

**DIVISION OF
POLICY AND
PLANNING**

WORKING PAPERS

**UNIVERSAL PRIMARY
EDUCATION:
REACHING THE UNREACHED
IN CAMBODIA**

**FINAL ASSIGNMENT: UNICEF-
MAASTRICHT GRADUATE SCHOOL OF
GOVERNANCE
EVIDENCE-BASED POLICY ANALYSIS
AND ADVOCACY**

**CHANDER BADLOE, JOHN FLANAGAN,
RADHIKA GORE, TOMOO HOZUMI,
KATRIN IMHOF, PERSEVERANDA SO**

UNICEF EAST ASIA AND THE PACIFIC

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Executive Summary

Achievements in access and participation in primary education show positive trends in Cambodia. The policy environment has been progressive and the government has shown commitment at the policy level towards achieving primary education goals. But gaps in results remain. This paper identifies the children who are not being reached with respect to universal primary education (UPE) in Cambodia, highlighting socio-economic disparities across the population. It analyzes the supply- and demand-driven factors that affect the achievement of UPE and examines relevant policies. The paper concludes with policy options to include hard-to-reach populations, specifically children from poor, rural, and remote areas and ethnic minority groups.

Key words - Universal primary education, education policy and Cambodia

Les accomplissements dans l'accès et la participation à l'éducation primaire montrent des tendances positives au Cambodge. L'environnement de politique a été progressif et le gouvernement a montré l'engagement au niveau de politique vers réaliser des buts dans l'éducation primaire. Mais les lacunes dans les résultats demeurent. Cet article identifie les enfants qui ne sont pas atteints de l'éducation primaire universelle (UPE) au Cambodge, accentuant des disparités socio-économiques à travers la population. Il analyse les facteurs supply- et demand-driven qui affectent l'accomplissement d'UPE et examine des politiques appropriées. Le papier conclut avec des options de politique pour inclure les populations dur-à-atteindre, spécifiquement enfants des régions pauvres, rurales, et éloignées et des groupes des minorités ethniques.

Mots clés - éducation primaire universelle, politique d'éducation et Cambodge

Los logros alcanzados en el acceso y participación en educación primaria en Cambodia muestra una tendencia positiva. El contexto político ha sido progresivo y el gobierno ha demostrado el compromiso político para alcanzar la meta de la educación primaria. Sin embargo, aún quedan brechas. El documento identifica a los niños y niñas que no se están beneficiando de la educación primaria en Cambodia, evidenciando las disparidades socioeconómicas entre la población. Se analiza los factores derivados de la oferta y de la demanda educativa que limitan los alcances de la universalización de la educación primaria y se examinan las políticas más relevantes. El documento concluye con opciones de políticas para incluir a la población más excluida, especialmente niños y niñas de áreas rurales y apartadas y minorías étnicas

Palabras claves: Educación Primaria Universal, Política Educativa y Cambodia

1 Introduction

1.1 Background

Cambodia's economic and social indicators illustrate significant progress since the signing of the 1991 Paris Peace Accords. In primary education, achievements in access and participation show positive trends. The government has demonstrated commitment at the policy level towards achieving goals in universal primary education (UPE).

The net enrolment ratio (NER) has increased from 53 per cent in 1997 to 76 per cent in 2004 and the gender gap in NER narrowed from 11 percentage points to 2 percentage points during the same period. The government administrative data show much higher NER figures of 78 in 1997 and 92 per cent in 2004¹.

Table 1: Net Enrolment and Completion Rate – Cambodia 1997 to 2004 (household survey data)

Net Enrolment Rate (%)						Completion Rate (%)		
1997			2004			2001		
Girls	Boys	All	Girls	Boys	All	Girls	Boys	All
48%	59%	53%	75%	77%	76%	70%	80%	75%

Despite this significant progress, enrolment in primary school is still far from being universal, with a quarter of children of eligible age not yet enrolled. Moreover, a quarter of children who are enrolled do not complete primary education.

The second Millennium Development Goal (MDG) seeks to “Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling”. MDG 2 defines universal primary education not in terms of enrolment but completion – rightly so as children will not be able to acquire life-long capacity of literacy and the foundation for further learning unless they complete minimum five to six years of primary education. In that sense, achieving universal primary education in Cambodia still remains an unfinished business.

As Tandon (2006) observed of countries in Asia, some of the most significant enrollment deficiencies within countries occur at the bottom end of the income distribution. Yet the ‘unreached’ are also characterized by factors other than income poverty, such as ethnicity, geographic location, gender, and disability, among others.

The progress of primary education in Cambodia attests to this view. After several decades of political unrest, Cambodia remains one of the least developed countries in East Asia. Its gross

¹ There are substantial differences in data on net enrolment rate and completion rate between the regular reporting from the Education Management Information System (EMIS) of the Government and independent household surveys. The EMIS shows substantially higher enrolment rate and lower completion rate compared with the household survey. Please see Annex 1 for explanations on data on enrolment rates.

domestic product per capita is estimated at approximately 1,400,000 Riel or \$339 in 2005, and about 35 percent of the total population of 13.09 million lives below the poverty line (Cambodia DHS, 2006). A large proportion of the population - 85 percent - lives in rural areas. Agriculture, mainly rice production and small-scale subsistence agriculture, is still the main economic activity for a majority of households.

1.2 Objectives and methodology

The objective of this paper is firstly, to analyze the situation of children who are unreached with respect to full six years of primary education in Cambodia and secondly, to suggest strategies and policies to address this situation. It attempts to answer the following questions:

- (a) What supply and demand-driven factors would explain why some children remain unreached by primary education in Cambodia?
- (b) How effective are current government policies to reach the unreached children with primary education in Cambodia? What additional policy options could be recommended to bring unreached children into primary schools, and in the process bring Cambodia closer to achieving UPE?

In the context of this paper, “access” to primary education encompasses both enrolment and completion. The paper relies on analysis of secondary data and existing studies to answer the two questions. Sources of data include government statistics, Demographic and Health Surveys, UNICEF, UNESCO, World Bank, and the Asian Development Bank. No primary data were collected for this study.

2 Identifying the Unreached

2.1 Who are the Unreached Children?

As described in its technical guidelines for Asia and the Pacific, the Education for All Mid-Decade Assessment (MDA) has the over-arching theme of disparities (UNICEF, UNESCO, and UIS, 2006). The MDA will be used to identify disparities and inequities in access to quality education at the sub-national level, highlighting the unreached target population groups and unattained goals.

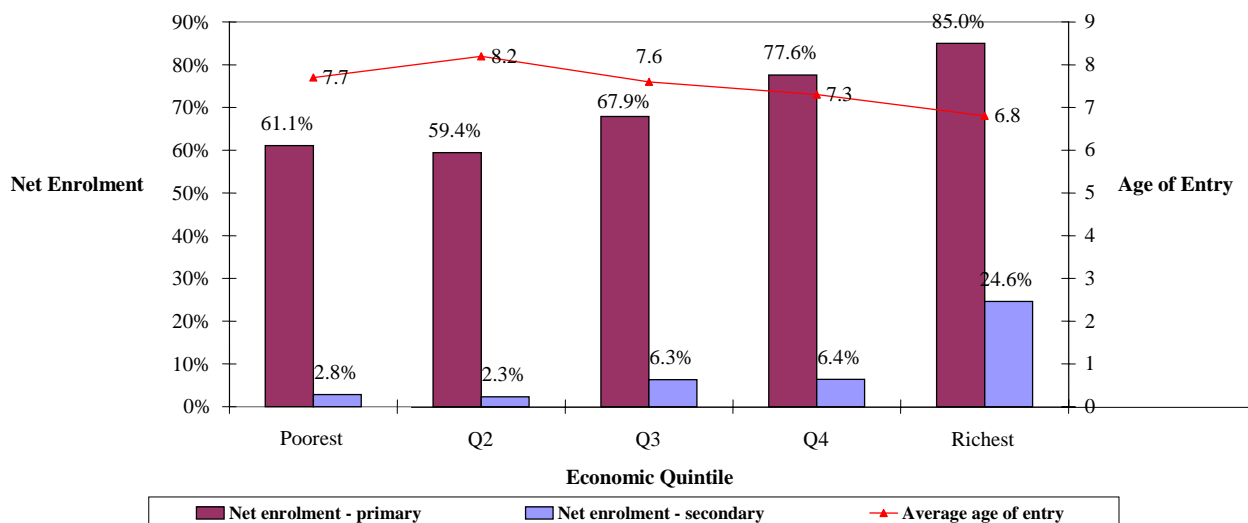
The analytical framework of the MDA describes the children who are unreached with respect to primary education according to their economic, social, ethnic, and regional characteristics as well as types of vulnerability. This section identifies the children unreached in Cambodia. It draws upon the MDA categories, which include the following:

- Gender: Male-female
- Regional: Sub-national administrative units, urban-rural, or less or more developed geographical units.
- Social: Occupation, socio-economic status, or legal status such as birth registration and citizenship.
- Ethnic: Ethnicity, religious affiliation, or language minorities.
- Vulnerability: Orphans, working children, children affected by HIV/AIDS, children affected by conflict, or migrants.
- Disability: Children with disabilities.
- Education source: private, public, and faith based; formal, non-formal, and community based.

2.1.1 Economic status

There are clear and substantial disparities in both enrolment in and completion of primary and secondary education depending on the economic status of households. Figure 1 shows differential access to basic education in Cambodia by economic quintile as of 2001. Children from the bottom quintiles have lower net enrolment rates in both primary and secondary education. Moreover, poor children are over-represented amongst those population groups excluded due to social and geographic factors, such as ethnic minorities and communities living in remote, rural areas.

Figure 1: Disparity in Access to Education by Economic Quintile, Cambodia Child Labour Survey 2001



Source: Prepared based on the data from the Government of Cambodia (2001).

2.1.2 Gender

In Cambodia, women have markedly less education than men do. The literacy rate of females in the age group of 15 years old and above is 60 per cent as compared with 80 per cent for males as of 2004 (Government of Cambodia, 2004b).

However, gender disparity has been diminishing in primary education. The difference in the net enrolment ratio in primary education between boys and girls was 11 percentage points in 1997 and declined to 2 percentage points in 2004 according to household surveys. The gender gap in primary completion rates also showed marked decline from 7.4 percentage points to 1.3 percentage points during the same period according to the data from the Education Management Information System (EMIS) (Government of Cambodia, 1996-2006). (Figure A1). One of the causes for this decline could be that there is little difference in the time use patterns of boys and girls (Cambodia Child Labour Survey, 2001).

While the evidence of narrowing gender disparity in primary education is encouraging, a critical issue is the significant gender disparity which starts in lower secondary education and continues to widen through upper secondary and tertiary levels. In the school year 2003/2004, the ratio of female students vis-à-vis their male counterparts was 47 per cent at the primary level, 42 per cent at the lower secondary level and 37 per cent at the upper secondary level (Government of Cambodia, 2003-04). The analysis of gender disparity in secondary and higher education is not taken up in this paper.

2.1.3 Geographic location

In Cambodia, 85 per cent of the population was based in rural areas as of 2004 (Government of Cambodia, 2004a). Table 2 shows the disparity across urban and rural areas with respect to access to primary education. Rural provinces include Koh Kong, Mondulhiri, Preah Vihear, Ratanakiri, and Stung Treng, where the proportion of non-enrolled children is particularly high.

