

A. EDUCATION

Table 7. Summary of data on education indicators

Indicator	%	Year						Targets	
		1997-99	2000	2001	2002	2003	2004	PRS 2003	MKUKUTA 2010
Primary net enrolment ratio		57	59	66	81	89	91	90	99
Girls		58	60	66	79	87	90		
Boys		56	59	66	82	90	91		
Primary gross enrolment ratio		78	78	85	99	105	106	100	99
Girls		77	78	84	96	102	104		
Boys		78	79	86	101	109	108		
Cohort completing std 4		86 (1997)	86	-	-	84			95
Cohort completing std 7		69 (1997)	70	74		72			90
Girls		73	70	76	-	72			
Boys		76	69	71		73			
Students passing PSLE		20	22	29	27	40		50	60
Girls		14	15	21	20	33			60
Boys		27	29	36	34	48			60
Enabling environment (primary school)									
Pupil/teacher ratio				46	54	57	59		
Pupil/desk ratio				4	5	5	5		
Pupil/classroom ratio				80	82	81	73		
Dip. & Grade A primary school teachers				50			58		
Pupil/diploma-grade A teachers				93			102		
Secondary net enrolment ratio ¹²					6	7	8		50
Girls					7	7	9		
Boys					6	6	7		
Secondary gross enrolment ratio ¹³					10	10	12		
Girls					10	10	11		
Boys					11	11	13		
Students passing form IV exams				64	77	88			70 ¹⁴
Girls				56	72				70
Boys				71	81				70
Proportion of 18-25 in higher education (above secondary)		-	-	-	0.5	-	-		
Literacy rate of population aged 15+		-	71	-	69	-			80
Female			64		62				80
Male			80		78				80
Literacy rate of population aged 15-24		-	82	-	78	-			
Female			80		76				
Male			84		81				

Sources: MoEC Basic Statistics Education (BSE) (various years); NBS (2002a), HBS 2000-01; NBS (2003), Census 2002.

¹² Secondary net enrolment includes all students who are enrolled in Forms I to IV and aged from 14 to 17 as the numerator, and the population of children aged from 14 to 17 as the denominator.

¹³ Secondary gross enrolment uses all students enrolled in Form I to IV (regardless of age) as the numerator, and children aged from 14 to 17 as the denominator

¹⁴ The MKUKUTA target is that at least 70 per cent of girls and boys pass at division I to III

ENROLMENT IN PRIMARY EDUCATION

There has been considerable progress in Tanzanian primary education, in particular in enrolment rates, following the implementation of the Primary Education Development Plan (PEDP)¹⁵ in 2000. Children are entering school at an earlier age and there is an increase in the proportion of children going to school. Gross enrolment ratios went up from 78 in 2000, to 106¹⁶ in 2004, surpassing the 100 PRS target set for 2003. During the same period, net enrolment went up from 59 to 91, achieving the 2003 PRS target of 90. The net enrolment of boys and girls is quite comparable. But there are increasing disparities over the years, with more over-aged boys retained in primary education.

Notwithstanding these remarkable achievements, data in Table 8 suggest that Standard 1 enrolment in 2003 and 2004 fell short of the PEDP targets by almost 20 per cent in 2004. Standard 1 enrolment is expected to stabilise in the long term. All the over-aged children should eventually be enrolled in primary school, leaving only the target group of seven year olds.

Table 8. Standard one enrolment: PEDP target versus actual

Year	PEDP Target enrolment	Actual enrolment	% deviation from target
2002	1,500,000	1,632,141	8.1
2003	1,600,000	1,481,354	-8.0
2004	1,640,969	1,368,315	-19.9

Source: URT 2001:5; URT 2002b:27; URT 2003b:16; URT 2004: 24.

A close scrutiny of the 2002 census data, from reports of children actually attending school, reveals that gross and net attendance ratios¹⁷ in primary schools are lower than the reported gross and net enrolment ratios for the same year: 91 and 68 versus 99 and 81 respectively. The actual attendance of seven years olds was in fact less than 50, peaking to 82 for 11 year olds (see Figure 3 and Appendix Table A.2). These data also suggest a substantial number of over-aged children, in particular boys, in primary schools in 2002. For example, close to three fourths of all 14 year olds and almost a quarter of 17 year olds were still attending primary school according to the 2002 population census.

