and VIII) and middle secondary (class IX and X), and is available to every citizen in the country.

Primary Education

In the 1960s, Bhutan adopted a 6 year primary cycle of "Infant-V". Later in the 1970s, this evolved to a 7-year primary cycle of Infant, Kindergarten-V. Still later, this was renamed Lower Kindergarten-V. This then changed to the present system of PP-VI in 1986. Children begin their schooling at the age of six years when they enter the first grade of primary, known as Pre-Primary (class PP). At the end of the primary cycle, children are required to sit for a national level examination which is set by the Bhutan Board of Examinations but administered and assessed by the schools. If they pass this examination they then continue on into secondary education.

Secondary Education

The secondary education programme consists of two years of junior secondary or lower secondary schools (class VII and VIII), two years of middle secondary(class IX and X) and two years of higher secondary school (class XI and XII), earlier known as junior college.

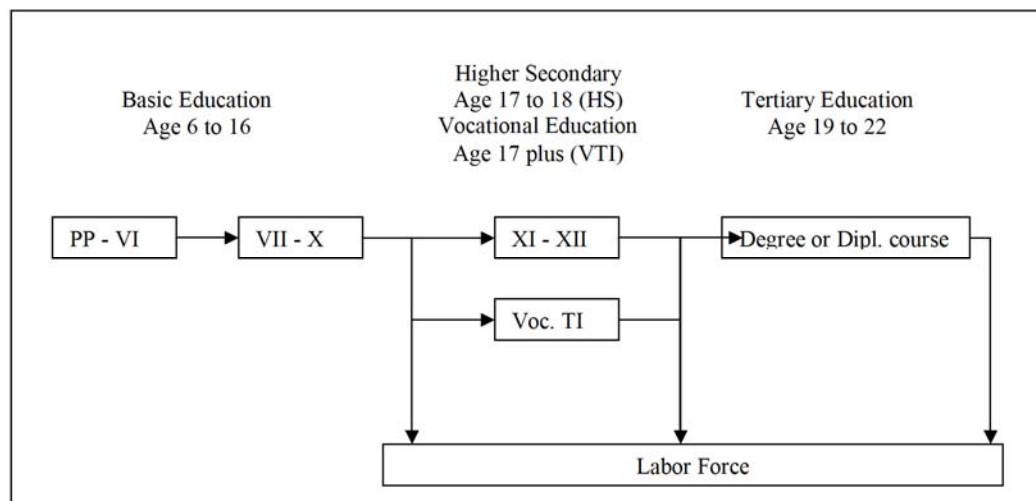
Students have to sit national examinations at the end of each level of education, namely at class VIII, X, and XII. Those who are successful at class XII may, based on merit, continue to study in a general degree programme. The rest either repeat the examination to get better marks, enrol in one of the training institutes or find employment. While education up to class

X forms the basic education and is intended to be universal, post basic education is presently more competitive and restricted to cater to the human resource needs of the country. A number of training options are available at this level, including engineering, agricultural extension, health sciences, office support services and teacher education. A major shift in recent years has been to make secondary education much more relevant by introducing basic skills training programme within the curriculum, and introducing career counseling to orient youth to the world of work.

Tertiary Education

Tertiary education is provided in Sherubtse College, the two Colleges of Education at Paro and Samtse, the Institute of Language and Culture Studies, the Royal Institute of Health Sciences, the College of Science and Technology, and the National Institute of Indigenous and Traditional Medicine (cf. Table 2.4). A limited number of students are selected for government scholarships for professional studies abroad, while others, who can afford it, arrange their further education privately.

Figure 2. 2. General Education Structure



2.10 Education Administration

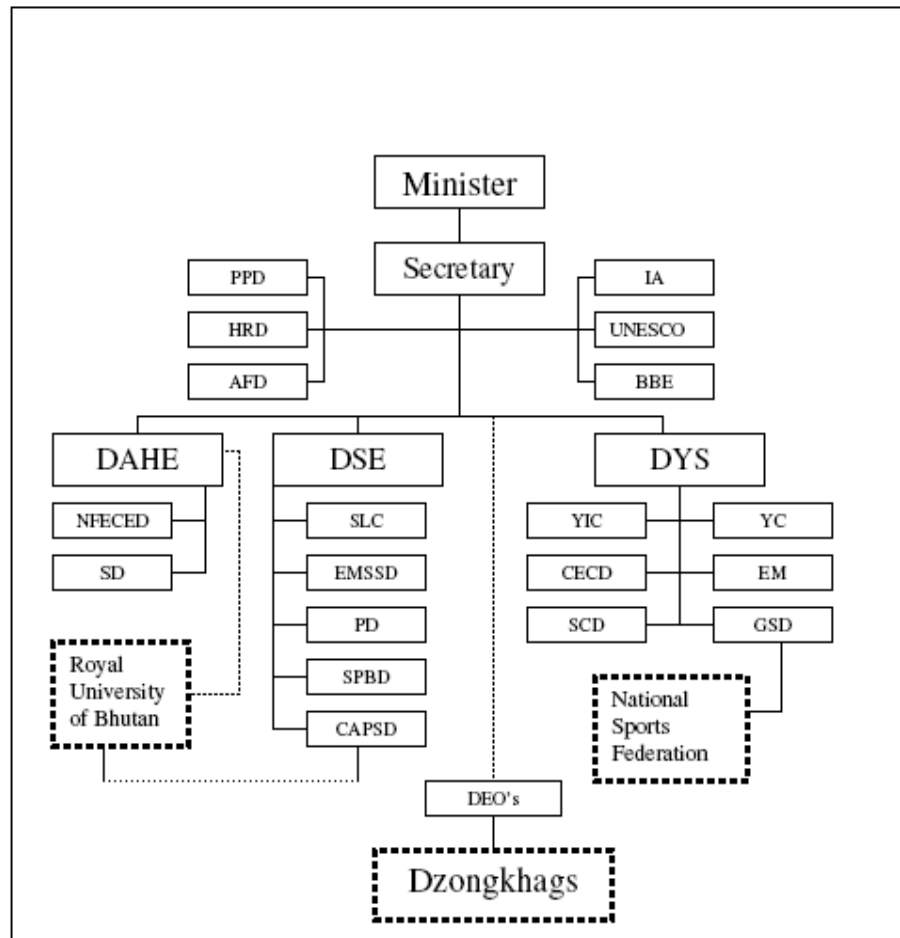
The responsibility for the administration of education in Bhutan is shared by several organizations: the Ministry of Education, the Ministry of Labor and Human Resources, the Royal University of Bhutan, the Dzongkhags and the Gewogs. The central monastic body and independent monasteries are responsible for the administration of the monastic education.

The Ministry of Education is responsible for policy, planning, curriculum development and administration of Basic (Primary up to Middle Secondary), Higher Secondary and Continuing Education, including the non-formal education. For tertiary education the Ministry of Education is responsible for selecting students for international scholarships, for designing and implementing Higher Education policy and for liaising with the Royal University of Bhutan. The organizational structure of the Ministry of Education is presented in the Figure 2.2.

As a result of decentralization, Dzongkhags and Gewogs are now entrusted with a range of responsibilities for Basic, Higher Secondary and continuing education, mainly focusing on school construction and maintenance, and the implementation of national policies. To fulfill these responsibilities every Dzongkhag employs Dzongkhag Education Officers (DEOs), supported by one or two assistant DEOs. They report to the Dzongda and to the Ministry of Education.

The Ministry of Labor and Human Resources is responsible for vocational training after class X, while the Royal University of Bhutan (RUB) is responsible for all tertiary education after class XII.

Figure 2. 3. Organizational Structure of the Ministry of Education



Lists of Abbreviations

| | | | |
|-------|---|-------|---|
| PPD | Policy and Planning Division | SPBD | School Planning & Building Division |
| AFD | Administrative and Finance Division | CAPSD | Curriculum & Professional Services Division |
| HRMD | Human Resource Management Division | DYS | Department of Youth & Sports |
| IA | Internal Auditor | YIC | Youth Information Centre |
| BBE | Bhutan Beard of Examination | YC | Youth Center |
| DAHE | Department of Adult and Higher Education | CECD | Career Education & Counseling Division |
| NFCED | Non Formal & Continuing Education Division | EM | Education Media |
| SD | Scholarship division | SCD | Scouts Division |
| SLC | School Liaison & Coordination Unit | GSD | Games & Sports Division |
| EMSSD | Education Monitoring & Support Service Division | PD | Programme Division |

2.11 Education Financing

Education has always been accorded a high priority by the Royal Government of Bhutan in its development plans and is among the highest recipients of the national budget. The Table below shows the budgetary support to the education sector in comparison with the overall outlay.

Table 2. 2. Outlays of Five Year Plans, First to Ninth (1961-2007) and Education Sector Budget (Nu. in mill.)

| | 1st Plan 1961- 1966 (actual) | 2nd Plan 1966- 1971 (actual) | 3rd Plan 1971- 1976 (actual) | 4th Plan 1976- 1981 (actual) | 5th Plan 1981- 1987 (actual) | 6th Plan 1987- 1992 (actual) | 7th Plan 1992- 1997 (outlay) | 8th Plan 1997- 2002 (outlay) | 9th Plan 2002- 2007 (outlay) |
|--------------------------------|--|--|--|--|--|--|--|--|--|
| Total Government Budget | 107.1 | 202.2 | 475.2 | 1,106.2 | 4,648.3 | 9,559.2 | 15,590.7 | 34,981.7 | 70,000.0 |
| Education Budget | 9.4 | 35.7 | 90.0 | 134.6 | 519.1 | 778.8 | 1,738.0 | 3,292.7 | 10,209.4 |
| % of Total Budget | 8.8 % | 17.7 % | 18.9 % | 12.2% | 11.2 % | 8.1 % | 11.1 % | 9.4 % | 14.5 % |

Source: RGOB 2003b, RGOB 2002

In the current Ninth Plan period, the budget of Nu.10, 209.4 million for the education sector was further divided between the centre, Dzongkhags and Geogs. Out of this outlay, 48 per cent was earmarked for capital expenditure (RGOB 2006c).

Table 2. 3. Budget Outlay for Education Sector in the Ninth Plan (Nu. in mill.)

| | Recurrent | Capital | Total |
|------------------------|-------------------|------------------|-------------------|
| Central Agency | 1,598.485 | 998.476 | 2,596.961 |
| Dzongkhags (districts) | 3,748.513 | 3,515.653 | 7,264.166 |
| Geogs (blocks) | 4.410 | 343.867 | 348.277 |
| Total | 5, 351.408 | 4,857.996 | 10,209.404 |

Source: Adapted from RGOB 2002

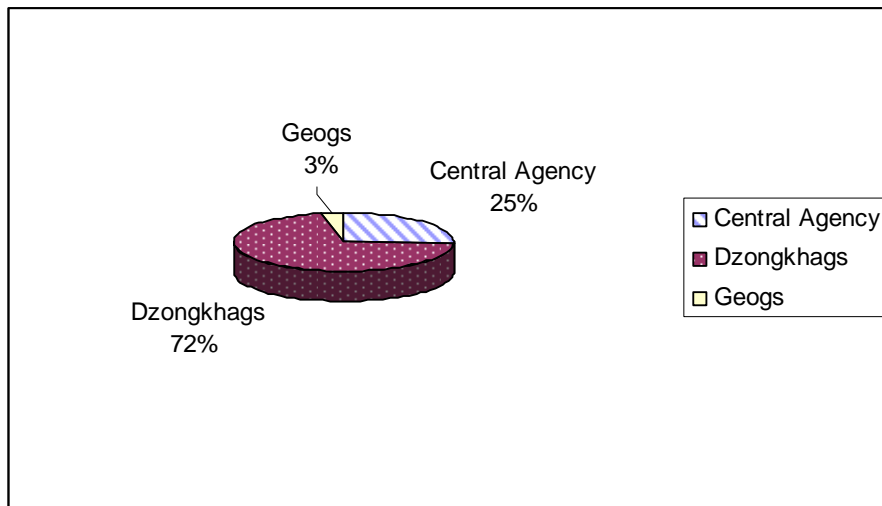
During the Ninth Plan period, the government has placed a lot of emphasis on participatory planning, with the Geog as the lowest administrative unit. In addition to the Geog Yargye Tshogchung (GYT) ¹⁷ at the block level, there is also the Dzongkhag Yargye Tshogdue (DYT) ¹⁸ at the district level, and both are important tiers in the decision making process of

¹⁷ Block Development Council

¹⁸ District Development Council

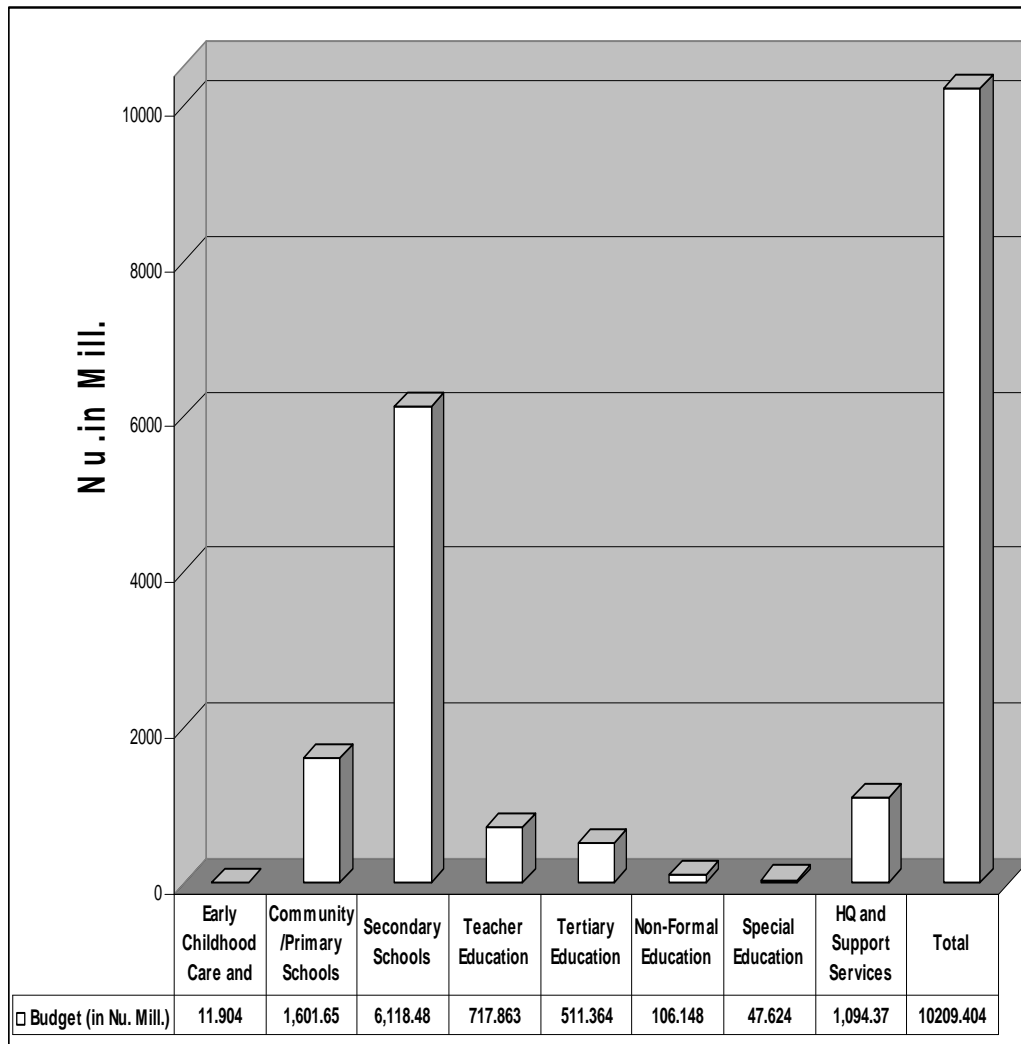
development in Bhutan. Although the allocations show that as much as 72 per cent of the education budget went to the Dzongkhags and 3 per cent to the Geogs, there is more of an administrative decentralization than an actual devolution of power. There were no discretionary funds or block grants allocated to the Dzongkhag or Geogs, although the actual needs were articulated by the people at the grass roots. The planning and priorities were still set by the central agencies in conjunction with the Planning Commission.

