ROYAL GOVERNMENT OF CAMBODIA

MINISTRY OF EDUCATION YOUTH & SPORT

All CHILDREN IN SCHOOL BY 2015

Global Initiative On Out of School Children

Cambodia Country Study (draft)

April 2015

United Nations Educational, Scientific and Cultural Organization

UNESCO INSTITUTE for STATISTICS

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ACRONYMS

EFA	Education for All
CDHS	Cambodia Demographic and Health Survey
CIPS	Cambodia Inter-Censual Population Survey
CSES	Cambodia Socio-Economic Survey
ESP	Education Strategic Plan
EMIS	Education Management Information System
GAR	Gross Attendance Rate
GER	Gross Enrolment Rate
MDGs	Millennium Development Goals
MoEYS	Ministry of Education, Youth and Sport
MoEF	Ministry of Economy and Finance
MoP	Ministry of Planning
NAR	Net Attendance Rate
NEP	NGO Education Partnership
NER	Net Enrolment Rate
NGO	Non-Governmental Organization
NIS	National Institute of Statistics
OOSC	Out of School Children
RGC	Royal Government of Cambodia
UIS	UNESCO Institute of Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund

1. INTRODUCTION

1.1. PURPOSE OF THE STUDY

The Out-Of-School Children (OOSC) study is a global initiative jointly supported by UNICEF and UNESCO Institute for Statistics (UIS). The OOSC study aims to accelerate country's efforts towards the goal of universal primary education by 2015. The study enables the country to conduct systematic analysis on the scope of school exclusions and to formulate appropriate policies and strategies to address multi-dimensional facets of inequalities in schooling opportunities.

The specific objectives of the study are:

- To improve statistical information and analysis in Cambodia regarding out of school children and develop complex profiles of these children;
- To identify bottlenecks that reflect multiple deprivations and disparities that out-of-school children face with regard to education;
- To analyze existing interventions related to enhanced school participation and to develop context-appropriate policies and strategies for accelerating and scaling enrolment and sustaining attendance rates for the excluded and the marginalized children.

Cambodia is one of 26 countries participating in Phase I of Out-of-School Children Initiative (OOSCI). Substantial analysis on OOSC was conducted of data from the Cambodia Socioeconomic Survey (CSES), the 2008 population census and the Cambodia Demographic and Health Survey (CDHS). This study consolidates and updates the information and knowledge already obtained in Phase 1 and makes recommendations on a package of interventions that address both the demand and supply side factors that constraints school participation of marginalized children. This is study is particularly relevant to Cambodia as it represents the first effort to systematically collate and analyse a wide range of information related out-of-school children, including ethnic minority children, children with disabilities, mal-nutrition and children with disabilities.

1.2. COUNTRY CONTEXT

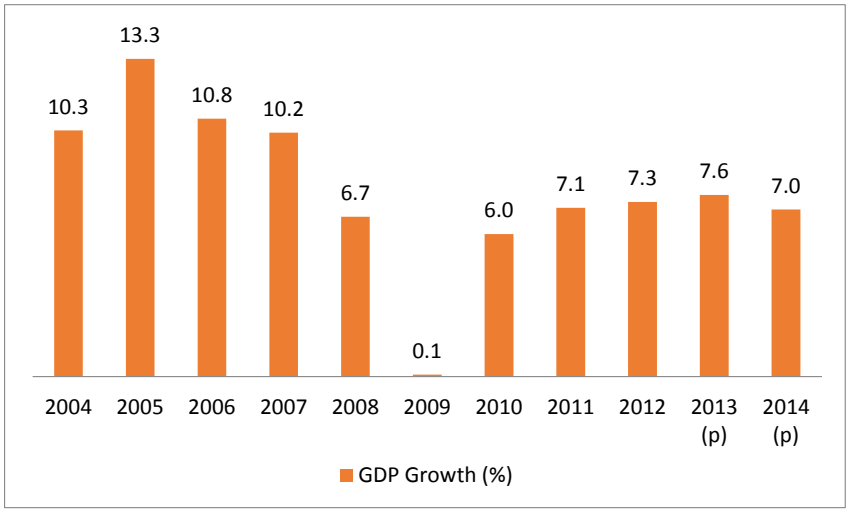
Cambodia is a constitutional monarchy with a democratically elected government. It has total landmass is 181,035 square kilometres bordered by Thailand to the northwest, Laos to the northeast, Vietnam to the east, and the Gulf of Thailand to the southwest. The total population is 14.68 million according to the recent Cambodia Inter-Censual Population Survey (CIPS) 2013 (see Annex 1). Cambodia is classified as a least developed country (LDC) by the United Nations. Its per capita income exceeded USD 1,000 the first time in 2012, a near 5-fold increase in the last decade.

Emerging from the genocidal regime of Khmer Rouge and a decade of civil war, Cambodia has made a remarkable recovery in nation rebuilding in the past two decades. Cambodia pursues a development strategy through planned development in a market framework. Since 2004, the Royal Government of Cambodia (RGC) has adopted a 'Rectangular Strategy' that

provides the development framework for the planning and implementation of the five-year National Strategic Development Plan (NSDP), currently in its fourth phase 2014-2018.

The successful implementation of and Rectangular Strategy and NSDP has enabled sustained security and social stability and provided opportunities for development, tourism and direct foreign investment. Driven by the burgeoning garment sector, Cambodia enjoyed exceptionally strong economic growth from 2004-2007, with an average GDP growth of over 11% per annum, peaking at 13.3% in 2005. The global economic recession in late 2000's greatly impacted Cambodia due to shrunken export demand from the West. The country's economy however has rebounded quickly with projected GDP growth between 7 to 7.5 percent over the medium term.

Figure 1-1: Cambodia GDP Growth Rate 2004-2014

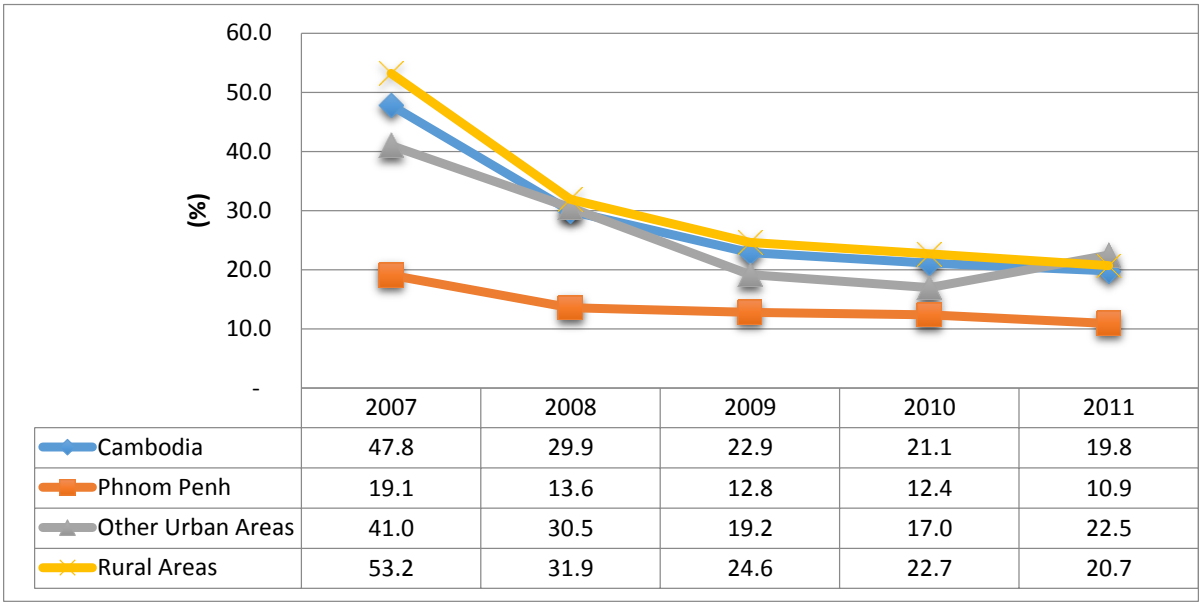


Source: MOEF 2014

Poverty alleviation is a development priority of RGC with formulation of the first Poverty Reduction Strategy in early May 2000. Over the last fifteen years, significant progress has been made in reducing poverty through economic reforms and pro-poor social policies. Poverty level has been reduced at a rate of more than one percentage point annually since early last decade. According to the 2011 Cambodia Socio-Economic Survey (CSES), the poverty rate stood at 19.8% in 2011 nearing the Cambodia's Millennium Development Goal (CMDG) target of 19.5% in 2015.[1] Poverty reduction has been particularly successful in rural areas where the poverty rate declined from 53.2% in 2007 to 20.7% in 2011

[1] In 1993-1994, the poverty rate was estimated at about 39 percent of the population using a poverty line developed by the World Bank. In 2011, the government raised the bar by redefining the poverty line while keeping the CMDG target for reduction in the poverty at 19.5 percent by 2015.

Figure 1-2: Trends in Poverty Rates in Cambodia by Broad Strata, 2007-2011



	2007	2008	2009	2010	2011
Cambodia	47.8	29.9	22.9	21.1	19.8
Phnom Penh	19.1	13.6	12.8	12.4	10.9
Other Urban Areas	41.0	30.5	19.2	17.0	22.5
Rural Areas	53.2	31.9	24.6	22.7	20.7

Source: MOP, CSES 2007-2011

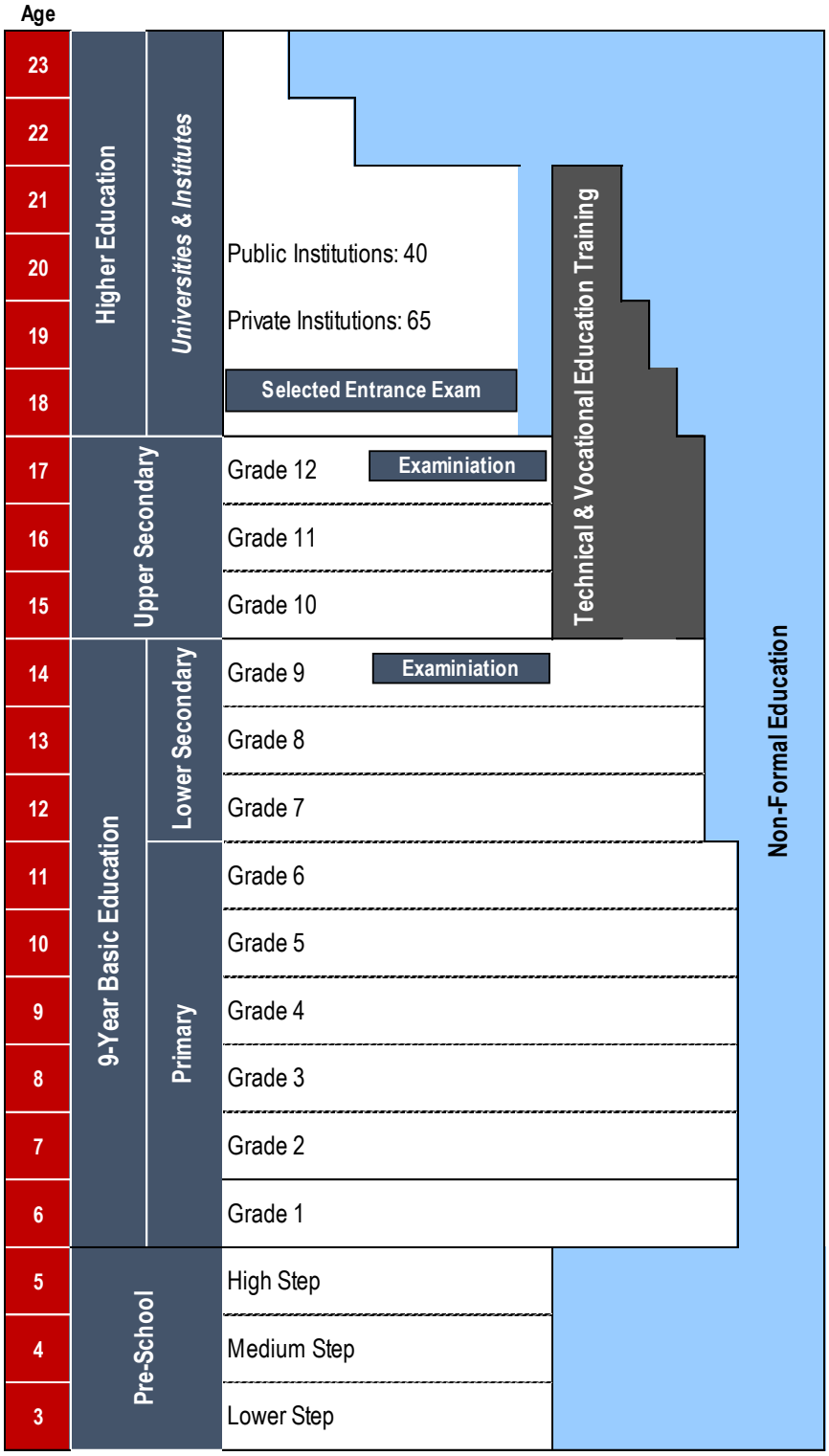
Cambodia is also on track to attain a number of its CMDG goals, such as achieving universal literacy and basic education, reducing child mortality, improving maternal health and combating HIV/AIDS, malaria and other communicable diseases. There are also some progresses made in promoting gender equity in basic education participation and employment, but more efforts need to be made at higher-level education access and women representation in public offices. Efforts also have been made to strengthen the sustainable natural resource and environmental management. However, there is need to further address reforestation, preserving fresh water sources, improving livelihoods of people dependent on natural resources, and forests management.[2]

1.3. EDUCATION SECTOR

The Cambodia public education system consists of: (i) three years of pre-school education (ii) six years of primary education (grades 1-6); (iii) six years of secondary education, with three years at lower (grades 7-9) and upper secondary (grades 10-12) levels; (iv) selective non-formal education programs focusing adult literacy and school equivalency; (v) limited range of technical, vocational and skills orientation programs through a network of urban and provincial technical training centers; (vi) a small number of public higher education institutions, mainly in Phnom Penh and provinces; and (vii) a network of regional and provincial teacher training colleges. The private sector in primary and secondary education is very small, but the past decade has seen rapid growth in the establishment of private universities mainly in Phnom Penh

[2] MoP; *Annual Progress Report on Achieving The Millennium Development Goals*, 2013

Figure 1-3: Cambodia Education System



The education sector is managed by the Ministry of Education, Youth and Sport (MOEYS) consisting of 6 directorates general, 34 line departments, 25 provincial education departments, 197 district education offices and around 11,860 pre-schools, primary and secondary schools, complemented by 24 teacher training colleges (TTCs). In addition to the general education system, higher education provision is delivered through more than 105 public and private institutions.

Figure 1-4: Basic Education Statistics, SY 2013-14

Education Level	Number of Schools	Enrollment		Teaching Staff	
		Total	Girl	Total	Female
Pre-Primary					
- Public Pre-School	3,184	157,288	75,697	4,537	4,326
- Community Pre-School	2,200	55,832	28,756	2,523	2,465
- Private Pre-School	403	36,379	17,459	2,918	2,311
Primary School	6,993	2,073,811	994,989	44,895	22,630
Lower Secondary Schools	1,659	538,626	267,773	27,829	11,764
Upper Secondary Schools	444	266,293	127,037	11,557	3,433
Whole Kingdom	**14,883**	**3,128,229**	**1,511,711**	**94,259**	**46,929**

Source: MOEYS/EMIS

MoEYS is mandated to ensure development of an effective human resource base through providing and enabling education opportunities for all Cambodians. In late 2000's, the Ministry of Education, Youth and Sports (MoEYS) initiated a comprehensive education reform, culminated in the preparation of the first Education Strategic Plan (ESP) 2001-2005. At the core of this medium term education-sector plans is the commitment to universal, gender-equitable, inclusive, quality basic education within the wider framework of Education For All (EFA) by 2015. The ESP adopts a sector-wide management framework and a set of program priorities to guide planning, management and implementation.

Since early 2000's, Cambodia has taken major stride in improving education access for the rural poor, girls, ethnic minority children and other marginalized groups. Since formulation of the first ESP 2001-05, access to schooling has improved regardless of place of residence, gender, or wealth. In pre-primary, public pre-school enrolment has risen from 63,747 pupils in 2001/02 to 157,288 in 2013/14. Including private and community-based pre-school, total pre-primary enrolment is nearly 250,000 children. In primary education, primary net enrolment rate (NER) has steadily increased from 87.0% in school year 2001/02 to 98.2% in school year 2013/14. In lower secondary education, the gross enrolment rate (GER) has increased from 32.7% to 55.3% over the same period. Moreover since 2007, girls have had a slightly higher net enrollment rate than males both in primary and in secondary education.

The quality and efficiency of the basic education system also has improved since adoption of the first ESP 2001-2005. The repetition rate in primary has been halved from 10.2% to 5.1% from 2001/02 to 2013/14. Lower secondary repetition rate also has declined to a mere 1.8% in school year 2013/14. The pupil teacher ratios have been lowered in primary from 56.8 to 46.2 and in secondary from 21.4 to 19.4 over the past 12 years, a positive trend in enhanced teaching and learning processes (see Table 1-2).

Figure 1-5: Selected ESP Key Achievements from 2001/02 to 2013/4

	2001/02	2005/06	2009/10	2013/14
Pre-school Enrollment	63,747	75,669	99,130	157,288
Primary NER	87.0	91.3	94.8	98.2 (1)
Lower Secondary GER	32.7	55.3	58.1	55.3 (2)
Repetition Rate				
- Primary	10.2	11.0	7.1	5.1
- Lower Secondary	5.4	2.5	2.0	1.8

Pupil Teacher Ratio				
- Primary Education	56.8	50.8	49.2	46.2
- Lower Secondary	21.4	31.7	24.4	19.4

Note:
(1) Net enrollment rate in primary education include private (2.6%)
(2) Gross enrollment rate in lower secondary education include private (1.8%,)
Source: MOEYS/EMIS

The Government's new National Strategic Development Plan (NSDP) 2014-2018 highlights the development of high quality and capable human resources is key to supporting economic growth and competitiveness of the country. Education development is critical for Cambodia's transition from a lower-middle income country in the near future to an upper-middle income country by 2030 and a developed country by 2050. The Education Strategic Plan (ESP) for the period 2014-2018 is designed as a further step in putting in place the necessary human resources and infra-structure to contribute achievement of these national vision and goals.

The ESP 2014-2018 will continue to give a high priority to equitable access for high quality basic education services. The three policy pillars of the ESP:

- Policy 1: Ensuring equitable access for all to education services
- Policy 2: Enhancing the quality and relevance of learning
- Policy 3: Ensuring effective leadership and management of education staff at all levels

Within the context of education service delivery, ESP gives increased focus on the expansion of Early Childhood Education, expanding access to quality secondary and post-secondary education and Non-Formal Education, Technical and Vocational Education. Specific measures also will be taken to assure the education for marginalized children and youth.

Within the context of sector management and governance, ESP recognizes that providing the education system with the right resources and the mechanisms to account transparently is crucial to improving the outcomes and impact of the education activities. The ESP 2014-2018 includes measures to improve the budget management and to better linking results to financial resources. Rigorous implementation of the Teacher Code of Conduct, developing the capacity of staff at all levels for effective implementation against clear standards will lead to better governance. In order to support these reforms, MEYS will continue to implement the strengthening of the partnership between the Government and communities and parents, the development partners, the private sector and non-governmental organizations.

The MOEYS priority reform agenda over 2013-18, as set out by by the Minister Hang Chuon Naron are presented below.

The MoEYS Priority Reform Agenda

1. Improving education quality all levels in response to the needs for economic diversification
    - Teacher qualification, incentives and career path
    - Student health, and school attendance
    - Quality curriculum
    - Quality schooling environment
    - Quality service delivery with community participation

2. Implementation of in-depth reform on public financial management (PFM)
3. Strengthening personnel management
4. Reforming examinations
5. Creating an Education Research Council, a think-thank on education policy
6. Higher education reform
7. Development of technical skills of youths in response to the needs of labour market
8. Reforming of physical education and sport

1.4. STUDY METHODOLOGY

1.4.1. OOSC CONCEPTUAL FRAMEWORK

The common definition on "out of school children" is children who have either discontinued their schooling before completion or never enrolled into schooling. The study methodology is based on the Conceptual and Methodological Framework (CMF) of the Global Initiative on Out of School Children for analysis on the problem of OOSC through the 'Five Dimensions of Exclusion, which are:

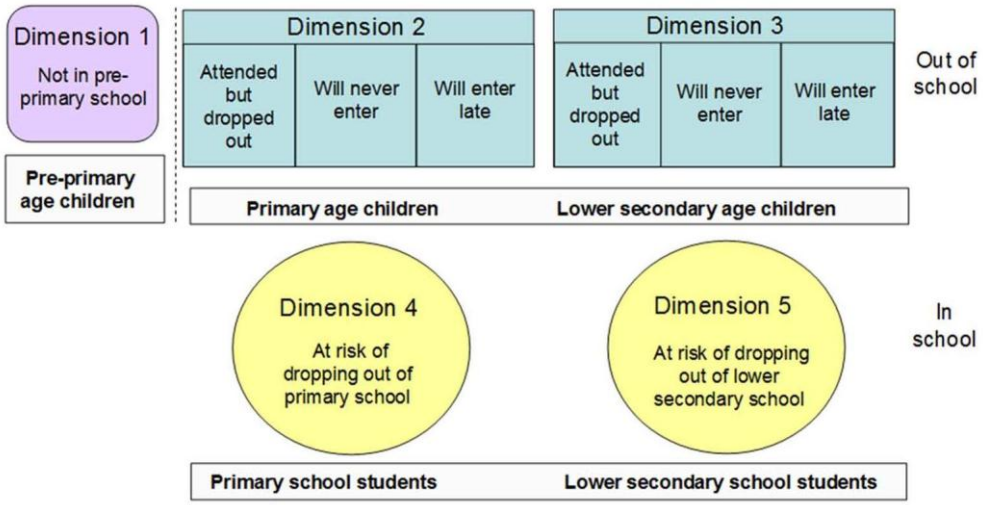
1. Children of pre-primary school age (5 years) who are not in pre-primary or primary school
2. Children of primary school age who are not in primary or secondary school
3. Children of lower secondary school age who are not in primary or secondary school
4. Children who are in primary school but at risk of dropping out
5. Children who are in lower secondary school but at risk of dropping out

Dimensions 2 and 3 are further split into three mutually exclusive categories:

- Children who attended in the past and dropped out;
- Children who will enter school late;
- Children who are unlikely to enter school; and

An illustration of the OOSC framework is presented in Figure 1-5 below.

Figure 1-6: OOSC Conceptual Framework: Five Dimensions of Exclusion



The analysis on the constraints and bottlenecks of Out-Of-School Children will adapt the conceptual framework developed in the early 1990's that distinguish the difference between students being push-out rather than pull-out of school [Jordan et al., 1994; Watt & Roessingh, 1994].

A student is *pushed out* when adverse situations within the school environment lead to the students leaving the system. In most cases, the reasons for students abandon their schooling is because schools don not understand and don not respond to individual needs, abilities and learning styles. [Shaffer, Sheldon, 2015] These include tests, attendance and discipline policies. With push factors, the school is the agent whereby a student is removed from school as a result of a consequence.

A student is *pulled out* when factors inside the student divert them from completing school. These occur when factors, such as poverty, employment, or marriage. These factors cause students or his/her families to place a greater value on something outside of school than completing the school. With pull factors, the student/family is the agent in opting for out of school Examples of these two dropout typologies, adapted from a series of longitudinal studies conducted in the US over 1980's-990's is summarized below:

Figure 1-7: Dropout Reasons & Causes

Push Factors	Pull Factors
▪ Missing too many school days ▪ Poor academic performance ▪ Cannot keep up with schoolwork ▪ Rigorous academic standards are too difficult ▪ Cannot get along with teachers ▪ Cannot get along with other students ▪ Did not feel safe at school ▪ Was suspended/expelled from schools ▪ Did not like school ▪ Student disinterest in learning ▪ Did not feel belonged there ▪ Disabilities/Illness ▪ Ethnic religious factors	▪ Had to care for family member ▪ Had to support family ▪ To care for a member of the family ▪ Could not study and work at same time ▪ Disability/Illness ▪ Got a job ▪ Family problems ▪ Pregnancy/marriage ▪ Alcohol or drug problem

Source: Adapted from Doll, Jonathan Jacob, et al 2013

As shown in the table above, most of the reasons on drop out are school-related factors (or pushed out). In some instance, they can be both. For example disability/illness is classified as pull factors in most international literature, but this study will treated as pushed factor as the most of the schools in Cambodia are not prepared to meet the needs of children with disability.

1.4.2. OVERVIEW OF DATA SOURCES

The study draws its quantitative findings from a broad range of data sources, including:

- MoEYS EMIS Annual School Statistics
- Cambodia Inter-Censal Population Survey (CIPS) 2013
- Cambodia Socio-Economic Surveys (CSES)
- Cambodia Demographic and Health Survey (CDHS)

- Cambodia Labour Force and Child Labor Study
- The Cambodian Rural Urban Migration Project (CRUMP) report

At times, there are varying results between different data sources due to different methodologies used in projections and sample survey estimations, especially between administrative data (MoEYS EMIS) and household survey data (e.g. CSES/CDHS).

Take for instance, the MoEYS/EMIS School Statistics, or administrative data, are based on enrolment at a specific date which can bias the results by either counting enrolled children who never attend school or by omitting those who enrol after the reference date for reporting enrolment data. The CSES household data collection was during the period of January to November and the school year in Cambodia is between September and June. Since the CSES was conducted primarily to capture information not specifically on education, it is likely that the start of school academic year was not taken into consideration with respect to survey data collection time. Moreover, being enrolled in school is not necessarily the same as attending school. Children may be recorded in school enrolment records and yet not actually be attending school. [UNESCO Institute for Statistics, 2005]

Interpretation of the results from these surveys therefore took into account of the potential distortion, caused by survey time. A comparison of the enrolment rates, calculated using the two man data sources of the study EMIS and CSES is shown in Table 1-3 below.