Table 2: Province-wise Percentage and Absolute Number of Non-Enrolled Children Aged 6 to 11 Years, School Year 2004-05 (EMIS Data)

No.	Province	% non-enrolment	Population of children 6 to 11 years	Estimated population of children out of primary school	No.	Province	% non-enrolment	Population of children 6 to 11 years	Estimated population of children out of primary school
1	Kampong Chhnang	3.4%	74,877	2,546	13	Pailin	8.3%	9,108	756
2	Kandal	4.2%	154,193	6,476	14	Phnom Penh	8.4%	113,359	9,522
3	Sihanoukville	4.5%	26,616	1,198	15	Svay Rieng	9.2%	93,695	8,620
4	Siem Reap	4.6%	128,208	5,898	16	Kampong Speu	10.1%	117,910	11,909
5	Takeo	5.1%	151,598	7,731	17	Stung Treng	10.2%	16,316	1,664
6	Kep	5.3%	5,790	307	18	Otdar Meanchey	11.1%	26,284	2,918
7	Banteay Meanchey	6.3%	102,078	6,431	19	Preah Vihear	11.8%	23,565	2,781
8	Kratie	6.3%	45,285	2,853	20	Kampong Cham	12.7%	300,380	38,148
9	Prey Veng	7.6%	167,084	12,698	21	Pursat	15.8%	75,323	11,901
10	Battambang	7.7%	164,573	12,672	22	Mondul Kiri	20.5%	7,417	1,520
11	Kampong Thom	7.7%	106,179	8,176	23	Koh Kong	21.7%	28,133	6,105
12	Kampot	8.2%	102,007	8,365	24	Ratanak Kiri	32.5%	22,569	7,335
Cambodia		8.7%	2,062,547	178,529					

Source: Calculated from the Government of Cambodia (1996 to 2006).

Moreover, there is greater disparity in enrollment in provinces that have “remote” areas. Remote districts are defined by the Ministry of Education, Youth and Sport (MoEYS) as located in isolated areas where communication with and transportation to schools is difficult and where the population density is less than 10 persons per square kilometre. Ten of the 24 provinces in the country have remote areas, and seven of these ten are in the lowest poverty quintile (Fayaud, 2003). A majority of the provinces towards the bottom of the list in Table 2, that is, provinces that have a high proportion of children not enrolled in primary school, also have remote areas².

In school year 2005-2006, 513 primary schools in Cambodia were in these remote areas, providing primary education to roughly 94,000 children or four per cent of total primary school students. The primary net enrolment ratio in remote areas was 7 percentage points lower than the national average of 91 percent according to EMIS data (Fayaud, 2003). The repetition rate in remote schools was 17 per cent in school year 2004-2005, compared with the national average of 12 per cent.

The enrolment and repetition rates indicate that children who live in rural and remote areas are disadvantaged in access to primary education.

2.1.4 Ethnicity

² The percentage figures on non-enrolment in this table are taken from the EMIS and subject to the constraints mentioned in Annex 1. The data are used to show the geographical pattern of non-enrolment issue rather than their absolute level.

There are reportedly 36 ethnic minority groups in Cambodia accounting for about 4 per cent of the population (World Bank, 2005a, p74). These groups tend to live in remote areas in the north eastern part of the country. There are not much education-related data specific to ethnic minorities. However, the existing data indicate that the education status of ethnic minorities is much lower compared to national averages. Enrolment data in Table 2 show substantially higher level of non-enrolment rates in provinces of Ratanakiri and Mondolkiri, two remote provinces which are predominantly inhabited by ethnic minorities and where literacy rates are lower than the national average (see Table A 1).

Children who belong to ethnic minority groups are unreached by dint of their relatively higher poverty levels and remote location. To varying degrees, ethnic minority groups in Cambodia face particular problems in terms of language barriers which constrain their access to social services such as schooling and healthcare (World Bank, 2006, p43).

2.1.5 Vulnerability and disability

According to the Cambodia Socio-Economic Survey 2004, only 2.3 per cent of those children who have completed upper secondary education or higher report one or more disabilities compared with 7.4 per cent of those who have no schooling. This indicates that children with disabilities are likely to have lower than average enrolment and completion rates, other factors being equal (World Bank, 2006, p.103). However, the topic is not covered in this paper as not much large-scale and comprehensive data exist on the topic in Cambodia.

Similarly, there is a high probability that children affected by HIV/AIDS are disadvantaged in terms of access to primary school. However, due to data constraints, this topic is not taken up in the present analysis.

2.1.6 Education source

Sources of education range from private, public, and faith-based schools operated by pagodas, and forms of education can be formal, non-formal, or community based. EMIS does not collect and report data on private primary schools, but summary observations show that private schools cater to a small proportion of children and are located mostly in Phnom Penh. The situation however may change quickly in the coming years as the economy improves and richer families seeking better quality education for their children turn to private schools.

Faith-based primary education classes run by pagodas comprise less than 0.1 per cent of total classes in Cambodia (EMIS, 2005-2006). This paper does not investigate the enrolment and outcomes in these schools. It concentrates on children unreached in formal education and does

not account for those who may be reached by non-formal education services offered by community-based organizations and NGOs.

2.2 *Factors that explain exclusion from primary education*

Section 2.1 identified the key groups of children “unreached” in primary education as those who are poor, live in rural and remote areas, and belong to an ethnic minority. This section further analyzes the exclusion of these groups of children from primary education, that is, it discusses the factors that influence access to education and how these factors play out in determining education outcomes for Cambodian children. The factors are categorized into two groups: supply-side and demand-side factors.

The supply-side factors concern the overall level of priority and allocation of resources accorded to primary education. The paper looks into the status of selected supply-side factors in Cambodia, i.e. a) share of primary education budget vis-à-vis the total government budget and total government education budget; b) government expenditure per primary school student; c) teacher-pupil ratio; and d) percentage of “complete schools”, that is, primary schools that have the full six grades. These indicators are selected as proxies of the level of resources and the key software and hardware inputs provided to primary education sector.

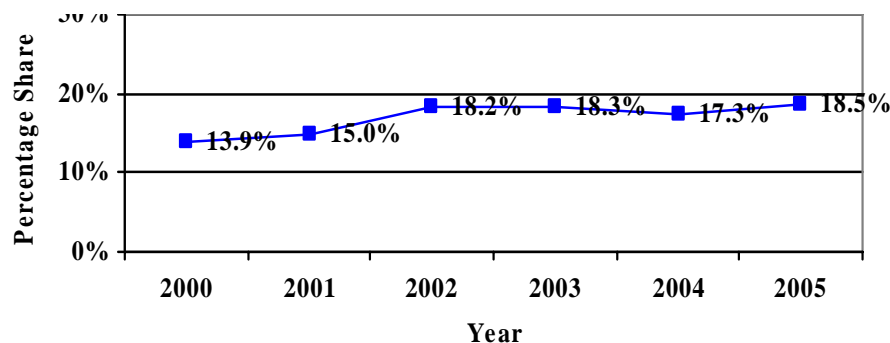
The “demand-side factors” concern socio-economic characteristics of specific groups of children who are currently most “unreached” with primary education. The paper will focus on three exclusionary factors, namely: a) poverty; b) geography; and c) ethnicity.

3 Supply-side factors

3.1 *Public expenditure on primary education*

The level and consistency of public spending on social sectors is an important determinant of social outcomes. In this respect, in Cambodia, public expenditure on education overall and on primary education in particular has been steady. Figure 2 shows the percentage share of the government recurrent budget for education vis-à-vis the total government recurrent budget between 2000 and 2005. The education budget has grown on average 6.6 per cent annually and gained one of the largest shares across the various sectors.

Figure 2: Percentage Share of Government Education Recurrent Budget vis-à-vis the Total Government Education Budget



Source: Government of Cambodia (2006).

In terms of expenditure within the education sector, primary education received consistently more than 60 per cent of the total education budget between 1997 and 2002 (see Figure A2). Together with lower secondary education, basic education has been allocated 80 to 84 per cent of total education budget in Cambodia, which is higher than more developed countries in the region. For instance, spending on basic education was 74 per cent of the total education budget for Thailand and 68 per cent for China (World Bank and Asian Development Bank, 2003, p.142). Cambodia's higher level of basic education spending reflects the relatively greater distance it needs to cover in terms of enrolment rates.

During the same period, resource allocation to primary education increased in not only relative but also absolute terms. Public expenditure per pupil for primary education rose by 150 per cent between 1997 and 2002, from 26,050 Cambodian Riels to 66,024 Cambodian Riels (World Bank and Asian Development Bank, 2003, p. 47).

While these trends in public spending are positive, a quarter of all children of eligible age are not enrolled in primary school. Addressing their needs involves resolving issues of distance from school, school infrastructure and facilities, and numbers and training of teachers, particularly for access to primary education in remote, rural areas and poor provinces. Reaching children in these regions will require additional efforts and resources, as is discussed further below.

A study of education policy impact over the 1990s in twenty countries noted that despite the increased financing for education and some progress made during that period, many countries were not on track for meeting the Dakar goals set in 2000 (World Bank, 2002). The case studies dealt with areas important to the achievement of Education for All (EFA) goals, such as school construction, user fees, language of instruction, textbooks, school grants, assessment of student learning, EFA planning, and girls' education. The study emphasized that:

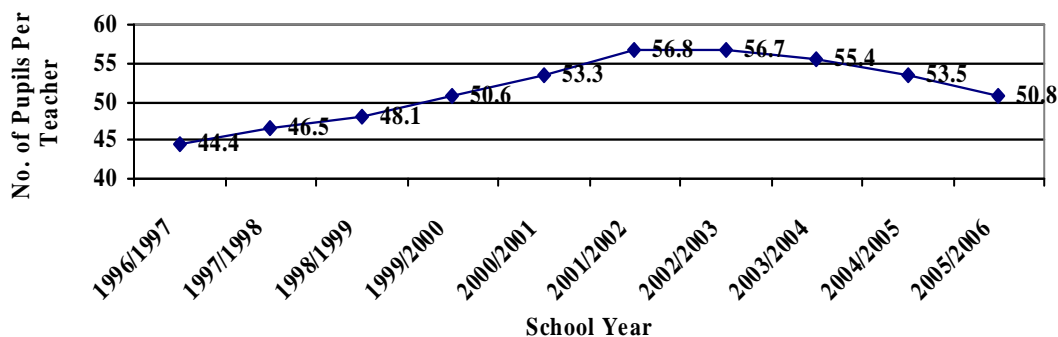
- “achieving EFA goals means addressing the inequitable distribution of educational opportunities in-country. EFA goals will not be achieved by simply accelerating programs to expand access.
- if the expansion of education systems to meet access goals undermines learning outcomes, then even this achievement will be fleeting. Many developing countries appear to have systematically under-invested in quality (World Bank, 2002, p.3).”

The experience in Cambodia is similar: Though investment in education has helped to increase the net enrolment rate in Cambodia by over 20 percent over the period 1997 to 2004, a substantial number of children are still denied education opportunities, particularly those children identified above as unreached. Policy options are discussed in Section 5.

3.2 Pupil-teacher ratio

Figure 3 shows the change in the pupil-teacher ratio in primary education between 1996 and 2005. The ratio worsened between 1996 and 2002 as the recruitment of additional teachers did not keep pace with the substantial increase in enrolment. There is also substantial spatial discrepancy in pupil-teacher ratio with poor regions of the country having a much higher ratio. Pupil-teacher ratios in schools in the poorest 300 communes averaged as much as 79 pupils per teacher compared with 46 in schools in the richest 300 communes (World Bank, 2006, p.101).

Figure 3: Pupil-Teacher Ratio in Primary Education



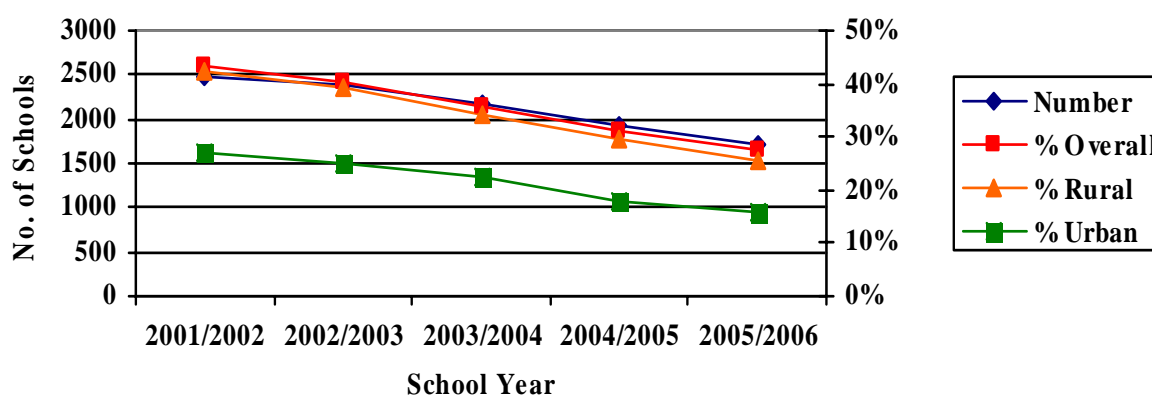
Source: Government of Cambodia (1996 to 2006).

