



Education 2007

**National Institute of Statistics
Ministry of Planning**

Phnom Penh, August 2009

***Report based on the
Cambodia Socio-Economic Survey***

Foreword

It is my pleasure to introduce one of a series of reports on the Cambodia Socio-Economic Survey (CSES) 2007. The CSES 2007 is the sixth socio-economic survey conducted by the National Institute of Statistics (NIS) at the Ministry of Planning. From 2007 and onwards the CSES is conducted annually and will contribute to the development of the living standards of people in Cambodia.

The CSES 2007 provides main indicators on the living conditions in Cambodia and covers many areas, e.g. health, housing conditions, labour force and victimization. The Royal Government of Cambodia (RGC) will benefit from the results by using the data to monitor the National Strategic Development Plan (NSDP) and to develop effective policies for reducing poverty in Cambodia. Users such as researchers, analysts and NGO's can also benefit from the results to better understand the Cambodian socio-economic situation.

The survey was planned, designed and conducted by the staff of NIS with overall technical and management assistance provided by Statistics Sweden. The CSES 2007 will be the starting point for NIS to produce results annually on the living conditions in Cambodia and meet the data needs of many users.

The CSES is part of a capacity building project financed by the Swedish International Development Cooperation Agency (Sida). On behalf of the Royal Government of Cambodia, I would like to take the opportunity to thank Sida for the financial support. I would also like to express my gratitude to Statistics Sweden for the technical assistance in planning, designing and conducting the CSES and for assisting NIS in the preparation of this report.

Chhay Than
Senior Minister
Minister of Planning

Ministry of Planning
Phnom Penh
August, 2009

Preface

This is one of a series of reports on the Cambodia Socio-Economic Survey (CSES) 2007 produced by the National Institute of Statistics (NIS) of the Ministry of Planning. The results in this report cover the area of education. Results from other subject matter areas of the CSES 2007, such as health, housing, labour force and victimization are released in separate reports.

Since 2007, NIS conducts the socio-economic survey annually. Previous surveys were undertaken in 1993/94, 1996, 1997, 1999, and 2004. The main objective of the CSES is to collect statistical information about living conditions of the Cambodian population and the extent of poverty. The survey can be used for identifying problems and making decisions based on statistical data.

The CSES is a very comprehensive survey which provides statistical data to be used for various purposes. The main user is the Royal Government of Cambodia (RGC) as the survey supports monitoring the National Strategic Development Plan (NSDP) by different socio-economic indicators. Other users are university researchers, analysts, international organizations e.g. the World Bank and NGO's. The primary data files are made available for research and analysis according to the procedures specified in the 2005 Statistics Law.

The Swedish International Development Cooperation Agency (Sida) sponsors the NIS for conducting the CSES while Statistics Sweden provides technical assistance. I am much obliged to both Sida and Statistics Sweden for their support. Furthermore, I wish to place on record my deep appreciation of the work carried out by the NIS staff, staff of provincial planning offices, the staff of the Ministry of Planning, and all who work with dedication and enthusiasm to sustain the survey quality. I also extend my thanks to all the participating households and individuals.

Responsible at NIS for this report are Mr. Ouk Eam and Mr. Lenh Heang, Deputy Directors of Social Statistics Department.

H. E. San Sy Than

Director General

National Institute of Statistics, August 2009

Ministry of Planning

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1 Introduction

In this report results of the subject matter area Education from the Cambodia Socio-Economic Survey (CSES) 2007 are presented. The tabulations and comments to the results have been produced by the subject matter staff at NIS in cooperation with consultants from Statistics Sweden. Five rounds of the CSES have been conducted between 1993 and 2004. Since 2007 the CSES runs annually. The CSES is a household survey with questions to households and the household members. In the household questionnaire there are a number of modules with questions relating to the living conditions, e.g. housing conditions, education, health, expenditure/income and labour force.