Figure 2. 4. Budget distribution (outlay) to different tiers of the education system during the Ninth Plan (2002-2007)



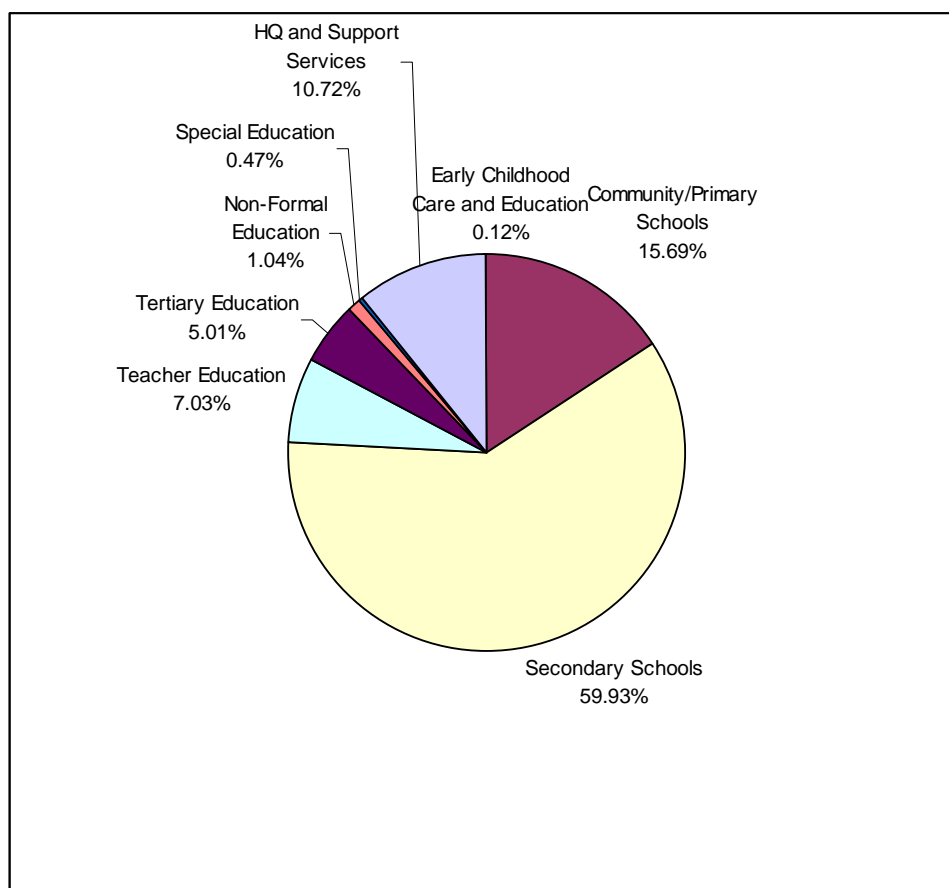
The final break down of the budget for various programmes under the Ministry of Education is shown in the next Table.

Figure 2. 5. Budget Outlay for Different Programmes in the Education sector in the Ninth Plan (Nu. in mill.)



The major portion of the budget was allocated for secondary schools (59.9 per cent) and primary schools (15.7 per cent), which is not surprising as over 50 large secondary schools and 137 new community primary schools were to be constructed, in addition to others being upgraded.

Figure 2. 6. Percentage Breakdown of the Budget for different Programmes in the Ninth Plan



2.12 Education For All (EFA) Coordination

The five year plan sets in motion all the development goals and strategies for all the sectors in the country. Prior to setting the priorities, there are discussions both at the level of National Assembly, and between the Planning Commission and the main line ministries which culminate into macro policy guidelines. It is worth mentioning that at this stage only broad goals are set, based on the situational analysis of the country, and these are shared with all the government agencies as well with development forums such as the DYT and the GYT. EFA goals also become part of the education sector plan and are mainstreamed so that the programme is holistic in its approach with all benchmarks clearly established and interventions laid out for the different stakeholders of the programme. In the past, plans were prepared by the central authorities and implemented with the help of the communities, but since the enactment of the DYT and GYT Acts in 2002, local people have had greater opportunity to participate and contribute towards the development of their locality.

Within the broad parameters set by Planning Commission, they can propose, reject or change any programmes pertaining to the development that has been tabled for their community, village, Geogs, or Dzongkhag through discussion and debate at the GYT and DYT. Their proposals are sent to the Planning Commission and the different central ministries and action plans are formulated taking into consideration the availability of funds and the capacity to manage the programme at the various levels. Once the plan is approved, the ministries concerned are responsible for coordinating the various activities with their sector heads and extension workers at the Dzongkhag and Geog levels in tandem with the communities.

The Chief Coordinator of the EFA programme is the Secretary, Ministry of Education, who is assisted by the Planning and Policy Division (PPD), which has the added responsibility of ensuring that the activities are dovetailed and monitored regularly. A weekly meeting is held to deal with any issues under the Ministry of Education. An extended task force, in addition to the various heads within the Ministry of Education¹⁹, includes representatives from the National Commission for Women and Children, Department of Aid and Debt Management, UNICEF, UNFPA, WFP and UNESCO. The Ministry of Education keeps in touch regularly with the other agencies over other business and only very occasionally is the task force of EFA required to meet.

¹⁹ These are the Planning and Policy Division, Department of Education, Education Statistics Division, Curriculum and Professional Services Division, Adult and Higher Education, two colleges of Education, Royal University of Bhutan, Education Research Institutes, Department of Youth and Sports, and Education Monitoring and Support Services.

III. Goal 1: Early Childhood Care and Development (ECCD)

3.1 National Goal

1. Awareness

(a) As the ECCD is a relatively new concept in Bhutan, an awareness programme on child care is to be produced and will be targeted at families using the different media.

(b) The subject of ECCD to be developed and included in the post-literacy material of the non-formal education programme for dissemination throughout the country.

2. Participation of Private Sector

Private individuals and entrepreneurs will be encouraged to set up child care centres and nurseries in areas where a demand for such programmes exists.

3. Reduce Under Five Mortality

To reduce under five mortality by two-thirds between 1990 and 2015.

3.2 Strategy

An ECCD unit will be established within the Department of School Education, Ministry of Education to oversee the programme and coordinate its activities with other stakeholders.

The different media are to be used to advocate the importance of ECCD. Also, the existing non-formal education centres will be used as vehicles to disseminate information on early child care.

The ECCD programme will be synergized with the efforts of other sectors and institutions involved with the delivery of health, nutrition, water and sanitation, housing, labour and education programmes. While the former will deal with issues concerning the cognitive, emotional and social development of children, the enabling physical and social environment will be addressed through the latter.

The participation of the private sector in the programme will be encouraged.

3.3 Current Situation

It is a recognized fact that there is a crucial period in the early years of the child which, depending on the type of environment, can either promote or damage the development and character of the child. This includes not just the physical development of the child, which most mothers are careful to observe, but also the development of his/her mental and psychological faculties. To this end, there is a need for children to interact with their parents,

siblings, peers and other beings around them, so that by the time they reach 6 years they are physically, mentally and emotionally prepared to start school.

Traditionally, the bond between the child and the parents has been very close in Bhutan. Despite the challenge of having to juggle time to be with their child, it has been common to see babies strapped onto the back of the mother while she did the household chores. Sometimes it was the sisters or brothers that tended the child, and other times it was the grandmothers who took care. Although many people dote on the toddler, once the child is mobile and becomes independent, there may be lesser interaction, particularly with the child's parents. In this context, the pressure from hard work, especially for the poorer families in the rural areas, and the tendency to hand over of the responsibility of bringing up the child to another relative, or to friends, can become strong. In the urban areas, this inclination is manifested in the number of hired maids who are employed to look after children. The problem that schools have in having to refuse admission to under age children is largely a symptom of the distress faced by parents in looking for a child minder.²⁰

The target of this programme is the family, both in the urban and rural areas. The principle underlying ECCD is that the child's home becomes the focus. Given that the family and social structure are undergoing radical changes in Bhutan, a lot of advocacy is needed. Family fabric is changing, with both parents working in urban areas, or children sometimes brought up by single parents. When a child is sent to a school or a monastery, not only are the child's educational needs to be met, but there is an inherent expectation among parents that discipline and education go together. The question of who is responsible for discipline, including whether corporal punishment should be allowed, becomes even more crucial. The fast pace of life style and the need to create time to be with ones children will require a huge effort on the part of the parents in the country.

3.4 Progress towards Goal

3.4.1 Day Care Centres

There has been notable progress made in the implementation of ECCD programmes:

- (i) An ECCD section has been established under the Department of School Education, Ministry of Education, and currently has one external advisor-cum-trainer and two national staff.

²⁰ Some contend that it shows the importance parents attach to education.

- (ii) A draft ECCD policy and guidelines was formulated in 2003 and has been incorporated into the Guidelines for Establishment of Private Schools in Bhutan. This paper highlights the minimum facilities required for Day Care Centres and the criteria and procedures for starting one, including class room size, fees, teachers and management board etc.
- (iii) A Guideline for the promotion of ECCD was translated into Dzongkha and has been included in the post-literacy course of the NFEs. Three types of pamphlets and a poster are being used as advocacy tools. Furthermore, the Dzongkha Education Officers (DEOs) and NFE Instructors have been oriented on ECCD programmes.
- (iv) A total of 9 licenses have been issued for the establishment of private Day Care Centres since 2005 but three have closed down due to non-availability of children. The ones closed down were located in Thimphu, Paro and Haa. The table below shows the enrolment of children and teachers.

Table 3. 1. Details of Day Care Centre in Bhutan 2005-2007

| Sl No. | Name of Day Care Centre | Location | Enrolment | | | No. of section | No. of Teachers | | | Year established |
|--------|----------------------------|---------------|------------|------------|------------|----------------|-----------------|-----------|-----------|------------------|
| | | | Boys | Girls | Total | | Male | Female | Total | |
| 1. | Pelkyi Losal Day Care | Thimphu | 27 | 30 | 57 | 3 | - | 4 | 4 | 2005 |
| 2. | Wangmo Montessori Day Care | Thimphu | 21 | 17 | 38 | 3 | - | 3 | 3 | 2005 |
| 3. | Yangdol Educare | Thimphu | 8 | 8 | 16 | 1 | - | 2 | 2 | 2005 |
| 4. | City Daycare | Thimphu | 12 | 15 | 27 | 2 | - | 2 | 2 | 2005 |
| 5. | First Steps Daycare | Phuentsholing | 28 | 31 | 59 | 3 | - | 5 | 5 | 2006 |
| 6. | Kuenga Daycare | Punakha | 8 | 6 | 14 | 2 | - | 2 | 2 | 2007 |
| | Total | | 104 | 107 | 211 | | | 18 | 18 | |

Thimphu, being the capital city, has attracted most of the proposals (4 out of 6 Day Care Centres in operation). The other two are in Phuntsholing, the second largest city in Bhutan situated on the border with India, and Punakha.

The ratio of boys to girls in Day Care Centres is almost at par, with girls having a slight edge. The teachers are all females, which is understandable given that the children attending the Day Care Centres are aged between 3 and 6 years.

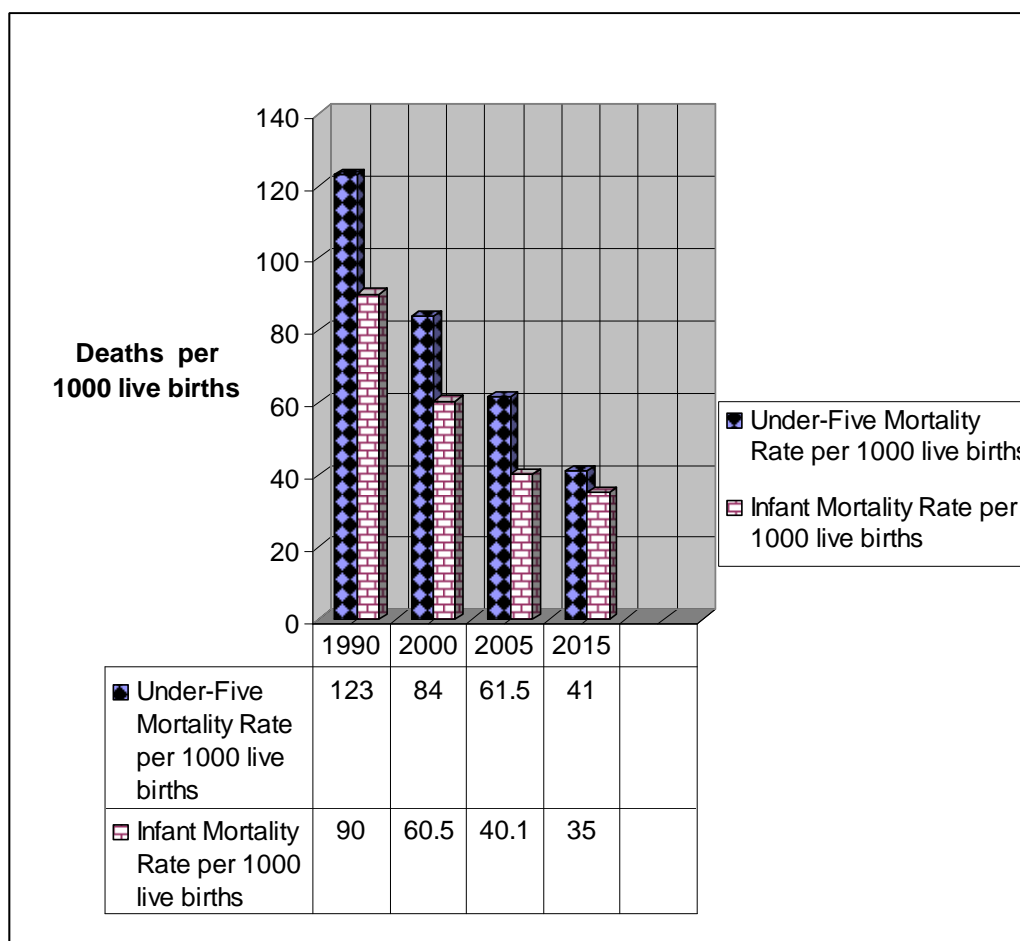
Although there are proposals in the pipeline for two Day Care Centres in Bumthang, on the whole, the demand for such services has not increased since 2005 which may indicate a lack of awareness and interest from the public. As the programme is commercially driven, there has been no penetration into the rural areas apart from Punakha, which is, in any case, a district headquarter. Any effort to introduce the programme to the rural community will require government intervention in the way of full or partial subsidies.

3.4.2 Health for Under-Fives

(i) Child Mortality and Morbidity

In the area concerning the health of the child, Bhutan has made significant achievements as the next Figure shows:

Figure 3. 1.Mortality Rates for Under-Fives and Infants and Targets for 2015



Bhutan had been able to reduce under-five mortality by two thirds between 1990 and 2000 and furthermore, by 2005, the mortality rate had gone down by another 27 per cent, making it seem possible for the country to achieve its goal by 2015. A similar trend is seen for infant mortality.

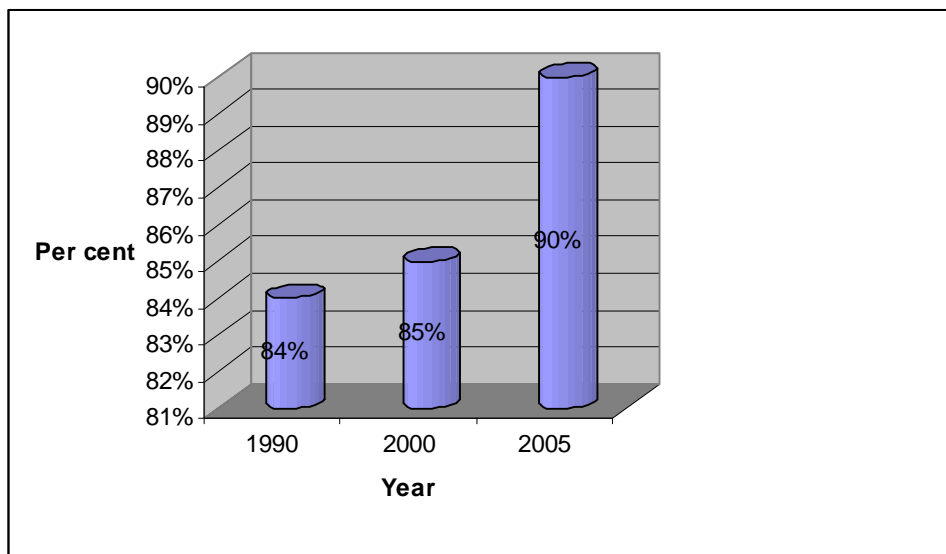
The common diseases causing death of under-five children appear to be acute respiratory infection (ARI), including pneumonia (21 per cent), and diarrhoea and worm infestation (13 per cent), both of which can be reduced by better hygiene and medical care (UN 2006). Skin disease was another cause of morbidity.