The pupil-teacher ratio in Cambodia does not compare favourably with that of other countries in the region (see Table A2). Cambodia has one of the highest pupil-teacher ratios in the region, between 1.8 to 2.9 times more than other countries. The high pupil-teacher ratio has a direct influence on attendance and learning outcomes, and it particularly affects those children living in underserved areas of the country.

3.3 School infrastructure

The quality of physical infrastructure in the education sector has improved substantially since late 1990s. One example of this is the decline in the number and percentage of “incomplete schools”, as shown in Figure 4. Incomplete schools are those schools that do not offer the full six grades of primary education because they lack classrooms or teachers. The number and proportion of incomplete schools have been steadily declining, and most villages in Cambodia now have primary schools within their boundaries.

Figure 4: Number and Percentage of Incomplete Schools



Source: Government of Cambodia (1996 to 2006).

While this is a positive development, yet at the same time, a third of all primary schools in the country are still incomplete, a majority of which are located in rural and remote areas. According to Fayaud (2003), the percentage of primary schools that were incomplete in remote areas was as much as three times as that in urban areas. In 2003/2004, the provinces of Koh Kong, Kratie, Monduliri, Preah Vihear, Ratanakiri, and Stung Treng had high levels of incomplete schools. The six provinces had an average of 85 percent compared to the 36 percent national average (Asian Development Bank, 2004) (see Table A3).

Incomplete primary schools greatly hinder children’s access to and completion of primary education. According to the Asian Development Bank (2004), the prevalence of incomplete schools in Cambodia is the most significant factor in high levels of dropout and repetition rates.

4 Demand-side factors

4.1 Poverty

Three inter-related factors play a critical role in translating the situation of poverty into poor performance in primary education in Cambodia. These are (i) child labour; (ii) direct costs and indirect or opportunity costs of child schooling; and (iii) late entry into primary school.

4.1.1 Child labour

According to the Cambodia Child Labour Survey, about half of all children aged 7 to 14 years in Cambodia were economically active in 2001, which is much higher than other countries with similar income level (ILO, UNICEF and World Bank, 2006). The onset of child labour is very early, some starting even before school age. Together with the demands of substantial domestic work, this economic activity delays the probability that a child will begin primary school by the official school entry age of six. For instance, among boys, involvement in productive work and domestic work reduces the probability of entering school by the official entry age of six years by 17 per cent and 13 per cent, respectively (ILO, UNICEF and World Bank, 2006, p.35).

While a majority of working children of school-going age attend school, their workload is intensive, with an average of 22 hours of economic activity each week for children aged seven to 14 years³. This heavy workload negatively affects children's learning achievement. Child labour not only disrupts timely entry into school, which can affect prospects for completion, but the burden of economic activity also interferes with learning outcomes.

4.1.2 Costs of child schooling

Household financing of basic education is high in Cambodia. In 2004, out of the combined resources of households and government, households contributed 56 percent towards the direct cost of sending a child to primary school, reduced from an even larger 77 percent in 1997. Households bear a disproportionately high economic burden when sending their children to primary school. However, what may be more important are the indirect or opportunity costs of child's schooling in the form of foregone wage earnings. A child's earnings and share in total household labour income increase sharply with the age of the child regardless of sex.

The Cambodia Child Labour Survey 2001 reports that average daily wage in Cambodia more than doubles for older children: the average daily wage increases from 1,594 Riels among

³ In addition, there is non-economic activity that adds an average of nine hours per week to the total work burden of economically active children aged seven to 14 years. ILO, UNICEF and the World Bank (2006), p.28.

children aged 6 to 11 years to 4,354 Riels among children aged 15 to 17 years (ILO, UNICEF and the World Bank, 2006, p34). The high opportunity cost of schooling in terms of foregone wages poses a substantial barrier to the entry and completion of schooling for poor children.

4.1.3 Late entry into primary school

Children in Cambodia enter school substantially later than the official school enrolment age of six, averaging 7.6 years as of 2001. Only about a quarter of children who entered Grade 1 in 2001 were of the right age of six years. Coupled with very frequent repetition, the late age of entry pushed up the average age of children in primary school to 10.8 years as of 2001 (World Bank, 2005b).

This tendency is even stronger among children from poorer households. The average delay (age-for-grade distortion) of all children who are currently attending primary school (not only new entrants) is as much as 2.23 years for the poorest quintile and 1.33 years for the richest quintile. The importance of late entry in explaining the level of average delay is higher for the poor as compared with the rich. For the poor, 80 per cent of the delay is explained by late entry; for the rich, 64 per cent of delay is associated with late entry, with other factors being school progress/repetition (World Bank, 2005b, p.17).

By the time children reach upper grades of primary education, many of them are already in their mid-teens, a time when economic factors start becoming more significant in terms of both direct costs and indirect/opportunity costs of education as mentioned above. This induces very high drop-out rate particularly among poor households.

Girls are significantly affected by delayed entry into primary school. According to a World Bank study (2005), for each additional year that a girl delays school entry, her chances of remaining in school are six per cent lower, her chances of completing primary school are 60 per cent lower, and her total number of completed years of schooling is reduced by three years. The drop-out of children of poor households becomes substantial starting from Grade 4 and accelerates thereafter (see Table A4). Eventually, children from the poorest income quintile have 33 per cent lower chance of completing primary education than children from the richest income quintile.

One of the reasons for late entry into school may be the very high prevalence of malnutrition in Cambodia particularly among the poor. The percentage of stunted children under five years of age was 53 per cent for the poorest quintile and 28 per cent for the richest quintile (Cambodia DHS, 2000). “Too small to go to school” is one of the reasons often quoted by parents for not enrolling their children in primary school at the official age of entry of six years. However, this remains a working hypothesis. Analysis by the World Bank (2005b) does not seem to show significant impact of this variable on average Grade 1 intake.

The problem of late entry into primary school has been persistent and pervasive despite initial momentum in the late 1990s. The percentage of overage intake in Grade 1 increased substantially between the school years 1998/1999 and 2001/2002 as shown in Figure A3 (EMIS). This coincides with the period of rapid expansion of the school system in Cambodia and is due to the fact that older pupils started school in regions that previously did not have education facilities⁴.

In recent years, there seems to be stagnation in intake: Overage intake has been at more or less the same level as pre-expansion period of late 1990s. The results of the household surveys, which are more accurate in terms of age-specification⁵, show much higher level of overage intake of 72 per cent but similar stagnation in reduction between 2001 and 2004 (see Figure A4). This may indicate the recalcitrant nature of this issue in the context of Cambodia which extends beyond the period of rapid school system expansion.

In sum, while the gap in net enrolment rate between the poorest and the richest income quintiles has been narrowing (see Figure A5 and A6), there are indications that this positive trend has slowed down recently. According to the data from household surveys conducted in 1997, 2001 and 2004, the gap in enrolment between the poorest and the richest income quintiles has narrowed down from 32 percentage points to 22 percentage points, but the rate of improvement has substantially slowed down between 2001 and 2004 (see Table A5). A review of pro-poor education policies to address income disparities is taken up in section 5.

4.2 Geography

The enrolment rate grew faster in rural areas than in urban areas between 1997 and 2004. Enrolments rose by 47 per cent in rural areas and 41 per cent in urban areas, which resulted in diminishing the rural-urban gap from approx. 5 to 4 percentage points over that period, as Figure A7 shows. However, the geographical factor manifests itself not only in terms of the dichotomy of urban-rural divide but in terms of “remoteness”, as described above. Remote areas have lower net enrolment rates and higher repetition rates in primary education.

These disparities reflect the less favourable school conditions in remote areas, and together with limited non-farming job opportunities in rural and remote areas, act as a disincentive for parents to enroll children in primary school. For instance, the pupil-teacher ratio in remote areas was 56 compared to the national average of 51 in school year 2005-2006 (Ministry of Education Youth and Sport, 2006). Moreover, the general education of teachers in remote areas is significantly lower than the national average: 55 per cent of teachers in remote areas have only primary

⁴ This is a common phenomenon observed during a period of rapid expansion of a school system particularly after a period of disruption. The World Bank (2005b) pointed out similar cases in present-day Afghanistan and Angola and in the last decade in Mozambique.

⁵ Please see the explanatory note on data in the Appendix, section 7.1.

education, while nationally the proportion of teachers with primary education is only 7 per cent (World Bank, 2005a).

In addition, the percentage of incomplete primary schools in remote areas was 62 per cent as compared with 16 per cent in urban areas and 25 per cent in rural areas in the school year 2005-2006 (MoEYS, 2006). The availability of other infrastructural facilities such as safe drinking water and toilet is also substantially lower in remote areas.

Thus, the remoteness and higher poverty levels of rural provinces are associated with less favourable school conditions in these provinces. Taken together, these factors which reduce household demand for education and effectively contribute to the exclusion of children from primary education in these areas.

4.3 Ethnicity

The literacy rate of ethnic minorities is 26 per cent compared with the national average of 63 per cent. Ethnic minority groups predominantly reside in rural, remote provinces, such as Ratanakiri and Mondolkiri. Approximately 65 percent of the population of Ratanakiri province is indigenous: Tampuan, Jarai and Kreung are the largest ethnic groups in this province, and the Khmers, who otherwise constitute a majority in Cambodia, make up 25 percent of the population of Ratanakiri (CARE, 2003). Highland minority cultures are distinct from mainstream Khmer culture, as are their languages. CARE International found that in Ratanakiri, 92 percent of families in select target villages considered it important for their children to learn to read and write in their own language, but also considered it important that they learn Khmer (88 percent) (CARE, 2003).

A national literacy survey illustrated the wide gap in literacy skills between the ethnic minorities of the Cambodian highlands and those who speak Khmer as their first language (Table A1). Among the Khmer ethnic groups in the highlands, 49 percent of males and 29 percent of females were literate. Among the highland minorities in the same area, 5 percent of males and no females were literate (Chap, The, and Thomas, 2003).

The disparity in education outcomes in the highland provinces reflects the less favourable school conditions, lower level of literacy of parents, and higher level of poverty among ethnic minority communities. Ethnic minority children are more likely to work than Khmer children, particularly at younger ages (ILO, UNICEF and the World Bank, 2006). Rural poverty, higher incidence of child labour, and inadequate school conditions together negatively affect the demand for education.

4.4 *Summary of demand-side factors*

Based on the analysis so far, the following can be said on the demand-side factors examined in this section.

- (a) Poverty is a critical factor that significantly influences the effective access to primary education. While the gap in enrolment between the rich and the poor has been reduced, the gap in completion continues to be very substantial. The pace of reducing the gap in enrolment seems to have slowed down substantially since 2001. Both direct and indirect/opportunity costs of children's schooling are hindrances and they increase as children get older, particularly towards the end of primary school and beginning of lower secondary school. This causes massive dropout starting in upper primary education.
- (b) Closely related to the issue of poverty is that of late entry into primary school. While a majority - 76 percent as of 2004 - of eligible-age children do get enrolled in primary school at least once, many of them do not do so at the right age and instead delay entry by as much as 1.6 years on average as of 2001. One important cause of delayed entry is the child's involvement in both economic and domestic work, even though this is the time when the opportunity costs of children's wage and labour contributions to the household are still relatively small.
- (c) Gender disparity in access to primary education in Cambodia has diminished substantially and plays a relatively minor role in explaining the "unreached" issue at the primary school level.
- (d) The rural-urban divide in enrolment rate in primary education has been decreasing. However, the aspect of "remoteness", which is not necessarily captured in the rural-urban dichotomy, still affects access to primary education. Remoteness is often intertwined with the issues of poverty, ethnic minority status, and unfavourable school conditions, which together contrive to reduce the demand for primary education in isolated rural areas.