Further analysis¹⁸ of enrolment figures suggests an over reporting of male and female pupils aged 8 and 9 years. This may have been the result of parents misreporting the age of their children to help ensure their enrolment through the PEDP which imposed much stricter school entry age requirements than had previously been the case (see Appendix Table A.3).

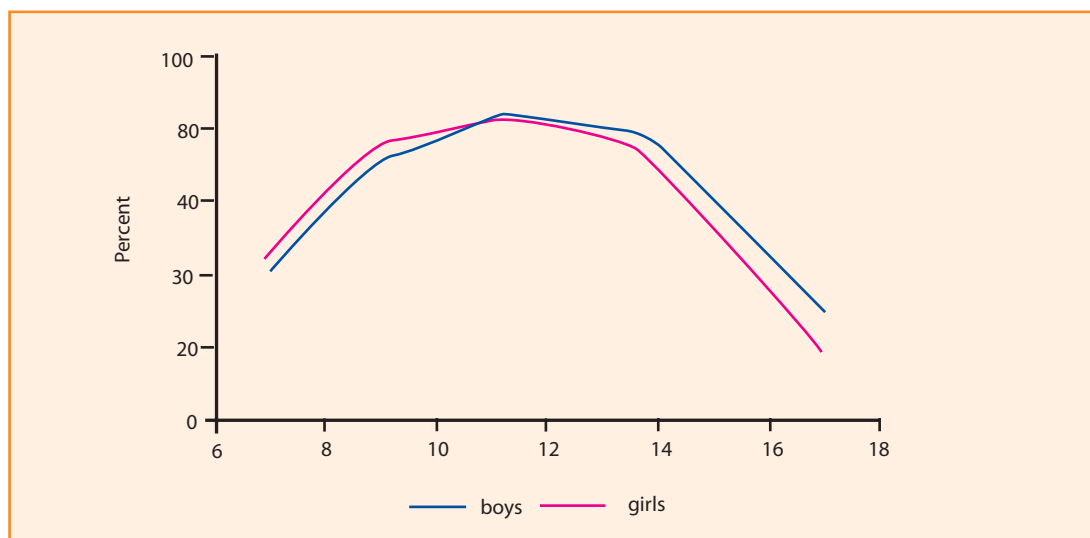
¹⁵ A five year plan to achieve universal basic seven-year education by 2006, nine years ahead of the MDG target; government abolished school fees in primary schools.

¹⁶ Gross enrolment ratios are calculated using all enrolled students as a numerator and children between the ages of 7 to 13 as the denominator. Since the numerator can include numbers of children outside the age range of those in the denominator, ratios can exceed 100. This happens when there are children outside the school going-ages (i.e. 7-13 years) enrolled in primary education.

¹⁷ Attendance ratios refer to children actually going to school. Reported enrolment ratios are based on routine data.

¹⁸ Applying official 2004 MoEC figures of reported net enrolment to 2002 census population projected to year 2004.

Figure 3. Primary school attendance by age, 2002



Source: NBS 2003, Census 2002

According to a rapid appraisal of school attendances in a few schools in Kilombero and Ulanga DSS (Demographic Surveillance Site) villages, for the most part children enrolled in schools attend classes most of the time (Msechu and Mtenga 2005). The 2003 Policy Service Satisfaction Survey (PSSS) found that parents are generally pleased with PEDP, with the abolition of school fees and the resultant expansion of enrolments (REPOA 2003). According to parents, the main achievements of PEDP are improved quality of school buildings (84 per cent), fall in the cost of schooling (73 per cent) and an increase in the number of classrooms (71 per cent). The poor were only slightly more appreciative of the cost reduction than the less poor (79 per cent versus 71 per cent).¹⁹ Preliminary findings of the 2005 Afrobarometer survey suggest that roughly 85 per cent of the respondents believe that the current government is addressing educational needs 'very or fairly well' (REPOA, 2005).