Figure 1-8: EMIS/CSES Primary Enrolment Rate Comparison 2007-2013

	2007	2008	2009	2010	2011	2012	2013
EMIS Primary NER	92.1	93.3	94.4	94.8	95.2	96.4	98.2*
CSES Primary NAR	81.5	83.6	81.1	85.6	84.3	86.1	85.1

Note:

(1) Net enrollment rate in primary education include private (2.6%)
(2) Gross enrollment rate in lower secondary education include private (1.8%,)

Source: EMIS and CSES

For this study, CSES 2012 is the main data source for the calculation of the out-of-school rates which are age-referenced. The assumption is that parents/households can provide more accurate information on the age of a child than school administrative records. CSES 2012 is the eleventh survey collecting data from household and individuals in Cambodia on different areas relating to poverty. The survey is first conducted in 1994 by the National Institute of Statistics (NIS) of the Ministry of Planning (MOP). Since 2007, CSES is conducted every year with a sample size of 3,600 household annually except CSES 2009 which expand its sample size to 12,000 households. For CSES 2010 to 2012, the sample size was again brought down to 3,600. Because of the small sampling size, Because of its smaller sample size, CSES 2012 is only statistically valid at the national level. Hence, the study will use CSES 2009 when disaggregate data into small population groups, such as provincial level and ethnic minority analysis, to ensure the findings are statistically valid.

The MoEYS EMIS is the main data source for the calculation internal efficiency indicators (e.g., dropout and repetition rates). This is due to the CSES survey does not provide information on single year dropout, in other words, children who attended school in the previous year but not in the current year. The survey does include questions on the previous year's attendance record, but the answer does not differentiate between attendance in formal and non-formal schools.

In addition to quantitative assessment, the analyses of barriers and bottlenecks on school exclusion involves extensive literature review of recent studies, surveys and project reports related to out-of-school children. The analysis paid particular attention to the field experience and lessons learned of NGOs in Cambodia working with the out-of-school children, including children with disabilities, street children/orphans, child labour and ethnic minority children.

2. PROFILES OF EXCLUDED CHILDREN

The Conceptual and Methodological Framework (CMF) categorizes Out of School Children (OoSC) into five dimensions. Based on the definition of OOSC, the **Five Dimensions of Exclusion** include two dimensions that capture the out-of-school population of primary school age (Dimension 2) and lower secondary school age (Dimension 3).

The calculation of the OOSC rate for each education level are:

- ***At the Pre-primary Education Level***: Number of children of official school age *(age 5*) who are not enrolled in pre-primary school, expressed as a percentage of the population of official pre-primary school age. Children enrolled in primary education are considered in school.

- ***At the Primary Education Level***: Number of children of official school age (*age 6-11*) who are not enrolled in primary or secondary school, expressed as a percentage of the population of official primary school. Children enrolled in pre-primary education are excluded and considered out of school.

- ***At the Lower Secondary Education Level***: Number of children of official school age (*age 12-14*) who are not enrolled in primary, lower secondary school or higher, expressed as a percentage of the population of official lower school age.

The school typology includes public and private schools as well as religious schools using formal national curriculum. Those in non-formal education or non-accredited vocational training are typically counted as out of school, except when it is recognised as fully equivalent to formal education.

2.1. DIMENSION 1: PRE-PRIMARY EDUCATION

Pre-primary education is represented by Dimension 1, which highlights children of pre-primary school age who are not in pre-primary or primary education. Three indicators are used to measure this group of children: Net Attendance Rate (NAR), Adjusted Net Attendance Rate (ANAR) and Out-of-school children Rate (OOSC) Rate. NAR represents the percentage of pre-primary school age children in pre-primary schools, ANAR is an internationally accepted indicator which counts enrolment in higher levels together with the correct level for the age groups. The ANAR for pre-primary therefore takes into consideration of pre-primary school age children who have furthered into primary schools, and OOSC Rate measures the percentage of pre-primary school children who are out of school education. The formulas used to calculate the indicators are as follows:

$$\text{Net Attendance Rate (NAR)} = \frac{\text{Number of children attending pre-primary schools}}{\text{Total number of children age 5}}$$

$$\text{Adjusted Net Attendance Rate (ANAR)} = \frac{\text{Number of children attending pre-primary or primary schools}}{\text{Total number of children age 5}}$$

$$\text{OOSC Rate} = 100 - \text{ANAR}$$

In Table 2-6 statistics are displayed on school attendance at both pre-primary and primary.

Figure 2-1: School Attendance Of Pre-Primary School Age Children (Age 5) 2012

	Attending		ANAR	Out-Of-School	
	Pre-Primary (NAR)	Primary		%	No.
Cambodia	10.9	18.2	29.1	70.9	212,710
Gender					
Male	11.4	19.2	30.6	69.4	111,271
Female	10.3	17.0	27.3	72.7	101,439
Location					
Urban	15.2	17.9	33.1	66.9	31,168
Rural	10.1	18.2	28.3	71.7	181,542
Wealthest Quintile					
Q 1 (Poorest)	10.2	11.8	22.0	78.0	72,993
Q 2	10.4	19.3	29.7	70.3	52,195
Q 3	6.8	18.1	25.0	75.0	55,340
Q 4	18.4	24.8	43.2	56.8	19,175
Q5 (Richest)	16.7	30.3	47.0	53.0	13,005

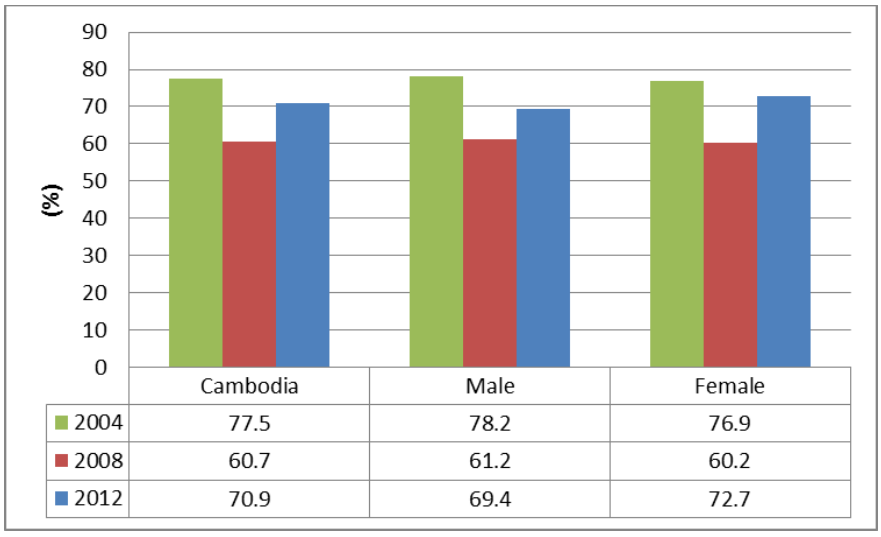
Source: Author's Calculation from CSES 2012

According to CSES, in Cambodia as a whole, 29.1% of its 5 years old children attend schools, of which 10.9% in pre-primary schools and 18.2% in primary schools. The actual attendance rate in pre-primary education therefore is very low. The percentage of children who are out of school in this age group stands at 70.9%. In other words, over two thirds of pre-primary school age children in Cambodia do not attend schools.

At this age, boys are slightly more likely to attend schools than boys. 30.6% girls, compared with 27.3% girls, attend schools. This is a reversal of trends from previous years. In respect to urban and rural areas, urban children are in clear advantage, with 33.1% in school, compared with rural only 28.3%. Over 15% of urban age 5 children attend pre-primary, compared to only 10% of their rural counterparts. This is due to existence of large number of primary pre-schools in urban areas. According to CSES 2012, nearly 22% of urban children in pre-primary enrolled in private schools compared to none in rural areas.

The next figure compares the trend in pre-primary out-of-school profile between 2004, 2008 and 2012. The proportion of age 5 children out-of-school children has increased by 10 percentage points between 2008 and 2012, higher for girls at an increase of 12.5%.

Figure 2-2: Multi-year Comparison of Pre-Primary Age 5 OOSC



Source: Author's Calculation from CSES 2004, 2008 and 2012.

The study acknowledges that there is a substantial difference between MoEYS statistics and CSES 2012 on the proportion of Age 5 children attending pre-primary. According MoEYS Education Congress Report 2012, there was a total of 146,071 age 5 children enrolled in pre-primary education, including public, private and community pre-schools. The pre-school net enrolment rate therefore is estimated to be 52.7% against a projected age 5 populations of 277,398 children. Assuming there was no age 5 children attending primary school, the maximum out-of-school rate is 47.3%, compared to the CSES figure of 70.9%.

As stated earlier in the methodology section above, the different rates of participation measured by administrative and household survey data sources can be attributed to the timing of data collection. However, the divergence between MoEYS/EMIS and CSES 2012 is too great to be attributed solely on the survey methodology alone. For this reason, the study will present both OOCS rates on pre-primary education without further qualification.

The profile of out of school children at the pre-primary age of 5 in 2012 can be summarised as follows:

- According household survey data, CSES 2012 estimates there is roughly 212,700 out-of-school children at the pre-primary age of 5 in Cambodia, of whom about 47.7% are girls and 52.3% are boys. 14.7% live in urban areas and 85.3% in rural areas.
- According MoEYS administrative data, EMIS 2011/12 estimates there is roughly 131,327 out-of-school children at the pre-primary age of 5 in Cambodia, of whom about 48.1% are girls and 51.9% are boys.

2.2. Dimension 2 And 3: Primary And Secondary Education

2.2.1. DIMENSION 2: PRIMARY EDUCATION

Dimension 2 represents children of primary school age who are not in primary or secondary schools. Three indicators are used to measure this group of children: NAR, ANAR and OOSC Rate. NAR represents the percentage of primary school age children in primary schools, ANAR takes into consideration of primary school age children who have furthered into secondary schools, and OOSC Rate measures the percentage of primary school children who are out of school education. The formulas used to calculate the indicators are as follows:

$$\text{Net Attendance Rate (NAR)} = \frac{\text{Number of children attending primary schools}}{\text{Total number of children age 6-11}}$$

$$\text{Adjusted Net Attendance Rate (ANAR)} = \frac{\text{Number of children attending primary or secondary schools}}{\text{Total number of children age 6-11}}$$

$$\text{OOSC Rate} = 100 - \text{ANAR}$$

Tables 2-7 below presents primary net attendance rate (NAR), adjusted net attendance rate (ANAR) and out-of school primary school age children (age 6-11) in Cambodia. At the national level, the primary NAR is 86.1%. Urban area has the highest rate of all the sub-

groups at 91.6%. The NAR gender parity index (GPI) is nearly 1.00 (at 0.995), meaning there is gender parity in primary attendance.[3]

Primary ANAR takes into consideration those primary-age children that studying at the secondary level, hence is marginally higher than NAR by 0.7 percentage points. Nationwide around 13% of age 6-11 children are out-of-school, or roughly 250,000 children. Primary OOSC rate includes children that are still attending pre-primary, highest for girls at 2.3%

Figure 2-3: School Attendance Of Primary School Age Children (Age 6-11) 2012

	Attending Pre-Primary	Attending Primary (NAR)	Attending Lower Sec	ANAR	Out-Of-School	
					%	No.
Cambodia	1.9	86.1	0.7	86.8	13.2	249,728
Gender						
Male	1.4	86.3	0.7	87.0	13.0	122,802
Female	2.3	85.8	0.8	86.6	13.4	126,926
Area						
Urban	1.7	91.6	0.8	92.4	7.6	27,022
Rural	1.9	84.8	0.7	85.6	14.4	222706
Poverty Quintile						
Q 1 (Poorest)	2.0	79.2	0.6	79.9	20.1	95,293
Q 2	2.3	87.8	0.3	88.1	11.9	65,418
Q 3	1.6	86.4	1.3	87.7	12.3	51,392
Q 4	1.8	89.5	0.8	90.3	9.7	28,503
Q5 (Richest)	1.0	92.9	1.5	94.4	5.6	9,122

Source: Author's Calculation from CSES 2012

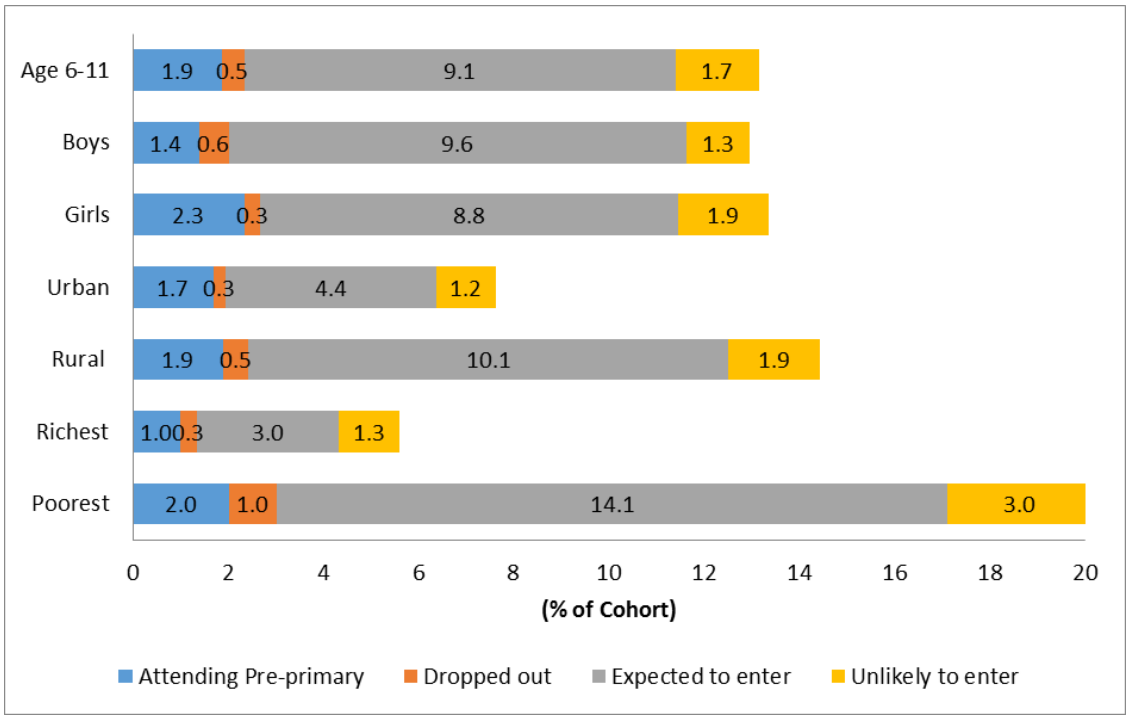
Figure 2-4 below provides further details on the profile of primary age 6-11 out-of-school children. The total out-of-school rate is 13.2% breaking down to:

- 1.9% in pre-primary
- 0.5% drop-out
- 9.1% have never entered school but are expected to attend school
- 1.7% have never entered and are unlikely to attend school

In other words, majority of the primary age 6-11 children that are currently out-of-school are expected to go to school at some later time. Late entry is particularly high for children from the poorest households at 14.1% and rural areas at 10.1%.

[3] Gender Parity Index (GPI) is calculated by dividing female statistics by male statistics. Values of the GPI between 0.97 and 1.03 are usually considered gender parity. If the GPI is less than 0.97, girls are at a disadvantage. If the GPI is greater than 1.03, boys are at a disadvantage.

Figure 2-4: Primary Age 6-11 OOCS Profile

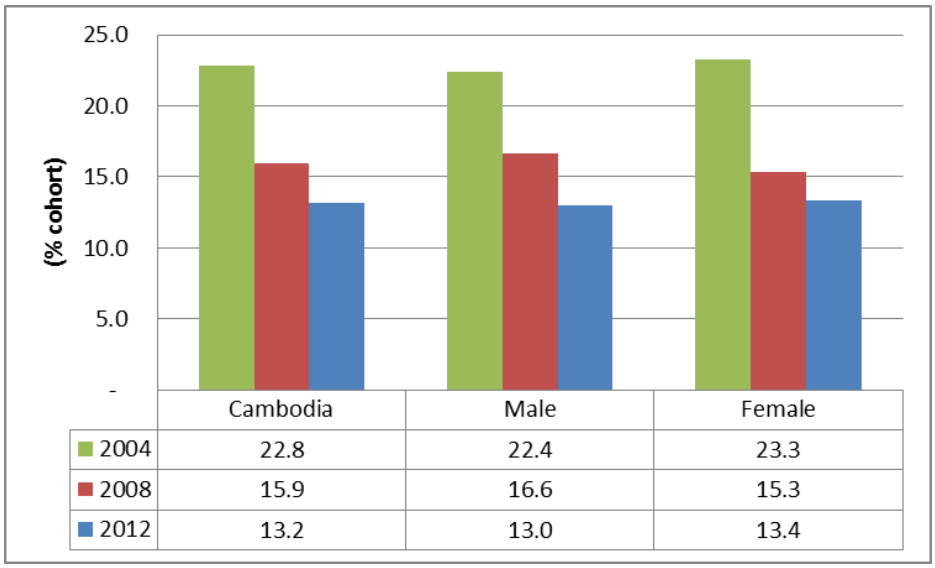


Source: Author's Calculation from CSES 2012

Figure 2-6 below shows that Cambodia has made significant progress in reducing the number of primary out-of-school children over the past decade. Cambodia education reform achieved remarkable results in early 2000's. Primary enrolment rate increased by 31% from 2.09 million students in 1998/99 to 2.75 million in 2002/03, or an increase of 31% over the five year period. Equally, enrolment in lower secondary increased from 226,000 to 415,700 students, or an increase of 84% over the same period.

Notwithstanding of the early success of the education reform over 2000/2005, it is estimated that nearly 23% of the primary school age children remain out of school in 2004. Since 2004, the primary OOSC rate has been lowered to 13.2% in 2014. The main factors contributing to the reduction in primary OOSC rate include expansion of the primary school system (especially reducing incomplete schools), enhanced quantity and quality of the teaching force, increased provision of teaching and learning materials in schools and strengthened capacity of the MoEYS in managing the system at central and local levels.

Figure 2-5: Multi-year Comparison of Primary Age 6-11 OOSC



	Cambodia	Male	Female
2004	22.8	22.4	23.3
2008	15.9	16.6	15.3
2012	13.2	13.0	13.4

Source: Author's Calculation from CSES 2004, 2008 and 2012

The profile of out of school children at the primary age of 6-11 can be summarised as follows:

- CSES 2012 estimates that there are around 1.9 million children at the primary age of 6-11 in Cambodia, of whom about 50.1% are girls and 49.9% are boys. 18.7% live in urban areas and 81.3% in rural areas.
- The average net attendance rate (NAR) in this age group is 86.1% and there is gender parity in primary school participation. Urban NAR is 91.6, considerably higher than rural NAR of 84.8%
- The percentage of out of school children stands at 13.2% in 2012, an improvement from 22.8% in 2004. However, almost one in every seven primary school age children in Cambodia still does not attend schools in 2012.
- In general boys and girls have similar OOSC rate in the primary school age. There is a big difference between urban and rural areas. The OOSC rate in urban areas is 7.6%, compared with the rural at 14.4%. In other words, OOSC rate in rural areas is double of that in urban areas.
- There is a major disparity in the OOSC rates between the richest and the poorest households. The OOSC rate of the richest quintile of households is 5.6% compared to 20.1% of the poorest quintle households. The number of out-of-school children from poor households is nearly ten-fold from the richest households.

2.2.2. DIMENSION 3: LOWER SEOCNDARY EDUCATION

Dimension 3 represents children of lower secondary school age who are not in primary or secondary schools. Four indicators are used to measure this group of children: NAR, ANAR, Attendance Rate in Primary Grades and OOSC Rate, and all of them involve only children who are at lower secondary school age of 12-14. NAR represents the percentage of the children attending lower secondary schools, ANAR takes into consideration of those who have furthered into upper secondary schools, Attendance Rate in Primary Grades measures the children still in primary education, and OOSC Rate gives the percentage of the children who are out of school. The formulas used to calculate the indicators are as follows:

$$\text{Net Attendance Rate (NAR)} = \frac{\text{Number of children attending lower secondary schools}}{\text{Total number of children age 12-14}}$$

$$\text{Adjusted Net Attendance Rate (ANAR)} = \frac{\text{Number of children attending lower or upper schools}}{\text{Total number of children age 12-14}}$$

$$\text{Attendance Rate in Primary Grade} = \frac{\text{Number of children attending primary schools}}{\text{Total number of children age 12-14}}$$

$$\text{OOSC Rate} = 100 - \text{ANAR} - \text{Percentage Attending Primary Grades}$$

Tables 2-8 below presents lower secondary NAR, ANAR and out-of school profile of age 12-14 in Cambodia. At the national level, lower secondary NAR is 33.1%. Urban area has the highest rate of all the sub-groups at 45.0%. The NAR gender parity index (GPI) is over 1.13 (at 0.995), meaning that boys are highly disadvantaged in lower secondary school participation. This is a result of high percentage of boys age 12-14 remaining in primary schools and are more likely to drop out of lower secondary than girls due to overage.

Lower secondary ANAR is 88.6%, marginally higher than NAR due to a small number age 12-14 children attending upper secondary schools. The OOCS for age 12-14 nationwide however is comparatively low around 11.4% or roughly 107,000 young people. This is due to over 55% of age 12-14 are attending primary schools, hence they are qualified as "in-school", but some of them can be considered at-risk of not completing basic education due to over-age.

Figure 2-6: School Attendance Of Lower Secondary School Age Children (Age 12-14) 2012

	Attending Primary	Attending Lower Sec (NAR)	Attending Upper Sec	ANAR	Out-Of-School	
					%	No.
Cambodia	54.4	33.1	1.2	34.2	11.4	107,401
Gender						
Male	55.5	31.1	0.8	31.9	12.6	61,597
Female	53.3	35.2	1.5	36.7	10.0	45,804
Area						
Urban	49.0	45.0	2.4	47.4	3.5	6,494
Rural	55.7	30.2	0.9	31.0	13.3	100,907
Poverty Quintile						
Q 1 (Poorest)	58.4	17.3	-	17.3	24.2	95,293
Q 2	66.7	21.4	0.6	22.0	11.3	65,418
Q 3	57.7	31.2	1.0	32.2	10.1	51,392
Q 4	40.2	55.5	1.4	56.9	2.9	28,503
Q5 (Richest)	34.4	57.6	4.8	62.4	3.2	9,122

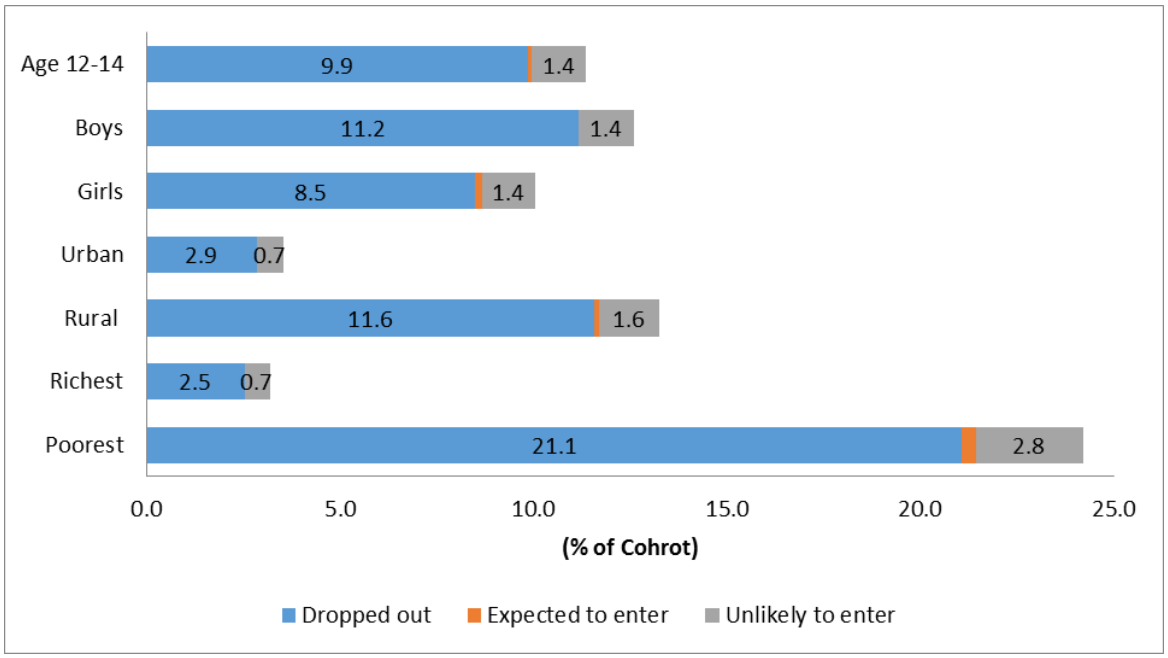
Source: Author's Calculation from CSES 2012

Figure 2-7 below provides further details on the profile of lower secondary age 12-14 out-of-school children. The total out-of-school rate is 11.4% breaking down to:

- 9.9% drop-out
- 0.1% have never entered school but are expected to attend school
- 1.4% have never entered and are unlikely to attend school

In other words, majority of the lower secondary age 12-14 children that are currently out-of-school are due to dropout. Dropout rates is particularly high for children from the poorest households at 21.1% compared to 2.5% from the richest households.