(ii) Immunization

The major reduction in child mortality is due to the extensive immunization coverage, which is about 90 per cent. The immunization programme includes six antigens (BCG, diphtheria,

pertussis, tetanus, polio and measles). Bhutan achieved Universal Child Immunization (UCI) in 1991 and to further increase the coverage, advocacy and awareness of the benefit of immunization to the still unreached people is being strengthened. The government plans to sustain the gains made by the UCI programme with improved surveillance, and in 2006 also introduced the Rubella vaccine.

Figure 3. 2. Immunization Coverage 1990-2005



(iii) Malnutrition

Malnutrition, including micronutrient deficiencies, can lead to children being stunted and/or under weight. Bhutan has been able to reduce the malnutrition rate significantly as the Table below indicates.

Table 3. 2. Malnutrition Rates among Under-Fives 1988-1999.

| | 1988 | 1999 |
|--------------------------------|------|------|
| % underweight (weight for age) | 38 | 17 |
| % stunted (height for age) | 56 | 40 |
| % wasted (weight for height) | 4.1 | 2.6 |

Source: RGOB 2003a.

The figure for other variables was not available in 2005 except for underweight under-fives. This was found to be 9 per cent, which was an improvement from 1999 and within acceptable margins.²¹

Malnutrition rates were higher in the eastern and southern regions, where food shortages are more likely to occur. The land holdings are smaller in the east and due to the climatic conditions food grains and cereals cannot be stored for long in the south.

(iv) Micronutrients

Due to poor quality food, children can suffer from micronutrient deficiency, particularly iron, vitamin-A and iodine.

Anaemia is a common problem in Bhutan. In 2003 a study showed that children were most commonly found to be anaemic, at 81 per cent as compared to 28 per cent for men and 55 per cent for women. The rates were lower in the southern region (50 per cent) compared with other regions where it was over 82 per cent (UNICEF 2006). To solve the problem, since 2004, the government has been providing all primary school children and all girls in higher education with weekly iron folate tablets.

Bhutan has had much better success with controlling iodine deficiency. In 1983, the prevalence of goitre (symptom of iodine deficiency) was 63 per cent. By 1992 this had been halved, and by 2003 the iodine deficiency disorder had been totally eliminated, Bhutan being the first country in the region and the second developing country in the world to do achieve this (UNICEF 2006).

There is a lack of data on Vitamin A deficiency. The government, through its Comprehensive School Health Programme (CSHP), distributes vitamin-A to primary school students at the same time as it carries out its de-worming programme.

²¹ A prevalence of less than 10 per cent under weight in proportion is considered a positive sign.

IV. Goal 2: Universal Primary Education

4.1 National Goal

Nets Primary Enrollment Ratio to reach near 100 per cent by 2015.

4.2 Strategies

Primary education facilities will be expanded so as to provide children with access within one hour's walking distance where there is no motorable access. This will be done by expanding community primary schools, the cost of which is to be jointly shared, with local materials and labour contributed by the community and the construction materials not available to be supplied by the government.

Some Primary schools (identified as Resource Centres) are expected to have a multifunction role of serving a broader community with a computer centre, literacy unit and community library.

Boarding facilities are to be provided to the isolated and nomadic communities. Education at the basic level (eleven years of school) will continue to be free.

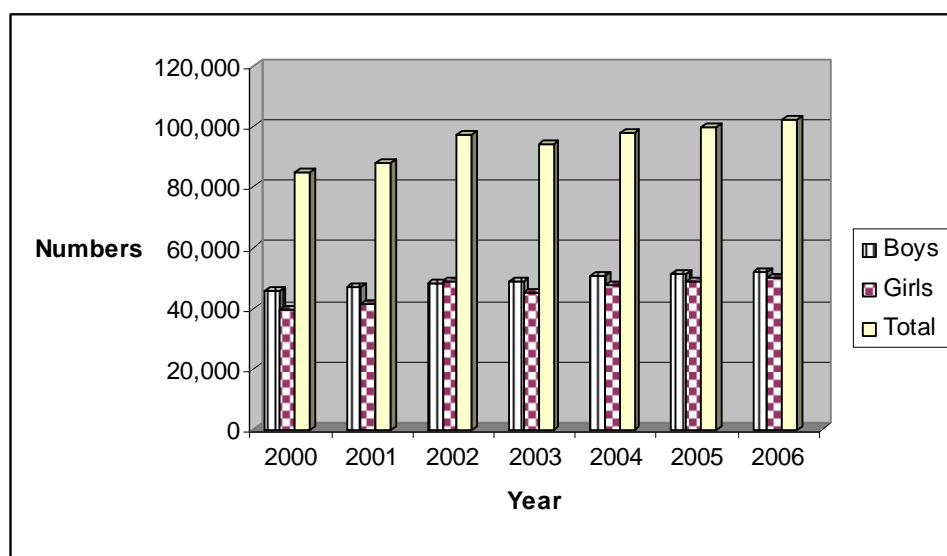
4.3 Progress towards Goal

4.3.1 Primary Education Enrolment Expansion

(i) Enrolment

The total primary school enrolment in 2006 was 102, 225 students, which is about 20 per cent more than in 2000 (RGOB 2006b) and 2.4 per cent more than the previous year.

Figure 4. 1. Enrolment Trend in Primary Schools, 2000-2006.



The table below gives the primary school enrolment for both government and public schools from 2000 to 2006.

Table 4. 1. Enrolment in Primary Schools 2000-2006

| Year | Students | | | Annual Growth | | | |
|-----------------------------------|----------|--------|---------|-----------------|--------------|--------|---------|
| | Boys | Girls | Total | Annual Increase | % Both Sexes | % Boys | % Girls |
| 2000 | 45,846 | 39,251 | 85,097 | 3,941 | 4.9 | 3.9 | 4.8 |
| 2001 | 46,942 | 41,250 | 88,192 | 3,095 | 3.6 | 2.3 | 5.0 |
| 2002 | 48,006 | 42,938 | 90,944 | 2,752 | 3.1 | 2.2 | 4.0 |
| 2003 | 48,921 | 45,053 | 93,974 | 3,030 | 3.3 | 1.9 | 4.9 |
| 2004 | 50,443 | 47,406 | 97,849 | 3,875 | 4.1 | 3.1 | 5.2 |
| 2005 | 51,218 | 48,656 | 99,874 | 2,025 | 2.1 | 1.5 | 2.6 |
| 2006 | 52,208 | 50,017 | 102,225 | 2,351 | 2.4 | 1.9 | 2.7 |
| Average Annual Growth Rate | | | | | 3.3 % | 2.4 % | 4.1% |

Source: Adapted from RGOB 2006b

Between 2000 and 2006, the average annual enrolment growth rate was about 3.3 per cent, but with a slight decline towards the latter part of the period. Enrolment on the whole is increasing, but the girls' annual growth is averaging around 4 per cent as compared to the boys with 2.4 per cent, which again is a positive sign, as girls are narrowing the gap. The stated annual enrolment growth rate (3.3 per cent) does not make allowance for retentions and says nothing about the incremental enrolment, if any. For this we resort to the figures for new admissions in PP, discounting repeaters, as shown in the next Table, and observe that there still is an average intake growth rate of 3.4 per cent over the same period, which is very similar to the earlier growth rate (3.3 per cent). This shows that there has been an increased intake except for 2001 and 2005 when there was a decrease. The intake level is higher for girls than boys as it is for the overall system.

Table 4. 2. New Admissions in PP, 2000-2006 (derived by subtracting repeaters from the total enrolment)

| Year | PP enrolment | | | Growth % | |
|----------------------------|--------------|-------|--------|-------------------------|----------|
| | Boys | Girls | Total | No. increased/decreased | Per cent |
| 2000 | 7,000 | 6,178 | 13,178 | 729 | 5.9 % |
| 2001 | 6,613 | 6,264 | 12,877 | -301 | -2.3 % |
| 2002 | 6,967 | 6,524 | 13,491 | 614 | 4.8 % |
| 2003 | 7,052 | 6,932 | 13,984 | 493 | 3.7 % |
| 2004 | 7,565 | 7,310 | 14,875 | 891 | 6.4 % |
| 2005 | 7,187 | 6,824 | 14,011 | -864 | -5.8 % |
| 2006 | 7,983 | 7,629 | 15,612 | 1601 | 11.4 % |
| Average annual growth rate | 2.8 % | 4.0 % | 3.4 % | | |

Source: Adapted from RGOB 2006b

(ii) Gross or Apparent Intake Ratio (AIR)

In order to gauge the general level of access to primary education (both public and private), the AIR by sex is shown for 2004 to 2006. The children studying in monastic schools, as well as those studying outside Bhutan, are excluded.

Both the sexes show an increase in absolute terms except in 2005 when the new entrants went down, but the AIR for the three years shows a gradual increase which is a credit to Bhutan.

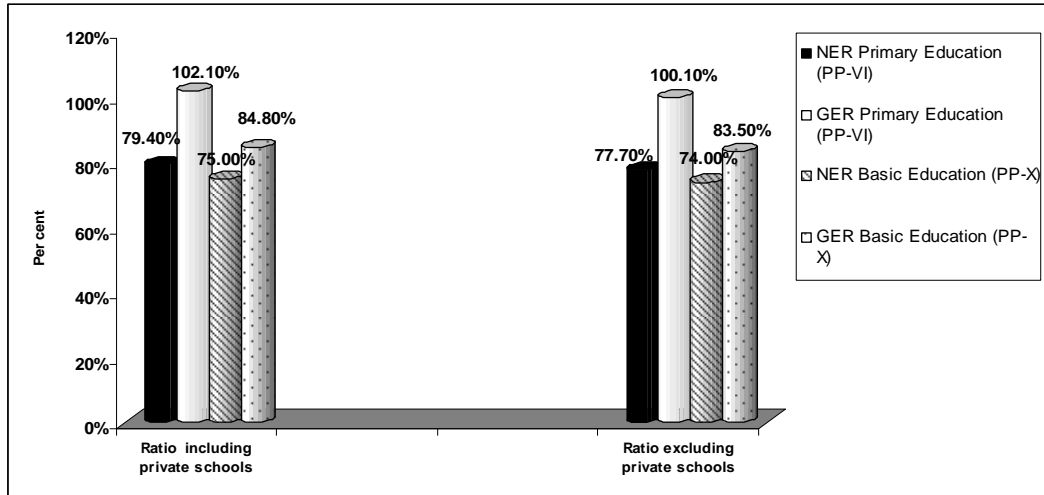
Table 4. 3. Apparent Intake Ratio by Sex, 2004-2006

| Year-2004 | | | |
|-------------------|--|---------------------------------|------------|
| Sex | Population at school entrance age | New entrants at all ages | AIR |
| Boys | 7,147 | 7,565 | 105 % |
| Girls | 6,966 | 7,310 | 104 % |
| Total | 14,113 | 14,875 | 105 % |
| Year -2005 | | | |
| Sex | | | |
| Boys | 6,511 | 7,187 | 110% |
| Girls | 6,376 | 6,824 | 107 % |
| Total | 12,887 | 14,011 | 109 % |
| Year -2006 | | | |
| Sex | | | |
| Boys | 7,027 | 7,983 | 114 % |
| Girls | 6,880 | 7,629 | 111 % |
| Total | 13,907 | 15,612 | 112 % |

(iii) GER and NER

Following the publication of the results of the Population and Housing Census of Bhutan in 2005, there is better information about the age composition of children, and a fairly accurate gross enrolment ratio (GER) and net enrolment ratio (NER) is now available. The figure below illustrates the GER and NER for the primary (PP-VI) and basic level education (PP-X).

Figure 4. 2. Enrolment Ratios for Primary and Basic Level Education 2006



Source: Adapted from RBOG 2006b

The GER for class PP to VI in 2006, including the private schools, was 102.1 per cent²² and the NER for the same category was 79.4 per cent. This is a big achievement for Bhutan, as in 2000 the GER was only 72 per cent and the target of achieving 100 per cent enrolment, which was set for 2015, has already been met. The NER was not available in the past but based on the current one, approximately 20 per cent of the official primary school age (6 -12 years), numbering about 20,000 children, are missing out on primary education: at least, they are not in schools in Bhutan.²³ In a similar vein, the GER for basic education (PP-X) is 84.8 per cent and the NER is only 75 per cent, showing a larger percentage (25 per cent) of children not in school.

(iv) Enrolment in Dzongkhags and Gender Parity Index

The geographical disparity and the gender parity index (GPI) may indicate, first of all, in which areas children are not going to school, and secondly what percentage are boys or girls. The next table shows the NER and GER of primary education for the twenty Dzongkhags and the Gender Parity Index (GPI).²⁴

²² The GER exceeding 100 per cent is partly influenced by 7,007 repeaters (7 per cent) in that year.

²³ The enrolment with primary school age in monastic schools is not known just as the children studying outside the country.

²⁴ GPI is the ratio of girls and boys’ enrolment. GPI between 97 and 103 per cent of the enrolment indicates enrolment of both sexes more or less is equal. Any percentage higher or correspondingly lower is assumed that one of the two sexes is underrepresented.

Table 4. 4. NER and GER for Different Dzongkhags with Gender Parity Index 2006

| | NER | | | | GER | | | |
|------------------------|------|-------|------------|------|------|-------|-------------|------|
| | Boys | Girls | Both Sex | GPI | Boys | Girls | Both Sex | GPI |
| Bhutan | 80% | 79% | 79% | 99% | 104% | 100% | 102% | 97% |
| Bumthang | 93% | 95% | 94% | 102% | 111% | 115% | 113% | 104% |
| Chukha | 71% | 70% | 71% | 99% | 95% | 90% | 93% | 95% |
| Dagana | 76% | 74% | 75% | 97% | 106% | 101% | 104% | 96% |
| Gasa | 69% | 66% | 68% | 96% | 93% | 82% | 87% | 89% |
| Haa | 80% | 88% | 84% | 110% | 101% | 113% | 107% | 112% |
| Lhuentse | 83% | 79% | 81% | 95% | 106% | 100% | 103% | 95% |
| Mongar | 78% | 77% | 78% | 99% | 102% | 98% | 100% | 96% |
| Paro | 85% | 88% | 86% | 103% | 105% | 107% | 106% | 102% |
| Pemagatshel | 89% | 89% | 89% | 100% | 117% | 110% | 113% | 94% |
| Punakha | 83% | 94% | 88% | 113% | 100% | 116% | 108% | 116% |
| Samdrupjongkhar | 81% | 76% | 78% | 94% | 111% | 104% | 107% | 93% |
| Samtse | 67% | 63% | 65% | 95% | 92% | 83% | 87% | 90% |
| Sarpang | 72% | 71% | 72% | 98% | 97% | 91% | 94% | 94% |
| Thimphu | 86% | 88% | 87% | 103% | 104% | 104% | 104% | 100% |
| Trashigang | 87% | 78% | 82% | 90% | 112% | 99% | 105% | 89% |
| Trashiyangtse | 89% | 84% | 87% | 95% | 116% | 108% | 112% | 93% |
| Trongsa | 90% | 94% | 92% | 105% | 115% | 120% | 117% | 105% |
| Tsirang | 70% | 67% | 68% | 96% | 103% | 96% | 99% | 93% |
| Wangdue | 81% | 85% | 83% | 105% | 103% | 106% | 104% | 103% |
| Zhemgang | 88% | 90% | 89% | 102% | 118% | 120% | 119% | 102% |

Source RGOB 2006b.

Samtse Dzongkhag is faring badly with respect to NER at 65 per cent, followed by Gasa and Tsirang Dzongkags. Since Samtse is in close proximity to India, it may be that some students are studying in the Indian border towns and may not be registered as students in Bhutan. Gasa, with its lower population, has a high percentage of nomadic people, so access to education in general may be difficult. Another consideration is that students can be mobile, either because of the higher education level not being available within the Dzongkhag and so they are placed in a boarding school elsewhere by the government, or their parents migrate to another part of the country for economic reasons.

Bhutan has achieved gender parity for primary education (97 per cent), the target for 100 per cent parity being 2015. The GPI for the Haa and Punakha show that more girls are enrolled in primary school than boys, a distortion in trend that may be caused by some boys being enrolled as monks.²⁵

²⁵ Both Haa and Punakha have slightly larger male sex ratio in population.