Despite the availability of primary education free of school fees to all children, the cost for keeping a child in primary school can be considerable for a poor family: ranging from roughly TShs 20,000 in Geita to TShs 30-40,000 in Rombo (Ewald et al, 2004). Parents still have to meet some of the costs of primary education through community financing,²⁰ and in Kilombero and Ulanga this often results in poor attendance of students, especially those coming from poor families (Msechu and Mtenga 2005). As noted by the 2002/03 Tanzania Participatory Poverty Assessment (TzPPA), other factors limiting poor children's access to education include distance to schools, fewer schools and schools of poor quality in areas where the poor live, and having to engage in income generating activities (R&AWG 2004). According to PSSS (2003) findings, over a quarter (28 per cent) of the respondents knew of people who could not afford to send their children to school, a third of the poorest quintile

¹⁹ REPOA (2003), page 21. Question: 'In the last three years, have you noticed any significant changes in the following?' Options: improvement, the same, deterioration, DK. Text figures indicate 'Improvements'.

²⁰ In the form of cash or labour.

(32 per cent) compared to a quarter of the least poor. It seems therefore that some of the differences in enrolment across income groups evidenced in the pre-PEDP years²¹ may well have continued its implementation.

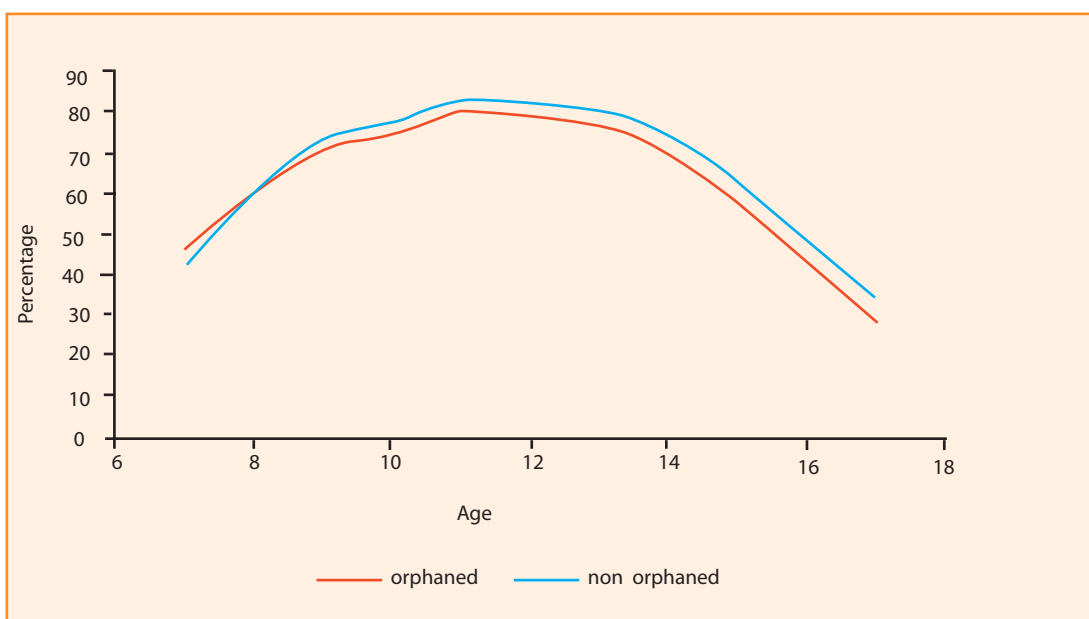
“These days we are required to contribute a lot of money for building schools and buying desks and there is no mercy for those who cannot afford. Imagine one family having to pay TShs 20,000 as contribution for building the ward secondary school... and there are still other contributions related to primary schools... the child still needs to wear uniform...”

(Male focus group discussant, Kilombero Msechu and Mtenga, 2005: 15)

THE MOST VULNERABLE CHILDREN IN PRIMARY AND SECONDARY SCHOOLS

An objective of PEDP is to ensure primary schooling for all disadvantaged children, including orphans and children with disabilities (URT 2001). Figure 4 suggests that at entry age there is not much difference in attendance of orphaned (single and/or double) and non-orphaned children in primary schools. At later ages however, orphans do not fare as well though the differences are small. In contrast, attendance of children with a disability is much poorer than those without a disability in both primary and secondary schools (see Figure 5).