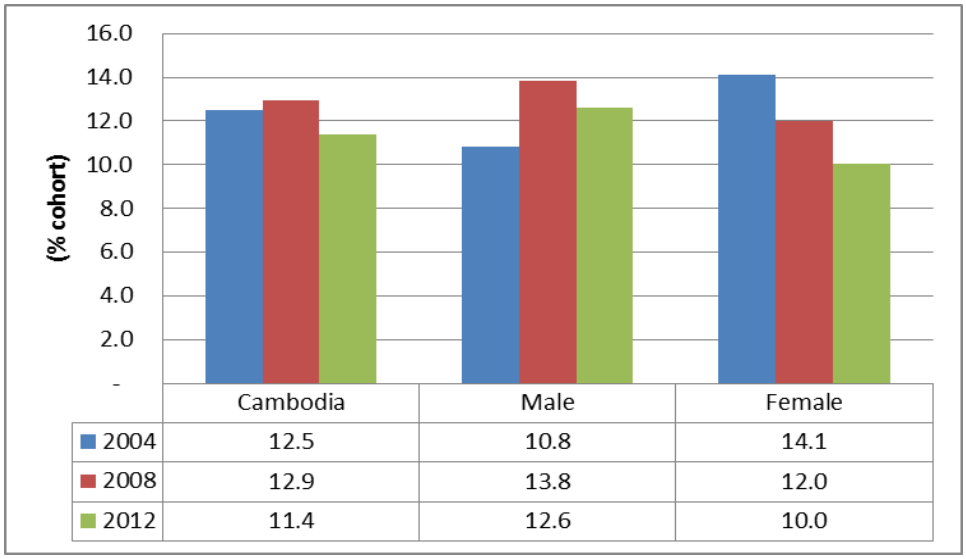
Figure 2-7: Lower Secondary 6-11 OOCS Profile



Source: Author's Calculation from CSES 2012

From a multi-year perspective, Cambodia has less success in reducing the lower secondary (age 12-14) OOSC rate than primary age 6-11. The OOSC rate in 2004 is 12.5% in 2004 compared to 11.4% in 2008. The major improvement is girls with OOCS rate reduced from 14% in 2004 to 10% in 2011. Age 12-14 boys however fared worse. The male OOSC rate increased from 10.8% in 2004 to 13.8% in 2008, then declined to 12.6% in 2012.

Figure 2-8: Multi-year Comparison of Lower Secondary Age 12-14 OOSC



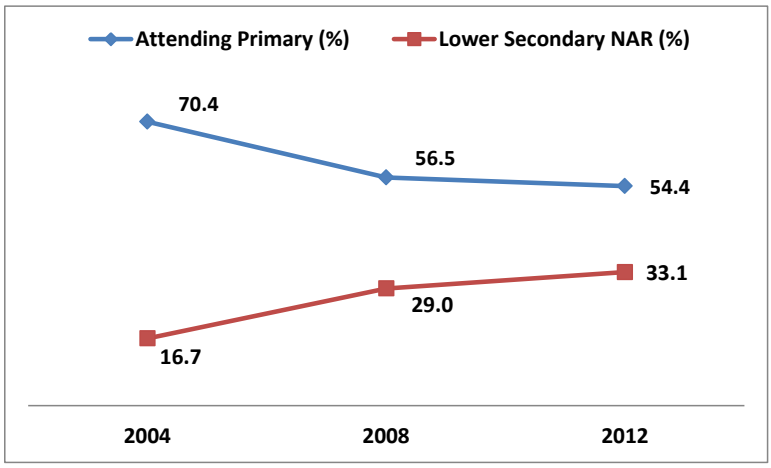
	Cambodia	Male	Female
2004	12.5	10.8	14.1
2008	12.9	13.8	12.0
2012	11.4	12.6	10.0

Source: Author's Calculation from CSES 2004, 2008 and 2012

This apparent lack of progress in reducing OOSC rate for age however is masked by the high proportion of age 12-14 students still at primary schools. In 2004, the lower secondary NAR is

only 16.5% while 70.4% of the age cohort was still in primary schools. In 2008, the NAR increases to 29.0% and the share of cohort in primary school reduced to 56.5%. In 2012, the NAR further improves to 33.1% and primary education share lower to 54.4% (see Figure 2-7).

Figure 2-9: Multi-year Comparison of Age 12-14 School Participation



Source: Author's Calculation from CSES 2004, 2008 and 2012

Nevertheless, much needs to be done to improve lower secondary school participation and retention. In spite of more than doubling of the number of lower secondary schools from 2004 to 2012, lower secondary gross enrolment rate (GER) and net enrolment rate remains low at 55% and 33% in SY 2011/12 according to the official government statistics. This is due to limited improvement in primary to lower secondary transition rate, in spite of increase in grade 6 enrolment and persistent high drop-out rate at over 20%.

Figure 2-10: Selected Lower Secondary Education Statistics EMIS 2004-12

	2003-4	2007-8	2011-12
Lower Secondary Schools	688	1,303	1,597
Lower Secondary Enrolment	459,986	637,629	541,147
No. of Grade 9 students	116,219	169,055	146,106
% of Grade 9 students	25.3	26.5	27.0
Primary to LS Transition Rate	82.7	78.9	79.3
Lower Secondary Dropout Rate	21.2	21.0	21.7

Source: MoEYS EMIS 2003/4, 2007/8, 2011/12

The profile of out of school children at the primary age of 12-14 can be summarised as follows:

- CESE 2012 estimates that there are in total 945,585 children at the lower secondary age of 12-14 in Cambodia, of whom about 48.3% are girls and 51.7% are boys. 19.5% live in urban areas and 80.5% in rural areas.
- The adjusted net attendance rate in this age group is 88.6%, of which 34.3% attends lower and upper secondary schools and 54.4% attends primary schools. It must be understood that although the latter group of children do attend schools, they are not in the grades right for their age. They are over-aged and are at risk of dropping out.
- The percentage of out of school children stands at 11.4%, higher for boys (12.6%) than girls (10.0%). The gender parity index on OOSC rate is 1.25, meaning that boys are significantly disadvantaged compared to girls..

- Girls progress better and higher percentage of girls than boys attend lower secondary grades that are right for their age. Boys lag behind and there is higher percentage of boys than girls attending primary school grades. The ratio is 35.2% girls to 31.1% boys in lower secondary grades, and 53.3% girls to 55.5% boys in primary grades.
- Overall, there continue to be a big difference in school attendance between urban and rural areas. The lower secondary NAR is significantly better in urban areas at 45.0% than rural areas at 30.2%. The average OOSC rate in urban areas is 3.5% while in rural areas it is 13.3%.

2.2.3. OOSC NEVER ATTENDED SCHOOL

As highlighted in the earlier section, the percentage of age 5 children never attended schools is high at over 70% due to limited pre-primary school coverage. This rate dropped steadily from age 6 to 8 as families start to enroll their children into primary. The cumulative "never attended school" rate at the primary level age 6-11 is 11.1%, but this figure is somewhat distorted by the high rates at age 6 and 7. A more telling figure perhaps is the cumulative rate at the lower secondary level age 12-14 which stands 1.5%. It can be assumed that this group of young people, roughly 15,000, will ever participate in formal education.

Gender-wise, the patterns of non-school attendance between boys and girls from age 5 to 11 are quite uneven. At age 11, all girls are attending schools while 1.5% of boys are unlikely to attend schools. As can be expected, urban/rural comparison also clearly favors urban children.

Figure 2-11: Percentage Of Age 5-14 Never Attended Schools

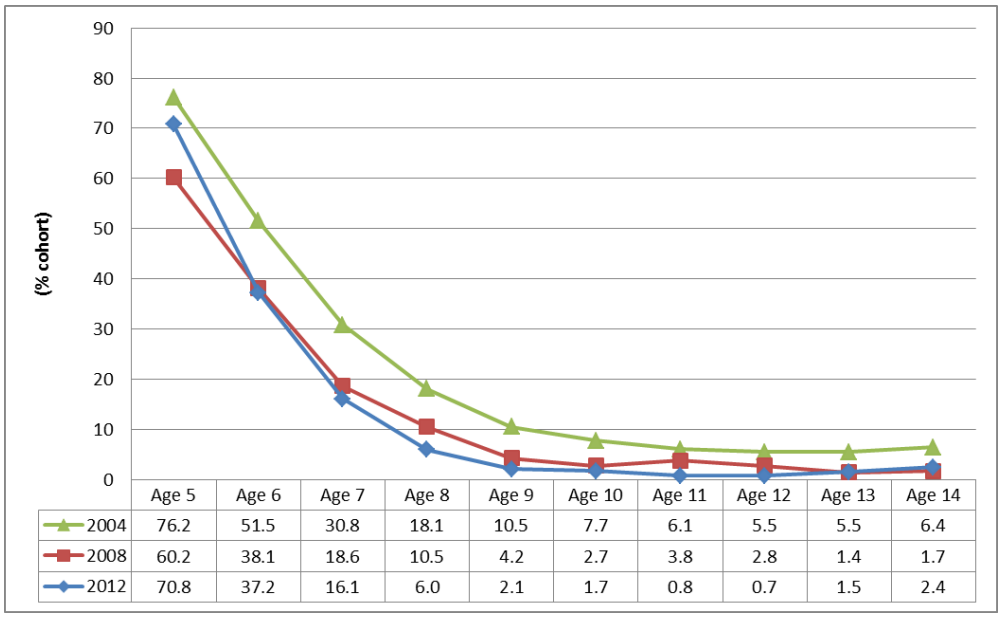
	Age									
	5	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Cambodia	70.6	37.2	16.1	6.0	2.1	1.7	0.8	0.7	1.5	2.4
Gender										
Boys	69.4	38.1	17.5	6.0	0.7	1.2	1.5	0.6	1.4	2.4
Girls	72.5	36.3	14.9	6.0	3.4	2.3	-	0.8	1.6	2.4
Area										
Urban	66.9	24.0	9.0	0.8	-	-	-	-	-	2.4
Rural	71.6	40.3	17.7	7.2	2.5	2.2	0.9	0.9	1.9	2.4
Poverty Quintile										
Q1 (Poorest)	76.8	54.5	28.7	11.8	5.6	4.5	1.8	2.2	2.9	8.9
Q2	70.3	34.4	13.5	5.6	-	2.2	1.1	1.1	2.8	-
Q3	75.0	35.9	14.6	6.9	-	-	-	-	1.2	-
Q4	56.8	31.9	7.2	-	2.3	-	-	-	-	1.1
Q5 (Richest)	53.0	18.4	4.7	1.4	-	-	-	-	-	2.5

Source: Author's Calculation from CSES 2012

Among all the sub-groups (e.g., disability, working children), ethnic minority groups have the highest proportion of children never attended schools. It is estimated that 37% of age 6-11 and 27% of age 12-14 ethnic minority children never attended schools.

From a longitudinal perspective, there has been major improvement in reducing the number of children never attended schools. In 2004, 20.5% of age 6-11 and 5.8% of age 12-14 never attended the schools. These rates were nearly halved to 12.5% and 2.0% respectively by 2008 and further reduced by 2012 (see Figure 2-9).

Figure 2-12: Multi-year Comparison on OOCS Never Attended Schools



	Age 5	Age 6	Age 7	Age 8	Age 9	Age 10	Age 11	Age 12	Age 13	Age 14
2004	76.2	51.5	30.8	18.1	10.5	7.7	6.1	5.5	5.5	6.4
2008	60.2	38.1	18.6	10.5	4.2	2.7	3.8	2.8	1.4	1.7
2012	70.8	37.2	16.1	6.0	2.1	1.7	0.8	0.7	1.5	2.4

Source: Author's Calculation from CSES 2004, 2008 and 2012

2.2.4. OOSC DROP OUT CHILDREN

The CSES survey does not provide information on single year dropout, in other words, children who attended school in the previous year but not in the current year. The survey does include questions on the previous year's attendance record, but the answer does not differentiate between attendance in formal and non-formal schools. For this reason, the report will use MoEYS EMIS statistics to present the situation on dropout.

In school year 2012-13, primary education dropout rate stands at 10.5% and lower secondary dropout at 21.2%. In primary, boys had a much higher dropout rate (12.4%) than girls (8.3%). In lower secondary, the gender gap narrowed but there was significant disparity between urban and rural areas.

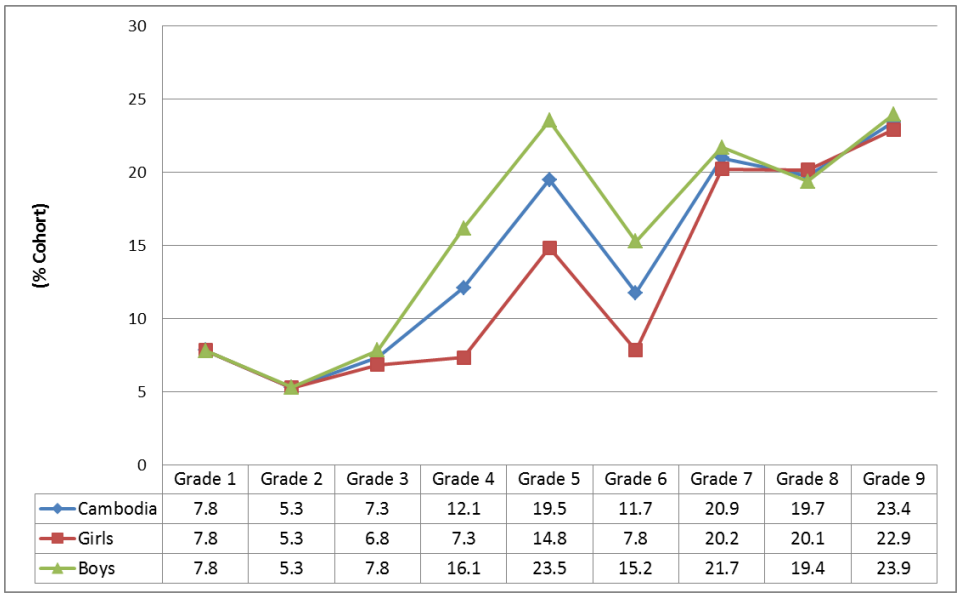
Figure 2-13: Primary and Lower Secondary Dropout Rates, SY 2012-13

	All	Females	Males
Primary Grade 1-6			
Cambodia	10.5	8.3	12.4
Urban	7.8	6.6	8.9
Rural	10.9	8.6	13.0
Lower Secondary Grade 7-9			
Cambodia	21.2	20.9	21.5
Urban	14.3	14.0	14.5
Rural	23.2	22.8	23.6

Source: MoEYS EMIS 2013/14

Figure 2-11 presents the dropout rate by grades and gender. In grades 1 and 2, the dropout rates of boys and girls are very close. Boy dropout rates start to rise in grades 4 to 6, highest at grade 5 at 23.5%. In lower secondary grades 7-9, the gender difference is much smaller, but consistently high at near or over 20%

Figure 2-14: Dropout Rates by Grades and Gender 2012/13



	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Cambodia	7.8	5.3	7.3	12.1	19.5	11.7	20.9	19.7	23.4
Girls	7.8	5.3	6.8	7.3	14.8	7.8	20.2	20.1	22.9
Boys	7.8	5.3	7.8	16.1	23.5	15.2	21.7	19.4	23.9

Source: MoEYS EMIS 2013/14

It is estimated that in School Year 2012/13, a total of 227,407 students dropped out of primary and 113,229 students dropped out of secondary; or a total of more than 340,636 students from basic education. The number of boy dropouts is particularly high, representing 62.8% at the primary level and 51.6% at the secondary level; or 59.1% of all dropouts from grade 1-9.

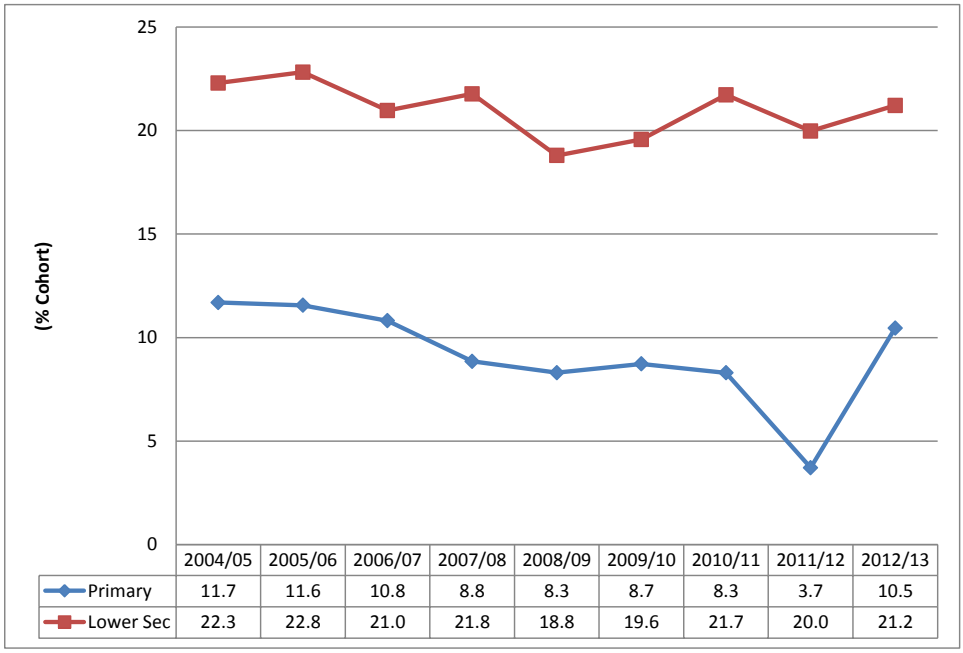
Figure 2-15: Primary and Lower Secondary Dropout Students, SY 2012-13

	Girls	Boys	Total
Grade 1	15,437	17,101	32,538
Grade 2	9,437	10,421	19,858
Grade 3	11,990	14,990	26,980
Grade 4	12,246	31,670	43,916
Grade 5	24,960	45,573	70,533
Grade 6	10,545	23,037	33,582
Primary Total	**84,615**	**142,792**	**227,407**
Grade 7	22,666	24,727	47,393
Grade 8	16,973	16,551	33,524
Grade 9	15,212	17,100	32,312
Lower Secondary Total	**54,851**	**58,378**	**113,229**
Grand Total	**139,,466**	**201,170**	**340,636**

Source: Author's Calculation of MoEYS EMIS 2013/14

In spite of Cambodia's success in increase school enrolment, keeping children in school until completion of basic education remain a daunting challenge. Figure 2-12 shows that there has been limited progress in reducing student dropouts, which is the main challenge for Cambodia in meeting its' EFA and MDG goals and targets.

Figure 2-16: Primary and Lower Secondary Dropout Trends 2004/05 to 2012/13



	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Primary	11.7	11.6	10.8	8.8	8.3	8.7	8.3	3.7	10.5
Lower Sec	22.3	22.8	21.0	21.8	18.8	19.6	21.7	20.0	21.2

Source: MoEYS EMIS 2005/06 to 2013/14

2.3. DIMENSION 4 AND 5: CHILDREN AT RISK

The characteristics of children at-risk of dropout usually include: (i) frequently absenteeism from schools (ii) weak academic performance; (iii) multiple grade repetition; (iv) vulnerable background (poor, orphan, etc.); and (v) overage. [USAID, 2011].

A 2011 USAID study on dropout in lower secondary schools grade 7-9 found that most of at-risk students generally have stable home environment. For instance, 80% of the students considered 'at risk' reported both parents living and married and 88.4% of the students live with parents. The parents/guardians of the at-risk students also appear to be supportive of their children's education. For instance, 70% parents expect children to complete upper secondary school and over 80% of them help with their children's homework. Majority of these "at risk" students also have positive attitudes about school and education as nearly 97% of them indicated that they like school and 87% felt liked by their teachers.

One common feature of the at-risk students is that they have heavy time commitments outside of school. The most frequent response is house chores (around 80%) followed by long-commute to school (around 70%). The most common feature of at-risk students are poor academic performance with nearly 70% of the students indicating that have failed subject, follow by high absenteeism, with 55% of the students indicating that they have absented from schools for more than 15 days.

Due to the lack of data on student performance and attendance record, the analysis on "at-risk" students will use "over-age" as the proxy indicator. The assumption is that over-age is the consequence of multiple-repetition due to student's poor academic performance, frequent absenteeism. Poor rural families also more likely to enroll their children in grade 1 at a later age due to longer school distance and parental perception not physically developed for school children's poor health condition (e.g., under-weigh/stunting).

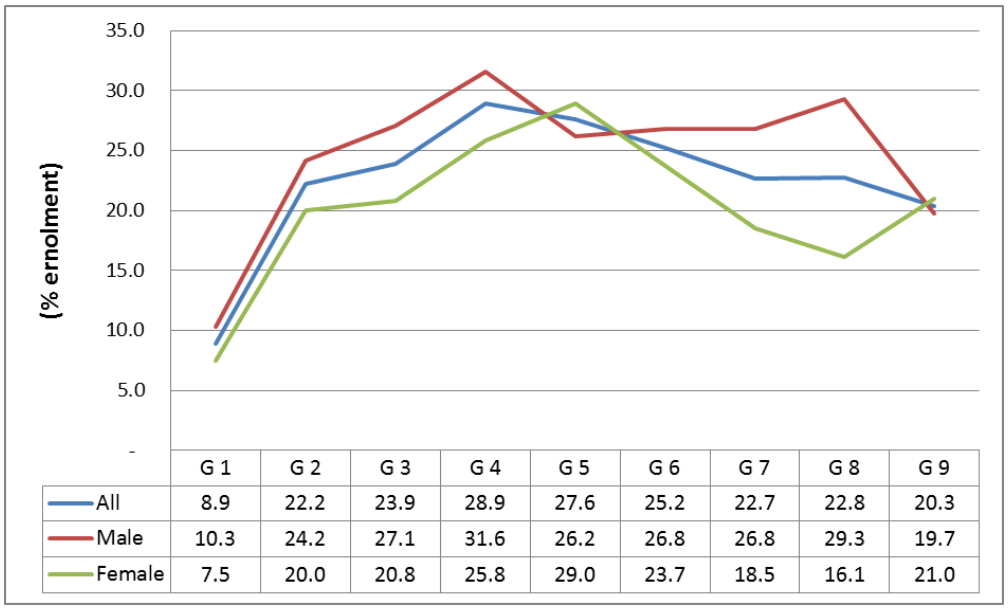
The qualification of "children at risk" is the students who are 3 years or older than the official grade-specific school ages, hence has a high possibility of dropping out of school before completing basic education grade 9. The table below graphically summarizes what was meant by the grade-specific over age by 3 years or more. The red cells represent over-age students for each grade. For example, all the students learning at Grade 1 who are 9 years or older are considered as over-aged students or at-risk, since the official age for Grade 1 is age 6.

Use CEA regression analysis on likelihood of one year late on chance of dropout

Level of education	Grade											
Lower secondary	9											
	8											
	7											
Primary	6											
	5											
	4											
	3											
	2											
	1											
Age		6	7	8	9	10	11	12	13	14	15	16	17+
		Over-age At Risk											
		Over-age by 3 years and At Risk											

Based on this methodology, the share of at-risk students from grades 1 to 9 is presented in Figure 2-13. The percentage of "at risk" students from grade 2 to 9 are relatively constant at over 20%, highest at grades 4 and 5. Except in grade 5, girls appear to be less "at-risk" than boys. This gender difference corroborates by the earlier analysis on actual dropout. However, girls are more likely to stay in school at an older age, hence the gender difference on "at-risk" children are likely to be even wider in favor of girls.

Figure 2-17: Student At Risk of Dropout by Grade and Gender 2012

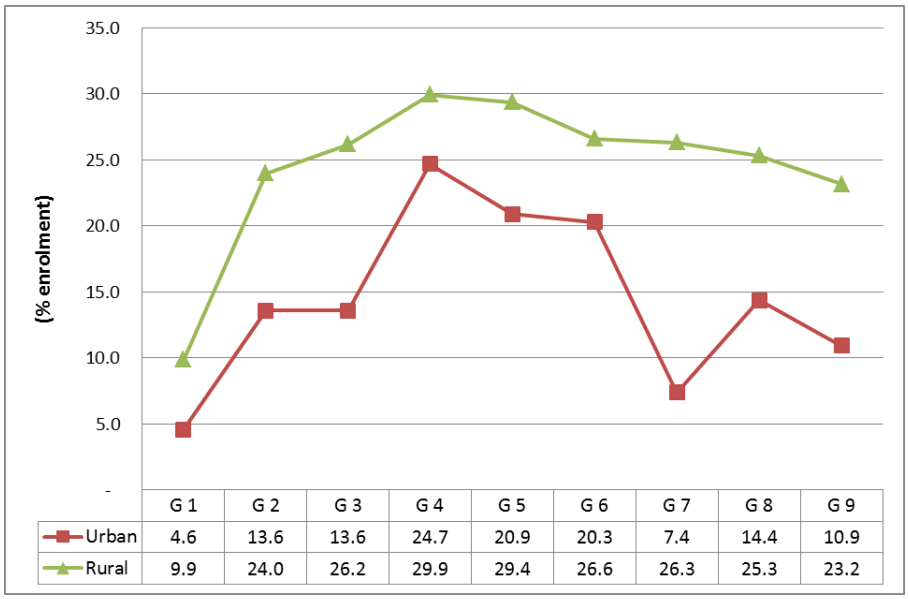


	G 1	G 2	G 3	G 4	G 5	G 6	G 7	G 8	G 9
All	8.9	22.2	23.9	28.9	27.6	25.2	22.7	22.8	20.3
Male	10.3	24.2	27.1	31.6	26.2	26.8	26.8	29.3	19.7
Female	7.5	20.0	20.8	25.8	29.0	23.7	18.5	16.1	21.0

Source: Author's Calculation from CSES 2012

Figure 2-14 below shows urban and rural differences in the shares of at-risk students. As can be expected, rural areas have significant higher shares of at-risk children than urban areas. In urban areas, the shares of at-risk children decline greatly after grade 6. In rural areas, the shares of at risk students sustains at around 25% or over from grade 2 onward.