(v) Community Schools

There were 245 community primary schools in 2006, compared to 151 in 2000, a 62 per cent increase in numbers. As new frontiers are opened for education, the need for community schools has become imperative although the increase in number may not necessarily signify an increase in enrolment, as sometimes community schools are upgraded and merged with lower secondary schools with boarding facilities. However, in this case, the number of students enrolled in community schools has gone from 17,335 in 2000 to 29,132 students in 2006. This represents about 28 per cent of the primary student body or about 20 per cent of the student population up to higher secondary level.

(vi) School Expansion Programme

The government has plans to shorten students' walking distance to school to one hour by constructing more community and primary schools and adding extra classes. As a result, the average size of community schools is now 119 students as compared to 114 in 2000, and, similarly, for primary, lower and middle secondary schools the average size was 461 students per school in 2006, as compared to 307 students²⁶ in 2000.

(vii) Food /Boarding Programme

Due to the mountainous terrain and the disbursed settlements, providing a school within 3 km radius is not always possible. Therefore, the provision of hostel facilities and food, provided mainly by the World Food Programme (WFP), has been instrumental in student enrolment and retention in remote areas. This food has been beneficial particularly for children from poor families. It was found that 87.8 per cent of the boarders were children of farmers (WFP 2006), and out of those boarders and day students who received one meal, 90.2 per cent of students' parents came from the same occupation.

About 5 per cent of primary students who are in boarding school are provided with two meals a day by WFP and 17 per cent are beneficiaries of one meal. In addition, the WFP provides two meals a day for all the boarders in government secondary schools and one meal a day for a few day scholars in those schools. The government supplements this with a stipend scheme²⁷ covering one meal for the boarders, and this stipend is also available to 4 remote primary schools and the National Institute for the Disabled (NID).

The details of WFP and Government beneficiaries are shown in the next table.

²⁶ Primary and Junior High Schools.

²⁷ The stipend was increased from Nu.180 to 240 per month with effect from July 2006 (MOE 2006)

Table 4. 5. Number of Beneficiaries of WFP Food and Government Stipend 2006

| | Primary Students with WFP support | | Primary Students with WFP and Government Stipend | | Secondary Students with WFP support | |
|--------------|-----------------------------------|---------------|--|--------------|-------------------------------------|---------------|
| | Nos. | % | Nos. | % | Nos. | % |
| Day Scholars | 17,217 | 17.2 % | 0 | 0.0 % | 643 | 1.6 % |
| Boarders | 7,122 | 7.1 % | 382 | 0.4 % | 16,456 | 40.2 % |
| Total | 24,339 | 24.1 % | 382 | 0.4 % | 17,099 | 41.8 % |

In 2006 there were 40 Lower Secondary, 18 Middle Secondary and 16 Higher Secondary Schools with boarding facilities receiving some food from WFP. In terms of students that were assisted, there were a total of 41,438 students, comprising 23,578 boarders (out of which 10,186 were girls) and 17,860 days scholars (out of which 8,610 were girls) in 2006. The number of students assisted was more than the 30,703 students (21,138 boarders and 9,565 day scholars) in 2000. The proportion of girls receiving food assistance was 45 per cent in 2006, slightly increased from 41 per cent in 2000.

(viii) Private Schools

The Royal Government of Bhutan has been encouraging the establishment of private schools to alleviate the pressure on public schools, and also to meet the rising expectations of higher income parents who desire more from education than is currently offered by the state schools. In 2000 there were 8 private schools with 1,460 primary students enrolled, but by 2006 the numbers have increased to 16 private schools with 5,421 students.

V. Goal 3: Life Skills and Lifelong Learning

5.1 National Goal

To continuously improve the quality and relevance of education to ensure holistic development of a child, encompassing innate abilities, moral and social values, social cohesion and the world of work including agriculture and other vocations.

5.2 Rise of Unemployment

Bhutan has a high proportion of young people: 56 per cent of the population is under 25 and 33 per cent is below 15 years (RGOB 2005c). Also, around 9,000 students are joining the labour market every year, two thirds being class X leavers and the majority of the rest from class XII. The unemployment rate was 3 per cent in 2005, but for people aged 15 -19 years it was 7 per cent.

Not only there is shortage of jobs, but there is also a mismatch between the expectation of school leavers and the demand from the market. Jobs in the civil service and public owned corporations are most popular, but those too are being filled. While there are blue collar jobs available, such as mechanics, electricians, plumbers, and bricklayers, to name a few, there are not enough takers for these with the result that it is expatriate labour that fills the gap. Unemployment is higher in the urban areas (4.7 per cent) than rural areas (2.4 per cent). The private sector is weak, though the government has privatized the transport service, tourism industry and road infrastructure and divested a significant portion of its holding in the public sector. Ninety per cent of the business licenses issued in 2005 were for cottage or small enterprises.

5.3 Wholesome Education

Under the banner of wholesome education, the Royal Government of Bhutan has been promoting various initiatives to prepare youth for employment based on signals from the market.

A multifaceted system of training opportunities on vocational and technical training is offered to higher secondary and post secondary level students. Programmes range from short training courses and apprenticeships to degree and postgraduate level training. Students are given the choice of either pursuing higher academic education or professional training. In the past, blue collar jobs and vocational education were only second choice and the government is still

trying to remove this stigma. To this end, some basic vocational orientation is being taught in schools as a means to introducing and exposing young people to different blue collar jobs.

5.4 Teachers and Parents

The curriculum and the textbooks of most subjects have value education embedded in them, but for that to be translated into reality a curriculum framework and teacher guide need to be developed. At the same time there is vast knowledge among parents on culture, morals and manners and this is to be harnessed and then imparted to other parents who in turn can teach their children. The School Based Parenting Education and Awareness Programme (SBPEAP) is the responsible agency for doing this task.

5.5 Health and Leisure

The Comprehensive School Health Programme was initiated in 1999 and this collaborative partnership programme between the Ministries of Education and Health helps to monitor the health and sanitation of the students and schools. Apart from providing health services to schools, it provides health education in schools,²⁸ promotes self esteem and respect among students and staff, and works in partnership with the homes and wider communities.

Under the leadership of Their Majesties the Queens, Ashi Tshering Pem Wangchuk, the President of the Youth Development Fund, and Ashi Sangye Chhoeden Wangchuk, the UNFPA Goodwill Ambassador, counseling services on career, life skills, first aid, HIV/AIDS and reproductive health, substance abuse and other youth issues are being offered.

Youth idleness in the urban areas during the long winter breaks is a growing concern. Therefore, to engage these young people in constructive activities, educational and cultural tours, home science, art and crafts, sports, school maintenance programmes, music and dance and nature study opportunities are being arranged.

The Scouts programme has been very useful in enhancing value education, moral education, and practical skills that are not otherwise covered in the school syllabus. The Scout Master's training is held regularly for one week at a time.

²⁸ The de-worming campaign, distribution of vitamin A and iron folic tablets are carried out under this programme.

Cultural Programmes, such as folk dance, which contributes towards the Bhutanese heritage, are being organized, and training and competitions are held at national, Dzongkhag and regional levels.

The Integrated School Agriculture Programme is jointly organized by the Ministry of Agriculture and Education. The technical input and the funds are provided by the Council of Research for Renewable Natural Resource of Bhutan, Ministry of Agriculture. This project aims to impart skill and knowledge of agriculture and to help schools generate cash incomes through the growing of vegetables and rearing of livestock on the school premises.

The idea is also to expose students to agricultural practices, so that those who are interested can pursue that line after leaving school and even set up rural enterprises as a means of employment.

5.6 Progress towards Goal

5.6.1 Vocational Education

The erstwhile Technical and Vocational Education Section (TVES) was upgraded into the National Technical Training Authority (NTTA), which later became the Department of Human Resource under the Ministry of Labour and Human Resources and is responsible for providing vocational education to out of school youths. In the schools, the vocational work orientation is administered by the Department of Youth and Sports. Currently, it operates like a club²⁹ in schools, operating in 39 schools and involving 1900 students.

Also, there are seven vocational workshops in boarding schools and these have proved to be popular. Through the use of these skills, the schools' maintenance has improved and the costs have been considerably reduced. The workshops also provide free service to the community schools.

There are 5 vocational training institutes spread across the country, in Punakha, Thimphu, Trashigang, and Trashiyangtse, and 2 handicraft training Institutes (Zorig Chusum) which are overseen by the Department of Human Resource.

²⁹ It runs for one hour a week

Table 5. 1. Total Enrolment in Vocational Training Institutes June 2006

| Name of Institutes | Students | | | Teaching | | | | | | Non-teaching | | | | | |
|---|------------|------------|--------------|-----------|-----------|-----------|--------------|----------|----------|--------------|-----------|-----------|--------------|----------|----------|
| | | | | Bhutanese | | | Non-National | | | Bhutanese | | | Non-National | | |
| | M | F | Total | M | F | Total | M | F | Total | M | F | Total | M | F | Total |
| Khuruthang Vocational Institute | 68 | 62 | 130 | 12 | 5 | 17 | 1 | 0 | 1 | 10 | 9 | 19 | - | - | - |
| Construction Training Centre | 233 | 166 | 399 | 17 | 4 | 21 | - | - | - | 11 | 4 | 15 | - | - | - |
| Rangjung Vocational Institute | 58 | 26 | 84 | 10 | 1 | 11 | - | - | - | 11 | 0 | 11 | - | - | - |
| Samthang Vocational Institute | 79 | 10 | 89 | 13 | - | 13 | 1 | - | 1 | 8 | 0 | 8 | - | - | - |
| National Institute of Zorig Chusum, Thimphu | 237 | 121 | 358 | 19 | 1 | 20 | - | 3 | 3 | 10 | 9 | 19 | - | - | - |
| Trashiyangtse Institute of Zorig Chusum | 73 | 33 | 106 | 9 | - | 9 | - | - | - | 6 | - | 6 | - | - | - |
| Total | 748 | 418 | 1,166 | 80 | 11 | 91 | 2 | 3 | 5 | 56 | 22 | 78 | - | - | - |

With unemployment at 2.5 per cent in 2004 and half of that being in the 15 to 24 age group, the Government has been increasing the intake of technical and vocational trainees from Class X pass students, so that such skills will make them employable in the market place. Apart from students in the Degree and Diploma colleges, there are now 1,166 students enrolled in different vocational and traditional craft training centres, which is a more than a 100% increase from 529 students in 2000.

5.6.2 Career Counseling

The Career Education and Counseling Division (CECD) have trained and placed two teachers each in all the secondary schools to counsel on subjects related to drug abuse. There is a total of 408 teachers who have been trained in career counseling for two weeks. In addition, there are 14 teachers who were awarded diplomas and another 13 are completing the training.

5.6.3 Scouts Programme

Bhutan Scouts Association was started in 1980 and really picked up momentum after the formation of the Youth Guidance and Counseling Division, Department of Education. It became a full fledged member of the World Organization of the Scout Movement in 1999. It has been graded to suit the different age group needs: cubs (6-12 years), scouts (13-17 years) and rovers (above 18 years).

Table 5. 2. Scout Enrolments, 2003-2005

| | 2003 | 2004 | 2005 | 2006 |
|-------------------------------|---------------|---------------|---------------|---------------|
| No. of Schools | 215 | 220 | 311 | 336 |
| Adult Members | 260 | 295 | 356 | 440 |
| Leader Trainer | 3 | 3 | 7 | 5 |
| Assist. Leader Trainer | 6 | 22 | 28 | 25 |
| Advanced Leader | 43 | 28 | 129 | 131 |
| Rover master | 18 | 13 | 7 | 0 |
| Scout master | 295 | 340 | 422 | 432 |
| Cub master | 100 | 176 | 155 | 367 |
| Rover members | 593 | 439 | 251 | 238 |
| Scout members | 8,918 | 12,051 | 14,309 | 13,924 |
| Cub members | 2,368 | 3,363 | 5,316 | 7,487 |
| Total | 12,604 | 16,730 | 20,980 | 23,049 |

From 215 schools participating in the scout movement in 2003, the number has increased to 336 in 2006 clearly showing the popularity of the scheme. The membership has almost doubled over the same period and now stands at 23,049.

5.6.4 The Integrated School Agriculture Programme

The Integrated School Agriculture Programme now covers 122 schools from primary to higher secondary schools. Through the sale of vegetables and fruits, the schools' income has increased and, in the case of boarding schools, the products from livestock have supplemented the school diet. The case of Drugyel Higher Secondary School is an example, where, from the sale of pork and milk, the school was able to generate Nu. 289,185 as income in 2006 and use it for the benefit of the school.

5.6.5 Continuing Education Programme

Another avenue for advancing one's academic qualifications is the Continuing Education Programme established two years ago. This is primarily for people who have missed out on their education but are working in the government or for private organizations, and some teachers are also enrolled in it. The popularity of this programme can be gauged from the figure below, as the number of students has doubled in the second year.

Figure 5. 1. Number of Students enrolled for Continuing Education Programme 2006-2007

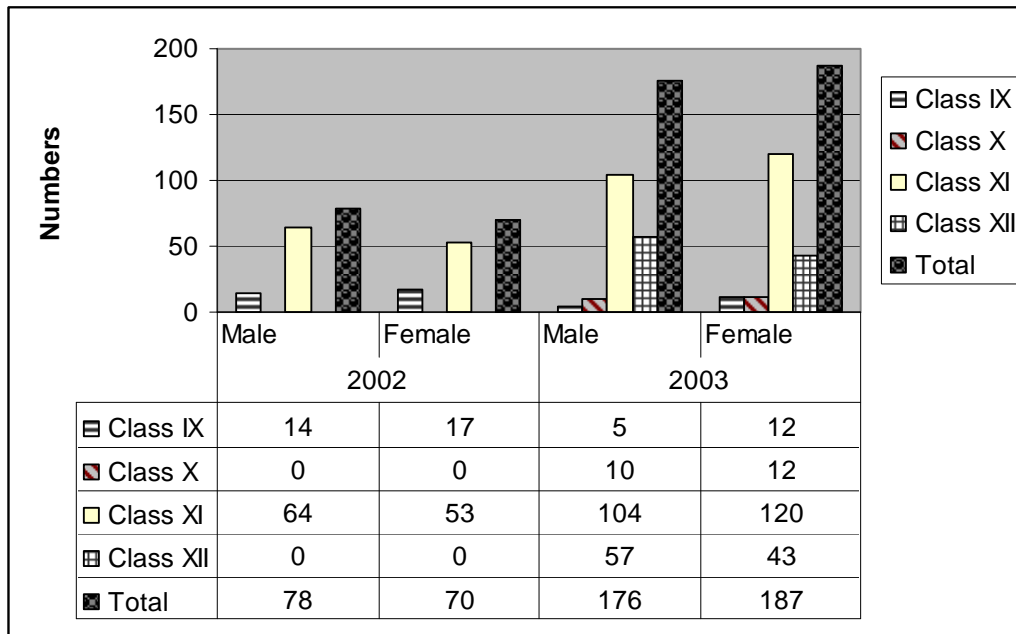
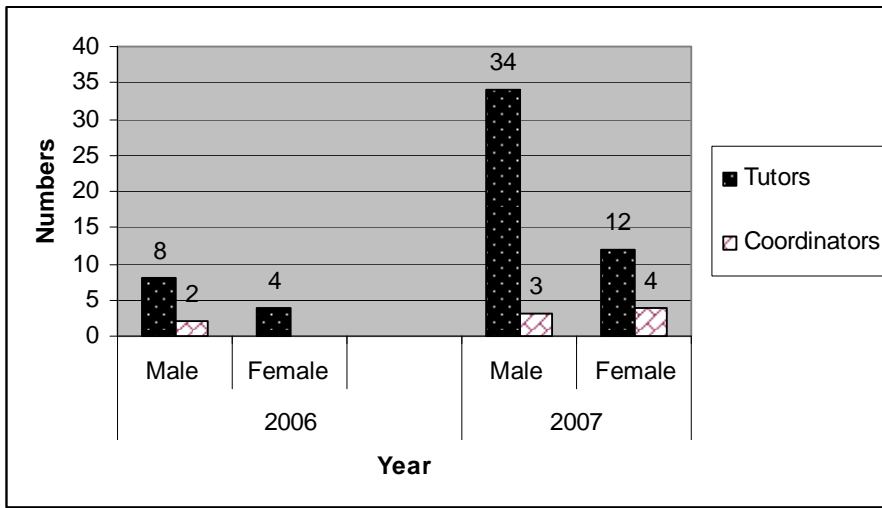


Figure 5. 2. Number of Staff (Teaching and Non-Teaching) in Continuing Education Programme, 2006 -2007



Faced with the shortage of space in government schools, this is a joint partnership between the government and the private schools. While the evaluation is done by the government's examination board, the space and the teachers are provided by the private schools.