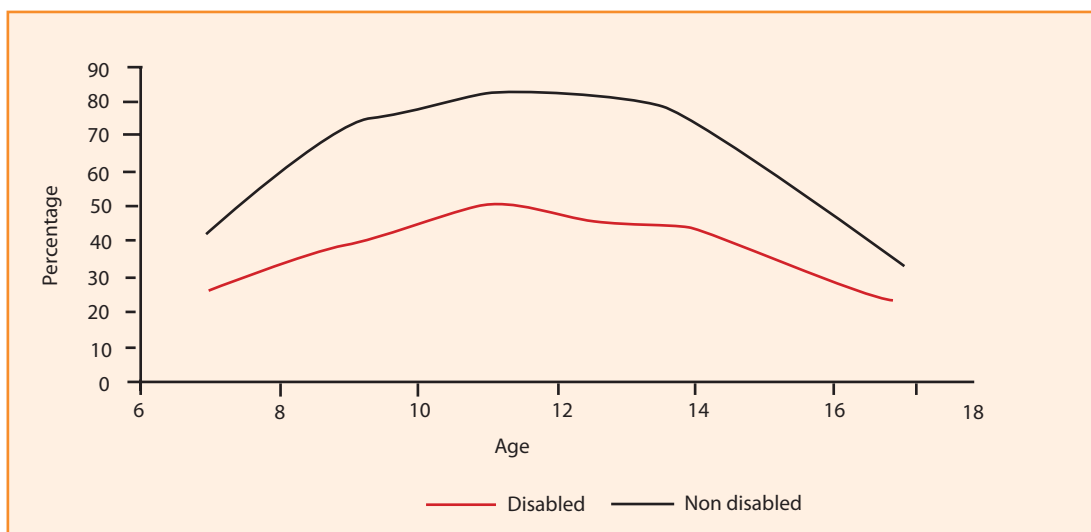
Figure 4. Attendance of orphans in primary/secondary schooling, 2002



Source: NBS (2003), Census 2002

²¹ An important finding of the 2000/01 HBS was that attendance of children in the poorest households may have declined over the 1990s. Only 50 per cent of children aged from age 7 to 13 from the poorest households were in school compared to 66 per cent from better off households.

Figure 5. Attendance of children with disabilities in primary/secondary schooling, 2002



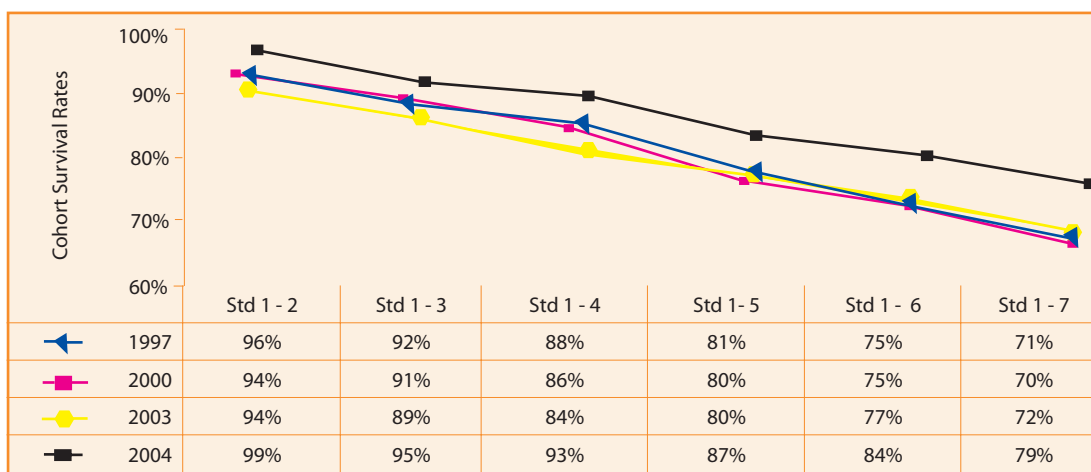
Source: NBS (2003), Census 2002

QUALITY OF PRIMARY EDUCATION

Several indicators of quality of education have been examined: retention rates and indicators of an enabling environment – pupil-teacher, pupil-desk and pupil- classroom ratios.