Figure 2-18: Student At Risk of Dropout by Grade and Location 2012



	G 1	G 2	G 3	G 4	G 5	G 6	G 7	G 8	G 9
Urban	4.6	13.6	13.6	24.7	20.9	20.3	7.4	14.4	10.9
Rural	9.9	24.0	26.2	29.9	29.4	26.6	26.3	25.3	23.2

Source: Author's Calculation from CSES 2012

In real term, the total estimated number of at risk students in basic education is 571,568, including nearly half million primary pupils. More than 85% of at-risk students are in the rural areas. It should be pointed out that, these figures do not represent the likely number of dropout students in a single year. For example, among the cohort of 32,000 plus at-risk children in grade 1, they will dropout in different school years, some might drop out after grade 4 and some after grade 5.

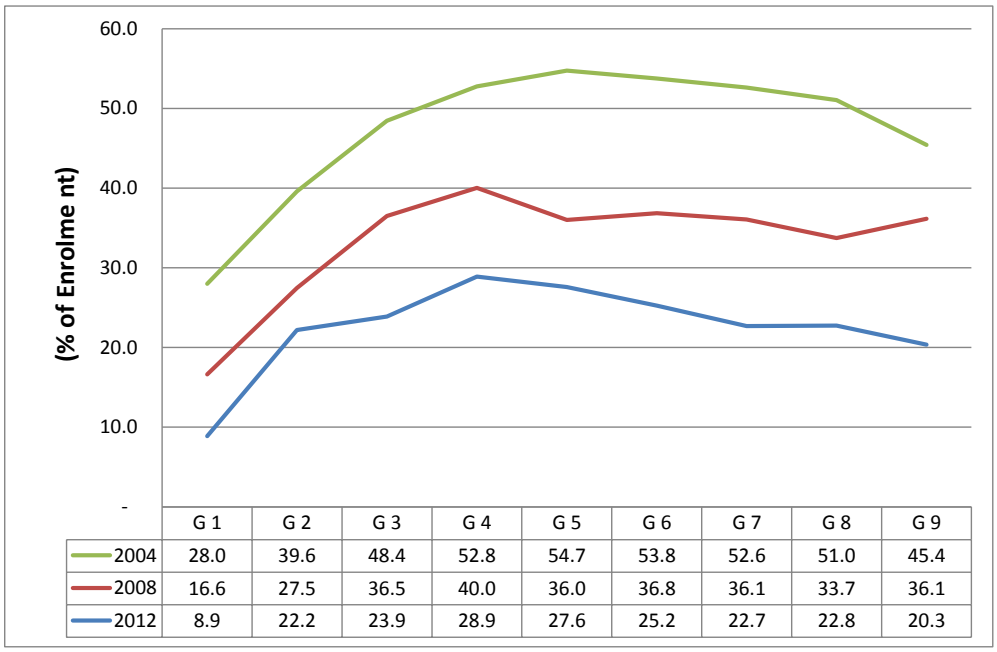
Figure 2-19: Estimated Number of At Risk Students 2012

	All	Male	Female	Urban	Rural
Grade 1	32,123	18,484	13,692	3,029	29,118
Grade 2	102,697	58,877	43,827	10,749	92,030
Grade 3	95,775	53,386	42,406	9,883	85,852
Grade 4	117,671	68,560	49,067	19,519	98,183
Grade 5	82,479	39,081	43,356	13,554	68,736
Grade 6	68,136	35,657	32,398	12,375	55,568
Primary Total	**498,882**	**274,044**	**224,745**	**69,110**	**429,487**
Grade 7	38,130	21,349	16,408	2,856	34,060
Grade 8	22,353	13,613	8,339	3,896	18,002
Grade 9	12,203	6,435	5,754	2,168	9,286
Lower Secondary	**72,686**	**41,397**	**30,501**	**8,920**	**61,348**
Basic Ed Total	**571,568**	**315,441**	**255,245**	**78,030**	**490,835**

Source: Author's Calculation from CSES 2012

Lastly, the analysis will present a longitudinal perspective on At-Risk children (see Figure 2-10). Overall, the trend has been positive in reducing the share of at-risk children since 2004. In 2004, nearly 50% of the students are at-risk compared to 20-25% in 2012.

Figure 2-20: Multi-year Comparison on At-Risk Children

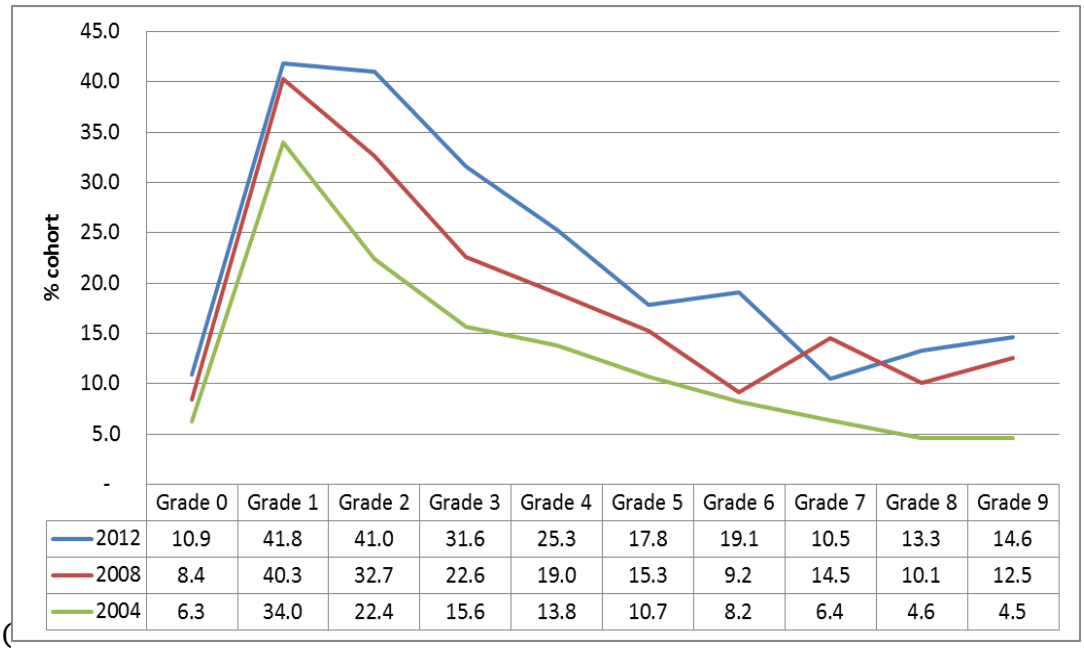


	G 1	G 2	G 3	G 4	G 5	G 6	G 7	G 8	G 9
2004	28.0	39.6	48.4	52.8	54.7	53.8	52.6	51.0	45.4
2008	16.6	27.5	36.5	40.0	36.0	36.8	36.1	33.7	36.1
2012	8.9	22.2	23.9	28.9	27.6	25.2	22.7	22.8	20.3

Source: Author's Calculation from CSES 2004, 2008, 2012

A related analysis in on the shares of students attending the grade at the right ages (e.g. age 6 at grade 1) or grade level net attendance rate. Similar as above, there has been marked improvement since 2004. However, high repetition rates remain a main constraint in sustaining the NAR. In 2012, grade 1 has a NAR of 41.8% but steadily declined to only 14.6% in grade 9, resulting in more students at-risk of dropout as they move up the education ladder.

Figure 2-21: Multi-year Comparison on Grade level NAR



	Grade 0	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
2012	10.9	41.8	41.0	31.6	25.3	17.8	19.1	10.5	13.3	14.6
2008	8.4	40.3	32.7	22.6	19.0	15.3	9.2	14.5	10.1	12.5
2004	6.3	34.0	22.4	15.6	13.8	10.7	8.2	6.4	4.6	4.5

(

Source: Author's Calculation from CSES 2004, 2008, 2012

3. BARRIERS AND BOTTLENECKS ON CHILD EXCLUSION FROM EDUCATION IN CAMBODIA

3.1. OVERVIEW ON FACTORS IN SCHOOL EXCLUSIONS

A standard economic assumption is that the parents of a child, especially families with limited means, try to maximize utility of education in terms of the impacts of years of schooling and of skills obtained on the future incomes of children. Household decision on school participation can be influenced by a range of factors such as: (i) school characteristics, including teachers, school infrastructure, teaching and learning environment; (ii) child characteristics, including health, ability and motivation; (iii) household characteristics, including wealth, parental education; and (iv) cost of school facing the household, including both direct and indirect/opportunity costs [Glewwe and Kremer (2006)].

A useful starting point in the analysis on the barriers/bottleneck on school exclusion is the household CSES survey, which asked the interviewees the main reasons for non-school participation. The responses analyzed are directly from the children, hence needs to be treated with some caution in their interpretation.

Among the primary age 6-11 group, the over-whelming reason given is "To Young" at 65% (70% of girls and 60% of boys). The second most frequent reason given is "Don't Want To" at 16%, more with boys (21%) than girls (11%). Poverty is a distant third reason at 7%.

In contrast, amongst the lower secondary age 12-14 cohort, the highest response is "Don't Want To" at 30%, particularly high for boys at 37%. Household economic factors also appear to be the major reasons for non-attendance, including (i) "contributing to household income" at 27%, (ii) "helping with household chores" at 10%; and (iii) "too poor" at 12%. It is also worth noting that 12% of respondents indicate poor academic performance is the reason for leaving school.

Figure 3-1: Reason Not Non-School Attendance by Gender

Reasons	Age 6 - 11			Age 12 -14		
	All	Boys	Girls	All	Boys	Girls
Don't want to	16%	21%	11%	30%	37%	19%
Did not do well in school	1%	1%	2%	12%	11%	12%
No suitable school available/school is too far	2%	1%	3%	3%	4%	2%
No Teachers or Supplies	2%	2%	2%	-	-	-
High cost of schooling	-	-	-	-	-	-
Must contribute to household income	2%	3%	1%	27%	25%	31%
Must help with household chores	1%	1%	-	10%	8%	13%
Too poor	7%	6%	7%	12%	6%	19%
Due to disability	3%	4%	2%	3%	4%	-
Due to long term illness	1%	1%	2%	4%	5%	3%
Too young	65%	60%	70%	-	-	-
Other	0%	-	0%	-	-	-

Source: Author's Calculation based on CSES 2009

With regard to urban/rural disaggregated response, for age 6-11, more urban children (76%) gave "too young" as the reason than rural children (64%). This is rather counter-intuitive as it is assumes that rural children has to travel greater distance to school than urban

children. The presumption is that urban parents might perceive that there more unsafe elements in their environment for their children than rural parents.

Amongst the age 12-14, "Don't Want To" is the more frequent response, especially rural children. Household economics are also the major factors for non-school attendance. It is important to note however for the urban children, "not doing well in school" is a major reason given at 24% of the responses. This could be due to limited schooling space in urban areas, hence low-performing students are "pushed out" rather than "dropped out" of schools. Another critical finding is that 10% of the urban children given "disability" as the reason, compared to 2% in the rural areas. Statistically, there is a large percentage of rural disabled population than urban population. One possible explanation is that disabled children in urban areas are more likely to be "pushed out" of schools than their counterparts in rural communities.

Figure 3-2: Reason for Non-School Attendance by Urban/Rural

Reasons	Age 6 - 11		Age 12 - 14	
	Urban	Rural	Urban	Rural
Don't want to	12%	16%	21%	30%
Did not do well in school	-	2%	24%	11%
No suitable school available/school is too far	-	2%	-	3%
No Teachers or Supplies	-	2%	-	-
High cost of schooling	-	-	-	-
Must contribute to household income	-	2%	27%	27%
Must help with household chores	-	1%	8%	10%
Too poor	2%	7%	10%	12%
Due to disability	3%	3%	10%	2%
Due to long term illness	4%	1%	-	5%
Too young	76%	64%	-	-
Other	2%	-	-	-

Source: Author's Calculation based on CSES 2009

Table 3-2 presents the reasons given by children that have never attended schools. The most important finding in this analysis is that nearly 39% of age 12-14 children given health reasons; disability or long-term illness, as the reason they never attended schools.

Figure 3-3: Reason Children Has Never Attended School

Reasons	Age 6 - 11	Age 12 - 14
Don't want to	15%	24%
Did not do well in school	1%	8%
No suitable school available/school is too far	2%	-
No Teachers or Supplies	2%	-
High cost of schooling	-	-
Must contribute to household income	1%	23%
Must help with household chores	1%	15%
Too poor	7%	-
Due to disability	3%	12%
Due to long term illness	1%	17%
Too young	68%	-
Other	0%	-

Source: Author's Calculation based on CSES 2009

Drawing on the analytical framework of students "push out" versus "pull out" of schools, it can be said that some of the children are "pushed out" of schools due to adverse school factors. For example, many children who do not want to go to school could be because schools are not perceived as a nurturing place to help them grow or learn, whether it is due to academic reasons or their relationship with their teachers or fellow students. In terms of a student *pulled out of school,* factors such as poverty, paid/unpaid employment, cause student and the families to place a greater value on non-schooling. To minimize these "pulled out" factors, there is a need to change parental perception on the utility of education in terms of what skills their child learns in school can positively affects their future earning.

3.2. SOCIO-CULTURAL DEMAND SIDE

3.2.1. ETHNIC MINORITY

As highlighted in the provincial analysis, Ratanakiri has the highest out-of-school children rates in the country due to its large ethnic minority population. According to CSES 2009, 95.7% of the Cambodia population is ethnic Khmer, followed by Cham at 2.43% and Indigenous population at 1.31%. The remaining ethnic groups, such as Chinese, Vietnamese and Thais and Laos, made up only 0.55% of the population. The discussion on ethnic minority will focus only on Cham and Indigenous/Population.[4] Table 3-4 presents the population distribution of age groups in different ethnic groups.

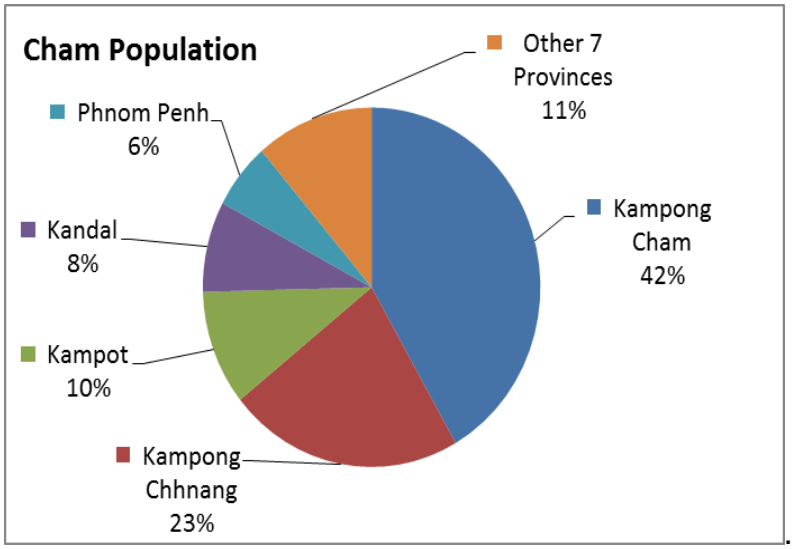
Figure 3-4: Cambodia Ethnic Population Composition (%)

Ethnicity	Age Group						Total
	Age 0-4	Age 5	Age 6-11	Age 12-14	Age 15-17	Age 18+	
Khmer	95.46	94.67	95.37	95.16	95.81	95.91	95.71
Cham	2.40	2.20	2.24	2.41	2.77	2.45	2.43
Indigenous	1.68	2.34	1.87	1.50	0.93	1.11	1.31
Chinese	0.11	-	0.14	0.44	0.07	0.02	0.08
Vietnames	0.27	0.49	0.30	0.39	0.41	0.42	0.39
Thai	-	-	-	-	-	0.03	0.02
Lao	-	-	-	-	-	0.00	0.00
Other	0.08	0.30	0.08	0.09	-	0.05	0.06

Source: Author's Calculation based on CSES 2009

[4] Because non-Khmer ethnic population represent less than 5% of the total population, the analysis on ethnic minority will use the CSES 2009 because of its large sampling size, compared to CSES 2012.

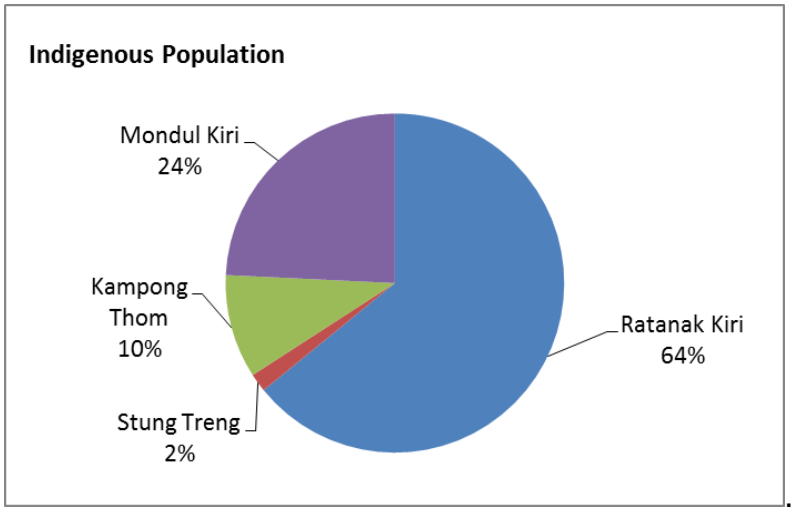
Figure 3-5: Cham Population Distribution in Province



Source: Author's Calculation based on CSES 2009

The Cham is one of Cambodia's largest ethnic groups and are distinguished from ethnic Khmers by their subscription to Islam and the language they speak. They are most heavily concentrated in Kampong Cham Province where they began settling in the sixteenth and seventeenth centuries but can also be found in 11 other provinces as well. [Kape 2007] In Kampong Cham, the Chams makes up 8.0% of its total provincial population. The second most populated province for Chams and Kampong Chhnang which makes up 15.4% of its provincial population.

Figure 3-6: Cham Population Distribution in Province



Source: Author's Calculation based on CSES 2009

The indigenous population consists of 17 ethnic minority groups; the largest ones are Kuy, Tampuen, Jarai, Phnong, Kreung with over 20,000 native language speakers. Unlike the Chams however, the ethnic minority groups are highland dwellers living in only 4 provinces. Nearly 64% of the ethnic minority groups are in Ratankiri, representing 73.6% of its provincial population. Around 24% of the indigenous populations are in Modulkiri, representing 68.4% of the provincial population.

Tables 3-5 presents the out-of-school situation of the Chams and the Indigenous populations. For both groups, none of the Age 5 children attended pre-school, but 11.6% of Chams and 28.2% of indigenous children are in primary education. The OOSC rate of indigenous children Age 5 is 71.8%, comparable to the national average of around 70%.

The overall OOSC rate of Chams children age 6-11 children is 22.3% which is about 10 percentage points above the national average. The OOSC rate of indigenous age 6-11 children however is very high at 73.2%, particularly higher for boys at 80.3%.

At the lower secondary age 12-14 level, the OOSC rate of Chams is very close to the national average of around 11-12%. However, there are more Cham children still studying at the primary leve (65%)l than the national average (55%). The OOSC rate of indigenous age 12-14 children is 46.9%, but very few are in lower secondary education.

Figure 3-7: Age 5-14 Education Profile, Chams and Indigenous Population (%)

	Chams				Indigenous			
	Pre-school	Primary School	Lower Secondary	Out-of-School	Pre-school	Primary School	Lower Secondary	Out-of-School
Age 5	-	11.6	-	88.4	-	28.2	-	71.8
Age 6-11	0.6	75.7	1.9	22.3	-	26.8	-	73.2
Age 12-14	-	65.6	22.1	12.3	-	49.6	3.5	46.9

Source: Author's Calculation based on CSES 2009

The proportion of out-of-school children that never attended schools between Khmers and Chams is comparable. The main difference it appears is that Cham children enrolment into school at a later age than Khmers. In fact, from age 9 onwards, there were less Cham children never enrolled in school than Khmers. The share of indigenous out-of-school children never attended school is extremely high, especially in the early primary schooling age from 6 to 8.

Figure 3-8: OOSC Never Attended Schools by Ethnic Origins

Age	5	6	7	8	9	10	11	12	13	14
Khmer	68.1	42.1	18.0	9.0	4.4	4.9	2.3	4.9	3.4	4.4
Chams	88.4	59.1	32.4	23.0	3.5	3.6	-	3.5	4.7	3.6
Indigenous	71.8	91.5	80.1	71.3	65.8	57.1	65.5	56.3	31.5	44.9

Source: Author's Calculation based on CSES 2009

Comparing the two ethnic minority groups, there is major disparity in education participation between the Chams and the Indigenous population. One reason is the location. While majority of the indigenous population live in rural/remote highland areas, the Cham population spreads out more widely around the country, including over 10% of the Chams living in urban areas, hence have better access to the schooling system.

Another factor is the ability to speak the national language of Khmer. Overall nearly 96% of the Chams can speak Khmer, compare to only 54% of the indigenous population. At the start of school pre-primary age 5, around 93%% of the Cham children can speak Khmer compared to only 46% of the indigenous children.

Figure 3-9: Percentage of Populations Can Speak Khmer Language by Age Group

	TOTAL	Age 0-4	Age 5	Age 6-11	Age 12-14	Age 15-17	Age 18+
Chams	95.6%	69.8%	92.9%	95.9%	98.8%	0.0%	98.7%
Indigenous	54.5%	25.6%	46.4%	40.4%	69.0%	72.8%	63.4%

Source: Author's Calculation based on CSES 2009

Another challenge for the indigenous population is the prevalence of incomplete schools in their community, especially in Ratanakiri. According to EMIS 2013/14 data, nearly 47% of primary schools in Ratankiri are incomplete, compared to 12% of primary schools nationwide.

The lack of primary schools that offer full six grades of primary education makes it even more difficult for indigenous children to complete their grade of primary education.

. Box 1: Adapting Education To Meet The Needs of Ethnic Minority Groups

Parents from an ethnic minority group advised that often Khmer teachers do not speak the local language well enough to teach children in their language. Students from an ethnic minority group said that sometimes their teachers used Khmer words during explanations that the students did not understand. Students advised that their lack of understanding of Khmer words limits their ability to read and do homework. Some parents felt that teachers from outside their ethnic minority did not care if the students understood them or not and therefore did not try to adapt their teaching. However, students did say that sometimes the teacher does try to use examples from their own culture to help them understand lessons or common practices in Khmer culture.

Source: NEP (2014) Right to Education in Cambodia: Community Level Research

3.2.2. CHILDREN WITH DISABILITY

Disability is one of the main causes of non-school attendance. According to the interim census CIPS 2013, the total number of persons with disability, or the disabled population in Cambodia is 301,629, includes 157,008 (52.1%) males and 144,622 females (48.0%). The disabled population constitutes 2.06% of the country's population of 14,676,591 in 2013. The proportion of the disabled population in the rural areas is 2.2% and in the urban areas 1.9%.

At the provincial level, Battambang and Kampong Cham have the highest shares of the total disabled population in the country at the over 10%. The top five provinces with the highest number of disabled people is listed below.

Figure 3-10: Disabled Population in Top Five Provinces

Province	Number of Persons with Disabilities			% of National
	Total	Male	Female	Total
Battambang	32,123	16,422	15,701	10.7%
Kampong Cham	31,720	16.063	31,704	10.5%
Prey Veng	25,301	11,315	13,986	8.4%
Kampong Thom	23,172	11,888	11,284	7.7%
Siem Reap	22,434	12,793	9,641	7.4%
National	301,629	157,007	144,622	100%

Source: MOP/NIS CIPS 2013

Eyesight and movement are by far the most prevalent disabilities. Males are especially high with disability in movement in the northwestern provinces, due to pro-longed civil conflict and landmines. In the urban areas, impairment in seeing is the most frequent incident of disability.

Figure 3-11: Disabled Population by Type of Disability

	Total	Males	Females	Urban	Rural
Total Number Of Disabled Persons	301,629	157,008	144,622	41,649	259,981
Type Of Disabilities					
Seeing	34.8%	31.4%	38.6%	41.7%	33.7%
Movement	33.4%	41.4%	24.7%	26.1%	34.6%
Hearing	9.0%	7.4%	10.8%	10.2%	8.9%
Mental Illness	7.0%	6.2%	7.9%	5.3%	7.3%
Speech	5.4%	4.4%	6.5%	4.7%	5.5%
Mental Retardation	5.2%	3.6%	6.8%	6.9%	4.9%
Other	3.5%	3.9%	3.1%	3.1%	3.6%
Multiple Disabilities	1.6%	1.7%	1.6%	2.1%	1.6%

Source: MOP/NIS CIPS 2013

The total number of children age of 0-14 children with disability is 32,056 representing 10.7% of the total disabled population in Cambodia. Majority of the children with disability (age 0-14) live in rural areas (87.5%). In the urban area, the number of disabled children increases sharply from 844 children at age 0-4 to 1,590 children age 5-9. Gender-wise, there are more girls inflicted with disabilities than boys at 51%, particularly high among girls age 0-9. The number of boys with disabilities increases by over 73% from age 5-9 to age 10-14 (see Table 3-10 below).