VI. Goal 4: Literacy

6.1 National Goal

1. To provide literacy lessons in Dzongkha, the national language, for men and women who have missed out on formal education.
2. To provide functional literacy and basic life skills knowledge.
3. To increase the number of participants in the non-formal education programme from 1,000 to 4,800 annually.
4. Full adult literacy by 2012

6.2 Strategy

Expand the NFE programme using the existing teachers and space in primary schools.

Recruit promising NFE graduates to teach in the NFE with an appropriate remuneration.

NFE education to be inducted in the pre-teacher education course

Foster greater collaboration with other ministries to support post literacy programmes.

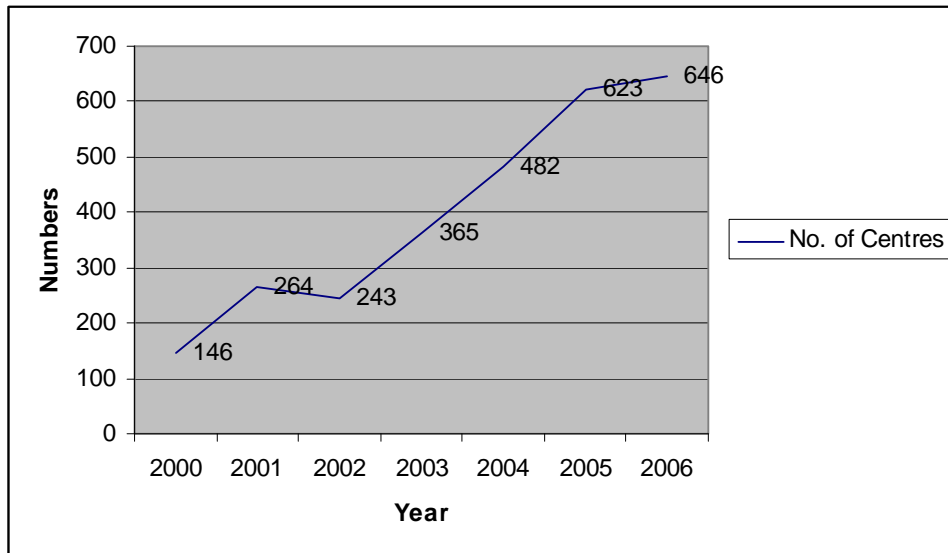
6.3 Progress towards Goal

The literacy information was updated when, in 2005, a comprehensive population and household census was taken. This showed that 74.4 per cent of 15 to 24 years olds were literate, with 68 per cent female, 80 per cent male, divided between 84 per cent literacy in urban and 68 per cent in rural areas. The rate for adult literacy (15 years and above) was 53 per cent, 39 per cent female and 65 per cent male. The rate for urban literacy was 72 per cent and 44 per cent for the rural areas. Also, 60 per cent of urban females and 29 per cent of rural females were literate, the corresponding figures for males being 80 and 57 per cent respectively.

Granted that formal education has made significant inroads in the younger generation and helped increase the literacy level, for those who dropped school, and others who had no opportunity to attend school, the NFE has been the only hope to dispel the ignorance resulting from illiteracy. These target people are mainly in the age 15 to 40 year bracket, and although the NFE centres are also located in the urban areas, those in the rural areas have largely benefited from this programme.

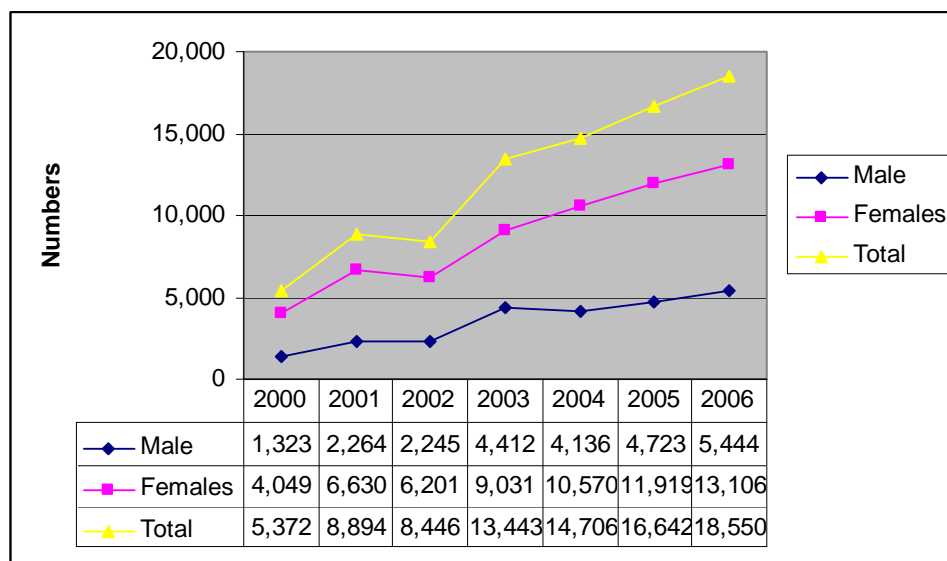
The next table shows the growth of NFE centres during the last seven years. The NFE centres have grown by leaps and bounds and the number of learners has also increased through the years.

Figure 6. 1. Growth of NFE Centres



In 2000, there were 146 centres with 5,372 learners but by 2006 the centres had quadrupled (cf. Figure 6.1) and the learners had tripled to 18,550 people. The NFE centres had 159 instructors in 2000 but by 2006 had reached a staggering 449.

Figure 6. 2. Number of NFE Learners, 2000 -2006



NFE is easy to set up and where there is a threshold group of twenty learners,³⁰ the Dzongkhag authorities, after consulting with the people, send a request for the establishment of a learning programme to the NFE Division, Ministry of Education. At the moment, this identification of centres is left entirely to the Dzongkhag and Geogs and the NFE Division, on request, supplies free books for the centre. The recruitment of an instructor is also left to the Dzongkhag officials, though approval is needed in order to sanction the budget needed for the centre.

It has been difficult to get instructors for the NFEs from within the same localities who have passed Class XII. The advantage is that the instructors will be known to the local people, and also they can be engaged in alternative employment while the NFE classes are not running. Secondly, local instructors would have the potential to demonstrate skills like raising poultry, vegetable growing and health and sanitation which are taught in the course and ensure that the impact is felt by the community. Instructors are sometimes required to move from village to village once the NFE course is completed in one place. While this creates a sense of adventure for some instructors, it may not appeal to others who consider the post as a full time career.

In recent times the government has been concerned with the issue of rural-urban migration and NFEs are known to contribute towards helping create employment at the local level. The

³⁰ Exemptions are made if the villages are smaller.

people's social capital (ability to come together and form groups for a common purpose) is enhanced through the teaching of life skills, such as agriculture practice and health issues etc.

There is considerable collaboration among the different central ministries under the NFE programme, especially when it comes to the post literacy level and continuing education programmes. The reading materials are mainly concerned with advocacy and therefore appeal to the government ministries such as Agriculture, Health, and Environment. The learners fit nicely into the role of change agents and with their help many new innovations are being adopted by the rural people. Therefore, while functional literacy and numeracy are objective of the NFEs, the multiplier effect from the programme, such as social and economic impact on the people as result of this change, is substantial. Opportunities abound beyond the literacy classes and there are options for employment creation such as micro-enterprises and self employment which will help to alleviate poverty.

The classes are taught in Dzongkha, the national language. The government has been promoting Dzongkha through the formal education system as well as through informal means. People who are able to complete the 30 basic readers are able to read the local newspaper. It allows the people to keep abreast of national development as they can follow the news through television and radio. The graduates of the NFEs are also known to participate in the local development meetings, their motivation arising from their literate knowledge. Parents who understand Dzongkha are likewise able to help their children with their homework and able to keep track of their children's progress in school.

One drawback of the NFE programme is the low attendance of men, who account for only 28 per cent of the learners. Men folk are usually the ones who travel on business and they are sometimes absent from home for considerable lengths of time, leaving most of the household work to be done by women. Thus, the mobility of the men folk in their occupations is an impediment and prevents them from attending the NFE programmes. However, when the literacy of men and women is compared, it is often the women who most need to improve their literacy skills.

VII. Goal 5: Gender

7.1 National Goal

1. To increase the ratio of girls to boys in primary education
2. To increase the percentage of girls to boys in secondary education
3. To increase the percentage of females to males in tertiary Education

7.2 State of Women

Women in Bhutan in general enjoy freedom and equal opportunities, entitlements and legal status. There is no overt discrimination against women in Bhutanese society. For this reason, gender has not been prioritized as a problem needing a separate entity to address it, but rather it is mainstreamed as a cross cutting issue in Bhutan's development plans. Yet, if the statistics of women participating in economic and political life were to be examined³¹ it would appear that there is gender gap, if not an explicit bias, in Bhutan.

Table 7.1. Share of Women and Men in Employment

| | 1998 | | 2003 | |
|--------------------------|--------|--------|--------|--------|
| | Female | Male | Female | Male |
| Labour Force | 62.8 % | 76.7 % | 54 % | 72.5 % |
| Unemployment Rate | 1.2 % | 1.6 % | 2 % | 1.6% |

Source: DOP 2005.

If participation in the labour force is considered to be a better alternative than performing family responsibilities, then Bhutanese women are at a disadvantage. In 2003, the female labour force participation stood at 54 per cent as against 72.5 per cent for males. Likewise, unemployment for females was slightly higher at 2 per cent as compared to the males (1.6 %) for the same year.

Secular education came late into the country and in the initial years most of the students had to walk days to get to boarding schools in India. The earliest schools in the kingdom were mostly located at district centres and entailed a long walk to schools unless girls stayed as boarders, like boys, which many parents were reluctant to allow in those days. This was a disadvantage for girls and the under-representation of women in public offices today is largely a repercussion of that era. With more schools being established nearer homes, and with improvement in boarding facilities, the whole scenario is being changed and a prime

³¹ In the National Assembly, women represented only 13 per cent of the members in 2004 and constituted 23 per cent of the civil service in 2005.

example of the results is the enrolment of girls in the primary schools, where gender parity has been reached. The enrolment of females in secondary and tertiary education is also improving. Indeed, the situation of education for women in Bhutan is improving for the better with unprecedented opportunities becoming available, even without affirmative actions such as the reservation system needed in some other countries.

7.3 Strategy

To increase the enrolment of females in Higher Secondary and Tertiary education through easier access to schools and better hostel facilities.

Expand NFE and skills training in rural areas.

7.4 Progress towards Goal

7.4.1 Girls Enrolment in General Education

In 2000, girls constituted 46.1 per cent of primary enrolment and this had increased to 48.9 in 2006. In numbers, this is a jump from 39,251 to 50,017 girls over the same period of time.

The growth of girls' enrolment in primary and secondary education from 2002 to 2006 is shown in the next table

Table 7. 2. Enrolment of Girls in primary and secondary education 2002-2006

| level | PP-VI | | | | VII-VIII | | IX-X | | XI-XII | | | |
|-------|--------|-------|-------|-------|----------|-------|--------|-------|--------|-------|------|-------|
| | Public | | Pvt | | Public | | Public | | Public | | Pvt | |
| Year | Std | % | Std | % | Std | % | Std | % | Std | % | Std | % |
| 2006 | 49,003 | 48.9% | 1,014 | 49.7% | 10,251 | 50.0% | 7608 | 48.4% | 1695 | 35.6% | 1673 | 50.1% |
| 2005 | 47,514 | 48.7% | 1,142 | 48.0% | 9,734 | 49.5% | 6838 | 48.2% | 1432 | 33.1% | 1654 | 49.3% |
| 2004 | 46,327 | 48.4% | 1,079 | 48.1% | 8,653 | 49.1% | 6540 | 47.3% | 1213 | 32.3% | 1418 | 48.4% |
| 2003 | 44,235 | 48.0% | 818 | 49.4% | 7,936 | 49.0% | 5816 | 46.4% | 1092 | 32.6% | 1196 | 48.8% |
| 2002 | 42,244 | 47.2% | 694 | 47.7% | 7,681 | 48.0% | 5083 | 44.5% | 844 | 32.0% | 856 | 46.6% |

Source: RGOB 2006b

Beginning from 2002 there was a steady increase in the enrolment of girls until gender parity had been nearly reached in 2006 for primary level, with cent per cent parity for Class VII and VIII. Although there has been a marginal increase of girls over the years in class XI and XII in government schools, they accounted for only 35.6 per cent in 2006. Interestingly, the corresponding figures for girls' enrolment in the private schools at the same level were at par with the boys (50 per cent), much higher than in government schools. Two observations can be made from this. First, the private schools are more expensive than the state schools and, therefore, it is often the wealthier families who send their children to these types of schools. Secondly, it would appear that there is a high correlation between being well off and gender

parity, so girls from wealthier families are given equal opportunity to study as boys, as confirmed by the enrolment figures. This is not only true of lower level education in private schools but even at class IX-XII, where the girls have a slight edge in parity, as shown in the next table.

Table 7. 3. Enrolment of girls by level and type of schools 2006

| Class | Private Schools | | Com. Primary Schools | | Primary Schools | | Lower Sec. Schools | | Middle Sec. Schools | | Higher Sec. Schools | | Total | |
|-----------|-----------------|-------|----------------------|--------|-----------------|--------|--------------------|--------|---------------------|--------|---------------------|--------|--------|---------|
| | G | T | G | T | G | T | G | T | G | T | G | T | G | T |
| PP | 320 | 659 | 2,791 | 5,881 | 1,888 | 3,834 | 2,581 | 5,223 | 613 | 1,272 | - | - | 8,193 | 16,869 |
| I | 220 | 448 | 2,385 | 4,949 | 1,794 | 3,792 | 2,498 | 5,179 | 570 | 1,178 | - | - | 7,467 | 15,546 |
| II | 140 | 295 | 2,348 | 4,915 | 1,990 | 3,996 | 2,724 | 5,450 | 697 | 1,453 | - | - | 7,899 | 16,109 |
| III | 122 | 212 | 2,124 | 4,377 | 1,851 | 3,751 | 2,601 | 5,152 | 609 | 1,280 | - | - | 7,307 | 14,772 |
| IV | 90 | 200 | 1,881 | 4,032 | 1,854 | 3,768 | 2,671 | 5,287 | 661 | 1,304 | - | - | 7,157 | 14,591 |
| V | 59 | 116 | 1,388 | 2,822 | 1,619 | 3,407 | 2,569 | 5,046 | 585 | 1,227 | - | - | 6,220 | 12,618 |
| VI | 63 | 111 | 1,005 | 2,156 | 1,525 | 3,197 | 2,612 | 5,087 | 569 | 1,169 | - | - | 5,774 | 11,720 |
| Sub-Total | 1,014 | 2,041 | 13,922 | 29,132 | 12,521 | 25,745 | 18,256 | 36,424 | 4,304 | 8,883 | - | - | 50,017 | 102,225 |
| % girls | 49.7% | | 47.8% | | 48.6% | | 50.1% | | 48.5% | | | | 48.9% | |
| VII | - | - | | | | | 3,932 | 7,890 | 1,399 | 2,767 | 269 | 557 | 5,600 | 11,214 |
| VIII | - | - | | | | | 3,048 | 6,262 | 1,290 | 2,415 | 313 | 591 | 4,651 | 9,268 |
| Sub-Total | - | - | | | | | 6,980 | 14,152 | 2,689 | 5,182 | 582 | 1,148 | 10,251 | 20,482 |
| % girls | | | | | | | 49.3% | | 51.9% | | 50.7% | | 50.0% | |
| IX | 4 | 11 | | | | | | | 1,974 | 4,199 | 2,378 | 4,649 | 4,356 | 8,859 |
| X | 19 | 31 | | | | | | | 1,298 | 2,972 | 1,958 | 3,853 | 3,275 | 6,856 |
| Sub-Total | 23 | 42 | | | | | - | - | 3,272 | 7,171 | 4,336 | 8,502 | 7,631 | 15,715 |
| % girls | | | | | | | | | 45.6% | | 51.0% | | 48.6% | |
| XI | 865 | 1,709 | | | | | | | | | 944 | 2,525 | 1,809 | 4,234 |
| XII | 808 | 1,629 | | | | | | | | | 751 | 2,239 | 1,559 | 3,868 |
| Sub-Total | 1,673 | 3,338 | | | | | | | | | 1,695 | 4,764 | 3,368 | 8,102 |
| % girls | 50.1% | | | | | | | | | | 35.6% | | 41.6% | |
| Total | 2,710 | 5,421 | 13,922 | 29,132 | 12,521 | 25,745 | 25,236 | 50,576 | 10,265 | 21,236 | 6,613 | 14,414 | 71,267 | 146,524 |
| % girls | 50.0% | | 47.8% | | 48.6% | | 49.9% | | 48.3% | | 45.9% | | 48.6% | |

Source: RGOB 2006b

The girls' enrolment seems to fall dramatically in class XI and XII, from the aggregate representation of 48.6 per cent in Class IX and X to 41.6 per cent in XI and XII. The next table shows the girls' enrolment in class X and XI.