Retention rates²² for 2003 were not very different from those observed in the pre-PEDP years (see Figure 6). Between 2000 and 2003, only around 70 per cent of the students who had entered Standard 1 completed Standard 7. Rates for 2004 however, reflect a dramatic improvement in the retention of the cohort. Compared to 2003, there was a 10 per cent increase in retention.

Figure 6. Cohort retention rates in primary school, overall, 1997-2004.



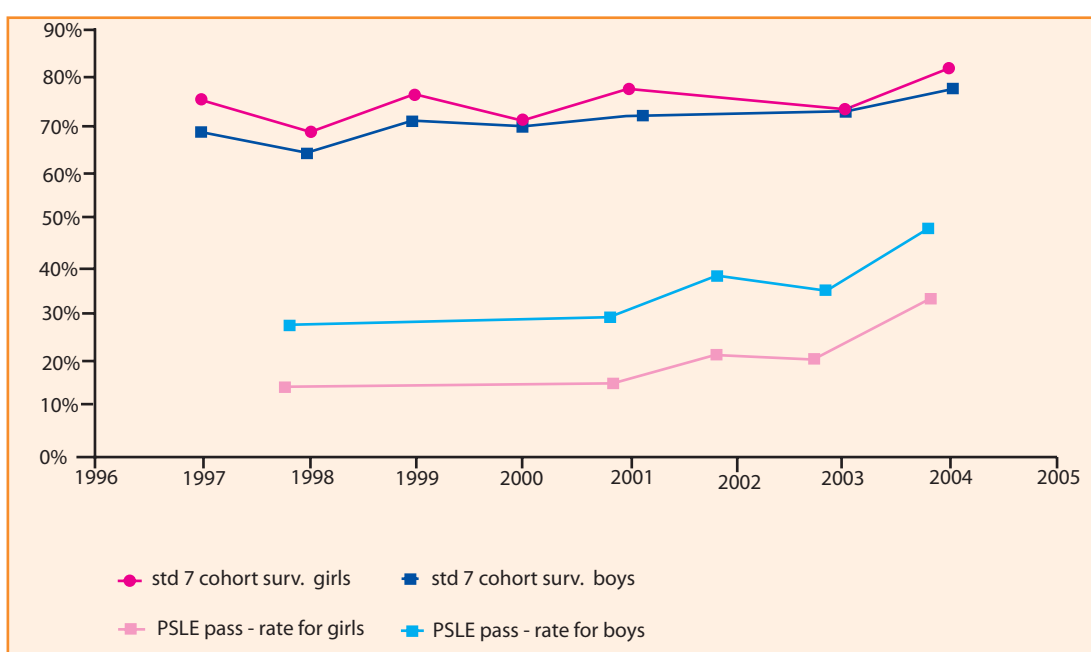
Source: MoEC: BSE 1997-2004

²² These estimates of cohort retention rates are based on actual progression, dropout and repetition rates observed during a period of time and applied to a hypothetical cohort of children enrolled in Standard 1.

Compared to boys, the retention of girls within primary education appears to be marginally better (see Figure 7 and Appendix Tables A.4 and A.5). But there remain concerns regarding the performance of girls in Standard 7. Primary School Leaving Examination (PSLE) pass rates for boys have always been much better than for girls. Between 2000 and 2004, boys' performance exceeded girls' by about 15 percent. From 1997 to 2002, the overall pass rates fluctuated from between 20 and 30 per cent, with a substantial increase of 33 per cent from 2002 to 2003.

Follow-up work is warranted to provide insight into the possible underlying reasons behind this sudden and dramatic improvement from 2003 to 2004 - in retention and in PSLE pass rates, and generally in the variable performance between girls and boys.

Figure 7. Standard 7 cohort retention rates for boys and girls, and PSLE pass rates, 1997-2003



Source: MoEC: BSE 1997-2004

Three enabling environment indicators: pupil-teacher, pupil-desk and pupil-classroom ratios, reflect the conduciveness of the teaching environment and are indicators of the quality of education delivered. As indicated in Table 7, PEDP has been very successful in constructing new classrooms. The number of pupils per classroom decreased from 82 in 2002, to 73 in 2004. The number of new desks has also kept pace with the increasing number of pupils. However, enrolments have outpaced the hiring and training of new teachers, and the number of pupils for each teacher has increased on average from 54 in 2002, to 59 in 2004.