Figure 3-12: Disabled Population by Age Group

Age Group	Total		Male	Female		Urban	Rural	
	No.	*%*	*No.*	*No.*	*%*	*No.*	*No.*	*%*
0- 4	7,018	2.3	2,898	4,121	58.7	844	6,175	88.0
5-9	10,712	3.6	4,685	6,026	56.3	1,590	9,121	85.1
10-14	14,326	4.8	8,122	6,208	43.3	1,567	12,760	89.1
Total	32,056	10.7	15,703	16,355	51.0	4,001	28,052	87.5

Source: MOP/NIS CIPS 2013

The most common form of disabilities among Age 0-14 children is eyesight at 37.1%, particularly high for urban children at nearly 60%. Disability in physical movement is highest amongst girls at 26.2%. (see Table 3-6 below).

Figure 3-13: Age 0-14 Disabled Population by Type of Disability

	Total	Males	Females	Urban	Rural
Age 0-14 Disabled Children	32,056	15,703	16,355	4,001	28,052
Type Of Disabilities					
Seeing	37.1%	41.5%	32.9%	59.8%	33.9%
Movement	22.0%	17.6%	26.2%	0.6%	25.0%
Speech	12.0%	12.0%	12.1%	8.9%	12.5%
Mental Retardation	8.7%	8.1%	9.2%	10.0%	8.5%
Mental Illness	8.1%	8.7%	7.5%	11.8%	7.6%
Hearing	5.0%	4.0%	6.0%	0.0%	5.7%
Other	4.6%	4.8%	4.3%	0.0%	5.2%
Multiple Disabilities	2.5%	3.4%	1.7%	8.9%	1.6%

Source: MOP/NIS CIPS 2013

Nationally, the adult literacy rate stands at 79.7%, males 86.4% and females 73.6%. The literacy rate of disabled population is significantly lower at 55.8%, males at 66.8% and

females at 43.9%. The urban population has the relative high literacy rate, especially age 15-19 cohort.

Figure 3-14: Literacy and Education Level of Disabled Population 2013

	Cambodia	Male	Female	Urban	Rural
Total Disabled Population	55.8	66.8	43.9	69.3	53.6
5 - 9	30.9	35.8	27.1	20.9	32.7
10 - 14	61.5	66.9	54.4	74.4	59.9
15 - 19	73.9	75.1	72.3	86.5	71.3

Source: MOP/NIS CIPS 2013

The low literacy rate of disabled people is a possible indication of school exclusion. According to the interim census, 47.7% of disabled population nationally is either illiterate and/or never attended schools, particularly high amongst women at 60.9%. In the urban areas, nearly all of age 5-9 disabled children are either illiterate or never attended schools, but the percentage of age 10-14 children drastically reduced to 25.7%, likely due to late entry into grade 1.

Figure 3-15: Illiteracy and/or Never Attended School Disabled Population 2013

	Cambodia	Male	Female	Urban	Rural
Total Disabled Population	47.7	35.6	60.9	37.9	49.3
5 - 9	77.2	73.2	80.3	100.0	73.2
10 - 14	40.1	34.4	47.6	25.7	41.9
15 - 19	30.5	25.8	37.1	23.6	32.0

Source: MOP/NIS CIPS 2013

Because of late school enrolment, the analysis on the education attainment of disabled children will focus on age 15-19 cohort. Nationally, 26.8% of the age 15-19 disabled children has some primary education. Around 42.7% of the age 15-19 cohort completed primary schooling, including those that continue on to secondary education. In urban areas, nearly 40% of the group attended secondary schools, including 14.6% that moves on to upper secondary education. This however, is quite exceptional compared to disabled children in the rural areas where only 13.3% of the age 15-19 attended lower secondary schools and none in upper secondary.

Figure 3-16: Education Attainment of Age 15-19 Disabled Population 2013

	Cambodia	Male	Female	Urban	Rural
Primary *(Not Complete)*	26.8	31.5	20.2	29.1	26.3
Primary *(Complete)*	42.7	42.7	42.8	47.3	41.8
Lower Secondary	17.9	16.4	20.0	39.9	13.3
Upper Secondary	2.5	0.5	5.3	14.6	-

Source: MOP/NIS CIPS 2013

Table 3-15 present the literacy and education level of disable population by gender, age group and location. It needs to bear in mind however, that the CIPS 2013 report does not disaggregate disabled populations by the degree of their impairment/disability. Hence, mildly disabled children might still be able to take part in the formal education system without special support from the schools; whereas moderately and severely disabled

children are more likely to be excluded from schools because of the lack of resources to help meet their special needs.

Figure 3-17: Literacy and Education Level of Disabled Population 2013

Age Group	Disabled Population	Illiterate	Educational Level of Literates						
			None	Primary *(Not Complete)*	Primary	Lower Secondary	Upper Secondary	TVET & Higher Ed	All Literates
Cambodia	301,629	44.2%	3.5%	27.4%	13.9%	9.5%	0.8%	0.7%	55.8%
5 - 9	10,711	69.1%	8.1%	22.8%	-	-	-	-	30.9%
10 - 14	14,327	38.5%	1.6%	48.5%	11.4%	-	-	-	61.5%
15 - 19	20,184	26.1%	4.4%	26.8%	24.8%	15.4%	2.5%	-	73.9%
Males	157,007	33.2%	2.3%	30.2%	18.2%	13.9%	1.0%	1.1%	66.8%
5 - 9	4,686	64.2%	9.1%	26.7%	-	-	-	-	35.8%
10 - 14	8,120	33.1%	1.3%	51.1%	14.5%	-	-	-	66.9%
15 - 19	11,720	24.9%	0.9%	31.5%	26.3%	15.9%	0.5%	-	75.1%
Females	144,622	56.1%	4.8%	24.4%	9.3%	4.7%	0.5%	0.2%	43.9%
5 - 9	6,026	72.9%	7.4%	19.7%	-	-	-	-	27.1%
10 - 14	6,207	45.6%	2.0%	45.0%	7.4%	-	-	-	54.4%
15 - 19	8,464	27.7%	9.4%	20.2%	22.8%	14.7%	5.3%	-	72.3%
Urban	41,649	30.7%	7.2%	27.2%	12.9%	14.7%	4.2%	3.0%	69.3%
5 - 9	1,590	79.1%	20.9%	-	-	-	-	-	20.9%
10 - 14	1,567	25.7%	-	28.5%	45.9%	-	-	-	74.4%
15 - 19	3,511	13.5%	10.2%	29.1%	7.4%	25.3%	14.6%	-	86.5%
Rural	259,980	46.4%	2.9%	27.5%	14.1%	8.6%	0.2%	0.3%	53.6%
5 - 9	9,121	67.3%	5.9%	26.8%	-	-	-	-	32.7%
10 - 14	12,760	40.1%	1.8%	50.9%	7.2%	-	-	-	59.9%
15 - 19	16,673	28.7%	3.2%	26.3%	28.5%	13.3%	-	-	71.3%

Source: MOP/NIS CIPS 2013

Box 2: Education Needs of Children with Disability

Some children who are physically impaired, have low vision or are 'slow learners' received some support from schools such as a scholarship, bicycle or learning materials. Teachers sometimes supported them by seating them in the first line or with good performing students. Some student groups in Kampot province said that some teachers provide more explanation to slower learners and encourage peer learning and three parents groups said that schools and teachers encourage slow learners to come to classes regularly and provide remedial classes to improve their reading and writing during the school vacation47.

However, it was reported that children who are deaf or blind did not go to school. Students gave the following reasons for this: 1) they could not go to school by themselves and their parents could not take them; 2) schools do not have any facilities for this type of children; and 3) teachers could not provide support to deaf or blind children due to a lack of capacity. Generally, public schools do not have specific facilities or materials for children with physical disabilities, although some of the schools visited had ramps and toilets for children with disabilities.

Source: NEP (2014) Right to Education in Cambodia: Community Level Research

3.2.3. CHILD NUTRITION

According to the CSES 2012 survey, 65% of the age 6-11 children indicate that the reason they are not in school is because they are "too young". This perception of children being too young to go to school is likely associated with stunting/under-weigh caused by malnutrition.

According to the Cambodia Demographic and Health Survey (CDHS) 2010, nationally, 40% of children under age 5 are stunted, and 14% are severely stunted. There is very little difference in the level of stunting by gender. The disparity in stunting prevalence between rural and urban children is substantial: 42% of rural children are stunted, as compared with 28% of urban children. At the provincial level, stunting is highest in Preah Vihear/Steung Treng (56%) and lowest in Phnom Penh (25%).

Underweight, or too thin for age, is also common across the country; 28% of Cambodian children under age 5 are underweight and 7% are severely underweight. The prevalence of underweight is 11 percentage points higher among rural children (30%) than among urban children (19%).

Wasting (too thin for height), which is a sign of acute malnutrition, is less common (11%). Wasting does not vary substantially by sex or area of residence. The wasting prevalence is highest among children less than 6 months (16%) and begins to show a general decline only after 18 months of age.

Unlike wasting, the prevalence of stunting and underweight increases with age of the child. Stunting prevalence rises sharply from 10% among children less than 6 months of age to 32% among children age 12-17 months to 49% among children age 48-59 months. The percentage of children underweight increases more steadily from 13% among children under age 6 months to 26% among children age 18-23 months, and 3% among children age 48-59 months.

The CDHS found that both stunting and underweight are negatively correlated with mother's level of education and family wealth. For example, the prevalence of stunting is higher among children living in the poorest households (51%) than among children in the richest households (23%). The prevalence of children stunting among mothers with no education is around 52%, compared to a little over 30% among mothers with at least 6 years of primary education. Due to mother's limited education, inappropriate and/or inadequate feeding practices lead to increase in the percentage of underweight children when normal complementary feeding starts.

Some progress were made in reducing child malnutrition over 2000/2005, but there has been little changes in reducing malnutrition over 2005/2010. The education consequence of stunting and underweight is that these children will likely to enroll into school at a later age and do less well academically because of the effect of malnutrition on their cognitive development.

3.2.4. HOUSEHOLD CHARACTICS: MOTHER'S EDUCATION

The 2008 UNICEF Study on Out-Of-School Children found that children in households headed by someone other than their mother or father, or by non-relatives, are generally less likely to attend school. Large household size and working mothers also negatively influence students'

success. Children whose mothers do not work are more likely to be enrolled than children whose mothers work, regardless of their occupation. .

Another strong positive predicator of school enrolment is the children's mother having completed lower secondary or higher education. In urban areas, father's education loses significance while the impact of mother's education increases. Additionally, having a female head of household positively impacts school enrollment. [UNICEF Cambodia 2008]

The adult literacy of women has made steady improvement over the past 15 years. In 1980 at the end of the Khmer Rouge regime, female literacy rate was extremely low at only 23% compared to 74% for males. Since 1998, female literacy rate has improved steadily from 57% to nearly 74% in 2013 (see Table 3-15).

Figure 3-18: Adult Literacy Rate (Age 14 and Over) 1980-2013

Year	Both Sexes	Males	Females	GPI
1980	-	74.0	23.0	3.22
1998	67.3	79.5	57.0	1.39
2004	73.6	84.7	64.1	1.32
2008	77.6	85.1	70.9	1.20
2013	79.7	86.4	73.6	1.17

Source: MOP/NIS CIPS 2013

Nevertheless, female education attainment remains low. According to the CIPS 2013, only 34% of the women completed primary and 16% has some secondary education or above. Education attainment of rural women age 25 and over are particularly low with only 27% completed primary education and 10% have some secondary education.

Figure 3-19: Population Aged 25 and over by Educational Attainment and Sex: Urban/Rural, 2013

	Both Sexes	Males	Females	Urban Females	Rural Females
None (Illiterate & No Education)	27.8	18.3	35.9	20.3	40.6
Primary Not Completed	28.3	26.4	29.8	22.2	32.2
Primary Completed	21.9	25.5	18.8	22.8	17.5
Lower Secondary	17.0	22.6	12.3	23.9	8.8
Secondary/Diploma	2.4	3.3	1.6	5.2	0.5
Beyond Secondary	2.6	3.8	1.6	5.5	0.4

Source: MOP/NIS CIPS 2013

Positively, the education attainment of women is steadily improving in past three decades. Amongst women age 15-19, 72% completed primary education, including 33% with some form of secondary education and above. Comparing to women Age 40-49, only 32% of them completed primary education and 13% attending secondary schools.

Figure 3-20: Female Educational Attainment by Selected Age Groups, 2013

	Age 15-19	Age 20-29	Age 30-39	Age 40-49
None (Illiterate & No Education)	8.8	16.6	29.1	32.1
Primary Not Completed	19.2	23.2	29.8	35.5
Primary Completed	38.5	28.9	23.2	19.1
Lower Secondary	30.7	22.3	13.6	11.2

Secondary/Diploma	2.5	5.9	2.0	1.2
Beyond Secondary	0.2	3.1	2.2	0.9

Source: MOP/NIS CIPS 2013

According to MoEYS EMIS statistics 2013/14, Cambodia has achieved gender equity in primary and lower secondary completion rates with the Gender Parity Index (GPI) of 1.03 and 1.02 respectively. Upper secondary is also nearing gender equity with GPI of 0.95. These trends bode well in terms of minimizing one of the major bottlenecks in getting all the children into school.

3.3. ECONOMIC DEMAND SIDE

3.3.1. POVERTY

The Royal Government of Cambodia has made remarkable progress in reducing poverty over the past decade. According to the World Bank's estimate, poverty rate has been reduced from 53.2% in 2004 to 18.6% in 2012. In the rural areas, poverty rate has been reduced from 59.0% to 22.2% over the same period.

The Ministry of Education, Youth and Sport's (MoEYS) response to RGC's poverty reduction strategy also has yield a positive results. A 2008 UNICEF study comparing school participation using Cambodia Demographic Household Survey (CDHS) 2000 and 2005 data found that among the age group 6-14, the overall enrollment rate increased from 70.1 to 81.4 percent during the five-year period with highest gain in poorest quintile 1. The percentage of children Age 6-14 never attended schools declined from 25.6 to 14.0 over the same period, also most improved in quintile 1. The UNICEF report concluded that this was a substantial achievement in a short period of time. [5](UNCIEF 2008)

In spite of these achievements, the gap in education outcomes between the richest and poorest household remain wide. For instance, the literacy rate of young adults (age 15-24) between the richest and the poorest quintiles have narrowed by over 11%, but the gap remained wide at nearly 17% in 2011. [World Bank 2014]

Figure 3-21: Literacy Rate of Youth (Age 15-24) By d Poverty, 2004/2011

	Youth (15-24 years old)		
	2004	2011	Change
Richest	93.8	97.5	3.7
Poorest	65.5	80.6	15.2
GAP	**28.3**	**16.9**	**(11.4)**

Source: World Bank estimates based on CSES

The gap in in primary net enrolment between the poor and the rich is also wide. Among the poorest children, the net attendance rate is only 34.4%comparred to the richest at 62.9%.

[5] The UNICEF study measures the percentage of children who are currently enrolled at the time of the 2000 and 2005 CDHS applications. Unlike net and gross enrollment ratios, the figures report only the percentage of children who are currently enrolled in school irrespective whether these children are enrolled in the appropriate grades or levels for their ages.

The poorest quintile is the only group that has a NAR below the national average. Even children in the next wealthiest group (quintile 2) have a higher NAR than the national average (see Table 3-19).

At the secondary level, the disparity is even greater. Children in the richest quintile had secondary enrollment rates at over 8 times of those of the poorest quintile (compared to less than 2 times in primary) and over 3 times of those in the middle quintile (compared to only one-fourth in primary). [World Bank 2011]

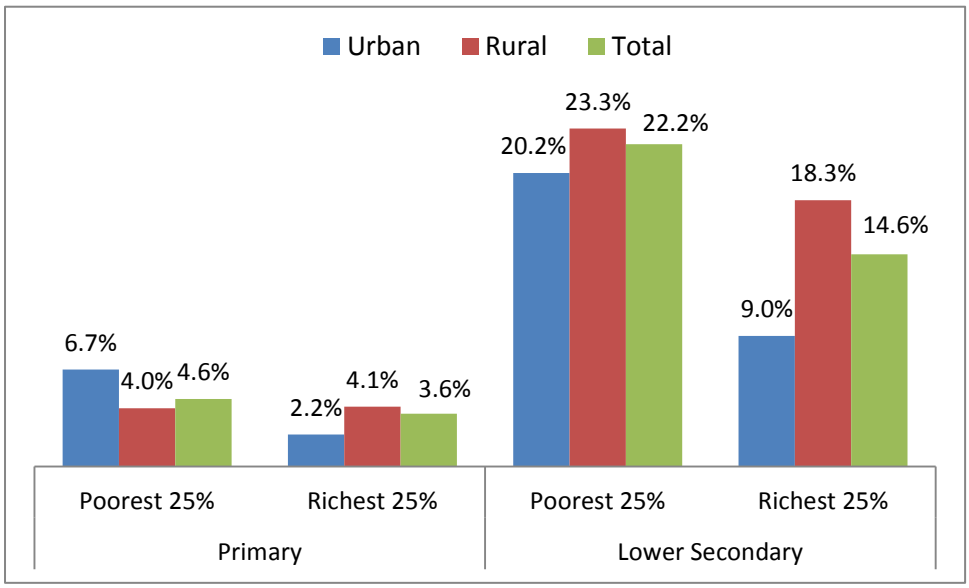
Figure 3-22: Net Attendance Rates For Primary And Secondary, Cambodia 2011

	Wealth by quintile					
	Poorest	Q2	Q3	Q4	Richest	National
Primary	34.4	49.6	50.4	58.3	62.9	48.8
Secondary (all)	5.6	13.7	14.8	27.7	45.4	20.0
Grade 9	*4.2*	*15.7*	*20.1*	*26.7*	*51.5*	*21.5*
Grade 12	*5.3*	*5.7*	*9.4*	*11.1*	*35.5*	*14.0*

Source: World Bank estimates based on CSES

Dropout rate is also highest for the poorest households. In primary, the total dropout rate is 4.6% poorest quintile compared to 3.6% for the richest quintile; highest for the urban poor at 6.7%. The difference in dropout rates in lower secondary is even greater between 22.2% of the poorest versus 14.6% of the richest households. (see Figure 3-3).

Figure 3-23: Dropout Rates of the Poorest and Richest 25%, 2013



Source: Cambodia National Council for Children (CNCC) estimates based on CSES

The rate of children that have never gone to school is improving in Cambodia. Children from 11 to 18 years old that have never attended school has reduced from 8.5% in 2004 to 3.6% in 2011. Nevertheless, 7.7% of children from the poorest households never go to school. The World Bank's Cambodia Poverty Assessment 2013 found that economic considerations (the need to work or education costs) are the main reasons for children never enrolling in school. Household chores are no longer the main reason for

never attending school, dropping significantly from 35.4 percent in 2004 to only 13.5 percent in 2011.

Figure 3-24: Percentage Of Children 12-17 Years Old Never In School, Cambodia 2014-2011

	Wealth by quintile					
	Poorest	Q2	Q3	Q4	Richest	National
2004	14.9	8.6	6.8	4.1	2.0	7.5
2011	7.7	1.7	3.1	1.2	0.4	3.1

Source: World Bank estimates based on CSES

There is a clear relationship between wealth and education. Children from the poorest households are being left behind at the beginning of their education due to late entry into grade 1. Repetition and dropout are much greater amid the poor. Although the enrollment gap between the poorest and richest children from 7-11 years old is less than 10 percentage points, at age 12 the gap increases to 18 percentage points. At 18 years of age, the gap widens to 57 percentage points. The enrolment gap between the poor and the rich is wider than that of males/females and urban/rural households. [World Bank 2013]

3.3.2. WORKING CHILDREN

Due to high incidence of poverty, a large informal labour market and growing industrial and commercial sectors, particularly the garment industry, it has generated high demand for child labors. A recent survey jointly conducted by the RGC and ILO - Cambodia Child Labour Survey 2012 - estimates that out of nearly 4 million age 5-11 children, 755,245 (19%) are considered economic active, including 236 498 children (6%) in hazardous labors such as mining and construction.

Children are considered economically active if they are aged 5-17 and contribute to the production of goods and services by market enterprises, government and non-profit institutions (such as religious institutions and charities). The definition excludes the production of services for own final consumption within the same household; hence children performing only household chores are not considered economically active.

The percentage of working children increases by age. An estimated of 4% of age 5-11 children are economically active, increased to 20% by age 12-14 and 47% by age 15-17. Age 15-17 represents over 63% of the total working children. There is a higher percentage of working children in rural areas than in urban areas. Rural children makes up 87% of all the children engaged in economic activity. Gender-wise, there are slightly more girls (51%) than boys (49%).

Figure 3-25: Economic Active Children Age 5-17 by Gender, Age Group and Area

	Total Children	**Economic Active Children**		
		No.	**% of Cohort**	**% of Working Children**
Cambodia	3,956,751	755,245	19.1%	100%
Gender				
Male	2,025,257	372,208	18.4%	49.3%
Female	1,931,494	383,037	19.8%	50.7%
Age group				
5–11 years	1,946,551	77,764	4.0%	10.3%

12–14 years	987,828	198,819	20.1%	26.3%
15–17 years	1,022,372	478,662	46.8%	63.4%
Area				
Urban	803,027	100,801	12.6%	13.3%
Rural	3,153,724	654,444	20.8%	86.7%

Source: MOP/ILO CCLS 2012

At the provincial level, 14.3% of working children are in Kampong Cham, followed by Batttamang (12.4%), Takeo (8.9%), Kandal (8.0*). Phnom Penh has a very small share of the working children cohort at 3.7%.

In terms of the percentage of children in each province that are economically active, in Palin, 46% of the age 5-17 children are economically active, followed by Kampong Chhnnang (37%), Ratanakiri (34%) and Battambang and Pursat (both at 31%). Svay Rieng has the lowest percentage of the working children at 7%. In Phnom Penh, only 8% of the children are engaged in employment, one of the lowest in the country. Other provinces with low percentage of its children engaged in employment are Siem Reap (8%), Preah Sihanouk (8%) and Kampong Speu (9%).

In terms of economic sector, more than five of every ten working children (50.4%) aged 5–17 are engaged in the agriculture, forestry and fishing sector; of them, 55% are boys and 45% are girls. Other working children reported employment in manufacturing (19%), wholesale and retail trade and repair (15%), accommodation and food service (5%) and construction (4%). It is further estimated that around 57% of the working children are unpaid family worker, meaning that the children is working in an economic enterprise (e.g., farm, street stall, restaurant) operated by a relative in the household.

The 2013 Cambodian Child Labour Survey (CCLS) found that around half (50.1%) of the working children age 5-17 are attending school, 44% had dropped out of school and 6% never attended school. There are more boys (8%) than girls (4%) that never attended schools. In urban areas, nearly 64% working children are still in school compared to 48% in rural areas. From age 5 to 14, majority of the working children can still manage to stay in school. However, when they reach age 15-17, only 34% are still in school and 61% has already dropped out of school. (Table 3-19).

Figure 3-26: Economically Active Children School Attendance Status, 2012

	Attending school		Dropped out		Never attended		Total
	No.	%	No.	%	No.	%	
Cambodia	378,629	50.1	331,047	43.8	45,569	6.0	755,245
By Gender							
Male	185,841	49.9	156,789	42.1	29,578	7.9	372,208
Female	192,788	50.3	174,258	45.5	15,991	4.2	383,037
By Location							
Urban	64,355	63.8	35,685	35.4	761	0.8	100,801
Rural	314,274	48.0	295,362	45.1	44,808	6.8	654,444
By Age							
Age 5-11	67,563	86.9	2,269	2.9	7,931	10.2	77,763
Age 12-14	150,323	75.6	37,091	18.7	11,404	5.7	198,818
Age 15-17	160,742	33.6	291,686	60.9	26,234	5.5	478,662

Source: MOP/ILO, CCLS 2013

In terms of the number of working hours, the largest share of the economically active children worked more than 48 hours per week at 28%, followed 25% who worked 15–29 hours. Older children tend work longer as 38% of Age 15-17 children working more than 48 hours a week. More girls (110,663) than boys (101,567) work more than 48 hours a week. Rural children also work longer than urban children as 29% of them work more than 48 hours a week.

Figure 3-27: Economically Active Children Working Hours and School Attendance Status, 2012

	Total		Attending school		Dropped out		Never attended	
	no.	% (total)	no.	% (hour)	no.	% (hour)	no.	% (hour)
Cambodia	755,245		378,629		331,047		45,569	
1–7 hours	64,996	8.6%	58,878	90.6	3,342	5.1	2,776	4.3
8–14 hours	133,772	17.7%	117,226	87.6	12,361	9.2	4,185	3.1
15–29 hours	191,615	25.4%	140,798	73.5	42,319	22.1	8,498	4.4
30–42 hours	99,513	13.2%	42,196	42.4	49,076	49.3	8,241	8.3
43–48 hours	53,118	7.0%	3,526	6.6	46,189	87.0	3,403	6.4
>=49 hours	212,231	28.1%	16,004	7.5	177,760	83.8	18,467	8.7

Source: MOP/ILO, CCLS 2013

It is self-evident that the number of working hours has an impact on the school attendance of working children. From Table 3-19, it appears that most of the working children can manage school attendance if they work less than 15 hours a week. The dropout rate starts to rise to 22% when the children has toowork 15-30 hours (22%) and reaching 87% when the children has to work more than 43 hours per week.

A recent study by the Cambodia National Council for Children (CNCC) conducted an independent analysis on student dropout at lower secondary schools using CSES data. The study found that if a child is working, the probability that he or she will drop out from school is about 19.9% at primary school and about 29.0% at lower secondary level. The study also looked into the issue regarding the threshold level of working hours, beyond which students will prefer to work than attending school. The study found that at primary and lower secondary level, the average working hour of students still in school is around 23 hours a week, compared to primary dropout at about 39 hours and lower secondary dropout at 42 hours per week.