5 **Review of Selected Policies and Programmes**

This section will review the current government education policies that aim to promote access to primary education by disadvantaged groups of the population, namely children from poorer households, children who live in rural and remote areas, and children from ethnic minorities. While there are other groups of children who are excluded from primary education, such as orphans, children affected by HIV/AIDS, children with disabilities, and trafficked children, the present analysis focuses on education policies that are oriented to address poverty, to extend coverage and quality in rural and remote areas, and to include ethnic minorities. There are several reasons for this focus:

Firstly, these groups are likely to constitute the biggest proportion of unreached children in Cambodia, and illustrate a high level of disparities in education. As noted in a statement made

by the International Monetary Fund (IMF), “One third of the population still lives below the poverty line, and fully 91 percent of these poor live in rural areas, where the rate of poverty reduction and real per capita consumption gains have been much slower than in the urban areas. To illustrate the extent of the divide that has widened in recent years, poverty fell by one half in Phnom Penh, to 5 percent, while in the rural areas poverty fell by only one fifth, and remains well above 30 percent” (IMF, 2006).

Moreover, the greatest proportion of children not enrolled in primary school are in the poorest provinces, many of which have remote areas with a high number of incomplete schools (Asian Development Bank, 2004). These provinces have a high population of ethnic minority groups (CARE, 2003).

By focusing on pro-poor, inclusive policies oriented to rural areas, the analysis can cover a large number of disadvantaged children, as well as some of the most severely disadvantaged children, that is, those who are excluded due to multiple, overlapping factors.

Secondly, in the last four to five years, the government has clearly articulated and implemented specific policies and actions targeted to reach these groups. This is an opportune time to assess the objectives and impact of these policies, and to use the available information, data and experiences to inform future strategies.

Finally as caveat, the paper also recognizes that the disadvantaged groups are not neat discrete groups and there is likely to be a significant overlap among disadvantaged categories. For instance, children with disabilities, children with HIV/AIDS, or orphans are more likely to be out of school if they are poor. While recognizing that specific strategies are required to address each form of vulnerability or disadvantage, a policy focus on poverty, geographic location, and ethnicity will go a long way toward mitigating the overlapping, exacerbating effects of these factors.

The paper thus considers three key policy areas, as follows:

- (1) Pro-poor education policies, specifically abolition of enrolment fees and the provision of school operational budget;
- (2) Policies to reach rural and remote areas, specifically completion of incomplete schools and provision of incentives to redeploy teachers to rural/remote areas;
- (3) Policies on ethnic minority education, specifically targeted facilities programs, curriculum reform for ethnic minorities and increasing incentives for minority area staff deployment.

5.1 *Pro-poor education policies*

Reducing primary education cost burdens on households - In view of still pervasive poverty and high direct and indirect/opportunity costs of child schooling in Cambodia, the government has made “reducing cost burdens to schooling” a key education policy⁶. These aspirations were translated into the twin policies of abolition of enrolment and other informal fees and the provision of school operational budget introduced in 2000/2001. The school operational budget, given in the form of direct school grants linked to enrolment, was intended to replace the school fees imposed on households. Did these twin policies reduce the household burden on primary schooling?

While there has been no rigorous quantitative study conducted to assess the impact of these twin policies, one can reasonably expect a positive impact of these policies through the removal of practical and even more importantly psychological barriers for poor households to send their children to primary school. A few related study findings support this conclusion.

There is an indication that the abolition of the “start-of-year-school fees” in primary schools under the Priority Action Programme (PAP) of the Government in 2001 resulted in reducing the direct cost burden of education on households. The Priority Action Programme (PAP) was launched in 2000, first on a pilot basis. PAP shifted the focus of education policy towards demand-side factors. A specific purpose of this pilot was “to reduce the cost burden on the poorest families to increase participation of their children in Grades 1-9”. There are twelve PAP components, and the measures taken under the programme include the removal of registration and other school fees, provision of grants to schools for pre-determined operational expenditures to replace school fees previously imposed on households, remedial classes and scholarships. PAP accounts for 20 percent of the total education budget and 28 percent of the recurrent budget.

Although small in comparison to other expenditure categories, Cambodian households previously spent between 5 per cent (richest quintile) and 12 per cent (poorest quintile) of primary education costs on school fees in 1997/1998 (Bray and Seng, 2005, p52). However, “school fees” as a category of household education disappeared and was no longer a significant expenditure item in the 2004 household survey as shown in Table 3 below (see Figures A8 to A11 for a breakdown of household expenditure).

Studies of household financing of education in 1997/1998 and 2004 showed a dramatic reduction of household costs in primary schooling between these years. On average, households’ costs at Grade 1 in 2004 were 37 percent of their 1997/1998 levels, and the figure for Grade 6 was 46 per cent. The reduction was even more marked in real terms when the cost figures were adjusted based on consumer price index between 2000 and 2003 (Bray and Seng, 2005, p48). This

⁶ The Education Strategic Plan 2004-2008 articulates on page 15 “The long-term policy goal for education is that no potential students will be excluded from access to education and training opportunities due to inability to pay formal or informal charges or contributions. The medium-term policy is to gradually eliminate all informal contributions in basic education which are the primary cost barriers to access education for the poorest families”.

significant decrease in household costs has been attributed mainly to PAP-based operational budget provided to schools which effectively reduced the demands for school fees and other household expenditures.

Table 3: Direct Costs of Primary School Per Pupil, as Incurred by Households, 2004

(Unit: Riel**)										
No.	Expenditure Item	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Average per annum	% Share	
Urban Areas										
1	Pocket money	57,900	60,300	61,800	68,300	76,000	82,300	67,767	42%	
2	Supplementary tutoring	21,000	21,500	32,600	38,100	40,700	48,700	33,767	21%	
3	Transport	11,200	11,200	18,500	25,500	28,600	33,000	21,333	13%	
4	Uniforms and equipment	16,900	17,100	17,600	21,300	21,900	23,900	19,783	12%	
5	Learning materials	7,700	9,600	12,100	15,400	17,300	20,000	13,683	9%	
6	Other expenses	1,900	1,900	2,000	2,100	2,200	2,900	2,167	1%	
7	Registration and record books	200	200	2,500	900	400	2,500	1,117	1%	
8	Tests and examinations	100	100	800	800	800	900	583	0%	
	Total	116,900	121,900	147,900	172,400	187,900	214,200	160,200	100%	
	% vis-à-vis the poverty line income*	16%	17%	21%	24%	26%	30%	22%	-	
Rural Areas										
1	Pocket money	25,400	27,700	28,400	41,700	44,000	46,300	35,583	50%	
2	Uniforms and equipment	11,700	12,000	12,700	16,000	16,700	17,100	14,367	20%	
3	Transport	-	-	5,400	12,900	19,000	23,100	10,067	14%	
4	Learning materials	5,000	6,200	8,700	10,300	12,200	14,400	9,467	13%	
5	Registration and record books	100	100	200	1,400	200	2,300	717	1%	
6	Other expenses	400	400	600	700	700	700	583	1%	
7	Supplementary tutoring	-	-	-	-	-	3,300	550	1%	
8	Tests and examinations	-	-	-	-	-	-	-	0%	
	Total	42,600	46,400	56,000	83,000	92,800	107,200	71,333	100%	
	% vis-à-vis the poverty line income*	7%	7%	9%	13%	15%	17%	11%	-	
* Calculated by multiplying the daily poverty line income of 2004 (712,480		Riels in urban and			639,845		Riels in rural areas)	
by 365 days.										
** The exchange rate between US dollar and Cambodian Riel is approximately US\$1 = 4,000 Riels.										
Source: Calculated from the data in Bray and Seng (2005). Poverty line calculated based on data from World Bank (2006), p.21.										

5.2 Reaching rural and remote areas

Completing incomplete schools - As earlier highlighted in section 3.3, incomplete schools are major barriers to primary schooling in rural and remote areas of the country. The government in 2004 set a target of 95 per cent coverage by 2008 of additional classrooms and selective multi-grade teaching in villages and communes without complete Grades 1-6 in the Education Strategic Plan (ESP) 2004-2008—a target expressed more clearly in the updated ESP 2006-2010 as “reduced number of incomplete schools from 1,934 in 2006 to 500 by year 2010” (Government of Cambodia, 2005b, p46).

While some progress was noted in completing the incomplete schools, the rate of progress is slow. In the six most remote provinces in the country, the proportion of incomplete schools dropped from 65 per cent in school year 2003/04 to 55 per cent in 2005/06, which is still substantially higher than the national average of 27 percent incomplete schools (see Table A3). This could indicate that despite the clear need for completing incomplete schools in the six most

remote provinces, the less remote provinces with incomplete schools are able to strongly compete for government support and resources.

Completing incomplete primary schools is not simply a matter of constructing additional classrooms; the process often requires complementary inputs of additional teachers or teacher training in multi-grade pedagogy to work optimally. It was only in mid-2006 that the government was able to start designing a coherent multi-grade programme with the development of a multi-grade teacher training package. It is still too early to assess its implementation.

Recognizing that the diverse circumstances of individual incomplete schools cannot be addressed by a single nationwide strategy, the government is implementing a pilot project that brings in community governance and management of the school completion process, with the assumption that greater community involvement will ensure greater transparency and more appropriate solutions designed by local stakeholders. These pilot experiences under the Japan Fund for Poverty Reduction are too early to assess.

Incentives for teacher deployment in rural/remote areas - chronic teacher shortages in Cambodia were most pronounced in rural and remote provinces and the government implemented a policy of granting allowances and incentives to boost teacher retention in these areas. Teachers in difficult postings received an additional allowance of 50,000 Riels (about US\$ 12.50) per month; while teachers in remote postings get 60,000 Riels (US\$ 15.00).

A performance incentive in the form of lump-sum payment was also granted to school principals paid in one annual lump-sum.

Remote allowances were allocated for teachers in the 390 primary schools identified as remote in the 29 districts in the country (Geeves and Bredenburg, 2005, page 19). Even with these allowances, the monthly income of a teacher remains about the same as a semi-skilled factory worker and is still below a living wage. Anecdotal evidence shows that these incentives have not been effective in keeping teachers posted to isolated schools in remote provinces. This needs to be validated with further studies.

5.3 Ethnic minority education

Although ethnic minority groups account for only 4 per cent of Cambodia's total population, they are a diverse group with different economic and social characteristics and relationships with the Khmer majority and mainstream development (World Bank, 2006, p43). The poorest and the smallest of the ethnic minority groups, numbering about 104,000, are known as the highlanders. They reside in the provinces of Ratanakiri, Mondolkiri, Kratie, and Stung Treng, are perhaps the hardest groups to reach for reasons of language barriers, extreme remoteness and high levels of poverty.

Bilingual education -Mainstream education programmes are not adequate in this context. Reaching remote, ethnically diverse, relatively poor communities requires intense and sustained investments in specific culturally-sensitive interventions. Recognizing this need, the government undertook a bilingual education project on a small scale in Ratanakiri. The project allowed the teaching of national curriculum with the use of ethnic minority language as a bridging language for the first four years of primary education, and was supported jointly by the government, CARE and UNICEF. Although the pilot project provided a useful model for reaching ethnic minority children and an effective way to use quasi-contract teacher strategies in areas with special needs, its expansion was held up for two reasons. Firstly, the pilot project funding level could not be sustained by the government. Secondly, the ministry—despite the evident success of a four year bridging programme that allowed children to gradually transition from the use of their ethnic minority language to Khmer as medium of classroom instruction—decided on a curriculum that allowed for a one year bridging in Grade 1.