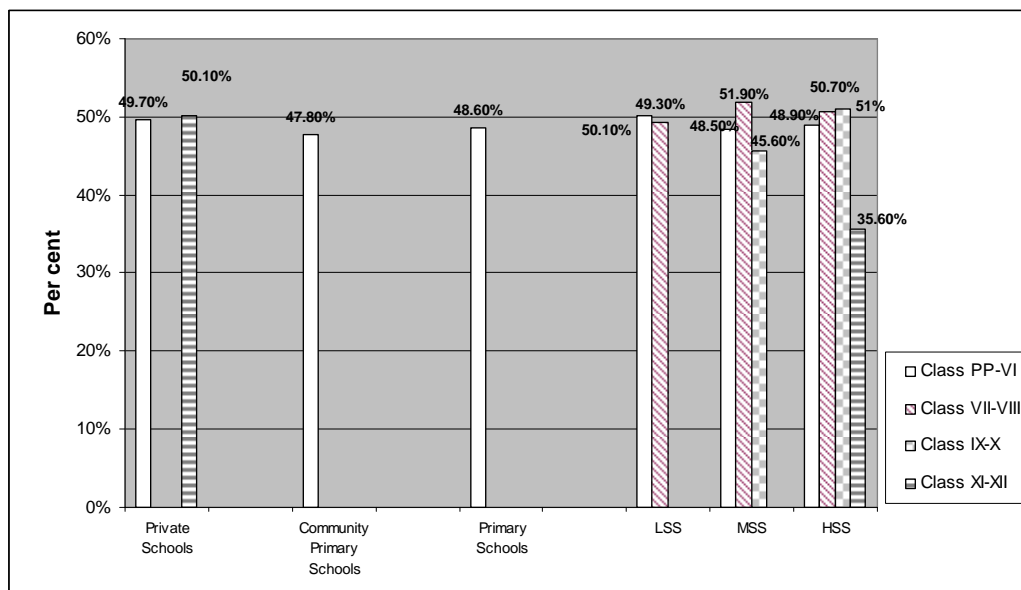
Table 7. 4. Girls Enrolment for Class X and XI 2003-2006

| | X | | | XI public | | | XI private | | |
|------|------|------|-----|-----------|------|-----|------------|------|-----|
| | G | T | % | G | T | % | G | T | % |
| 2006 | 3275 | 6856 | 48% | 944 | 2525 | 37% | 865 | 1709 | 51% |
| 2005 | 3038 | 6427 | 47% | 770 | 1539 | 33% | 851 | 1688 | 50% |
| 2004 | 2842 | 6246 | 46% | 656 | 2031 | 32% | 774 | 1579 | 49% |
| 2003 | 2361 | 5264 | 45% | 571 | 1751 | 33% | 613 | 1240 | 49% |

Source; RGOB 2006b

Although the absolute numbers of girls have increased, the percentage of girls is still low, particularly in class XI (37 per cent).

Figure 7. 1. Percentage of girls enrolled at different levels and types of schools, 2006



A similar trend is seen at the higher education level, where in 2005, 35 per cent of the enrolment in the Royal University of Bhutan was female and of those studying on government scholarships outside the country, females accounted for only 25 per cent. As for the six vocational training institutes in the country, females made up 37 per cent of the trainees in 2006.

7.4.2 Women in Teaching (WIT)

With respect to teachers, the table below highlights the gender ratio.

Table 7. 5. Percentage of Female Teachers in various categories 2006

| | Type of School/Institutes | Teachers | | | |
|----|------------------------------------|--------------|--------------|--------------|-------------|
| | | Male | Female | Total | % of Female |
| A. | Day Care Centres | 1 | 12 | 13 | 92 % |
| B. | Schools | | | | |
| 1 | Community Primary Schools | 665 | 187 | 852 | 22 % |
| 2 | Primary Schools | 427 | 363 | 790 | 46 % |
| 3. | Private Primary Schools | 52 | 112 | 164 | 68 % |
| 4. | Lower Secondary Schools | 857 | 786 | 1,643 | 48 % |
| 5. | Middle Secondary Schools | 440 | 308 | 748 | 41 % |
| 6. | Higher Secondary Schools | 413 | 183 | 596 | 30 % |
| 7. | Private Higher Secondary Schools | 136 | 34 | 170 | 20 % |
| | Sub-Total | 2,990 | 1,973 | 4,963 | 66 % |
| C. | Royal University of Bhutan | 278 | 59 | 337 | 17 % |
| D. | Technical and Vocational Education | 86 | 12 | 98 | 12 % |
| D. | Non-Formal Education | 346 | 323 | 669 | 48 % |

At the 5 Day Care Centres, except for one, all the teachers are females.

In the schools, there are big variations, female teachers represent as low as 20 and 22 per cent in the private higher secondary schools and community primary schools respectively. Most community schools are located in remote areas, sometime involving walks of a day or two from road heads and therefore teachers, women in particular, are reluctant to take up such postings. However, the percentage is an improvement from 2000, when females accounted for only 12 per cent. Most female teachers are found in private primary schools (68 per cent), which is again an increase from 2000 (52 per cent). Females also had 48 per cent representation in both the lower secondary schools and non-formal education centres.

One area where female representation could improve is at the different higher learning institutes under the Royal University of Bhutan. Sherubtse College, for example, had only 14 per cent females on its faculty and the Institute for Language and Cultural Studies had only one woman, out of a total of 26 people in the teaching profession, in 2006. In the technical and vocational training centres, including handicrafts (Zorig Chusum), women accounted for only 12 per cent of the instructors in 2006.

VIII. Goal 6: Quality Education

8.1 National Goals

1. To reduce the annual dropout rate at the primary level from 10 per cent to 5 per cent.
2. To reduce the repetition rate from 21 per cent to 10 per cent.
3. To universalize the coverage of the new curriculum and the new activity based teaching method.
4. Full adaptation of secondary school curricula to the Bhutanese context by 2007

8.2 Strategy

To ensure adequate facilities such as school buildings with spacious classrooms, well stocked libraries, science laboratories, multipurpose halls, sport fields, teacher's quarters, computers and electricity are available to the schools.

Continue to provide textbooks, stationery and hostel facilities for needy students.

Boarding facilities are to be expanded and new hostels to be created.

Encourage private schools with secondment of teachers from the government schools.

Develop a quality curriculum which is relevant and as per the need of the country.

Encourage wholesome education and development of productive citizens.

Enhance the quality of teachers through pre-service and in-service training, and upgradation of qualifications.

Introduce incentives to attract teachers to remote areas.

Strengthen administrative support through improved monitoring and networking among educators.

8.3 Quality of Education

One of the biggest challenges, perhaps, in promoting the EFA goal, is that of maintaining the quality of education while enhancing the enrolment. Sometimes, there seems to be a trade off between the two, with modest national goals being set on both fronts, and Bhutan is no exception when it comes to the quality of education. There is a general perception that quality has been sacrificed for the sake of expansion and Bhutan now has to improve the standard of its education.

8.4 Progress towards Goal

8.4.1 Teachers: Quantity and Quality

When it comes to quality of education, teachers are seen to be the kingpins of the education system and they are held responsible whatever other ramifications may be there.

In 2000 there were 3,045 teachers, including those in private schools and government institutes and this number had doubled to 6,094 in 2006. Furthermore, although the number of non-national teachers had gone up from 577 in 2000 to 613 in 2006, the percentage had gone down, from 19 to 12 per cent respectively.

Much of the increase is attributed to the concerted effort made by the Royal Government of Bhutan to increase the capacities of the two teacher training institutes in Paro and Samtse. In 2000 the capacity of the two colleges was 872 students, but by 2006 it had increased to 1,430.

Table 8. 1. Number of Teacher Graduates from the two teacher's training institutes 2000-2006

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | Total |
|---|------------|------------|------------|------------|------------|------------|--------------|
| Post Graduate Certificate in Education (PGCE) | 40 | 52 | 49 | 48 | 46 | 48 | 283 |
| Bachelor in Education (B.Ed) | 17 | 63 | 101 | 136 | 177 | 371 | 865 |
| Primary Teacher Certificate | 162 | 289 | 150 | 170 | - | - | 771 |
| Zhungkha Teacher Certificate | 20 | 33 | 37 | 32 | 37 | - | 159 |
| Total | 239 | 437 | 337 | 386 | 260 | 419 | 2,078 |

N.B. The Primary Teacher Certificate and the Zhungkha (Dzongkha) Teacher Certificate were phased out in 2002 and 2003 respectively.

Source: Adapted from RGOB 2006b

The number of teacher graduates had almost doubled between 2000 and 2005 and, in fact, if the ongoing PGC and B.Ed. courses are considered, then the difference is even more, i.e. 635 per cent increase.

When we examine the qualifications of teachers between 2000 and 2006, there is a significant difference in numbers and their qualifications. The number of Masters Degree holders had increased by 92 per cent between 2000 and 2006, although the number of trained teachers had gone down by 14 per cent. This is attributable to the high number of non-national teachers with Masters degrees, who numbered 315 (85 per cent) but did not have a teaching certificate. There is a phenomenal increase in the number of teachers holding Bachelors degrees, from 452 in 2000 to 1,789 in 2006 and in addition, the percentage of trained teachers had increased from 17 per cent to 74 by 2006. The current high percentage of trained teachers (92 per cent) is certainly remarkable considering the overall increased number of teachers.

Table 8. 2. Qualifications of Teachers in Community, Primary, LSS, MSS, HSS and Private Schools 2000 and 2006

| Sl.No | Qualifications | 2000 (April) | | | 2006 (March) | | |
|-------|------------------------------------|--------------|---------|-----------|--------------|---------|-----------|
| | | Total | Trained | % Trained | Total | Trained | % Trained |
| 1. | Masters Degree | 193 | 170 | 88 % | 371 | 276 | 74 % |
| 2. | Bachelors Degree | 452 | 336 | 74 % | 1,789 | 1,633 | 91 % |
| 3. | Higher Secondary/ Matriculation | 1,396 | 1,369 | 98 % | 1,806 | 1,728 | 96 % |
| 4. | Under Matriculation | 225 | 225 | 100 % | 148 | 145 | 98 % |
| 5. | Zhungkha Language Certificate | 597 | 597 | 100 % | 849 | 782 | 92 % |
| | | 2,863 | 2,697 | 94 % | 4963 | 4564 | 92 % |

Source: RGOB 2000b, RGOB 2006b

The government has discontinued the ZTC and also has raised the entry level³², which explains the dwindling numbers of those with this qualification.

8.4.2 Non-national Teachers

³² For B.Ed. course, the minimum requirement is class XII or equivalent certificate and entry into PGCE requires a degree.

Non-national teachers have played a critical role in supplementing the teacher shortage in the country. In 2000 there were 576 such teachers (19 per cent) out of the total teaching force of 3,026. By 2006 this non-national teacher percentage had come down to 12 per cent (614) of the total of 4,975 teachers in all the schools, including the national Institute for the Disabled (NID). Despite the increase in student enrolment and a considerable number of non-national teachers, the increase in numbers of trained Bhutanese teachers has led to this overall reduction in the percentage of non-national teachers. The number of national teachers rose by 78 per cent from 2,450 in 2000 to 4,361 in 2006. Most of the non-national teachers are teaching in middle and higher secondary schools.

8.4.3 In-service training

To enhance the skills and competency of teachers, the Royal Government of Bhutan has also provided in-service training programmes for teachers. The table below shows the number of teachers who have undergone in-service training.

Table 8. 3. Number of in-service training conducted for teachers (2002-2005)

| Year | National level | | Dzongkhag level | | Total | |
|--------------|----------------|--------------|-----------------|--------------|-----------|--------------|
| | Courses | Participants | Courses | Participants | Courses | Participants |
| 2002 | 31 | 2,033 | - | - | 31 | 2,033 |
| 2003 | 27 | 1,358 | - | - | 27 | 1,358 |
| 2004 | 22 | 851 | - | - | 22 | 851 |
| 2005 | 10 | 560 | - | - | 10 | 560 |
| Total | 90 | 4,802 | - | - | 90 | 4,802 |

Source: RGOB 2006b.

8.4.4 External Training

In addition, a number of teachers have been sent on short courses, workshops and long term fellowships as shown in the next table.

Table 8. 4. Teachers sent outside for short courses, workshops and long term fellowship 2002-2006

| Sl. No. | Type of Study | Number of Teachers |
|---------|--------------------|--------------------|
| 1. | Ph.D | 1 |
| 2. | Masters | 96 |
| 3. | Diploma | 3 |
| 4. | Attachment courses | 137 |
| 5. | Short courses | 167 |
| | Total | 404 |

Source: RGOB 2006b

8.4.5 Continuing Education

As part of the continuing education programme, teachers have been given the opportunity to upgrade their qualifications just as other members of the public. They are required to attend the part-time classes and appear for examinations at the close of the school year. The upgradation started in 1998 with 31 candidates and by 2007 about 1167 teachers will have enhanced their qualifications.

Table 8. 5. Number of teachers who have upgraded their qualifications

| Year | Class X | Class XII | ILCS | Total |
|---------------|----------|------------|------------|------------|
| 2003 March | 2 | 103 | 14 | 119 |
| 2004 December | - | 10 | 91 | 101 |
| 2005 December | 1 | 190 | 54 | 245 |
| 2006 December | - | 268 | 36 | 304 |
| Total | 3 | 571 | 195 | 769 |

Source: 2006b

8.4.6 Teacher Pupil Ratio

The government has categorized the location of schools into 7 types: urban, semi-urban, semi-remote, remote, very remote, and difficult. The teacher pupil ratio is shown next in these locations.