Box 3: Child Labor In Brick Making Factory

Child workers in brick-making factories can work on a contract, daily, on weekend, or anytime they are free to come to work (likely to be in the morning or in the afternoon when school day is over). Their usual working hours range from a minimum of 3 hours to 10 hours daily.

Child workers who are involved in contractual work are more likely to work longer hours than those working on a daily basis and than those who come to work occasionally. Between 40% and 45% of those who work under the contract work more than 8 hours a day, while between 4.3% and 15.7% of those who work daily

work such longer hours every day. However, children who work less than 6 hours a day are likely to be those who come to work occasionally, either on the weekend or when they have free time.

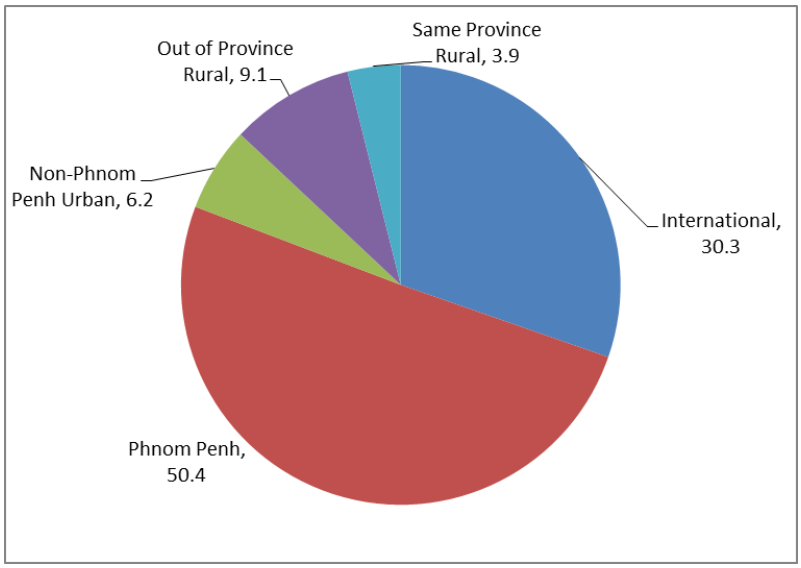
For children who work occasionally, the proportion of those working less than 6 hours a day is larger among those living in the brick factory than among those not living in the brick factory compound (87.5% versus 20.0%, respective). One explanation is plausible. Given that both groups are likely to be in school, children living in the brick factory compound work part-time any time when they are not in school, either for extra money or for helping their parents, while living at the workplace daily. In contrast, those in the villages are likely to come to work full day on weekends, rather than coming to work a few hours a day.

Source: LICADHO and World Vision Cambodia (2007); Child Workers in Brick Factories: Causes and Consequences

3.3.3. MIGRANT CHILDREN

The 2012 Ministry of Planning report on migration in Cambodia finds that the present migration pattern in Cambodia is mainly from rural to urban. On average, the out-migration rate from rural village is 48.1 per 1,000, the temporary out-migration rate is 19.9 per 1,000, hence suggesting that the additional 28.2 out-migrants per 1,000 are permanent [CRUMP Report 2012]

Figure 3-28: Destination of Rural Migrants



Source: MOP Crump Report 2012

Figure 3-4 illustrates the main destinations of the rural migrants. Half of migrants out of rural areas of Cambodia take up residence in Phnom Penh. The second most popular destination is international, with about 30% of migrants leaving the country.. Rural to out of province rural migration accounts for approximately 9% of moves. Rural to non-Phnom Penh urban migration makes up about 6%. Finally, rural to same province rural migrants are about 4% of the total.

The 2012 Cambodia Child Labour Survey estimates that there are 129,106 internal migrant children in Cambodia, of which 51% are girls and 60% are in rural areas. The age distribution of migrant children 5-11 years old is 33%, 12-14 years old 28%, 15-17 years old

39%. Of the 130,000 or so migrant children, 48,545 (38%) are considered economically active.

CCLS estimates that 25,647 of the migrant children have dropped out of school, slightly more girls (12,892) than boys (21,755). In addition, the child labour survey asked the surveyees their reason for dropping out of school and the responses are summarized in Table 3-21.

Figure 3-29: Reasons for Dropping Out of School, Migrant and Working Children

Reasons for Dropout	Migrant Children	Working Children
Cannot afford schooling	59.4	33.5
No school/school too far	13.2	4.8
Poor in studies/not interested	9.6	21.7
To learn a job	7.0	2.3
To work for pay	3.8	13.1
To help at home with household tasks	3.6	11.9
To help unpaid in family business/farm	0.4	5.5
Family did not allow schooling	0.2	2.6
Disabled/illness	0.6	1.9
Other	1.9	2.6

Source: MOP/ILO, CCLS 2013

Nearly 60% of the migrant children indicated that the reason they dropped out is because they cannot afford schooling, comparing to 33.5% of the working children. The second most frequent response (13%) is "no school/school too far". Given that rural to urban migration accounts for 80% of all internal migration, it is not surprise the high cost of schooling and the lack of schooling space in urban areas "push out" many migrant children from the education system.

Box 4: Education Challenges of New Urban Poor/Migrant Families

During the past two decades, Phnom Penh has experienced rapid growth, with its population doubling from 1998 to 2008, mostly due to the migration of rural Cambodians seeking employment in the booming capital. While in 1998 1 in 20 Cambodians lived in Phnom Penh, in 2012 it was estimated to be 1 in 10. The Phnom Penh Capital Authority estimates that urban poor communities account for about one quarter of the capital's residents.

Parents from urban poor communities have a strong commitment to their children's education but often lack the means to continue support through a higher level of education. Of 34 families interviewed during the rapid assessment, 26 (76 per cent) had problems meeting their children's educational needs. Absenteeism is frequent. Expenditures for daily food, books, stationery and fees often become unaffordable, especially when many children go to school. Preschool enrolment is good but there is a high dropout rate of 28 per cent in the transition to secondary school, according to the Urban Poor Assessment. When children become adolescents, many drop out of school so as to contribute to income generation for the family, taking up low-

skilled professions like their parents.

Source: Phnom Penh Capital Authority (2013), Concept Note On Reducing Poverty and Vulnerability in Phnom Penh Urban Poor Communities

3.3.4. COSTS OF SCHOOLOING

Cambodia has experienced robust economic growth over the past 10 years. Rising household incomes also meant increased demand for goods and services, including the cost of schooling. Table 3-26 compares the cost of schooling in 2004, 2008 and 2012, estimated based on CSES data.

The highest increase in school cost is in primary education at nearly a 6 fold increase from 2004 to 2012. Pre-school cost has increased by 3.5 times over the same period. The cost of lower secondary education in 2012 in 3 times the cost in 2004. Higher education is the only subsector with cost increase (1.6 times) in line with the overall increase in the consumer price index (CPI) from 2004 to 2012.

The increase in schooling cost is significantly higher in 2008/2012 than in 2004/08. Over 2008/12, pre-school incased increase by 326% compared to only 6% from 2004-08. Primary education has the second highest increase in the last four years at 246%. It is not clear the reason why schooling cost increase so much over 2004/08. One possible factor is the high inflation rate of 25% in 2008 which had a rippling effect on the schooling cost in the ensuing years even though the inflation subsided quickly to an annual average of 3% from 2009/12.

Figure 3-30: Mean Average Cost of Schooling by Education Level, 2004/08/12

Educational level	2004 (US$)	2008 (US$)	% change from 2004	2012 (US$)	% change from 2008
Pre-School	10.7	11.4	6%	48.5	326%
Primary	11.1	19.8	79%	68.4	246%
Lower secondary	46.2	63.6	38%	141.4	122%
Upper secondary	106.7	132.4	24%	255.1	93%
TVET	322.9	328.5	2%	901.0	174%
Higher Ed	546.6	596.8	9%	876.9	47%

Source: MOP/NIS Cambodia Socio-Economic Survey (CSES)

The Cambodia Socio-Economic Survey classified schooling cost into 7 expenditure items

- School fees
- Tuition
- Other school supplies
- Allowances for children studying away from home
- Transport cost
- Gifts to teachers, school building fund etc.
- Text books

Table 3-15 compares the share of each expenditure items between 2004 and 2012 for pre-primary, primary and lower secondary education. Overall, "Allowances for children studying away from home" is the biggest expense at all three levels of basic education. In pre-primary, it constitutes 50% of the schooling cost, 64% in primary and 57% in lower secondary.

Figure 3-31: Cost of Schooling by Expenditure Items 2004/12

	School fees	Tuition	Text books	School supplies	Allowances	Transport cost	Gifts
Pre-Primary							
2004	46%	14%	2%	7%	15%	14%	0%
2012	21%	0%	4%	7%	50%	13%	5%
% change	-25%	-14%	1%	0%	35%	-1%	4%
Primary							
2004	12%	21%	16%	20%	24%	6%	2%
2012	6%	9%	6%	9%	64%	5%	1%
% change	-7%	-12%	-9%	-11%	40%	-1%	-1%
Lower Secondary							
2004	20%	29%	11%	11%	21%	7%	1%
2012	7%	16%	6%	8%	57%	6%	0%
% change	-13%	-13%	-5%	-3%	35%	-1%	-1%

Source: Author's Calculation from CSES

There are also great variations in the cost of schooling between Phnom Penh, other urban and rural areas. In Phnom Penh, primary education costs nearly 3.5 times more than rural areas. The expenditure patterns also are varied. In Phnom Penh and other urban areas, there is much higher share of school fees than in rural areas, especially in pre-primary. This is partly due to more urban families sending their children to private pre-schools.

Figure 3-32: Cost of Schooling by Expenditure Items and Location 2012

	Total Amount	School fees	Tuition	Text books	School supplies	Allowances	Transport cost	Gifts
Pre-Primary								
Phnom Penh	$80	26%	0%	3%	5%	51%	15%	0%
Other Urban	$59	30%	1%	3%	8%	40%	6%	12%
Other Rural	$39	13%	0%	4%	7%	58%	17%	1%
Primary								
Phnom Penh	$182	16%	18%	7%	9%	42%	9%	0%
Other Urban	$110	9%	17%	5%	7%	57%	5%	0%
Other Rural	$51	1%	3%	7%	11%	74%	4%	1%
Lower Secondary								
Phnom Penh	$264	15%	18%	7%	8%	43%	9%	0%
Other Urban	$209	11%	18%	5%	7%	53%	6%	0%
Other Rural	$114	4%	15%	6%	8%	62%	5%	0%

Source: Author's Calculation from CSES

"Allowances" is the largest expenditure item in schooling, especially for the rural families. CSES however does not specify what types of expenses the allowance covered. The NGO Education Partnership (NEP) conducted a community level research in 2014 and identified a range of informal fees in primary school, some of which might be paid out of the "allowance" by students (e.g., bicycle parking fee) (see Table 3-28).

Figure 3-33: Informal School Fees, Primary Education

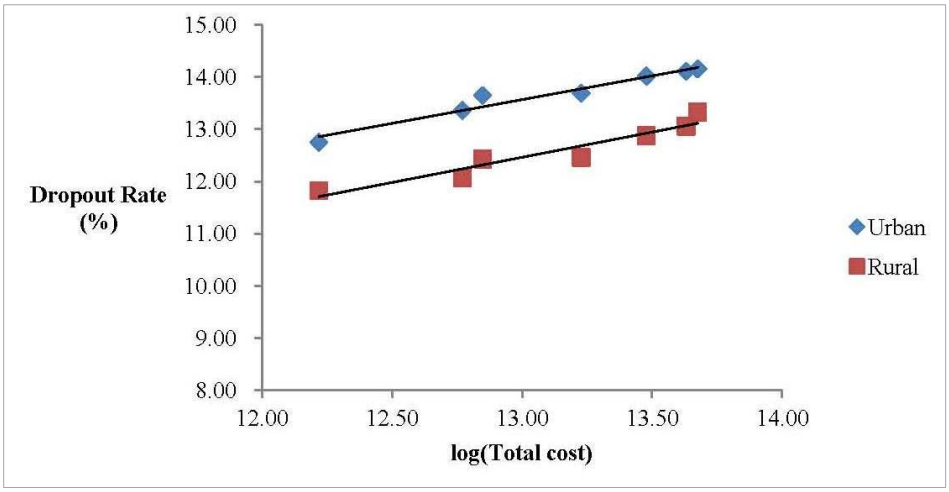
Types of expense	Student responses: Mean average of expenditure (Riels)	% of students paying		
		Urban	Rural	Remote
Bicycle parking fee	2,860 per month			

Appraisal record book	1,200 per month	41%	22%	11%
Examination fee	2,300 per time	22%	13%	22%
Extra tuition fee inside of school	12,500 per month	56%	22%	16%
Extra tuition fee outside of school	18,400 per month	32%	14%	11%
Daily Teacher's Fee	13,200 per month	25%	8%	3%
Teacher's note	1,800 per time	20%	12%	10%
Teacher's learning materials/stationery	1,400 per time	23%	15%	18%
Present for Teacher	6,800 per year	21%	7%	3%
Other expenses	1,200 per time			

Source: NEP (2014); Right To Education, Community Level Research

The direct cost of schooling, including both formal and informal fees, is one of the major reasons why many children are not in school. Figure 3-6 shows the correlation between average education expenditure by family and dropout rate at lower secondary school for both rural and urban areas.

Figure 3-34: Correlation between Average Education Expenditure and Dropout Rate at Lower Secondary School



Source: Cambodia National Council for Children (CNCC) estimates based on CSES

Since 2004, the Ministry of Education, Youth and Sport has been implementing a lower secondary scholarship program to defray the cost of schooling for poor students. The program has had a positive impact on improving school participation [World Bank evaluation, 2009]. The scholarship amount was set at $45 per annum in 2004 which has not been increased since then. Over 2004-2013, the average annual inflation rate in Cambodia is around 6.6%. Taking into account the general price level changes since 2004, the real value of the current scholarship is only at about $27. In order to re-establish the real value of the scholarship back to its 2004 level, the scholarship amount should be at around $75 per annum.

Box 2: Too Poor For School or School Too Expensive For the Poor?

A 17 year-old girl living in Siem Reap town, Siem Reap province dropped out from school when she was 13 because of a combination of poor learning and economic factors. She lives with her widowed mother who tried to feed and provide education

to four children. When the girl was at grade 4 in Kok Ta Chan primary school, she did not have money to go to school as her mother did not have any source of income. Her teacher collected 200 riels per day from students without exception. If the girl didn't pay, the fees were accumulated to next day. In addition, her teacher always wrote lessons on the blackboard with little or no explanations and left students to copy them. She could not read and write well until she was at grade 6 when her teacher worked hard to improve her reading and writing. When she finished grade 6, she decided to drop out of school as she knew that to study in lower secondary school was even more costly than at primary school.

Source: NEP (2014) Right to Education in Cambodia: Community Level Research

4. CONCLUSION AND RECOMMENDATION

This study investigates the issues surrounding out-of-school incidence at pre-primary, primary and lower secondary school. It addresses several aspects of out-of-schools, using a mixed approach of drawing qualitative and quantitative data from secondary sources (Cambodia Socio-Economic Survey). The findings from the study are summarized as follows.

Main Findings:

Firstly, the study uses the OCSC analytical framework to analyze the school participation of children age 5-14. The findings point out the reasons behind the school dropout decision. Empirical results suggest that main factors leading to out-of-school dropout are closely related to student's performance, school, family, and community factors.

Firstly, opportunity cost positively affects children being out-of-school. This implies that working children are more likely to leave school than non-working children. Working children tend to drop out from school when they graduate from primary school and are about to enter lower secondary school. By that time, they will reach a working age of around 12 years old and the opportunity cost of going to school is increasing with higher grade.

Secondary, the percentage share of household expenditure on education significantly affects school participation especially at lower secondary school. If scholarship is ensuring direct payment toward education, it will more likely help in reducing dropout.

Overage children are more likely to drop out of school. Late entry into primary and multiple repetitions will constraint students from completing nine year of basic education. Other factors contributing to children being out-of-school include teacher's quality, distance from house to schools, illness, disabilities, migration and others.

Household characteristics also matters. Students with a larger family size are more likely to drop out than those with a smaller family size. Students whose parents or household heads have low education are more probable to leave school. Students from the poor families are more likely to drop out than those from non-poor ones. Family economic conditions i.e. low income and small land size increase probability of dropout.

Policy Recommendations:

Policies with financial, mental, consulting supports for student groups with high probability of dropout and their families are needed. These groups include: (i) students live in a poor family; (ii) working students, especially students whose family is poor and family size is large; (iii) students live in rural areas, particularly female students; and (iv) students whose parents do not well understand the importance of education.

Education expenditure still has a strong effect on family decision relating to children school participation, mainly poor families. Government supports such as an increase of scholarship allowances, especially at the lower secondary level, to students with a high risk of dropout will be effective.

Encourage the integration of children out-of-school issues into local authority development plan with clear targeted goals i.e. development and budget plan of the Sangkat or Commune. Improve coordination between local authorities, schools, and families to jointly solve out-of-

school issues; and public awareness on dropout issue should target areas with high rates of primary and lower secondary school dropout.

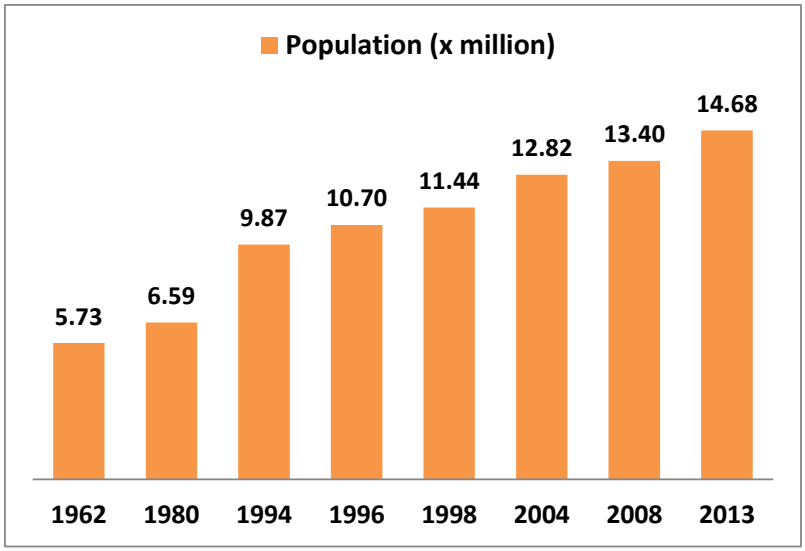
Improving school environment, curriculum quality, and teacher quality are always needed and are a continuing process to encourage students staying at school. Curriculum should be updated in response to market and social demand so that parents will value the future benefits of education.

ANNEXES

ANNEX 1: DEMOGRAPHIC & CHARACTERISTICS OF SCHOOL AGED CHILDREN

Cambodia has a population of approximately 14.68 million people, as projected by the latest Cambodia Inter-Censal Population Survey (CIPS) 2013. Population of Cambodia was only 5.7 million according to the 1962 Census which was the first official census conducted after the country attained independence from the French rule. Cambodia's demographic scenario had changed completely after that census due to Khmer Rouge period of the 1970s and ensuing civil war.

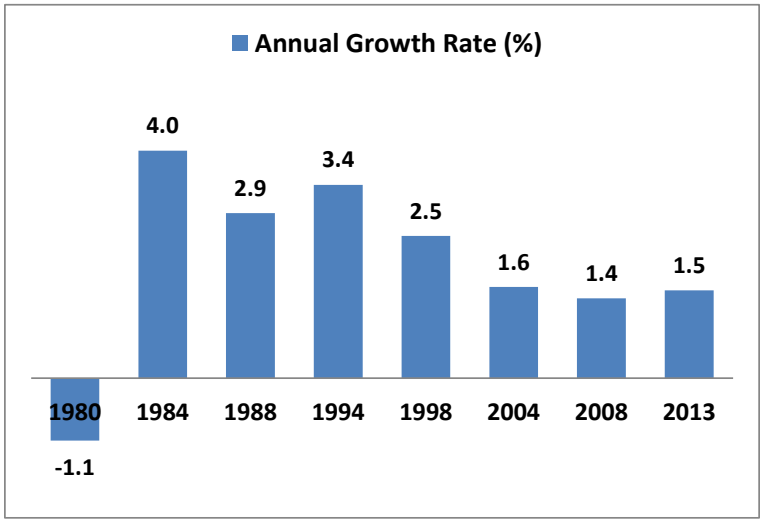
Figure 4-1: Population Trends in Cambodia



Source: MOP/NIS, CIPS 2013

The annual population growth rate at national level is estimated at 1.54 per cent in 2013, which is slightly higher than the average 1.46 per cent growth rate during 2008-2013 according to the CIPS 2013 estimate. Nevertheless, population growth rate in 2000's represent a significant decline comparing to the 1980's and 1990's with an average growth rate near 3 per cent as as Cambodian family life settled down after civil strife.

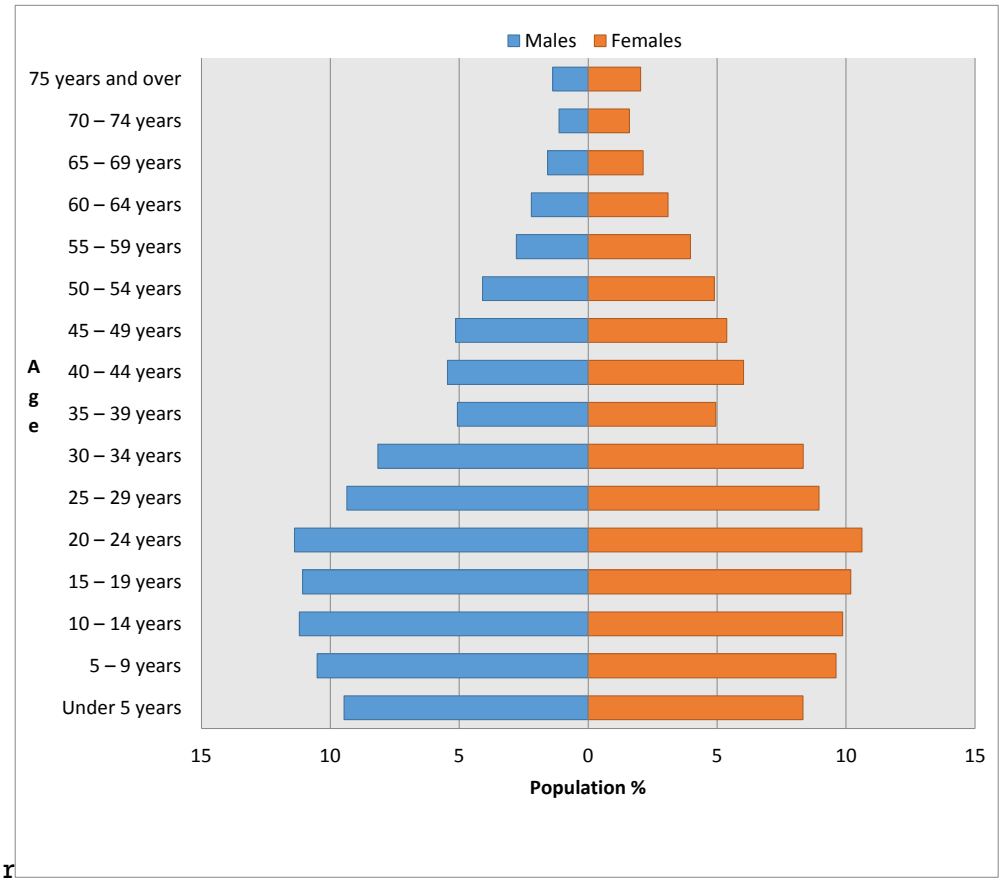
Figure 4-2: Annual Population Growth Rate in Cambodia



Source: World Bank Development Data and Stat

The massive tragic losses of life during the Khmer Rouge period, combined with ensuing high population growth lead to the unusual population distribution. Figure 2-3 below highlights some of the unusual features of Cambodia's current population distribution. Cambodians under 25 years of age account for more than half of the population (51.1%), albeit a slight drop in the age 0-9 cohort. The relatively low numbers of people in the 50+ age groups, especially men, is due to the very high levels of mortality during the 1970s.

Figure 4-3: Population Pyramid, Cambodia 2013



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Source: MOP/NIS, CIPS 2013

In the overall population, there are more females than males, largely due to differential mortality affecting men during the late 1970s. Currently, about 51 percent of adult Cambodians are women, or a gender ration of 94.3 (or 94.3 males per 100 females). Around 78.6% of Cambodians live in rural areas which has a slightly lower gender ratio than urban areas.

Figure 4-4: National Population by Gender and Location, 2013

Location	Total Population	% of National Population	Male	Female	Gender Ratio *
Urban	3,146,212	21.4	1,527,479	1,618,734	94.36
Rural	11,530,378	78.6	5,594,029	5,936,349	94.23
National	14,676,591		7,121,508	7,555,083	94.26

Note: Gender Ratio is the number of males per 100 females
Source: MOP/MIS, CIPS 2013

Table 2-3 to 2-5 below presents the school age population at the national, urban and rural levels. As shown above, at the national level, there is a higher percentage of females and males. However, at the school-age level (age 5-14), there are significantly more males than females, especially the age 5 cohort (see Table 2-3). The higher number of males at birth decrease with age is the result of higher mortality among males and large scale of exodus of adult male from Cambodia during the Khmer Rouge years. (CIPS 2013)

Figure 4-5: National Population of School Age Groups, 2013

Age Group	Age Group Population	% of National Population	Male	Female	Gender Ratio *
Pre-primary (Age 5)	304,631	2.1	160,141	144,490	110.8
Primary (Age 6-11)	1,750,634	11.9	885,660	864,973	102.4
Lower Secondary (Age 12-14)	962,545	6.6	500,101	462,444	108.1
Upper Secondary (Age 12-14)	896,334	6.1	456,350	439,986	103.7

Note: Gender Ratio is the number of males per 100 females
Source: MOP/NIS, CIPS 2013

Another key feature of the demographic pattern is that the share of school age population (age 5-17) is significantly higher in rural areas than in urban areas. In the urban areas, age 5-17 represents 22.8% of the total urban population. In comparison, the age 5-17 group in rural areas represents 27.7% of total rural population. The difference in the shares of primary school age population is particularly striking. In the rural areas, 12.5% of the population is in the age 6-11 compares to only 9.9% in urban areas.