Targeted training of future teachers from remote and ethnic minorities -The government adopted a policy of recruiting and training more ethnic minority students in formal teacher training institutions in order to address the chronic teacher shortages in remote areas. The plan included two key actions to support this policy. The first was the lowering of the entry requirements for applicants from remote provinces and ethnic minorities into formal teacher training; and the second was constructing dormitory facilities, particularly for women student-teachers, in Stung Treng. The policy actions have not been very successful, since virtually all of the recruits from remote provinces into teacher training in Stung Treng are Khmers rather than local minority ethnic groups (Geeves and Bredenburg, 2005, page 26)⁷.

6 Conclusion

Based on the analyses of the “who are the unreached” in section 2, the factors contributing to exclusion in sections 3 and 4, and the effectiveness of selected policies to reach the poor and ethnic minorities in section 5, this section will focus on broad policy recommendations to bring more unreached children, especially the poor from rural and remote areas and ethnic minority groups, into primary schools in Cambodia. Given the limitation of space and relative importance of different factors identified in the previous sections, the recommendations will focus on the following key areas:

- (1) Further reduction of household education cost burden among the poor
- (2) Promotion of right-age school entry at Grade 1

⁷ For example, from annual quota of 30 entrants to Stung Treng teacher training college from Ratanakiri in the early 2000's it was not unusual for no ethnic minority to be included. In earlier years this was a reflection of pass rates at Grade 9. Now it is more a reflections of higher aspirations of the small, but growing, number of minority students who do pass grade 9—they are interested in university education or immediate employment with international NGOs which offer far more attractive conditions than government.

- (3) Investment in specific education infrastructure with potentially biggest gains in education outcomes

The three factors were selected as they constitute the most promising areas where policy actions could bring the biggest gains in reaching the unreached. At the same time, these are policy areas where government has already initiated programme interventions. This paper hopes to contribute to further analysis of these programmes and lead to better and more focused policy actions in the future.

6.1 Policies to support further reduction of household cost burden

Table 3 shows the average direct costs that sample households incur for primary schooling of their children in urban and rural areas of Cambodia as of 2004. Pocket money⁸ constitutes the biggest share of household direct expenditures on primary education in both rural and urban areas. Other significant items include supplementary tutoring (in urban areas), uniforms and equipment, transport and learning materials. The share of the total household direct expenditure of primary education vis-à-vis the poverty line income ranges from 16 to 30 per cent in urban areas and 7 to 17 per cent in rural areas depending on the grade, respectively. In both urban and rural areas, the share increases substantially as child moves up the grades.

This represents a substantial economic burden, and it is important to see how it can be reduced and/or supported by the system. One of the major costs in urban areas is payment for supplementary tutoring, which teachers provide outside of school hours to augment their low salaries. On the official salary scale in 2003, experienced teachers were earning 113,000 Riels (US\$29) per month in primary schools and 154,000 Riels (US\$37) in lower secondary schools. A primary school teacher in Phnom Penh would be living below the poverty line if he or she had to support even one additional person exclusively on an official teacher salary (World Bank, 2005b, p.65). Between 2004 and 2005, average teacher salaries have risen to US\$43 per month, but are still low (World Bank, 2006a, p.91).

While it is not compulsory, refusal to pay for tutoring may cause the child to repeat a grade, which would then cost a household more than the tutoring fees⁹. Peer pressure to attend tutoring sessions also plays a role in sustaining the tutoring system. In a situation where official salary levels of teachers are bordering the poverty line, it is difficult to effectively enforce prohibition of these private practices. It is therefore essential for teachers' salary levels to be increased well beyond the subsistence level, which in turn can generate an environment for phasing out the supplementary private tutoring.

⁸ "Pocket money" is for children to buy snacks and breakfast. Where the school is far from home, this may also include money for lunch. Bray and Seng (2005), P.44.

⁹ In Cambodia, it is difficult to differentiate between the formal teaching and supplementary tutoring in terms of contents as both are taught by the same teachers for the same pupils in the same classrooms. This situation can potentially lead to exploitative situations in which teachers cover only part of the standard curriculum during formal classes in order to increase demand for their supplementary tutorial after school. Bray and Seng (2005), p.41.

Scholarships and conditional cash transfers - Another policy area to consider is direct financial support for schooling to the poor households in the form of scholarships and conditional cash transfers. In Cambodia, there have been four scholarship schemes for poor students funded by the government and donors, but all of them have been focused on students in lower secondary schools (Grade 7 to Grade 9), covering 53 per cent of the lower secondary schools and seven per cent of the students in the school year 2005-2006¹⁰. They provide the annual amount of 180,000 Riels (approximately US\$45) per student per year.

Under a scheme financed by the Japan Fund for Poverty Reduction (JFPR), the concerned families receive cash transfers if their daughter is (i) enrolled in school; (ii) maintains a passing grade; and (iii) absent without “good reason” fewer than ten days in a year. Scholarship recipients agree to use funds towards education, but no attempt is made to enforce this agreement.

Therefore, the JFPR programme functions like “conditional cash transfer” programmes implemented in many Latin American countries. Its implementation was started in the school year 2003/2004 in 93 out of 698 lower secondary schools in the country. In each school, 45 girls who were beginning the Grade 7 in the school year 2003/2004 were awarded the scholarship. Filmer and Schady (2006) estimated that the programme had positive effects on enrolment and attendance at programme schools to the extent of 30 to 43 percentage points. In addition, scholarship recipients were more likely to be enrolled in any school (i.e. not just 93 programme schools) by a margin of 22 to 33 percentage points.

The selection of scholarship recipients was based on criteria such as parental education, demographic composition of the household, ownership of various assets, housing materials and distance to the nearest secondary school. Once the application forms had been filled out, they were forwarded from the primary school to the Local Management Committee (LMC) of the relevant lower secondary school covered under the JFPR programme. The LMC in turn identified 45 girls who were most needy based on a set of weights that were to be given to each questions and a formulae to aggregate responses into a final score. In general, members of the LMC would not know the girls in question, many of whom would live in different villages or urban areas. LMC members would therefore have little information if any on the academic ability or socio-economic status of a given applicant other than the information provided on the application form. This is deemed to have contributed to maintaining a level of objectivity required for the selection of the recipient according to set criteria¹¹.

¹⁰ They are (i) “Priority Action Programme 12” (PAP 12); (ii) scholarship scheme financed by the Japan Fund for Poverty Reduction (JFPR); (iii) scholarship scheme financed by the Belgian Technical Corporation; and (iv) scholarships funded by the Cambodian Education Sector Support Programme (CESSP) funded by World Bank. For details of these programmes, see Bray and Seng (2005), pp.71-74.

¹¹ Evidence showed that scholarship recipients on average had significantly lower socio-economic status than non-recipients, indicating a positive targeting process. For instance, on average, the scholarship recipients had parents with lower education levels. They were more likely to live in a hut or a house with an earthen floor, and less likely to have houses made of high-grade materials like cement, brick, tiles, metal or fibre. They were also less likely to own any of a number of means of transportation, less likely to own more than a hectare of land, less likely to regularly lend money, and more likely to have debts (Filmer and Schady, 2006, p.5).

Scholarship recipients had an enrolment rate of 87 per cent in programme schools compared to 65 per cent among non-recipients and an attendance rate of 80 per cent compared to 58 per cent among non-recipients in programme schools. In addition, it was found that the impact of the programme was larger among girls from poorer households¹².

Though the amount provided under the JFPR scholarship programme is modest, it has had a measure of success. The cash transfer of 180,000 Riels or US\$45 barely covers the direct costs of lower secondary schooling in rural areas and less than half of the corresponding direct costs in urban areas¹³. In addition, the opportunity cost of child schooling in the form of wage and labour contributions of children foregone is much higher. Despite this, the programme seems to have substantial positive effects on school enrolment and attendance among scholarship recipients¹⁴, indicating that the decision-making of households does not only depend on simple cost calculation.

Given that the dropout of students, particularly from the poorest households, begins from the upper grades of primary schools, there may be justification to extend the coverage of these schemes to the poorest of the poor starting from that stage (say Grade 4). At the same time, the effectiveness of these measures can decline as the age of children increases since the amount of conditional cash transfer would become comparatively smaller as direct and indirect/opportunity costs of schooling substantially increase with age. In the next section, we turn to measures to address the child's age of entry and hence age while progressing through primary school.

Recommended future policy analysis and actions:

- Examine the affordability of increasing teachers salary to at least a living wage
- Examine the affordability of providing the scholarships for children from the poorest quintile beginning at upper primary

6.2 Promote right-age school entry

¹² JFPR programme increased enrolment in programme schools by 24 percentage points for girls with above-median socio-economic status and by 44 percentage points for girls with below-median socio-economic status; by 24 percentage points for girls who have at least one parent who had completed at least primary school compared with 32 percentage points for girls neither of whose parents had completed primary school; by 25 percentage points for girls who live less than four kilometres from the school compared with 37 percentage points for girls who live further away. In the absence of the scholarship, there could have been a difference of 24 percentage points in enrolment rate between girls with high and low socio-economic status, but because of larger programme effects among girls with lower socio-economic status, the programme eliminated the gradient between socio-economic status and school enrolment and there was no difference in enrolment rate depending on their socio-economic status.

¹³ According to Bray and Seng (2005), the average estimated direct costs of schooling incurred by households for Grade 7, Grade 8 and Grade 9 are 379,300 Riels, 402,700 Riels and 559,500 Riels in urban areas, and 191,300 Riels, 200,600 Riels and 276,200 Riels in rural areas, respectively.

¹⁴ However, one problem with PAP is its perennial delay in cash disbursement. For instance, the overall amount of cash released vis-à-vis the allocated amount under PAP in 2003 was 46.6 per cent. The rate of disbursement under PAP 12 ("Scholarship and Incentives for Equitable Access") was particularly low with 33.6 per cent. There is an issue of actual implementation of the concerned interventions in addition to their effectiveness.

The negative impact of late school entry in Cambodia is enormous as previously discussed. According to World Bank analysis (2005b), if the overage Grade 1 intake is decreased with 50-point, there would be 2.5-point decrease in the dropout rate per grade, which translates into 15-point decrease over six years of the full primary education cycle. Given that 72 per cent of children were entering Grade 1 over-aged in 2001, there is tremendous room for improvement and potential gains by promoting the right-age entry into primary school. As stated earlier, some of the infrastructure-related interventions (e.g. lower secondary school, drinking water facilities and completion of incomplete primary schools) seem to have positive impact in promoting the right-age entry.

In addition, what may be more vigorously pursued is the provision of early child development (ECD) services through formal pre-schools and community-based pre-schools. If the network of these services is substantially expanded and the timely transition of children from them to primary schools is systematically facilitated, it would make a significant contribution to increasing the right-age entry of children into primary school. There has been no systematic study in Cambodia in this regard, but a study conducted in Nepal confirms that a programme of organized ECD centres had a significant impact on the transition of children to formal school at the right age with a difference of 20 per cent between the intervention and control groups (Save the Children US and UNICEF, 2003, p.3). A similar study is underway in Cambodia to assess the effectiveness of home-based and community-based pre-school programmes on school readiness and right-age entry, the results of which will be available in 2007.

Recommended future policy analysis and actions:

- Assess the costs and benefits of providing universal coverage of early childhood education for children aged 3 to 5 years. Given the anticipated additional government revenue from recently-discovered oil reserves in the country - about US\$ 2 billion per year beginning in 2009 - this option may be affordable.
- Undertake rigorous cost effectiveness comparison of various ECD models in Cambodia

6.3 *Investment in specific infrastructure*

Analysis conducted by the World Bank (2005b) by using routine EMIS statistics for the school year 2002/2003 shows significant association between certain education infrastructure and the key performance indicators of primary education as follows¹⁵ :

- (a) If there is **lower secondary school** in the same commune, there is a 3.24-point decrease in overage intake in Grade 1, 1.07-point decrease in the dropout rate and 1.28-point increase in the promotion rate per grade. The latter two translate into 6.42-point decrease

¹⁵ All the statements are based on the assumption that the socio-economic environment of the school and other school characteristics are controlled.

in the dropout rate and 7.68-point increase in the promotion rate over the six years of primary education cycle¹⁶ .