Table 8. 6. Teacher pupil ratio in type of schools by location (number of students for every teacher)

| Type of Schools | Urban | Semi-urban | Semi-remote | Remote | Very Remote | Difficult | Total |
|--------------------------|-----------|------------|-------------|-----------|-------------|-----------|-----------|
| Community schools | 42 | 33 | 32 | 32 | 41 | 22 | 34 |
| Primary schools | 30 | 30 | 30 | 38 | 42 | - | 33 |
| Lowers Secondary schools | 30 | 31 | 29 | 35 | 37 | - | 31 |
| Middle Secondary schools | 28 | 28 | - | - | - | - | 28 |
| Higher Secondary schools | 24 | 25 | - | - | - | - | 24 |
| Total | 29 | 31 | 31 | 34 | 41 | 22 | 30 |

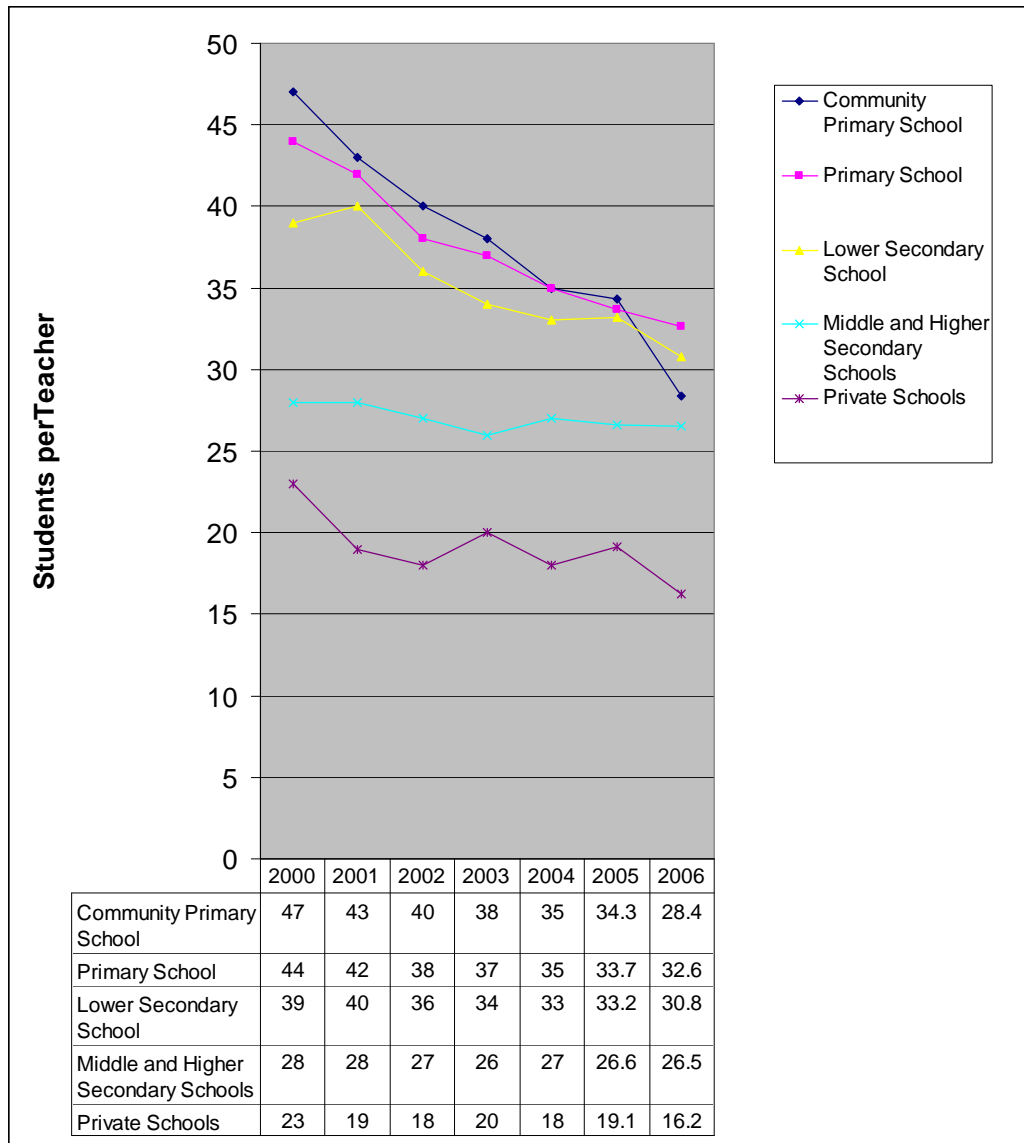
Source: RGOB 2006b

The ideal standard for teacher : pupil ratio has been set by the government at 1:32, and while the national average appears to be with the permissible limit, there are slight disparities in the distribution of teachers. It is generally the lower level schools, such as the community and primary schools, that have a high ratio both in urban and very remote areas. While there may be private schools in the urban areas to help relieve the congestion, extra effort is required to bring the teacher : pupil ratio down for the remote and very remote areas.

If we examine the different Dzongkhags specifically, Gasa has the lowest ratio at 1: 19. This is also the only Dzongkhag with no road. Bumthang and Trongsa also have a relatively low ratios of 1: 24.6 and 1: 24.5 respectively (RGOB 2006b), while Dagana and Samtse Dzongkhags have the highest ratios at 1: 42 and 1: 42.3 respectively. Interestingly, even if the two worse off Dzongkhags with the highest teacher pupil ratios are examined with respect to the location of schools within their Dzongkhag, it is the very remote areas that have ratios exceeding the norms.

In analyzing the overall the trend vis-a-vis teacher pupil ratio from 2000 until 2006, the Figure below shows that there is a substantial decline in ratio for community and primary schools, which is a big improvement. The lower secondary schools also show a similar trend, but not as dramatic. The middle and higher secondary schools have maintained a steady average in the 20s. The private schools have the best teacher: pupil ratio and that has been constant during the period.

Figure 8. 1. Teacher: pupil ratio trend 2000-2006 by type of schools



8.4.7 Class Size

Class size has a telling on the quality of education and each section of a year-class is considered as a separate class. The data has no bearing on the spatial area of a classroom, but more on the number of students or sessions that can be easily managed by a teacher, which is relative, but obviously the lower the ratio, the better for the teacher and students alike.

In urban areas, community and primary schools have the highest number of students in a section, with as many as 46 and 40 students respectively (RGOB 2006b). The lower secondary classes are also crowded in the urban areas, with as many 41 students in a section. At the other end of the scale, the community schools in remote and difficult areas have a very small number of students, ranging between 20 and 12, and it is in these situations where multi-grade teachers have been posted.

8.4.8 Curriculum Improvement

The government has always made an effort to ensure that the curriculum is relevant to work and is in line with the national needs and aspirations of the people. Revisions pertaining to the three tool subjects, Dzongkha, English and Mathematics have been initiated.

A curriculum framework for English, Classes PP to XII has been developed. The Curriculum Guide for Teachers and text books for classes V to XII have also been completed. The new curriculum for classes V –XII is under implementation and the text books and curriculum guides for teachers of classes PP to IV is under revision.

Communication, reading and literature were recognized as being weak in the Bhutanese education system. Schools have been instructed to keep a Reading Week, when students are encouraged to read different books and also to increase the amount of drama, elocution and debates in school activities.

A curriculum framework for classes PP to XII for the Mathematics has been developed. Curriculum Guides for Teachers for classes IX to XII have been also developed and teachers have been oriented to the new curriculum. Text books and Curriculum Guides for teachers for classes V to VIII are expected to be finished by 2007, and PP to IV by 2008.

For Dzongkha language, History has been being taught in Dzongkha in class VII since 2006 and class VIII is being piloted. Part of the Social Studies syllabus, related specifically to a Bhutanese context, is also taught in Dzongkha.

8.4.9 Continuous Assessment

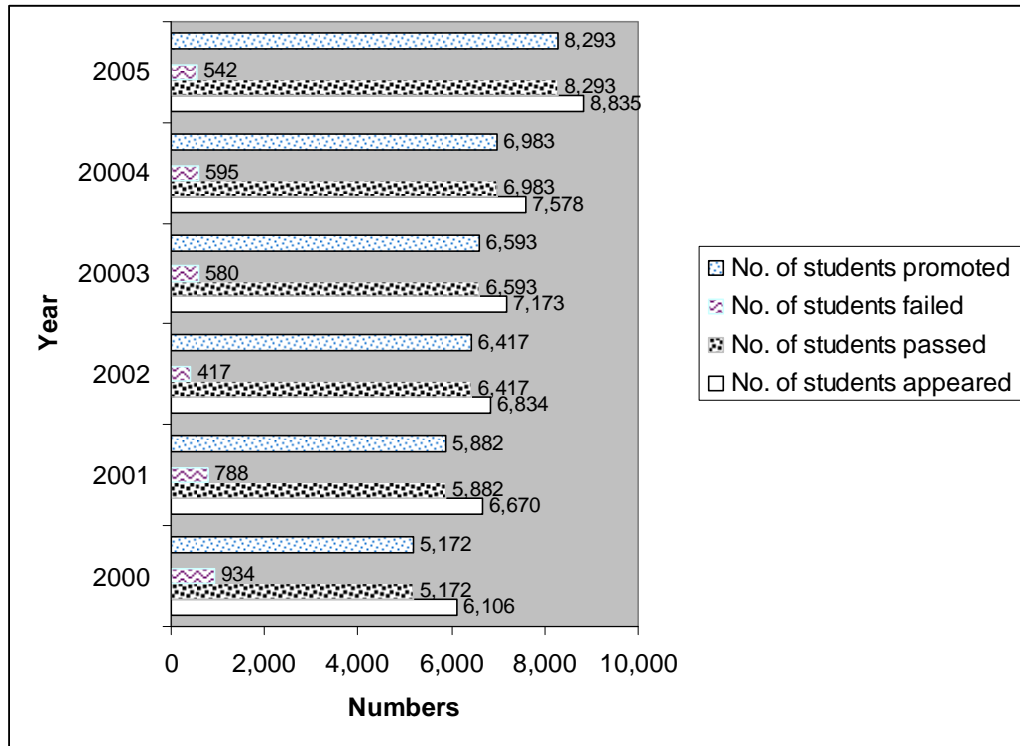
Whatever changes may be introduced in the curriculum, teachers are required to take a holistic approach to their teaching. Students are encouraged to explore and probe and not be bound by text books and rote learning. Teachers are asked to make a continuous assessment rather than depending only on the outcome of the final examination at the end of the term. For example, since 1994, in class VI, 50 per cent of the end of year assessment of students has been based on continuous assessment done by the school, and the other 50% has been determined by the board examination.

8.4.10 Quality Control

While schools have been given greater flexibility, in order to maintain the uniformity of standard and quality, examination papers are still being set by the Bhutan Board of Examinations. In the past, examinations for classes VI and VIII were set and assessments done by the Bhutan Board of Examinations. Then class VI was delegated to the individual schools. Until 2005, the class VIII examination was conducted centrally but with the increasing of basic education to class X the class VIII examinations are now conducted in the same manner as class VI.

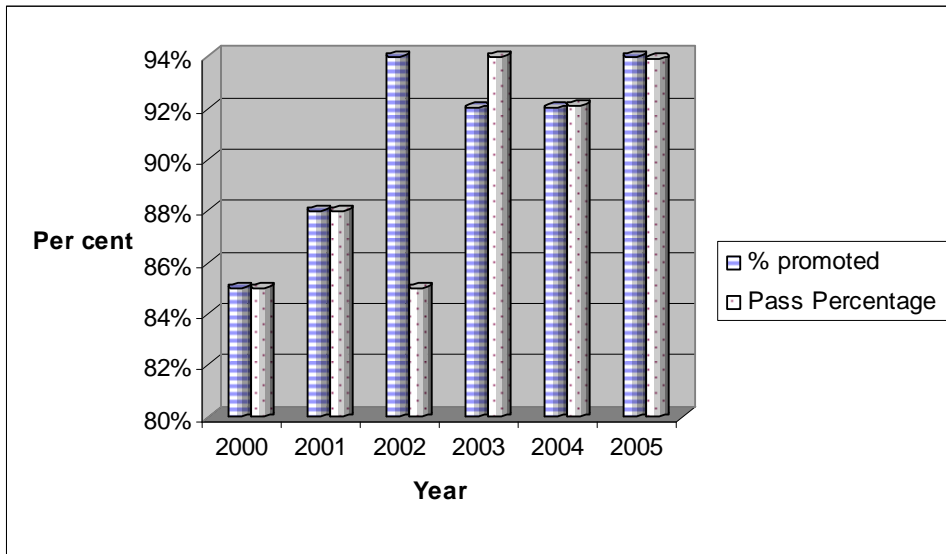
The Figures below shows the result of the Class VIII since 2000.

Figure 8. 2. Class VIII examination results from 2000 to 2005



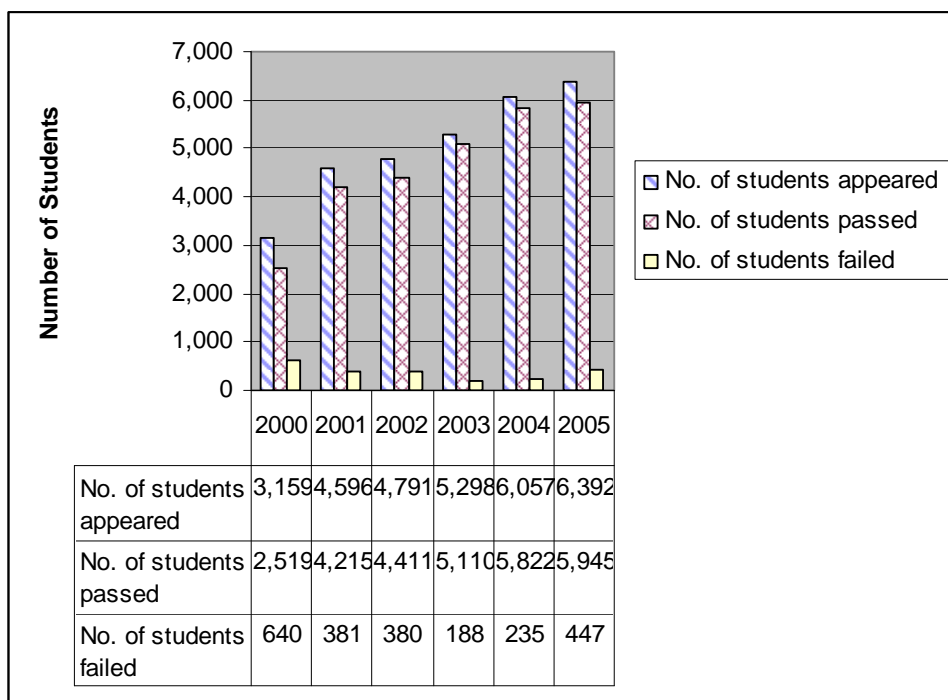
The number of students appearing for examinations has been increasing over the period 2000 to 2005(44 per cent increase). The percentage of promotion shows a small difference of 9 per cent over the period but the pass percentage has increased to an average exceeding 90 per cent in the last three years.

Figure 8. 3. Promotion and Pass Percentage for class VIII Examinations, 2000-2005



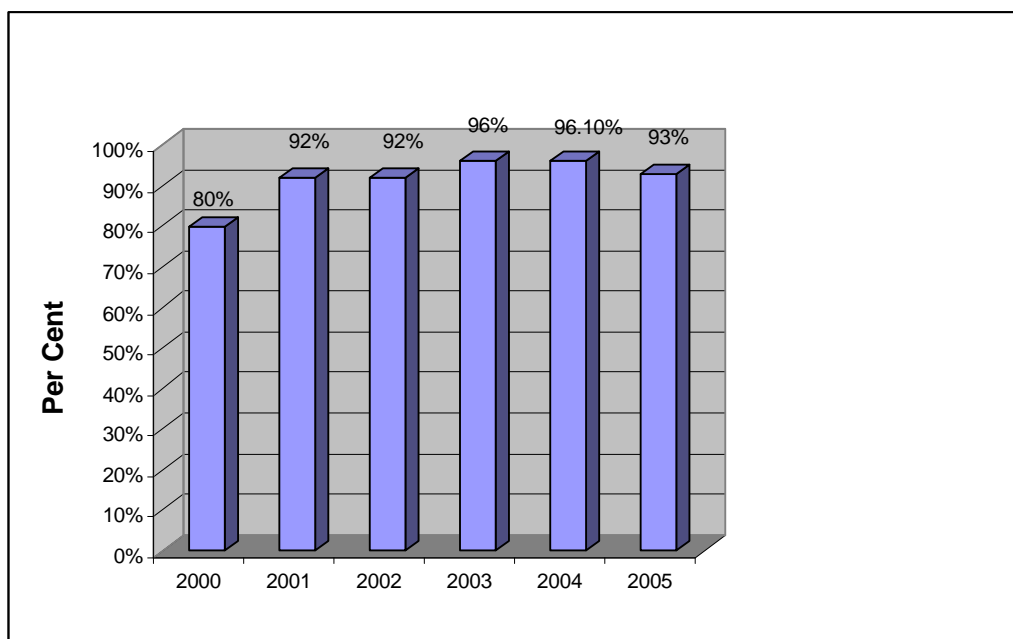
Class X is the final year of basic education and unsuccessful students are not permitted to repeat the class but only to re-appear for the examination as private candidates.

Figure 8. 4. Class X examination results from 2000-2005



There was a 100 per cent increase in the number of students sitting for class X examinations between 2000 and 2005. Except for 2000, the pass percentage is in the nineties. The class X examination was conducted by the Council of Secondary Examination, Delhi, India and later jointly with the Bhutan Board of examination. The class X examination was fully nationalized in 2001 and the rise in pass percentage since then may be due to the change of the Board of examinations. In the five years preceding 2000 the pass percentage never exceeded 88 per cent.

Figure 8.5. Pass Percentage of Class X Results, 2000- 2005



8.4.11 Efficiency of the Education Sector

The efficiency of the education system can be gauged from repetition, dropout, promotees and survival rates of the students. Lower dropouts and repetition as well as higher rates of promotion and survival indicate a relative efficiency in the system. The next table gives the repetition, dropouts, and promotion rate for the last 7 years.