Figure 4-6: Urban Population of School Age Groups, 2013

Age Group	Age Group Population	% of Urban Population	Male	Female	Gender Ratio*
Pre-primary (Age 5)	59,930	1.9	33,050	26,880	123.0
Primary (Age 6-11)	310,129	9.9	156,247	153,882	101.5
Lower Secondary (Age 12-14)	178,168	5.7	97,648	80,522	121.3
Upper Secondary (Age 12-14)	167,967	5.3	87,211	80,756	108.0

Note: Gender Ratio is the number of males per 100 females
Source: MOP/NIS, CIPS 2013

Figure 4-7: Rural Population of School Age Groups, 2013

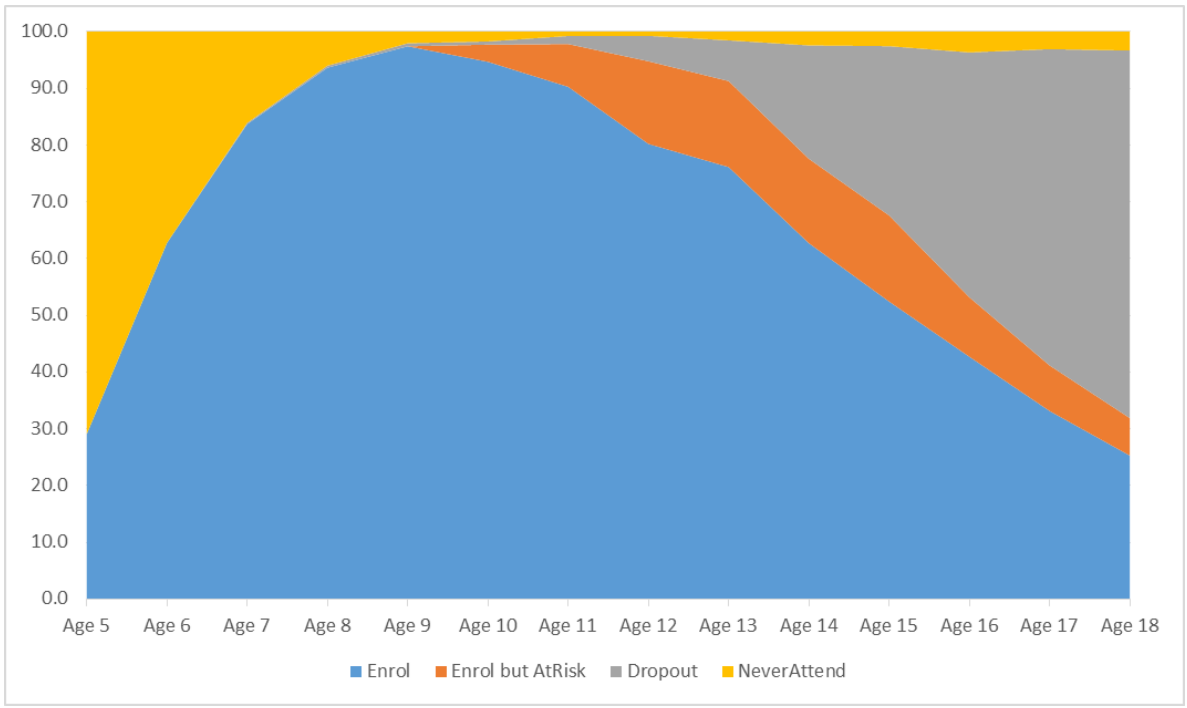
Age Group	Age Group Population	% of Rural Population	Male	Female	Gender Ratio *
Pre-primary (Age 5)	244,701	2.1	127,091	117,610	108.1
Primary (Age 6-11)	1,440,505	12.5	729,414	711,092	102.6
Lower Secondary (Age 12-14)	784,377	6.8	402,454	381,923	105.4
Upper Secondary (Age 12-14)	728,368	6.3	369,138	359,230	102.8

Note: Gender Ratio is the number of males per 100 females
Source: MOP/NIS, CIPS 2013

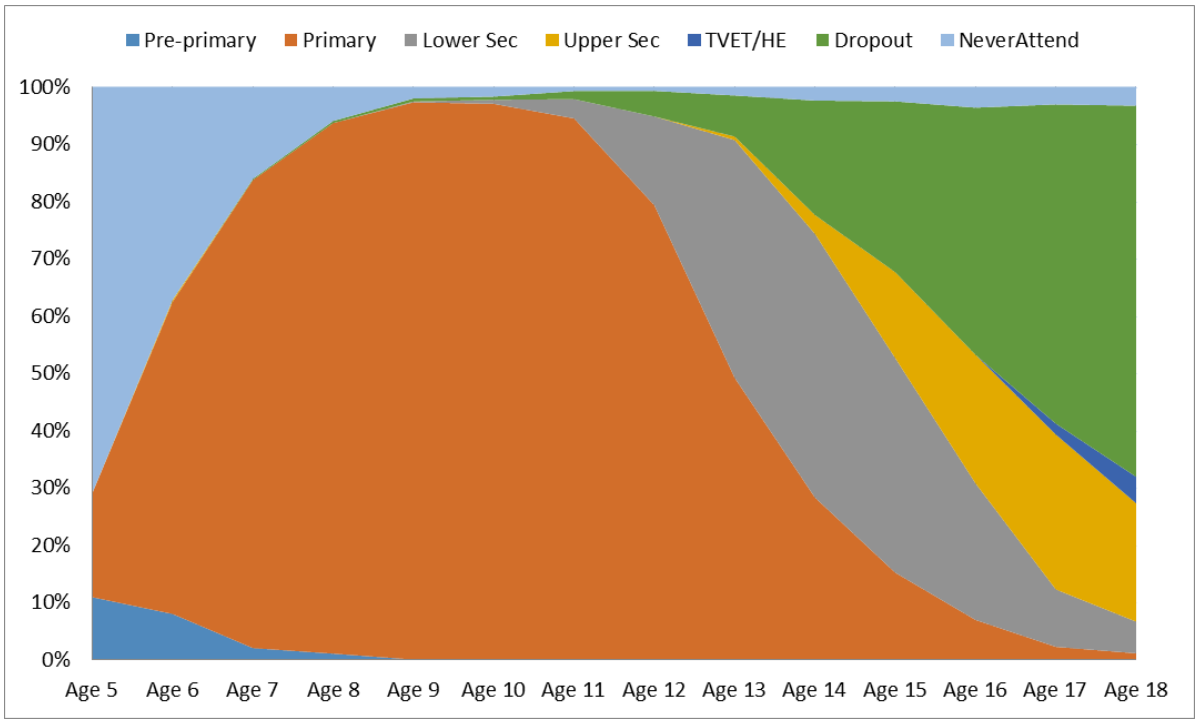
The education sector development planning needs to be responsive to this demographic pattern. Although the age 0-4 population is declining, there will continue to be upward demand pressure on the system over the medium term, especially at the secondary level as the current cohort of age 5-14 moving up the education ladder in the coming years.

ANNEX 2: OECD FIGURES AND GRAPHS

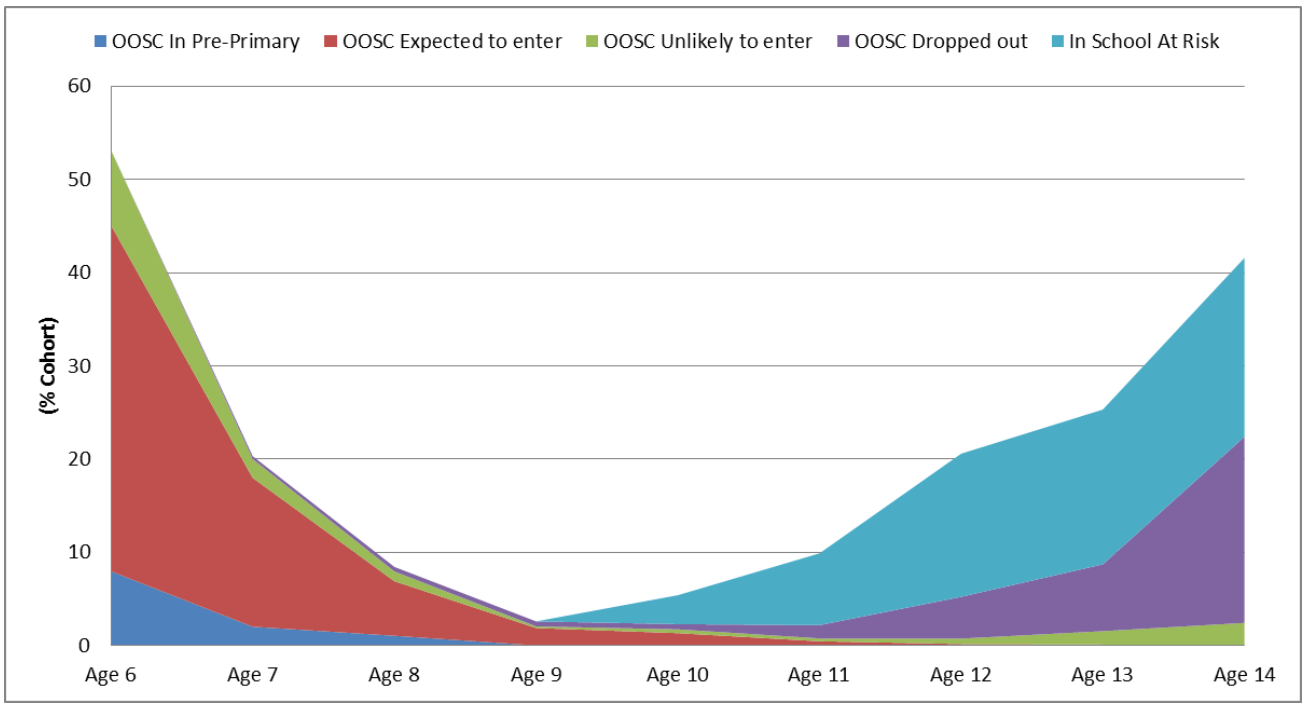
School Participation Status By Age



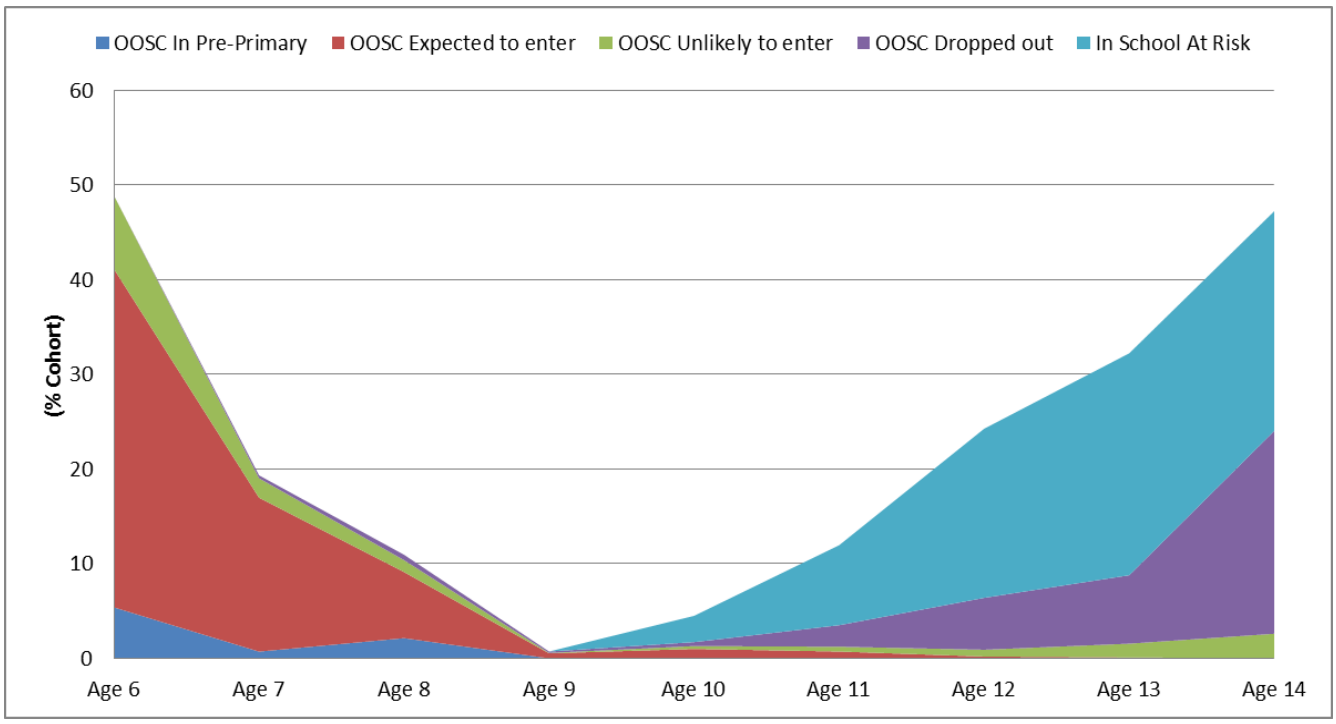
School Participation By Age and Education Level



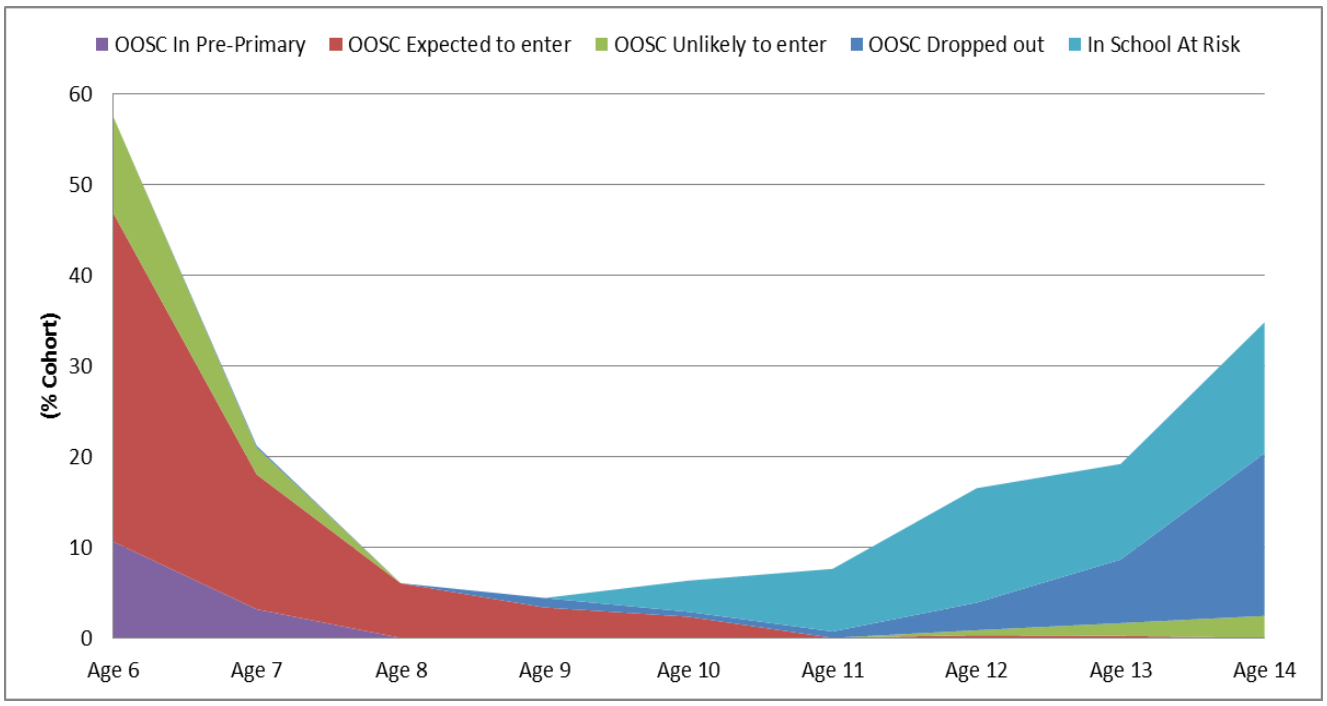
OOSC By Age: All Students



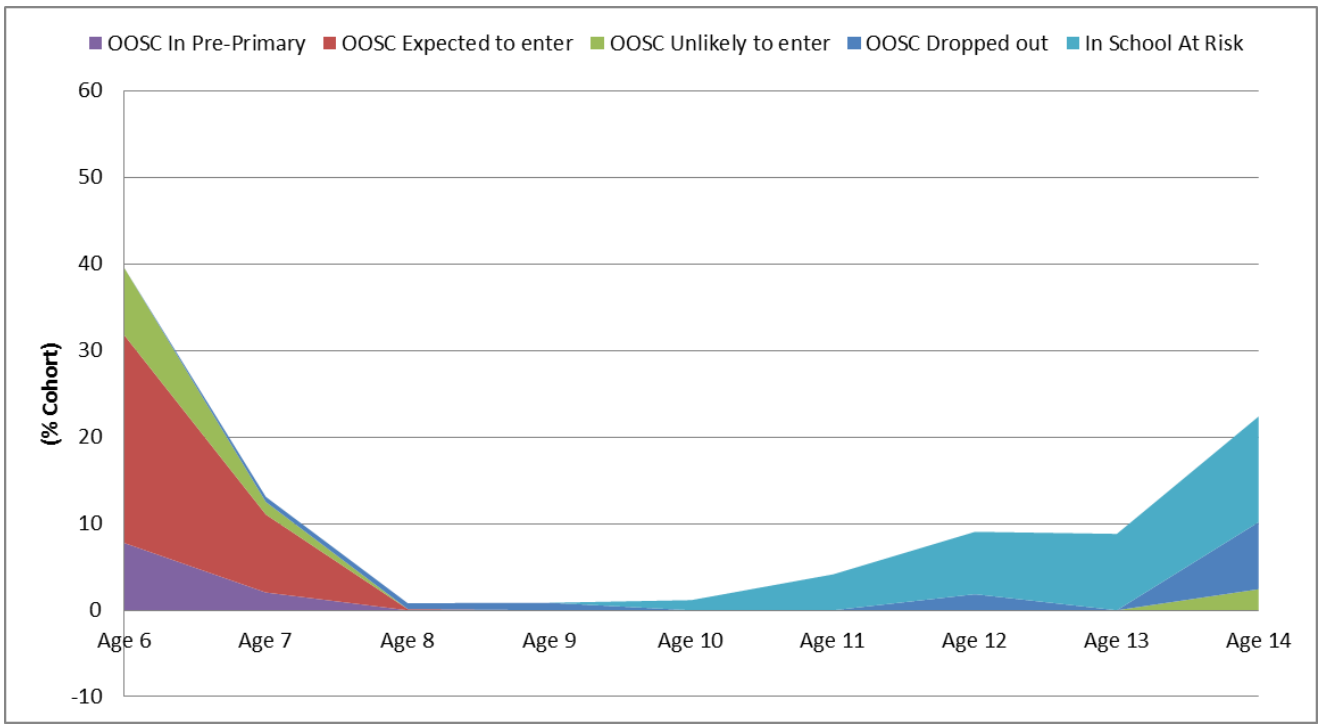
OOSC By Age: Boys



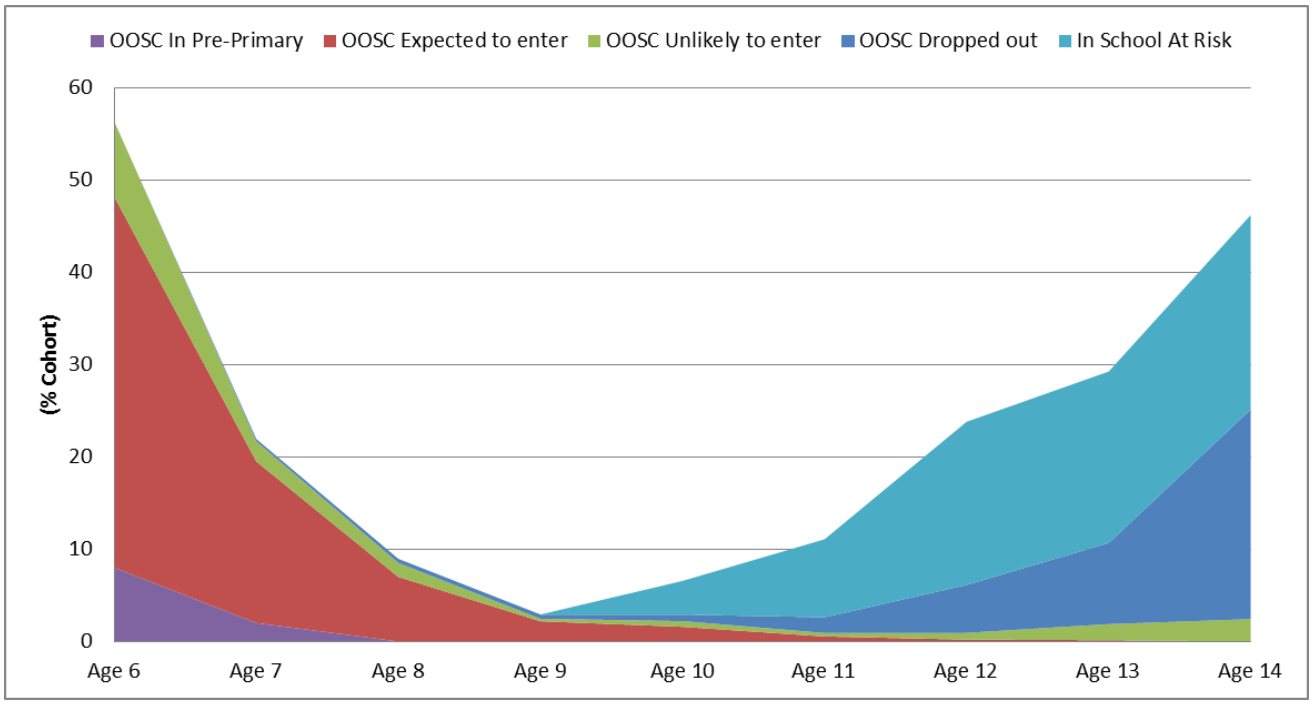
OOSC By Age: Girls



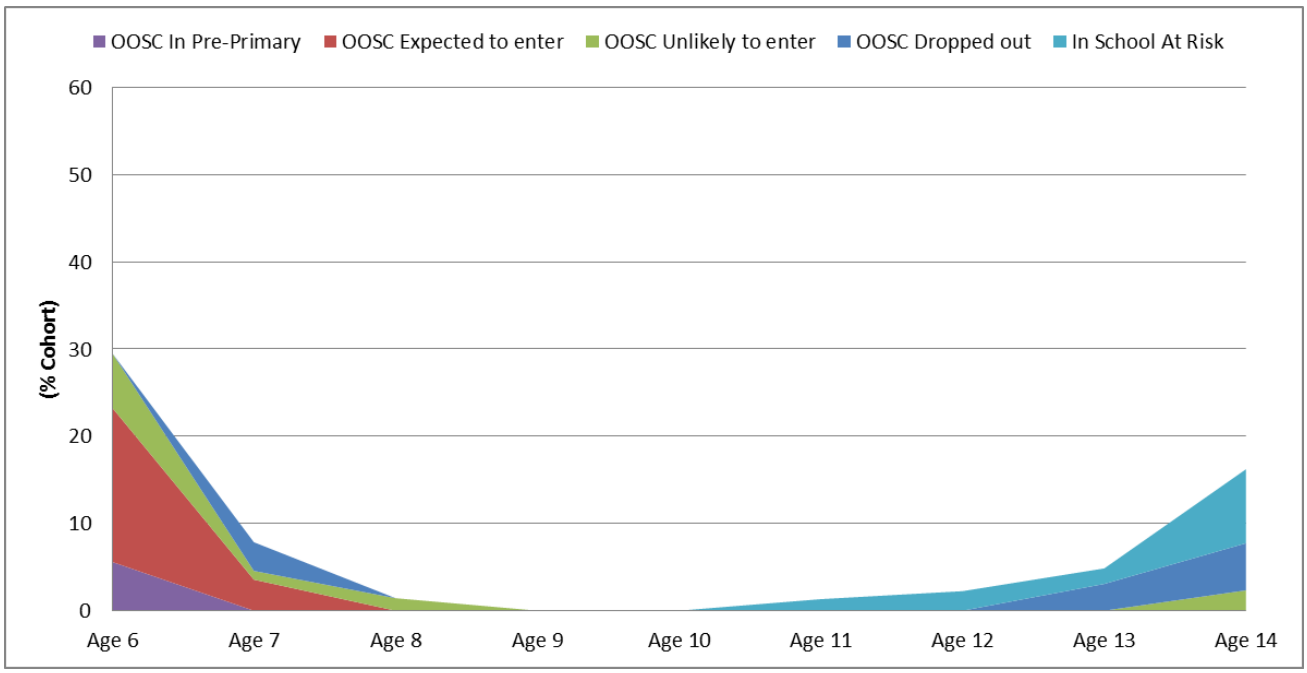
OOSC By Age: Urban



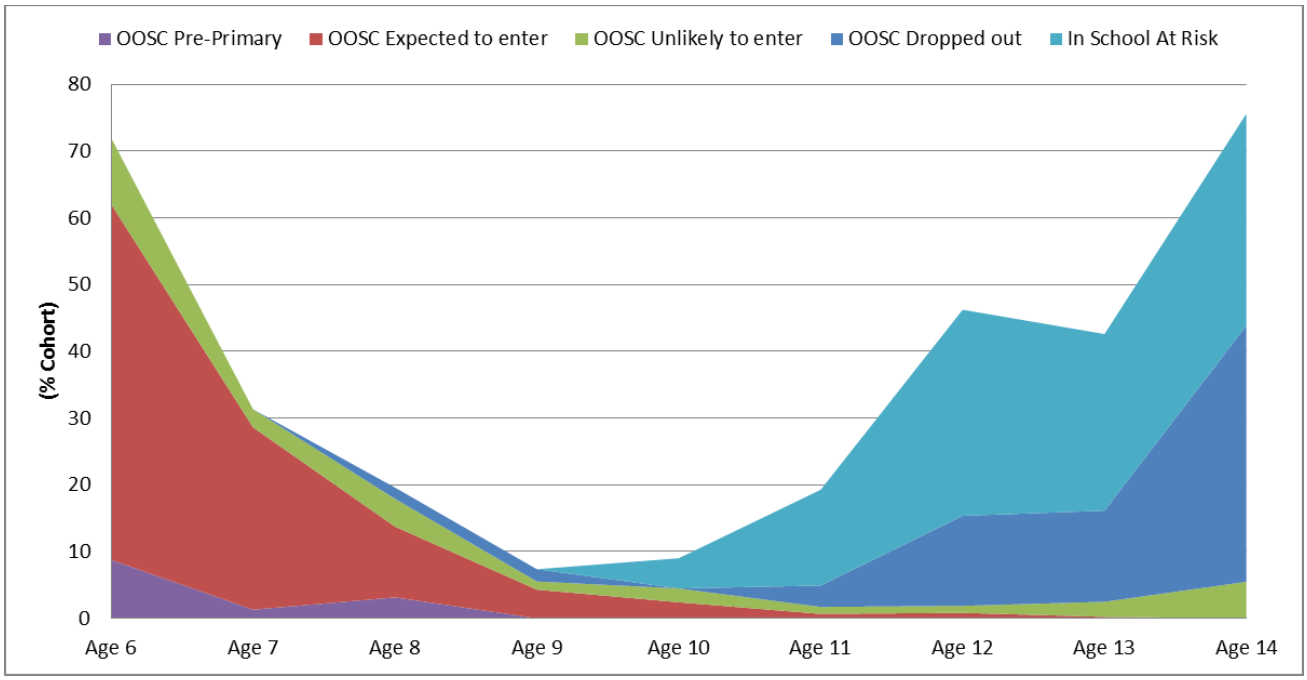
OOSC By Age: Rural



OOSC By Age: Richest Quintile



OOSC By Age: Poorest Quintile



ANNEX 3: SUMMARY ANALYSIS AT THE PROVINCIAL LEVEL

PROVINCIAL DEMOGRAPHIC OVERVIEW

The provincial analysis will use CSES 2009 dataset because of its large sampling size. The CSES 2012 survey covered 3,800 households and around 17,000 household members; hence it is only statistically valid at the national level. The CSES 2009 covered nearly 12,000 households and 57,000 household members; hence is more representative statistically at the sub-national level. Although the CSES data could be considered out-dated, the main objective of this section is to highlight any disparity at the provincial on out-of-school children situation.