- (b) If there is a **pre-school** attached to primary school, there is a 0.7-point decrease in the dropout rate, 0.68-point decrease in repetition rate and 1.36-point increase in the promotion rate per grade. They translate into 4.2-point decrease in the dropout rate, 4.08-point decrease in the repetition rate and 8.16-point increase in the promotion rate over the six years of primary education cycle.
- (c) If there are **drinking water facilities** available in primary school, there is a 4.16-point decrease in overage intake in Grade 1, and 0.5-point decrease in the dropout rate per grade. The latter translates into 3-point decrease in the dropout rate over the six years of primary education cycle.
- (d) If there are **latrines** available in primary school, there is a 1.09-point decrease in the dropout rate, 0.58-point decrease in the repetition rate and 1.69-point increase in the promotion rate per grade. They translate into 6.54-point decrease in the dropout rate, 3.48-point decrease in the repetition rate and 10.14-point increase in the promotion rate over the six years of primary education cycle¹⁷ .
- (e) For each grade that is additionally offered in the primary cycle (which is an indicator for **incomplete schools**), there is a 2.11-point decrease in overage intake in Grade 1, and 0.34-point decrease in the dropout rate, 0.75-point decrease in the repetition rate and 0.85-point increase in the promotion rate per grade. The latter three translate into 1.02-point decrease in the dropout rate, 2.25-point decrease in the repetition rate and 2.55-point increase in the promotion rate over the six years of primary education cycle.

Regarding the lower secondary school, one caution is that given the substantial differences in primary school completion by wealth quintiles as explained in the previous section and very high costs of secondary education as shown in this section, any investment in secondary school would not likely to function as “pro-poor” unless enrolment in and completion of primary education is improved (World Bank, 2005b, p.26).

Regarding the pre-school, there are altogether 1,429 formal pre-schools (i.e. attached to primary schools) in the country in the school year 2005/2006, covering 8.6 per cent of children of three to five years of age. Even including other services for early childhood development (ECD), the total coverage of ECD services in Cambodia is only 13.6 per cent for the school year 2005/2006. The formal pre-school is comparatively costlier and its outreach is relatively limited. It would be difficult to expect the substantial expansion of its network by the government in the near future. In the last several years, simpler and less costly community pre-schools¹⁸ have been established

¹⁶ However, additional analysis by poverty quintile suggests that those primary schools located in the poorest quintile do not benefit from the nearby presence of a lower secondary school. World Bank (2005b), p.31.

¹⁷ The same multivariate study shows very high level of association between the availability of library and librarian as independent variables and the levels of overage Grade 1 intake, dropout, repetition and promotion. However, they should be taken more of a proxy to indicate the “wealth” of the schools concerned.

¹⁸ Community pre-schools are village-level centres for early childhood education targeting children in the age group of three to five. They are typically housed in simple shelters built in the central location of the concerned hamlet and cater to about # children on an average. They are

with support from UNICEF. While the impact of this particular intervention still needs to be systematically evaluated, it is clear that the network of grassroots-level institutions for early childhood development need to be substantially expanded to realize the potential gains for better primary school performance as mentioned above.

Concerning drinking water facilities and latrines, 40 per cent and 31 per cent of the primary schools in Cambodia do not have drinking water facilities and latrines, as Table 4 illustrates (EMIS, 2005-2006). Once again, remote areas show much less coverage than urban areas and other rural areas. The costs of achieving universal coverage of all the primary schools with both water and sanitation are estimated to be US\$ 3.49 million for water facilities and US\$ 3.46 for toilets¹⁹. Given their substantially positive impact on selected school performance indicators and their contribution to the establishment of good health, hygiene and sanitation practices at the formative stage of life, increased investment in these essential facilities will yield multiple dividends.

Table 4: Coverage of Primary Schools With Drinking Water Facilities and Latrines – 2005-2006 (EMIS data)

Category	Urban	Rural	“Remote Areas” ²⁰	Total
Primary schools having safe drinking water facilities	64.4 per cent	62.2 per cent	36.3 per cent	60.3 per cent
Primary schools having latrines	81.1 per cent	70.7 per cent	41.1 per cent	69.4 per cent

Source: Government of Cambodia (1996 to 2006).

Finally, regarding the completion of incomplete primary schools, there are 1,719 incomplete schools as of the school year 2005/2006. In the last three years, about 200 incomplete schools have been completed annually on an average, mainly through the provision of additional classrooms. At that rate, it would take close to eight years to complete all the currently existing incomplete schools in Cambodia. The use of multi-grade teaching is not yet fully utilized. In order to realize the positive impact mentioned above, this process need to be substantially expedited, or other less costly and non-infrastructure-intensive alternatives, such as multi-grade instruction, need to be pursued.

Recommended future policy analysis and actions:

- Construction of targeted facilities (toilets and water) in primary schools that presently do not have these facilities

staff by volunteer teachers who receive a monthly honorarium of US\$7 (as compared with formal preschool teachers who are paid US\$29 per month). They are open for two hours and provide opportunities for development of children through a variety of play-and-learn activities.

¹⁹ The estimates were computed using the number of primary schools without water (2492) multiplied by the average unit cost of installing Afridev water hand pump (US\$1,400). The estimates for latrine used a total number of 1,921 schools without latrines multiplied by the average cost of a 3-toilet block at US\$ 1,800.

²⁰ Remote schools are defined as those located in isolated areas where transportation and communications to and from schools are difficult and where the population density is less than 10 persons per square kilometre.

- Undertake a rigorous analysis of the software and hardware requirements and costs of completing all incomplete schools

6.4 Summary and Conclusions

This paper analyzed various factors that are deemed to affect the level of enrolment in and completion of primary education in Cambodia, and based on that further reviewed the impact of the key interventions that can substantially improve them. It examined both supply- and demand-side factors with respect to enrolment in primary education.

Concerning the supply-side factors, the Government of Cambodia has indeed increased its resource allocation to primary education sector substantially over the last five years, which translated into positive developments such as decrease in the number and percentage of incomplete primary schools and improvement of other school facilities. These ultimately contributed to increased access to primary education, especially among the poor, rural population and girls. At the same time, in comparison with other countries in South East Asia, greater levels of investment are required as highlighted in the discussion of the high pupil-teacher ratio in Cambodia.

As for the demand-side factors, poverty was confirmed as the most critical factor in determining the level of effective access to primary education in Cambodia. Closely related to this is the issue of age of entry into primary education, extreme remoteness of the location and ethnicity. Wide prevalence of delayed entry into primary school, which is also a function of poverty and especially serious among children from poor households, works as the most serious deterrent against their finishing six years of primary education as direct and indirect/opportunity costs of education rise substantially as children get older.

With regard to the policy measures to address these critical factors, the paper examined the effectiveness of specific policy actions taken by government that are specifically targeted to reach the poor, those in rural and remote areas, and ethnic minorities.

Regarding infrastructure-related factors, key measures to improve primary school indicators (such as reduction in the overage intake in Grade 1, reduction in the drop-out rate and increase in the promotion rate) included the expansion of the network of pre-schools and lower secondary schools as downstream and upstream institutions for primary schools, together with the improvement of primary school facilities such as the provision of drinking water and latrines and the completion of incomplete schools.

One caution is that given the substantial differences in primary school completion by wealth quintiles and very high costs of secondary education, any investment in secondary school would

not likely be pro-poor unless enrolment in and completion of primary education is improved. This poses the issue of certain trade-offs even among effective policy options depending on the policy objectives to be pursued.

With respect to measures to address poverty, the paper confirmed the positive impact of the reduction of the costs incurred by households, such as through a conditional cash transfer in the form of targeted scholarship to poor households.

Finally, regarding the issue of late entry into primary school, the expected effectiveness of inexpensive early childhood education interventions, such as community pre-schools, was specifically highlighted as a means to promote the right-age entry into primary schools.

Cambodia has made impressive achievements in increasing access to primary education, especially when viewed against its difficult past. However, it still has a long way to go in achieving universal primary education of good quality as expressed in the goals of Education for All and the Millennium Development Goals. As seen in this paper, progress has stagnated since 2001 after the initial success in increasing primary enrolment. The challenges include lagging completion rates, gap in enrolment between the richest and the poorest, and the high level of overage entry into primary education. These challenges are all the more reason why there needs to be debate and actions that go beyond 'business as usual'.

7 Appendix

7.1 *Explanatory note on data sources*

Data from the Education Management Information System (EMIS) of the Government and independent household surveys show different net enrolment rate and completion rate. The EMIS shows substantially higher enrolment rate and lower completion rate as compared with the household survey. For instance, for the school year 2004/2005, the net enrolment rate according to EMIS was 91.9 per cent, while according to the Cambodia Socio-Economic Survey 2004 it was 76 per cent.

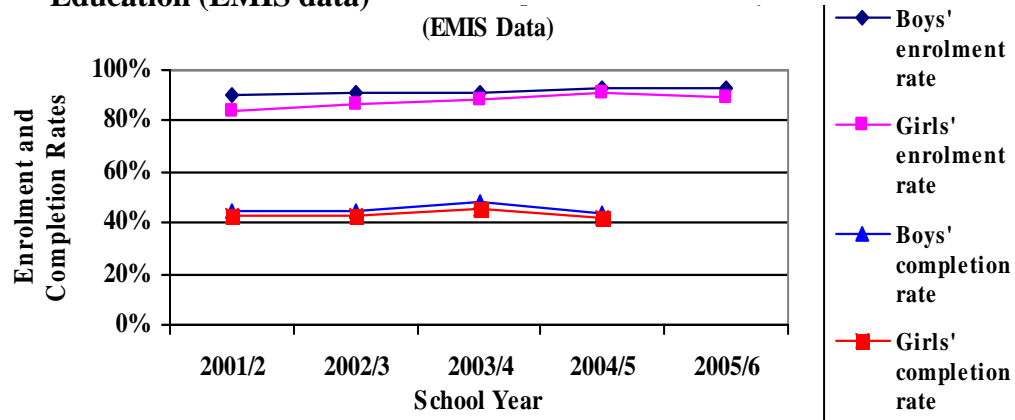
Similarly, for the school year 2000/2001, the completion rate according to EMIS using the reconstructed cohort was 45 per cent, while according to the Cambodia Child Labour Survey 2001 it was 75 per cent.

The discrepancy in the net enrolment rate is due to the fact that students attending schools are reported to be significantly older in household surveys than in EMIS. As the age specification under household surveys is generally much more carefully conducted and accurate, we use the enrolment data from household surveys in this paper except for Figures 9, 11 and Table 4 in which EMIS data are used for the sake of showing trends and patterns.

The discrepancy in the completion rate seems to be due to the difference between the official registration for enrolment in school and what parents perceive to be enrolment of their children in school. If a child is officially registered as enrolled into primary school but stops coming to school soon after the academic year starts, or effectively does not come to school at all, this may be regarded as non-enrolment rather than dropout by their parents. However, for official school statistics, this would be considered dropping out of school. The very high dropout rate of 21 per cent from Grade 1 to Grade 2 in EMIS data as compared with 0.4 per cent for household survey data may be explained by the different perceptions of parents and official definitions used by school authorities.

7.2 Tables and figures

Figure A 1: Girls and Boys, Net Enrolment Rate and Completion Rate in Primary Education (EMIS data)



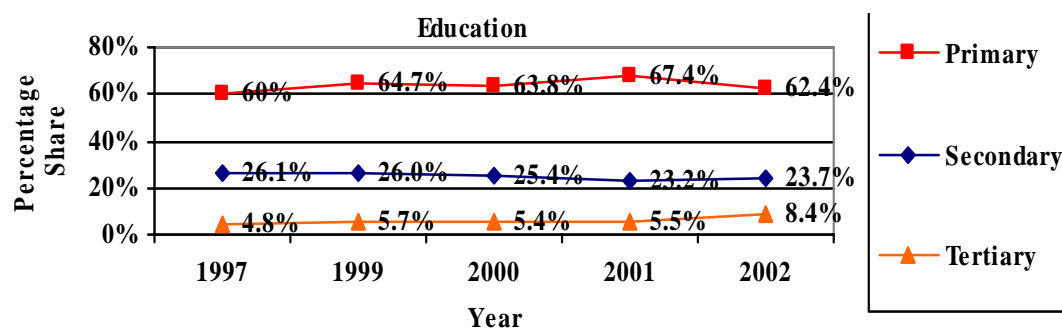
Source: Government of Cambodia (1996 to 2006).