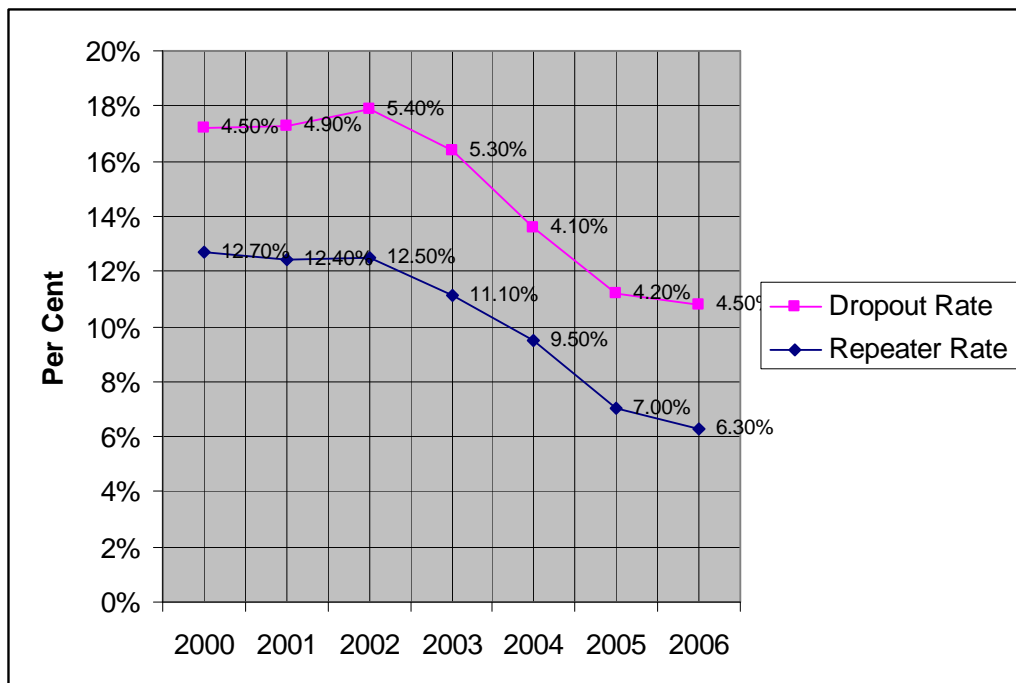
Table 8. 7. Number of Promotees, Repeaters and Dropout for class PP-X, 2000-2006

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|-----------|---------|---------|---------|---------|---------|---------|---------|
| Enrolment | 108,398 | 114,071 | 118,355 | 122,857 | 128,771 | 133,288 | 138,389 |
| Promotees | 82,624 | 88,625 | 92,883 | 98,218 | 105,384 | 113,948 | 118,256 |
| Repeaters | 13, 814 | 14,183 | 14,767 | 13,604 | 12,206 | 9,266 | 8,743 |
| Dropouts | 4,831 | 5,590 | 6,421 | 6,533 | 5,267 | 5,557 | 6,289 |

Source: Adapted from RGOB 2006b.

The student enrolment between 2000 and 2006 increased by 28 per cent and the repetition rate was halved. The latter was 12.7 per cent in 2000 and declined gradually to 6.3 per cent in 2006. Secondly, the dropout rates have remained more or less unchanged, averaging just over 4 per cent, though the number of students has increased. These figures are not conclusive, but they all point to the system being fairly efficient, as can also be verified by the internal efficiency coefficient.

Figure 8. 6. Dropout and Repeater Rates for Class PP-X, 2000-2006



The internal efficiency coefficient for 2005 in respect of classes PP-X is given in the table below, with a combined rate as well as a dis-aggregated figure separating the genders.

The internal efficiency coefficient is 68 per cent for the sexes combined, with the males' coefficient at 67.8 per cent as compared to females' at 68.0. The drop out rate for PP is 0 and the combined primary level has not exceeded 4.5 per cent, thus achieving the national goal of reduction to 5 per cent. The highest concentration of dropouts is in Class X (7.4 %) and VII (7.3 %). The other goal, of reducing repetition rate from 21 per cent to 10, has also been accomplished, as can be seen from the table. Class IV, however, has a relatively higher repetition rate (9.1 %) and the causal reasons need to be identified to improve this phenomenon. Females are doing much better when it comes to promotion for all the classes until class IX and X, when the males fare better. This is where the gender gap widens and the result is felt throughout the higher and tertiary education levels.

Bhutan's internal efficiency coefficient in 2005 was 68.0%. Compared to 2004, where the efficiency coefficient was 70.2%, this reflects a slight decline in efficiency.

Table 8. 8. Internal Efficiency Coefficient for classes PP-X 2005

Both Sexes, 2005

| | PP | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Graduates |
|------------------------------------|---------|-------|-------|-------|-------|-------|-------|--------------|-------|-------|-------|-----------|
| Promotion rate | 91.9% | 90.4% | 89.0% | 92.5% | 86.4% | 89.7% | 93.2% | 84.2% | 93.1% | 88.3% | 92.2% | |
| Repetition rate | 8.1% | 7.8% | 7.9% | 5.9% | 9.1% | 5.8% | 3.5% | 8.6% | 3.1% | 6.7% | 0.4% | |
| Dropout rate | 0.0% | 1.8% | 3.1% | 1.5% | 4.4% | 4.5% | 3.3% | 7.3% | 3.8% | 5.0% | 7.4% | |
| Adjusted promotion rate | 91.9% | 90.4% | 89.0% | 92.5% | 86.4% | 89.7% | 93.2% | 84.2% | 93.1% | 88.3% | 92.2% | |
| Survivors to the Grade | 1,000.0 | 999.9 | 980.0 | 947.3 | 931.7 | 886.1 | 843.7 | 814.7 | 750.0 | 720.4 | 681.7 | 630.9 |
| Average study time at Grade | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.1 | 1.0 | 1.1 | 1.0 | 11.7 |
| Pupil-years invested per Graduate | | | | | | | | | | | | 16.2 |
| Coefficient of Internal Efficiency | | | | | | | | | | | | 68.0% |

Male, 2005

| | PP | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Graduates |
|------------------------------------|---------|-------|-------|-------|-------|-------|-------|--------------|-------|-------|-------|-----------|
| Promotion rate | 91.3% | 89.2% | 87.4% | 91.1% | 84.5% | 88.5% | 92.0% | 84.1% | 93.2% | 90.6% | 93.6% | |
| Repetition rate | 8.6% | 8.9% | 8.7% | 6.5% | 10.4% | 6.1% | 3.7% | 8.2% | 2.8% | 6.1% | 0.4% | |
| Dropout rate | 0.1% | 1.8% | 3.9% | 2.4% | 5.1% | 5.5% | 4.3% | 7.7% | 4.0% | 3.3% | 6.0% | |
| Adjusted promotion rate | 91.3% | 89.2% | 87.4% | 91.1% | 84.5% | 88.5% | 92.0% | 84.1% | 93.2% | 90.6% | 93.6% | |
| Survivors to the Grade | 1,000.0 | 999.0 | 979.0 | 937.0 | 913.0 | 861.5 | 811.4 | 775.3 | 710.1 | 680.9 | 657.0 | 617.1 |
| Average study time at Grade | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.1 | 1.0 | 1.1 | 1.0 | 11.8 |
| Pupil-years invested per Graduate | | | | | | | | | | | | 16.2 |
| Coefficient of Internal Efficiency | | | | | | | | | | | | 67.8% |

Female, 2005

| | PP | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Graduates |
|------------------------------------|---------|---------|-------|-------|-------|-------|-------|--------------|-------|-------|-------|-----------|
| Promotion rate | 92.6% | 91.6% | 90.7% | 94.0% | 88.5% | 91.0% | 94.3% | 84.3% | 93.0% | 85.9% | 90.6% | |
| Repetition rate | 7.5% | 6.6% | 7.1% | 5.4% | 7.7% | 5.5% | 3.4% | 8.9% | 3.3% | 7.3% | 0.5% | |
| Dropout rate | -0.1% | 1.8% | 2.2% | 0.7% | 3.8% | 3.5% | 2.3% | 6.8% | 3.6% | 6.8% | 8.9% | |
| Adjusted promotion rate | 92.5% | 91.6% | 90.7% | 94.0% | 88.5% | 91.0% | 94.3% | 84.3% | 93.0% | 85.9% | 90.6% | |
| Survivors to the Grade | 1,000.0 | 1,000.0 | 980.3 | 957.1 | 950.4 | 911.3 | 877.4 | 856.5 | 792.5 | 762.6 | 706.7 | 643.2 |
| Average study time at Grade | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.1 | 1.0 | 1.1 | 1.0 | 11.7 |
| Pupil-years invested per Graduate | | | | | | | | | | | | 16.2 |
| Coefficient of Internal Efficiency | | | | | | | | | | | | 68.0% |

IX. Recommendations and Conclusions

9.1 Early Childhood Care and Development (ECCD)

- (i) ECCD is a relatively new concept for Bhutanese society and given that there has been no dramatic rise in public demand for related services, it appears that further rigorous advocacy programmes on its importance through the different media are imperative.
- (ii) The participation of the private sector in the Day Care Centres is a good initiative towards fulfilling the needs of urban parents. However, the outreach is limited to a few major towns and if it is to be expanded into the other unreached areas, the issue of sustainability appears. This will be a challenge for the Ministry of Education, as the majority of rural people, as well the urban poor, may not be able to afford this service. Therefore, the government will need to think about the subsidies or other financial incentives that would be required to undertake a programme of this magnitude.
- (iii) The activities of the Day Care Centres also need to be meshed with the general education system. The quality of teachers and the type of facilities offered may require constant monitoring by the Department of Education. Training of those teachers is another issue, as the respective private promoters may not see the importance of investing in the training of teachers employed by them. Currently, there is one ECCD Specialist – cum Trainer but this role will need strengthening and additional people may be required as the child care centres increase in number.

9.2 Universal Primary Education

- (i) The increased enrolment in primary education, while laudable, has created pressure for places at the secondary and higher education levels. Both the lack of quality school facilities and the shortage of well qualified teachers has underlined the need for more infrastructure and for more qualified and trained teachers.
- (ii) Bhutan has made considerable progress and has achieved the GER target of 100 per cent, while the NER has reached about 80 per cent. The 20 per cent of children who are missing from the education system need to be identified. While the updated data of those children in monastic schools need to be obtained, the Dzongkhags where the NER is lowest can be improved.
- (iii) Some of the children from the scattered settlements and nomadic tribes suffer from lack of access to schools due to the distance involved. The establishment of community schools has worked in some cases but the solution for these children may

require the government to look into the possibility of constructing boarding facilities at the locations involved.

- (iv) It is a known fact that boarding schools and the WFP food programme do attract students from the poorer backgrounds. The beneficiaries, including the proportions of females receiving food, have grown to 45 per cent and it may be that with the withdrawal of this assistance, the enrolment of females might drop. Better hostel facilities, coupled with food supplements, may be the key for sustaining the enrolment rates in remote Dzongkhags and the government may want to consider these options in order to sustain the enrolment..
- (v) The current policy of allowing private people to establish schools has proved to be a boon, and yet there is a conspicuous absence of such schools at the lower and middle secondary levels. Judiciously allowing private schools to be established may help to decongest the crowded government schools in urban areas. Great care is needed to ensure that the poorer section of the urban area population is not denied education because of not having the means to pay for it. Bhutan, inadvertently, may be creating elitism in the education system by allowing the establishment of better managed private institutions, accessible to those who can afford it. This may, however, free up resources which the government can invest in other areas where there are needs and where private sector participation is not forthcoming.
- (vi) The Special Need Schools have also seen a rise in enrolment, but there is still opportunity for further expansion, provided that the location of these children can be identified. By a rough count it is estimated that over 3,441 (99 per cent of the disabled) children are not accounted for, and a rigorous campaign to raise awareness needs to be conducted among the communities.

9.3 Life Skills and Lifelong Learning

- (i) The Royal Government of Bhutan has placed a lot of emphasis on wholesome education, as can be seen by the host of activities planned for students and youth. One of the biggest obstacles to implementing the activities is time. Students and teachers are required to spend 80 per cent of the school time on instruction, which that leaves only one free period in a week, when there is a wide array of extra curricular activities from among which students can choose. These, inter alia, include nature club, cultural club, health and sanitation, sports, vocational training club, and

gardening etc. However important such activities as these are, they take second place in the face of studies, which at the moment are seen as more important.

- (ii) The Scout movement has grown to over 23,000 members and although most of the camps and activities are held during the winter break, when there are no classes, the sheer scale of their organization warrants a new approach. The scout programme could be handled by an NGO which would free some of the teachers from that responsibility.

9.4 Literacy

- (i) The NFEs have been spearheading the drive towards the eradication of illiteracy. The organization has over 18,550 learners and 669 instructors. While Dzongkhag authorities have been authorized to oversee the establishment of NFE centres, a proper mapping of where illiterates are concentrated may help to strategize the literacy programme.
- (ii) New materials in Dzongkha need to be developed so that post literate learners have adequate Dzongkha literature to practice with after the skills have been acquired.
- (iii) The NFE programme has made a significant impact on the rural population, and, in particular, on women. Some have been able to take on the responsibility of being members of the National Assembly and, in addition to playing the role of change agents; their contribution towards the creation of social capital has been substantial. They are known to be able to discuss development issues and the needs of their village in the GYT meetings.

9.5 Gender

- (i) The low level of participation of female students to the higher and tertiary education is a major concern. The reason why there is a drop in the number of females moving up to higher secondary schools needs to be studied and appropriate policy framed to remedy the situation.
- (ii) To alleviate the shortage of both female students in schools and of female teachers, it is necessary to build both hostel facilities for girls and teachers' quarters in rural areas

9.6 Quality Education

- (i) The shortage of teachers can, to a certain extent, be solved by increasing the intake of students in the pre-service training institutes. However, one of the lacunas in the recruitment of teachers has been that, in the past, a teaching career was often pursued only as a last resort when there were no openings in other professions. This mentality has to change among the youths, and the choice to teach should not be influenced so much by financial benefits - although that too is important - but more from interest and aptitude, which career counseling should have addressed. At this juncture, when more than 30 per cent of the civil servants are teachers, it is not feasible to overhaul the system radically. While those already in the teaching profession should be given the opportunity to upgrade their qualifications and continue teaching, new recruits opting for teaching should be put through a stringent selection process so that only people with the right skills and interest are recruited into the system. For vacancies arising in the higher secondary schools, the policy of recruiting non-national teachers to fill the void for a limited period should be continued until an adequate number of nationals evince interest.

- (ii) In trying to improve the quality of education, the government is grappling with the issue of quantity as well as quality of teachers. On the quantity issue, applying the teacher pupil ratio of 1: 32 may show that there is an adequate number of teachers in country, but the truth is there are critical shortages of teachers for subjects such as Science and Mathematics, and so considerable numbers of non-national teachers have been employed in these posts. Given that there are so few takers for these subjects, the government may want to consider giving other incentives so that the teaching of these subjects is promoted. The second aspect relates to the distribution of teachers. In the remote areas of some Dzongkhags, there is such an acute shortage of teachers that existing teachers are compelled to handle three times more pupils than the standard set. Incentives such as priority in-service studies for those posted in remote areas should be continued, and additional pay and allowances revised to attract good teachers to these areas. The construction of staff quarters in the remote areas would be another way to ease the life of teachers there.

- (iii) The recent announcement of pay increases and other incentives for teachers is a boost to the education sector, needed to attract teachers to the remoter areas.

General

- (i) Bhutan is currently spending 7 per cent of the GDP on education and with further expansion in the tenth plan (2008-2015) substantial resources will be required to improve the current infrastructure and construct new school buildings. The fact that Bhutan has moved from low to medium human development status has not helped its case, and the foreign aid mobilization, on which most of its capital investment depends, may no longer be forthcoming. Despite the increased revenue from its hydro-electricity projects, Bhutan has considerable debt owed to the international community and will not be in a position to undertake new programmes and sustain the existing ones.

- (ii) Bhutan has a highly subsidized system of education with tuition fees, text books, and in some places meals, given free. However, at the same time there are costs for parents that have been increasing and have prevented poorer families from sending their children to school. This is clearly reflected in the enrolment figures, which show a 78 per cent enrollment from the families in the top 20 per cent of the income bracket, but only 59 per cent from those in the bottom 20 per cent of the income bracket. Instead of providing incentives such as free stationery and board to rural students across the board, it may be more appropriate to start a scholarship scheme on a need basis.

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