Overall, qualified teachers in primary schools, defined as those with a diploma or Grade A teachers, increased from 50 per cent of the total number of teachers in 2001 to 58 per cent

in 2004, a relative increase of 16 per cent. This increase in qualified teachers is not uniform across regions; it is more pronounced in Arusha, Dar es Salaam, Iringa, Kigoma, Mbeya, Lindi and Shinyanga (a more than 20 per cent increase), with hardly any changes in Kilimanjaro and Singida (less than 5 per cent) (see Appendix Table A.6). To assess access to quality teachers, it is important to consider the change in the ratio of pupils to qualified teachers. Primary pupils in only two regions experienced increased access to qualified teachers (in Dar es Salaam and Shinyanga). For most regions the situation has worsened. The number of pupils without qualified teachers has increased over the past three years. The situation is particularly acute in Mara and Mtwara which experienced a more than 30 per cent increase in pupil/qualified-teacher ratio.

Another very important indicator of an enabling learning environment is the pupil to textbook ratio. Results of the 2004 Public Expenditure Tracking Study (PETS) on primary education showed a decrease in the number of textbooks available in classrooms during the first two post-PEDP years compared to the pre-PEDP years (REPOA & MoF, GoT, 2004: 55). During this time a substantial amount of the funds sent to councils for the purchase of textbooks was not used in a timely fashion for this purpose.

In the Policy and Service Satisfaction Survey of 2003, almost half (45 per cent) of all parents interviewed were concerned about poor examination performance, and about 40 per cent mention the shortage of teachers, a lack of textbooks and large classes²³ as constituting "major problems" still facing the basic education system. When asked what the government should do to improve the education system, over 90 per cent said providing more textbooks was "very important." The main problems identified affect poor parents more than the better off, in particular poor examination results (REPOA 2003). A lack of clean water and toilets is also of concern, especially to poor, rural parents. A third of all parents are concerned with transparency in the use of money. Focus group discussions with parents of children attending schools in Kilombero and Ulanga DSS indicate that most are concerned with the lack of transparency in the use of funds from community contributions (Msechu & Mtenga 2005).²⁴

Only 1 per cent of the PSSS respondents reported having paid a bribe to a teacher or head teacher in the previous 12 months - the lowest for the five sectors that were surveyed (police, health, judiciary and local government, listed in descending order of reported corruption). In the 2003 Afrobarometer survey, 45 per cent of the respondents thought there was "some corruption" in the education sector, an increase from 36 per cent in the 2001 survey. However, education scored 'below' the other sectors covered, namely (in descending order with the sector showing most corruption first) elected leader, government officials, police, customs officials, judges and magistrates, Tanzanian businessmen and foreign businessmen.

Altogether, the audits of the Ministry of Education have improved since the early nineties (TGNB 2005). After receiving an 'Adverse' opinion in Fiscal Years 1999 and 2000, the Ministry received a 'Qualified' opinion in the next three years. The share of expenditure questioned was down to less than 1% in Fiscal Year 2003. Fiscal Year 2002 was also the only year in which the Ministry of Education had a higher share of questioned expenditure than the national average, 7 per cent versus 4 per cent.

²³ In a study in Kinondoni District, the average number of pupils per classroom space in sample schools rose from 126 in 1999/2000 to 171 in 2000/2001, and decreased to 145 and 130 in the two subsequent years; sample schools had a range of 40 to 60 pupils per stream (TCDD 2003).

²⁴ Even though some financial reports are posted on school boards, they are not in places that are easily accessed by the community and not in a format that can be easily understood by most community members given the low literacy levels.

In summary, routine information pertaining to the quality of education is mixed. On the one hand many more classrooms have been constructed, but availability of textbooks and qualified teachers, compared to the increased numbers of pupils, has worsened over the past couple of years. On the other hand there are dramatic improvements in the reported PSLE pass rates.

ENROLMENT IN SECONDARY EDUCATION

Gross and net secondary school enrolment rates²⁵ are recent additions to the list of poverty monitoring indicators. As shown in Table 7, the overall gross and net secondary enrolment increased from 10 to 12 per cent, and from 6 to 8 per cent, from 2002-2004, respectively.