Table A 1: Ethnicity and literacy rates in the Cambodian Highlands, 2000

Ethnic affiliation	Rates (%)					
	Male			Female		
	Illiterate	Semi-literate	Literate	Illiterate	Semi-literate	Literate
Khmer	23.2	28.0	48.8	44.1	26.0	29.0
Highland minorities	76.3	18.4	5.3	85.7	14.3	0.0
Others	53.8	23.1	23.1	65.0	19.4	15.0

Source: Ministry of Education and Youth, 2000

Figure A 2: Percentage Share of Government Education Budget by Level of Education



Source: Calculated based on World Bank and Asian Development Bank (2003), p.144

Table A 2: Pupil-Teacher Ratio in Primary Education in South East Asia

No.	Country	Pupil-Teacher Ratio
1	Malaysia	19
2	Indonesia	20
3	Thailand	21
4	Vietnam	23
5	Laos	31
6	Cambodia	55

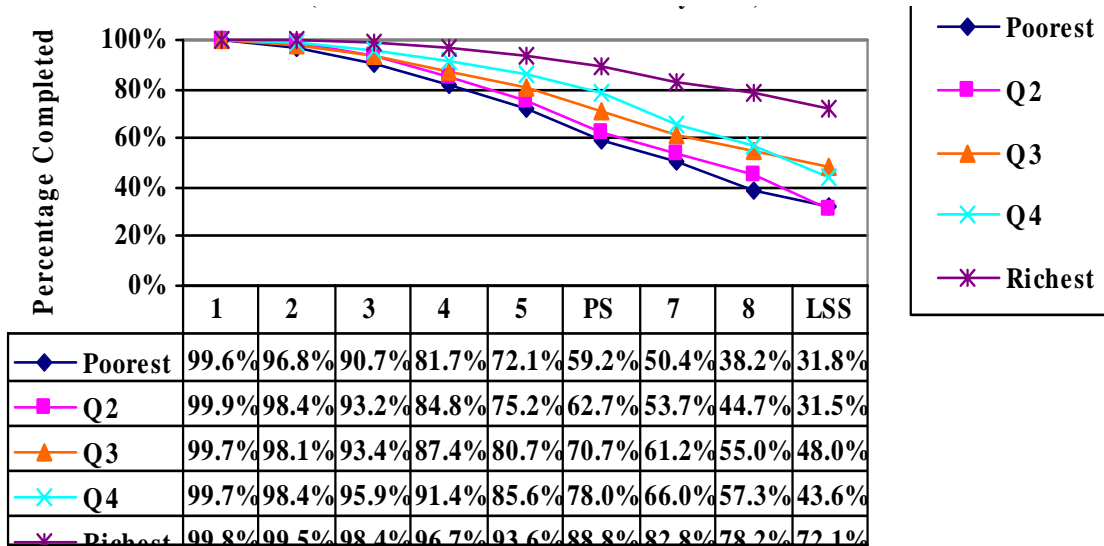
Source: Global Education Digest 2006. Statistics are from the period between 2002 and 2004.

Table A 3: Proportion of Incomplete Schools in Select Provinces

Province	Proportion of incomplete schools (%)		
	2002-03	2004-05	2005-06
Koh Kong	59.1	54.5	38.2
Kratie	48.6	43.5	42.0
Mondulkiri	81	77.0	69.7
Preah Vihear	70.7	61.7	54.4
Ratanakiri	84.4	81.0	79.1
Stung Treng	64.2	58.4	55.2
	65	59.6	54.9
Total			
All schools in Cambodia	35.9	31.3	27.4

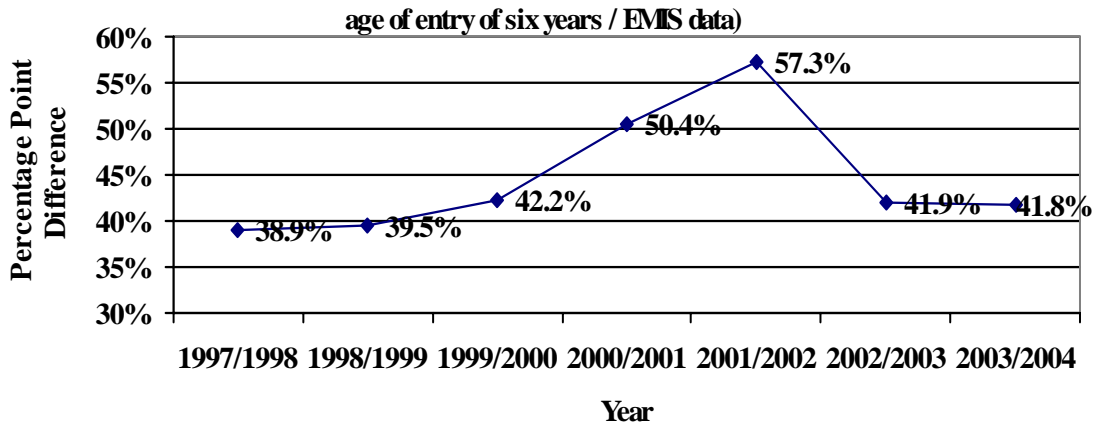
Source: Ministry of Education and Youth

Table A 4: Completion Rate from Grade 1 by Wealth Quintile (Cambodia Child Labour Survey 2001)



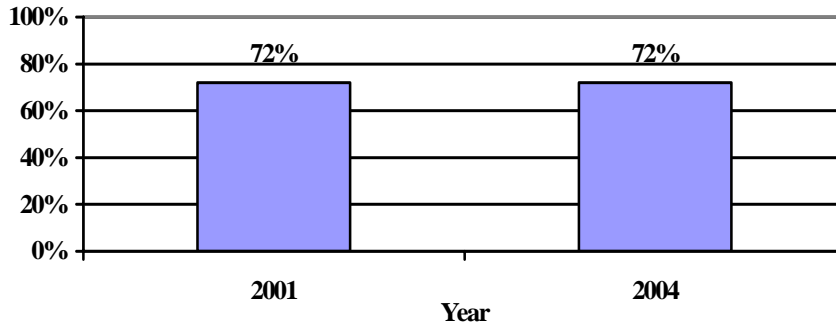
Source: Adapted from the data in the World Bank (2005b).

Figure A 3: Percentage of Overage Entry of Children in Grade 1 (EMIS data)



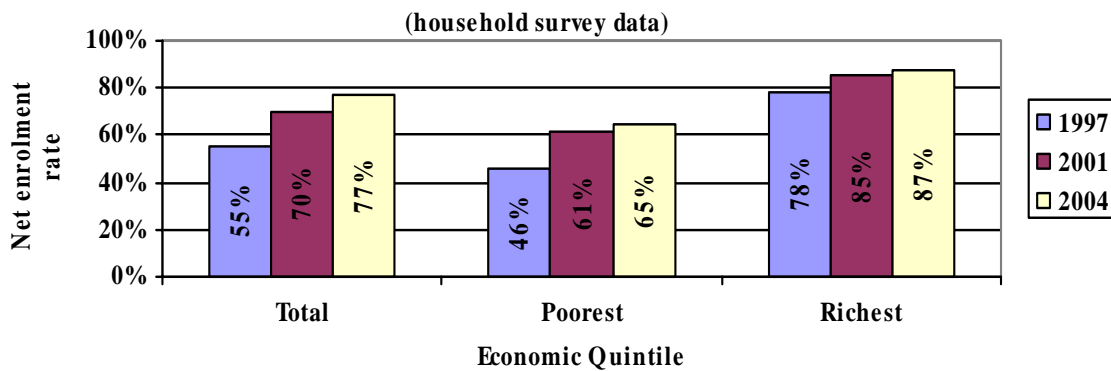
Source: Government of Cambodia (1996 to 2006).

Figure A 4: Percentage of Overage Entry of Children in Grade 1 (household survey data)
 (> the official age of entry of six years / household survey data)



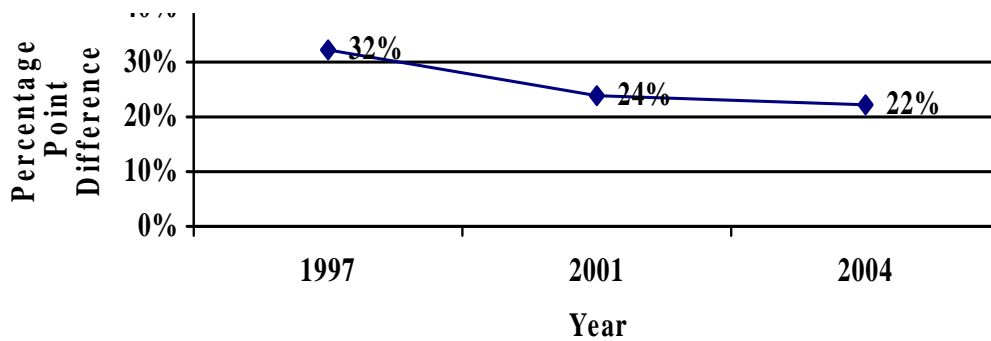
Source: The figure for 2001 is from the Government of Cambodia (2001) and the one for 2004 is from the Government of Cambodia (2004).

Figure A 5: Net Primary Enrolment Rates by Economic Quintile



Source: Adapted from the data in the ILO, UNICEF and the World Bank (2006).

Figure A 6: Gap in Enrolment Between the Richest and Poorest Quintile (household survey data)



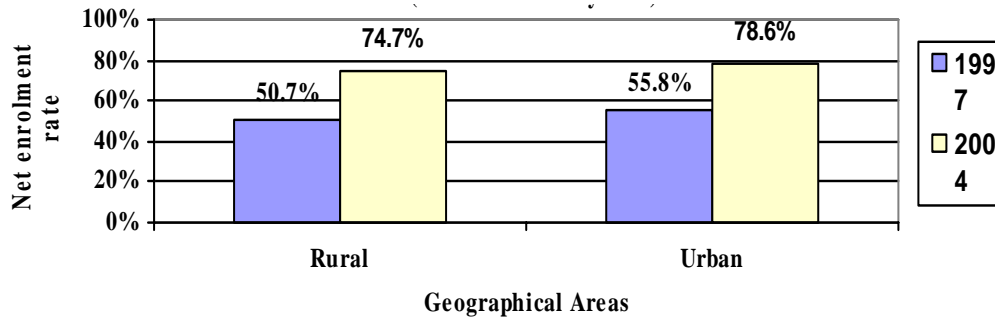
Source: Calculated from the data in the ILO, UNICEF and the World Bank (2006).

Table A 5: Growth of Net Enrolment Rate in Richest and Poorest Quintiles

Economic Quintile	1997-2001	2001-2004
Poorest	33%	7%
Richest	9%	2%

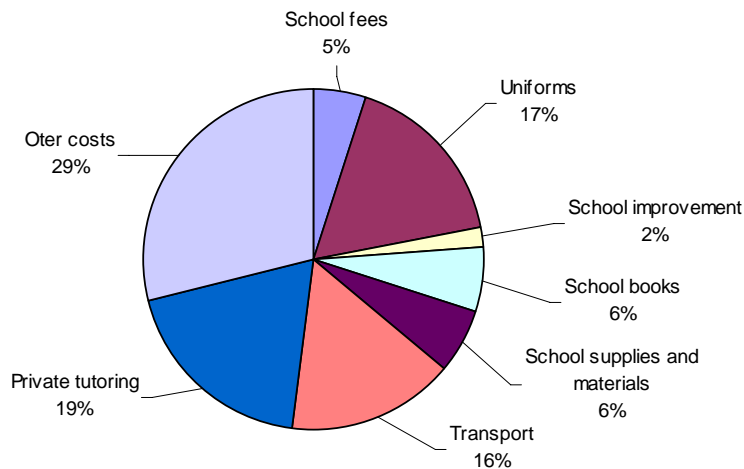
Source: Calculated from the data in the ILO, UNICEF and the World Bank (2006).