At the sub-national level, Cambodia is organized into 24 provinces.6 Table 2-13 below presents the provincial population distribution from the 2008 national census, based on which the CSES 2009 household sampling was devised. (No Indigenous Pop)

Figure 4-8: Provincial Population Distribution, Census 2008

Province	Population	Gender Ratio	Khmer	Cham	Indigenious	Chinese	Vietnames	Thai	Laos	Others
Banteay Meanchey	677,872	95.8	100%	0%		0%	0%	0%	0%	
Battambang	1,025,174	97.6	99%	1%		0%	0%			
Kampong Cham	1,679,992	95.0	92%	8%	0%	0%	0%			0%
Kampong Chhnang	472,341	92.5	81%	15%		0%	3%	0%		
Kampong Speu	716,944	94.6	100%	0%	0%	0%	0%			
Kampong Thom	631,409	95.1	97%	0%	3%	0%				
Kampot	585,850	94.2	94%	6%	0%	0%				
Kandal	1,091,170	93.9	97%	2%	0%	0%	1%			
Kep	35,753	102.0	100%							
Koh Kong	117,481	99.4	93%	6%				1%		
Kratie	319,217	105.5	96%	4%		0%	0%	0%		
Mondul Kiri	61,107	89.1	21%	0%	68%					10%
Otdar Meanchey	185,819	99.4	100%							
Pailin	70,486	91.7	100%							
Phnom Penh	1,501,725	94.5	97%	1%	0%	0%	1%	0%		0%
Preah Vihear	171,139	102.4	100%	0%						
Prey Veng	947,372	96.4	100%		0%	0%	0%			
Pursat	397,161	100.1	100%	0%						
Ratanak Kiri	150,466	99.3	24%	1%	74%	0%	0%			1%
Siem Reap	896,443	92.2	100%	0%	0%		0%			
Preah Sihanouk	221,396	94.6	100%							
Stung Treng	111,671	101.6	97%		3%					
Svay Rieng	482,788	97.8	100%	0%		0%	0%			
Takeo	844,906	106.4	100%	0%				0%		0%
Cambodia	13,395,682	94.7	96%	2%	1%	0%	0%	0%	0%	0%

Source: MOP/NIS, Census 2008

The most populated province is Kampong Cham with a population of 1,679,922. The three other provinces with more than one million populations are Phnom Penh (1,501,725), Kandal (1,091,170) and Battambang (1,025,174). The least populated province is Kep, with only 35,753 people in the province. The other two provinces with less than 100,000 population are Mondul Kiri (61,107) and Pailin (70,486).

[6] In 2014, a new province Thbaung Khmum was created. The total number of provinces is 25.

Out of 24 provinces, 19 have more than 80% of their population living rural areas. Takeo is the most rural province of all, with 98% of its total population living in rural areas. In the five provinces that have below 80% rural population, the capital Phnom Penh stands out very differently. It has only 5.6% of its population living in rural areas, while the rest four provinces 60% or more.

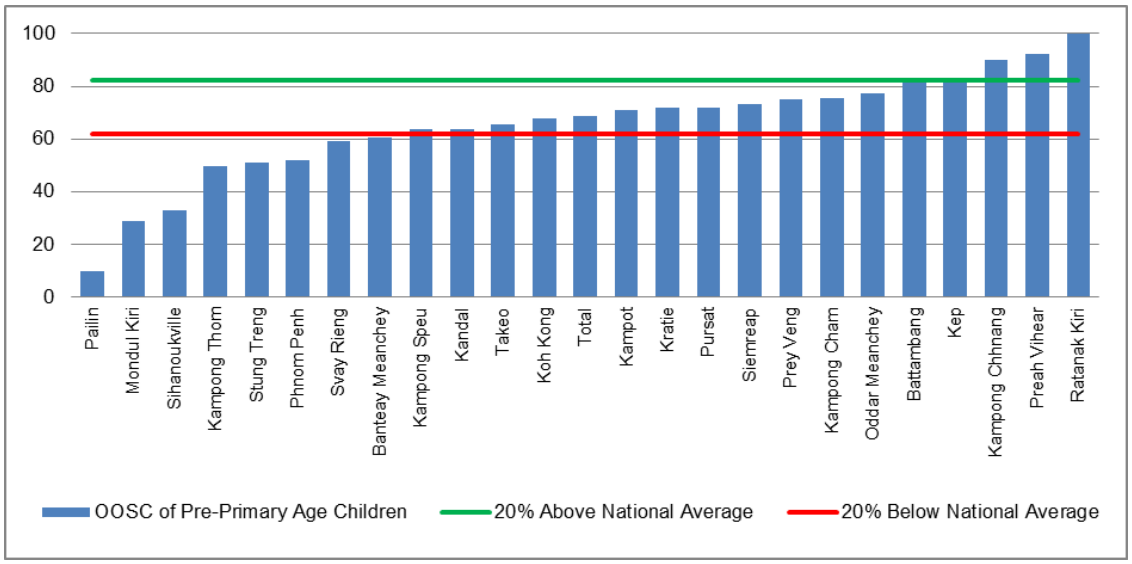
With regard to distribution of ethnic and indigenous population, Mondul Kiri and Ratanaka Kiri both have very high indigenous populations. The percentage of indigenous people in Mondul Kiri is 68% and in Ratanak Kiri is 74%. The other province that has a relatively high concentration of minority ethnic population is Kampong Chhnang, which has 15.4% of its total population being Cham.

PROVINCIAL OOSC DIMENSION 1-3

Figure 2-17 presents the out-of-school rate at pre-primary school age 5. The percentage of OOSC aged 5 ranges from 6.6% in Pailin to 100% in Ratanak Kiri. Four provinces are 20% above national average, and seven 20% below average. The most rural province of Takeo falls within the 20% range, and so is the most populated province of Kampong Cham. Being the capital of Cambodia, Phnom Penh achieves a relatively low OOSC rate at 51.9%.

Most interestingly, the two provinces which have the highest minority, in this case Indigenous, population are at the opposite end of the OOSC rate spectrum. Ratanak Kiri has the highest rate of out of school children, with 100% 5 year olds attending neither pre-primary nor primary schools. In Mondul Kiri, however, only 28% of its 5 year olds stay out of school. Kampong Chhnang is the third province that has relatively high minority population. The OOSC rate is high among its pre-primary school age children at 89.9%. (M Q Hasan et al 2012)

Figure 4-9: Percentage of Out of School Children at Pre-Primary School Age

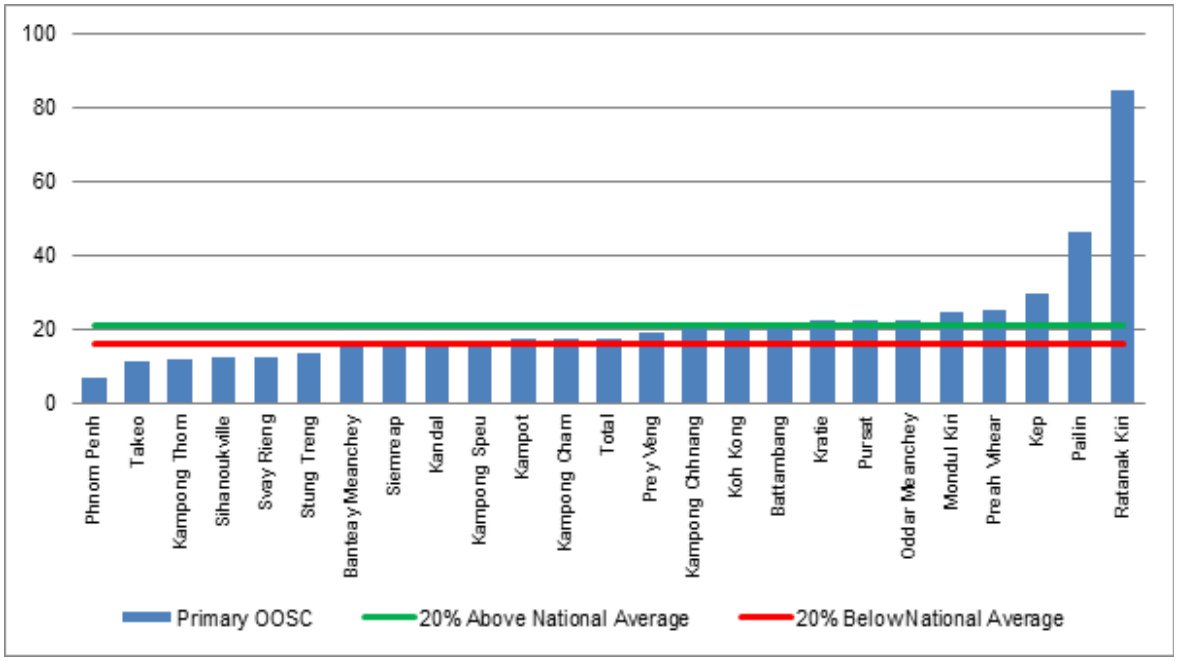


Source: MOP/NIS CSES 2009

The provincial OOSC rates at primary school age 6-11 OOSC range from 6.9% in Pailin to 84.9% in Ratanak Kiri. Ten provinces are 20% above the national average, and eight 20% below the average. The most rural province of Takeo performs well above the national average to be ranked second only to the capital city of Phnom Penh.

The worst five provinces that have 20% above average OOSC rate are: Ratanak Kiri (84.9%), Pailin (46.5%), Kep (29.6%), Preah Vihear (25.2%), and Mondul Kiri (24.7%). Provinces with high minority population perform very differently. Ratanak Kiri has very high OOSC rate at 84.9%. In Mondul Kiri and Kampong Chhnang, however, the rate is respectively 24.7% and 20.1%, above but closer to the national average.

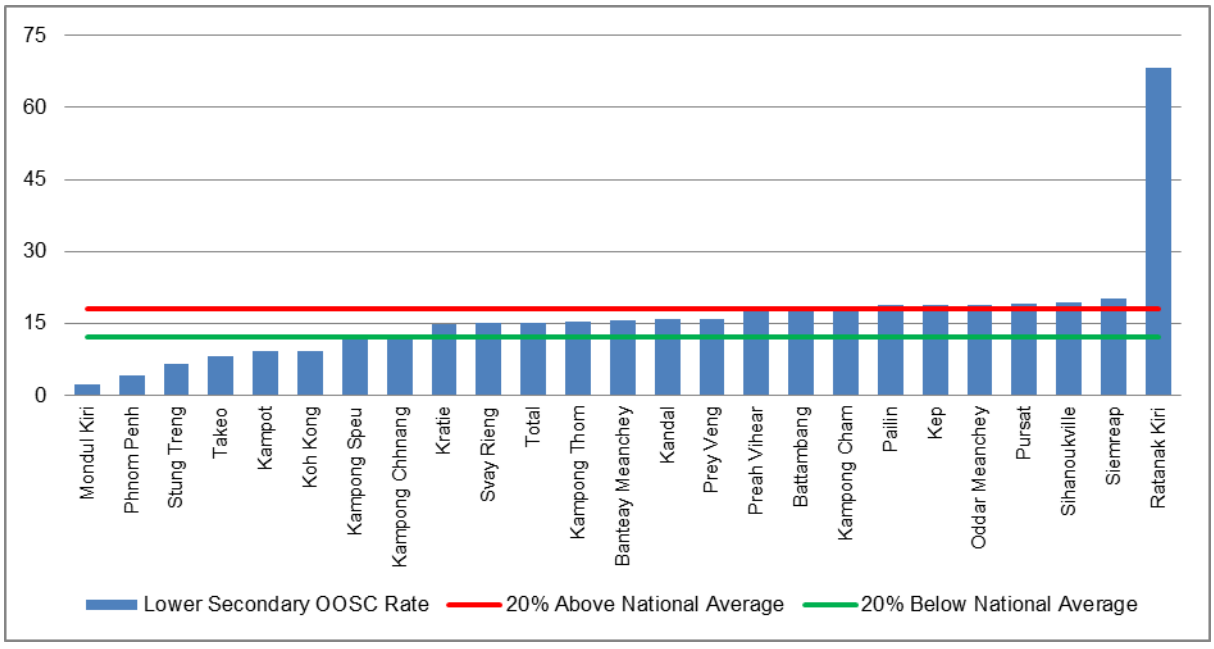
Figure 4-10: Percentage of Out of School Children at Primary School Age



Source: MOP/NIS CSES 2009

The provincial OOSC rates at lower school age 12-14 OOSC ranges from 2.2% in Mondul Kiri to 68.3% in Ratanak Kiri. Seven provinces are 20% above the national average, and seven 20% below the average. The worst five provinces that have 20% above average OOSC rate are: Ratanak Kiri (68.3%), Siemreap (20.3%), Sihanoukville (19.4%), Pursat (19.1%), and Oddar Meanchey (18.9%).

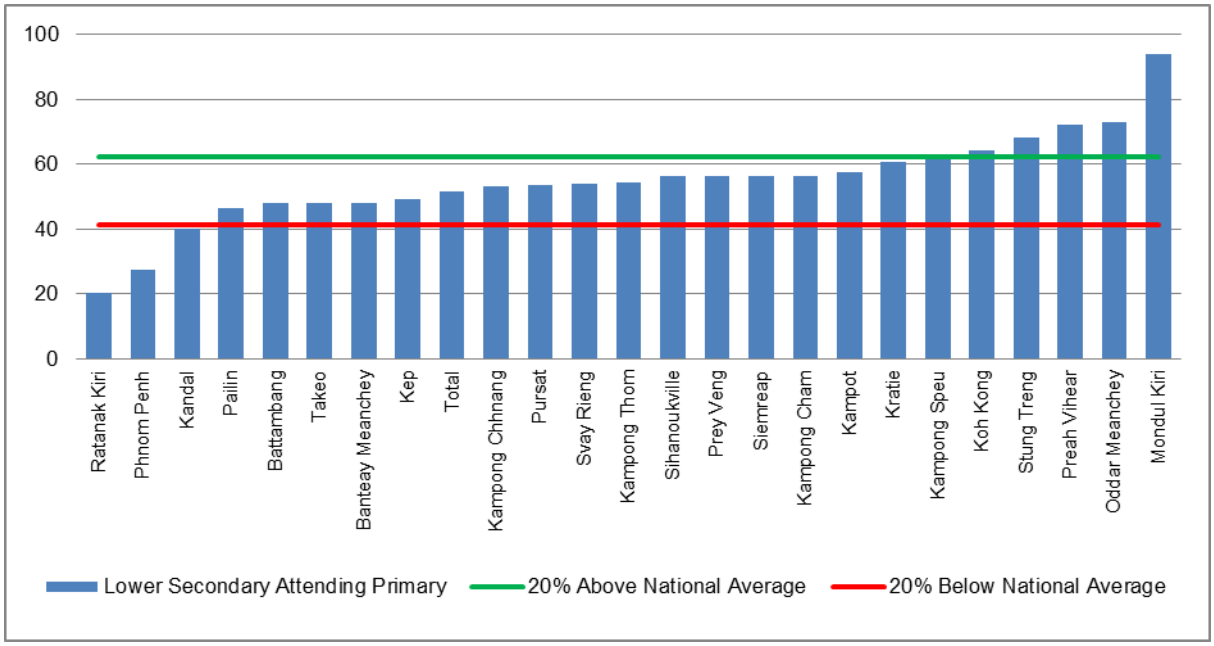
Figure 4-11: Percentage of Out of School Children at Lower Secondary School Age



Source: MOP/NIS CSES 2009

The two provinces that have the highest Indigenous population, Ratanak Kiri and Mondul Kiri, have very different OOSC rates. Ratanak Kiri is the worst in the country while Mondul Kiri the best in the country, even better than the capital city Phnom Penh. Study shows that the OOSC rate in Mondul Kiri is reduced by children attending schools, albeit in primary grades. The rate of attendance in primary grades by lower secondary school age children in Mondul Kiri is 94.1%, whereas in Ratanak Kiri it is only 20.3% (see Figure 2-19 below). Oddar Meanchey and Preah Vihear are second highest at over 72%.

Figure 4-12: Percentage of Lower Secondary School Age Children Attending Primary



Source: MOP/NIS CSES 2009

PROVINCIAL DROPOUT RATES

According to MoEYS EMIS 2013/14, the primary education dropout rates at the provincial level range form highest 17.9% in Ratanakiri to lowest 5.2% in Kandal. In terms of the number of dropout out students, Siemreap and Kampong Cham have the highest number of dropouts at 28,388 and 27,407, which constitutes nearly one quarter of all the dropout students nationwide.

A key feature of primary dropout is that there is ender inequity in all 24 provinces. Majority of the provinces have significantly higher the boy dropout rate than girl. In two provinces, Takeo and Siemreap, the boys dropout rates more than doubled that of girls. In contrast, Sihanoukville has GPI of 1.79 with girl's dropout rate of 17.4% to boy's 9.7% The only province that come closest to gender equity is Otdar Meanchey which has a GPI of 0.92. In total, 84,621 girls and 142,792 boys dropped out of primary schools in school year 2013/14.

Figure 4-13: Provincial Primary and Lower Secondary School Dropout Rates

Province	Primary School Dropout		
	%	No	GPI
Ratanak Kiri	17.9%	6,573	0.69
Mondul Kiri	15.7%	1,967	0.61
Siemreap	15.7%	28,388	0.43
Pursat	14.1%	9,889	0.68
Kratie	13.7%	8,161	0.82
Sihanoukville	13.5%	3,855	1.79
Koh Kong	13.2%	2,662	0.85
Banteay Meanchey	12.9%	13,444	0.87
Battambang	12.7%	22,696	0.78
Kampong Thom	12.7%	14,511	0.69
Otdar Meanchey	12.0%	4,600	0.92
Preah Vihear	11.5%	4,244	0.63
Prey Veng	11.1%	18,908	0.42
Pailin	11.1%	1,233	1.15
Stung Treng	10.0%	1,935	0.86
Kep	9.9%	563	0.83
Kampong Cham	9.7%	27,407	0.78
Svay Rieng	9.2%	7,188	0.58
Kampong Chhnang	8.5%	6,761	0.67
Kampot	8.0%	7,720	0.64
Takeo	7.4%	10,478	0.40
Phnom Penh	6.9%	9,081	0.84
Kampong Speu	5.9%	7,068	0.82
Kandal	5.2%	8,075	0.67

Province	Lower Seconday Dropout		
	%	No.	GPI
Kampong Thom	25.2%	6,391	0.93
Otdar Meanchey	24.7%	1,663	0.90
Banteay Meanchey	24.6%	5,684	0.88
Kampong Speu	24.3%	6,976	0.99
Prey Veng	24.2%	10,120	1.10
Kampong Cham	23.7%	15,412	0.97
Svay Rieng	23.6%	5,241	1.02
Battambang	22.9%	8,331	0.88
Kampong Chhnang	22.4%	4,530	0.93
Siemreap	21.1%	7,539	1.07
Kratie	21.1%	2,228	1.00
Pursat	21.0%	2,959	0.94
Kep	20.4%	344	0.96
Kampot	20.2%	5,612	0.94
Kandal	19.6%	8,965	0.92
Stung Treng	18.8%	636	1.10
Preah Vihear	18.7%	1,373	0.90
Takeo	18.6%	8,764	1.01
Sihanoukville	18.3%	1,334	0.95
Mondul Kiri	18.0%	379	1.03
Pailin	16.7%	368	0.86
Ratanak Kiri	16.7%	647	0.77
Koh Kong	16.1%	720	0.95
Phnom Penh	13.7%	7,013	0.91

Source: Author's Calculation based on MoEYS/EMIS 2013/14

The provincial lower secondary education dropout rates range form highest 25.2% in Ratanakiri to lowest 13.7% in Phnom Penh. Kampong Cham and Prey Veng have the highest numbers at 14,412 and 10,120, or 22.5% of all the lower secondary dropouts nationwide. In terms of gender equity, although 17 out of the 24 provinces have higher boy dropout rate than, it is significantly more balance than primary education. The only province with severe gender disparity is Ratankiri which has a boy dropout rate of 18.6% and girl 14.4%. In total, 54,851 girls and 58,378 boys dropped out of lower secondary schools in school year 2013/14.

4.1.1. PROVINCIAL OOSC DIMENSION 4-5

As noted section 2.5 above, the proxy indicator on "Children At Risk" is the students who are 3 years or older than the official grade-specific school ages, hence has a high possibility of dropping out of school before completing basic education grade 9.

Table 2-17 summarizes the percentage of students at-risk of dropout in primary, lower secondary and combined basic education grades 1 to 9. The overall patterns between in primary and lower secondary at-risk rates are very similar. For example Oddar Meanchey and Mondulkiri have the highest rates in both primary and lower secondary education. This is an indication that children in those provinces enroll in school at a much later age. The only anomaly is Ratankiri which has a very lowest at-Risk rate in lower secondary education. This is probably has to do with the overall low participation in secondary education in the

province which is limited to only urban/better off families. Similar can be say about Kep which has the second highest OOSC rate but second lowest At-Risk rate.

Figure 4-14: Provincial Primary and Lower Secondary School Dropout Rates

Province	Basic Ed (G1-9)	Primary	Lower Sec
Oddar Meanchey	50.3%	45.1%	74.1%
Mondul Kiri	48.8%	47.9%	66.5%
Preah Vihear	40.7%	36.6%	65.0%
Ratanak Kiri	40.2%	46.5%	13.9%
Pailin	36.9%	34.5%	40.5%
Kampong Speu	34.8%	32.6%	42.8%
Kampong Cham	34.3%	34.8%	32.0%
Stung Treng	33.9%	32.0%	40.3%
Siemreap	33.6%	32.3%	39.2%
Koh Kong	33.3%	32.5%	36.7%
Prey Veng	32.8%	32.7%	33.4%
Pursat	32.7%	32.3%	33.8%
Svay Rieng	32.1%	31.6%	34.1%
Kratie	31.8%	33.2%	23.9%
Sihanoukville	28.7%	29.0%	27.1%
Kampong Thom	28.6%	27.6%	32.7%
Battambang	28.5%	28.2%	29.6%
Kampot	27.9%	24.5%	38.5%
Banteay Meanchey	26.4%	24.0%	34.3%
Kampong Chhnang	26.2%	23.5%	33.7%
Kandal	22.2%	22.5%	21.4%
Takeo	21.7%	21.3%	22.7%
Kep	18.9%	13.9%	31.7%
Phnom Penh	12.9%	12.0%	15.0%

Source: Author's Calculation based on CSES 2009