An inadequate number of secondary schools was noted to be one of the key bottlenecks for secondary school enrolment. Following the successful implementation of PEDP in primary education, secondary education followed with its SEDP in the financial year 2003/04, focusing primarily on increasing the number of places in secondary schools to absorb the growing output of primary pupils. Available official figures for Form I enrolment in public and private schools indicate an absolute increase of almost 50 per cent from between 2003 and 2004 (see Appendix Table A.7).

Despite the much poorer performance of girls in PSLE, Form I enrolment data for 2004 suggest a near gender balance at entry level (see Appendix Table A.7). After Form IV however, the retention of girls drops substantially, and decreases further to a ratio of 2 boys to 1 girl in Form VI.

Of concern is the overall low transition from Form IV to Form V. Only 30 per cent of the 2003 Form IV cohort entered Form V in 2004. This could be for several reasons, including an inadequate number of available places, poor performance and inability to pay school fees.

QUALITY OF SECONDARY EDUCATION

Data in Table 9 suggest substantial improvement in Form IV results from 2001 to 2003 in each of the Division I to III. In 2001 and 2002, boys reportedly performed much better than girls in each of the three divisions. Disaggregated data for 2003 are not available.

Table 9. Certificate of secondary education examination results, Divisions I to III,

Year	Division (per cent passed)								
	I			II			III		
	All	Male	Female	All	Male	Female	All	Male	Female
2001	3	4	1	4	5	2	12	15	8
2002	4	6	2	6	7	3	15	17	12
2003	8	-	-	8	-	-	24	-	-

Source: MoEC: BSE 2001-2004

²⁵ In calculating these rates, it is assumed that the target population of Form I to Form IV students are between 14 and 17 years of age.

ADULT LITERACY

Literacy rates estimated from 2002 census data are comparable to HBS estimates (2000/01), though census rates were slightly lower (see Table 7). Males generally fare much better than females. The overall adult literacy rate (for 15 year-olds and older) is 78 per cent for males and 62 per cent for females. Literacy rates in the younger age group (15-24 years) are 81 per cent and 76 per cent, respectively – higher rates overall and with a much smaller gender differential.

CONCLUSIONS AND RECOMMENDATIONS

Summary of progress

Much of the information presented in this section is based on routine data from the Ministry of Education and Culture, and the conclusions are not different from those of the last PHDR in 2003.

PEDP has raised enrolment rates in primary school, and now SEDP is raising them in secondary. Actual primary attendance rates are lower than enrolment, with little gender differential, though boys tend to be in school at an older age than girls. Children with disabilities are much less likely to be in school than other children. Available survey and census data show little difference in attendance by younger, orphaned children compared to those who are not orphaned. After the age of 9, slightly smaller proportions of orphaned children are attending.

Issues of quality remain a concern. Though the number of classrooms and desks has increased with the higher number of children in school, the ratio of teachers to pupils has not kept pace with increased enrolment.

Nonetheless, estimates of the retention rate (the proportion of children enrolled in standard 1 who stay through standard 7) and the reported primary school leaving examination pass rates, both show improvement in 2004.

Policy and operational issues identified

Strategies are needed to facilitate access and enrolment of disabled children in school.

Many more teachers are needed to reduce pupil-teacher ratios, and continued training and retention of trained teachers is important so that the proportion of teachers who are qualified continues to increase.

More books are needed, and pupils' access to books needs to be more systematically reported through routine information systems and/or through more systematic tracking surveys.

Recommendations for indicators and monitoring systems

Information about early childhood and pre-schools is lacking, and needs to be included in routine data systems as well as in periodic surveys and population censuses.

For secondary and tertiary education, data for indicators of quality are lacking.

Much more information is needed from surveys and qualitative studies to shed light on the reasons for children's non-attendance, once enrolled in school, and strategies are needed

to facilitate higher levels of attendance.

Similarly, more systematic information is needed for tracking and research purposes and for communicating to a wider public. To understand and effectively address performance, the differences in performance between boys and girls, between different social and economic groups, and geographic differences, the following data are needed:

- an assessment of the flow of finances
- the availability of teachers
- the availability of critical teaching and learning inputs (especially books)
- the involvement of parents in school management committees

In addition, the reasons for recent improvements in retention rates and examination results need to be better understood.