Figure A 7: Net Primary Enrolment Rates in Rural and Urban Areas 1997 and 2004 (household survey data)



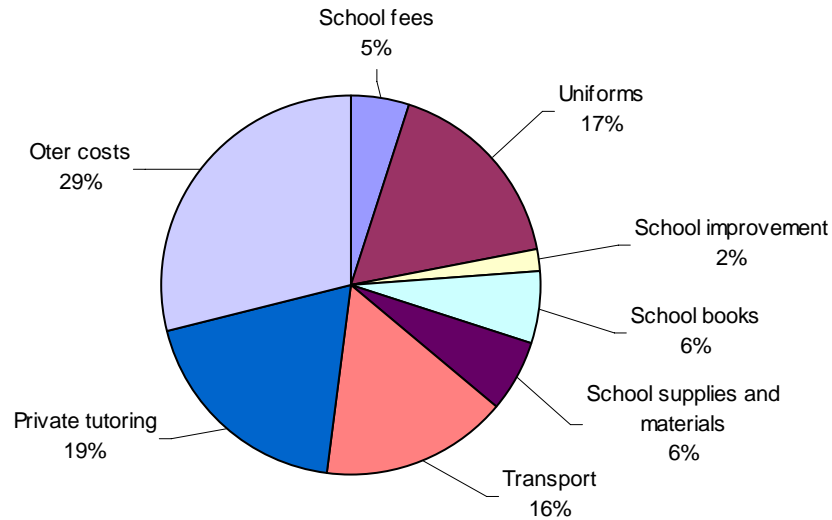
Source: Government of Cambodia (1997 and 2004b).

Figure A 8: Household Expenditures on Primary Education - Poorest Quintile, 1997



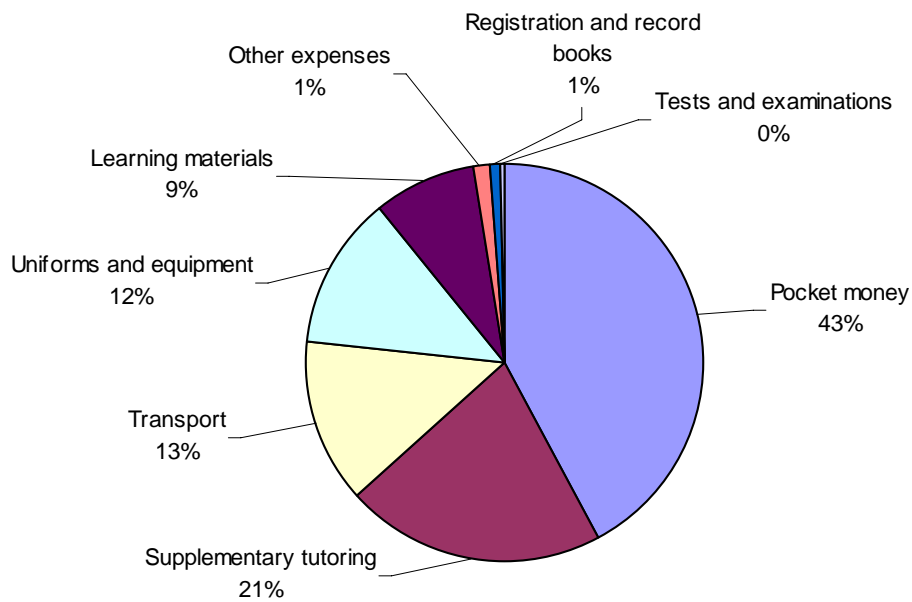
Source: 2000 Cambodia Poverty Assessment, reproduced in Ondrusek (2002) p. 11

Figure A 9: Household Expenditures on Primary Education - Richest Quintile, 1997



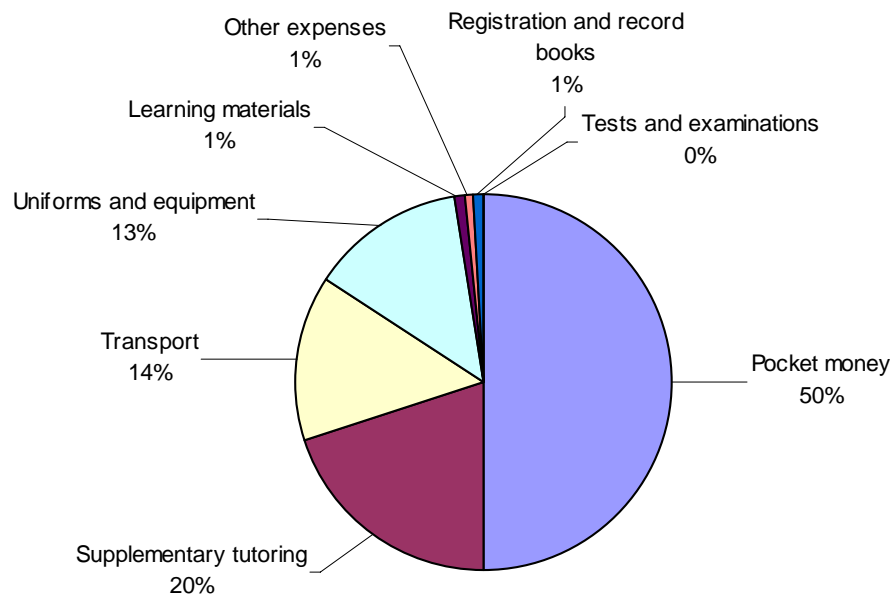
Source: 2000 Cambodia Poverty Assessment, reproduced in Ondrusek (2002) p. 11

Figure A 10: Direct Costs of Primary Schooling Incurred by Households per Pupil - Urban in 2004



Source: Calculated from the data in Bray and Seng (2005).

Figure A 11: Direct Costs of Primary Schooling Incurred by Households per Pupil - Rural in 2004



Source: Calculated from the data in Bray and Seng (2005).

8 References

Asia and Pacific Journal on Disability, Vol. 2, No. 1, May 1999.

Asian Development Bank. (2004). *Proposed Grant Assistance (Financed by the Japan Fund for Poverty Reduction) to the Kingdom of Cambodia for Improving Primary School Access in Disadvantaged Communes*. JFPR: CAM 38107.

Bray, Mark and Bunly Seng (2005), *Balancing the Books: Household Financing of Basic Education in Cambodia*, Comparative Education Research Centre, The University of Hong Kong, Hong Kong.

CARE. (2003). *Highland Children's Education Project (HCEP), Ratanakiri Province, Cambodia*. CARE International, Cambodia.

Fayaud, Patrick (2003), *Remote Schools Teacher Development*, UNICEF/Sida, Phnom Penh.

Geeves, R. and Bredenbeg, K. (2005). *Contract Teachers in Cambodia*. International Institute for Educational Planning. Paris: UNESCO.

Gordon, Raymond G., Jr. (ed.), 2005. *Ethnologue: Languages of the World, Fifteenth edition*. Dallas, Texas

Government of Cambodia (1996 to 2006), *Education Management Information System*, Ministry of Education, Youth and Sport, Phnom Penh.

Government of Cambodia (1997), *Cambodia Socio-Economic Survey 1997*, National Institute of Statistics, Ministry of Planning, Phnom Penh.

Government of Cambodia (2000), *Cambodia Demographic and Health Survey*, National Institute of Statistics, Ministry of Planning, Phnom Penh.

Government of Cambodia (2001), *Cambodia Child Labour Survey*, National Institute of Statistics, Ministry of Planning, Phnom Penh.

Government of Cambodia (2002a), *Poverty Analysis of Education Access Trends – Discussion Paper*, Ministry of Education, Youth and Sport, Phnom Penh.

Government of Cambodia (2002b), *National Poverty Reduction Strategy 2003-2005*, Council for Social Development, Phnom Penh.

Government of Cambodia (2003), *Discussion Paper on Revision of Education Strategic Plan 2004-2008: An Indicative Strategic, Institutional and Financing Framework*, Ministry of Education, Youth and Sport, Phnom Penh.

Government of Cambodia (2004a), *Cambodia Inter-Censal Population Survey 2004*, National Institute of Statistics, Ministry of Planning, Phnom Penh.

Government of Cambodia (2004b), *Cambodia Socio-Economic Survey 2004*, National Institute of Statistics, Ministry of Planning, Phnom Penh.

Government of Cambodia (2005a), *Cambodia Plus 5: Achieving the CMDG – Is Cambodia on Track?*, Ministry of Planning, Phnom Penh.

Government of Cambodia (2005b), *Education Strategic Plan 2006-2010*, Ministry of Education Youth and Sports, Phnom Penh.

Government of Cambodia (2006), *Education Indicators 2002-2006*, Ministry of Education, Youth and Sports, Phnom Penh.

HE Chey Chap, In The, Anne Thomas. (2003). *Bilingual education in Cambodia*. Government of Cambodia, Ministry of Education, Youth and Sport.

ILO, UNICEF and World Bank (2006), *Children's Work in Cambodia: A Challenge for Growth and Poverty Reduction*, An Inter-Agency Research Cooperation Project, Phnom Penh.

IMF. (2006). *Remarks on Recent Macroeconomic and Social Developments, Delivered by the IMF Representative on Behalf of Development Partners*. Cambodia Consultative Group Meeting, Phnom Penh, March 2, 2006.

Tandon, Ajay (2006), *Improving Primary Enrollment Rates among the Poor*, Asian Development Bank, Manila, Philippines

UNDP (2005), *Human Development Report 2005*, UNDP, New York

UNICEF, UNESCO and UIS. (2006). *Guidelines for the Asia and Pacific Education for All Mid-Decade Assessment: Identifying and Reaching the Unreached*. Bangkok, Thailand.

UNESCO (2006a), *EFA – Global Monitoring Report*, UNESCO Paris

UNESCO (2006b), *Global Education Digest - Comparing Education Statistics Across the World*, UNESCO Institute for Statistics. Montreal, Quebec, Canada

UNESCO (2006c). Sheldon Schaeffer. *Presentation at EFA Global Monitoring Report 2007 launch*. November 2006, Bangkok

UNESCO/UNICEF (2005), *Children Out of School: Measuring exclusion from primary education*, UNESCO Institute for Statistics, Quebec.

UNIFEM, World Bank, ADB, UNDP and DfID (2004), *A Fair Share for Women: Cambodia Gender Assessment*, UNIFEM, World Bank, ADB, UNDP and DfID, Phnom Penh

Save the Children US and UNICEF, (2003), *What's the Difference? – An ECD Impact Study from Nepal*, Save the Children US and UNICEF, Kathmandu, Nepal.

World Bank. (2002). *EFA: The Lessons of Experience. The Impact of Policy in 20 Case Studies*. Washington, DC: World Bank.

World Bank and Asian Development Bank (2003), *Enhancing Service Delivery through Improved Resource Allocation and Institutional Reform – Integrated Fiduciary Assessment and Public Expenditure Review*, World Bank, Washington.

World Bank (2005a), *Cambodia Education Sector Support Project*, World Bank, Phnom Penh.

World Bank (2005b), *Cambodia – Quality Basic Education for All*, World Bank, Phnom Penh.

World Bank (2005c), *East Asia Decentralizes: Making Local Government Work*. Washington, DC: World Bank.

World Bank (2005d), *World Development Report – A Better Investment Climate for Everyone*.
World Bank/Oxford University Press, New York

World Bank (2006), *Halving Poverty by 2015? – Cambodia Poverty Assessment 2005*, World
Bank, Phnom Penh.