There are no comparisons with previous CSES in this report. The first rounds had a different survey design than the surveys conducted in 2004 and 2007. The sampling design in CSES 2004 and 2007 was the same, where the sample selected for the 2007 survey is a subsample of the sample used in 2004. However, comparisons between the published results of CSES 2004 in September 2005¹ and the results in this report should be made with caution. For further information on the problems with comparability see section 4.8.

The CSES 2007 was conducted from October 2006 to December 2007. The monthly sample size was 300 households. In this report all estimates presented are based on the 12 month samples (3,600 households), i.e. the calendar year 2007.

In CSES 2007 some changes have been introduced in the household questionnaire compared to 2004.

In section 2 some basic results on the demography in Cambodia are presented and in section 3 results of the subject matter area Education from CSES 2007 are presented. In section 4 the methodology of the survey is described.

Information to the reader

As the results in this report are estimated values, all percentages and numbers are rounded off. A '0' (zero) means that there is a value. Therefore some tables with percentage do not sum up to 100 percent. In the tables the symbol (-) is used and means few or no observations in the cell.

All statistical surveys contain errors and the results from surveys are not the target values but estimates of them. There are many types of errors in a survey, e.g. measurement errors, coverage errors, non-response, data processing errors and in sample surveys there is also sampling errors. When conducting a survey it is important to minimize the total error so that accurate estimates can be produced. NIS has put a large effort in the work of minimizing the errors but recommends the reader to be aware of the possibility of deviations from the exact values.

¹ National Institute of Statistics (2005). Cambodia Socio-Economic Survey 2004, Summary Subject Matter Report, September 2005.

2 Demographic characteristics

Since 1980 there was a 15-year period with high fertility and strong population increase. After 1995 there has been a rapid decline in fertility and mortality. According to the population projections² the Cambodian population was predicted to be 13 million in 2004 and 15 million in 2010. According to the preliminary results from the General Population Census 2008³, the Cambodian population was estimated to 13,388,900. The tables below show the estimated population and estimated number of households in different censuses and surveys. In September 2009 the final results from the 2008 Census will be released and detailed numbers will then be available.

In urban areas the estimated population in CSES 2007 was about 2.583 million compared to the preliminary results from the Population Census 2008 which estimated the urban population to 2.615 million. In rural areas the estimated population was about 10.6 million in CSES 2007 and in the Population Census 2008 it was estimated to about 10.8 million people, see Table 1.

Table 1. Estimated Population by urban and rural

In thousands		
	CSES 2007	Population Census 2008 (preliminary)
Cambodia	13,230.0	13,388.9
Urban	2,583.0	2,614.5
Rural	10,647.0	10,774.4

In Table 2 results from four different surveys or censuses are presented. The results are from different years and explain the differences in results. Also, the results are based on censuses or sample surveys with different errors, e.g. coverage errors and sampling errors.

Table 2. Estimated Population by sex

In thousands				
	Census 1998	Cambodian Inter-censal Population Survey 2004 ⁴	CSES 2007	Population Census 2008 (preliminary)
Total	11,437.7	12,824.0	13,230.0	13,388.9
Women	5,926.3	6,627.0	6,815.0	6,893.4
Men	5,511.4	6,197.0	6,414.0	6,495.5

² Neupert, R.F. (2005). New Demographic Estimates and Updated Projections for Cambodia.. UNDP.

³ National Institute of Statistics (2008). General Population Census of Cambodia 2008, Provincial Population Totals. August, 2008.

⁴ National Institute of Statistics (2004). Cambodia Inter-Censal Population Survey 2004, General Report. November, 2004.

In Table 3 the estimated numbers of households are presented from CSES 2007 and preliminary results from the Population Census 2008. The number of households in the census data is slightly higher both in urban and rural areas. However one must remember that the census refers to 2008 and therefore should have higher numbers due to a continuous increase of the population and number of households.

Table 3. Estimated number of households by urban and rural

In thousands

	CSES 2007	Population Census 2008 (preliminary)
Cambodia	2,799.0	2,832.7
Urban	512.0	518.1
Rural	2,287.0	2,314.5

3 Results

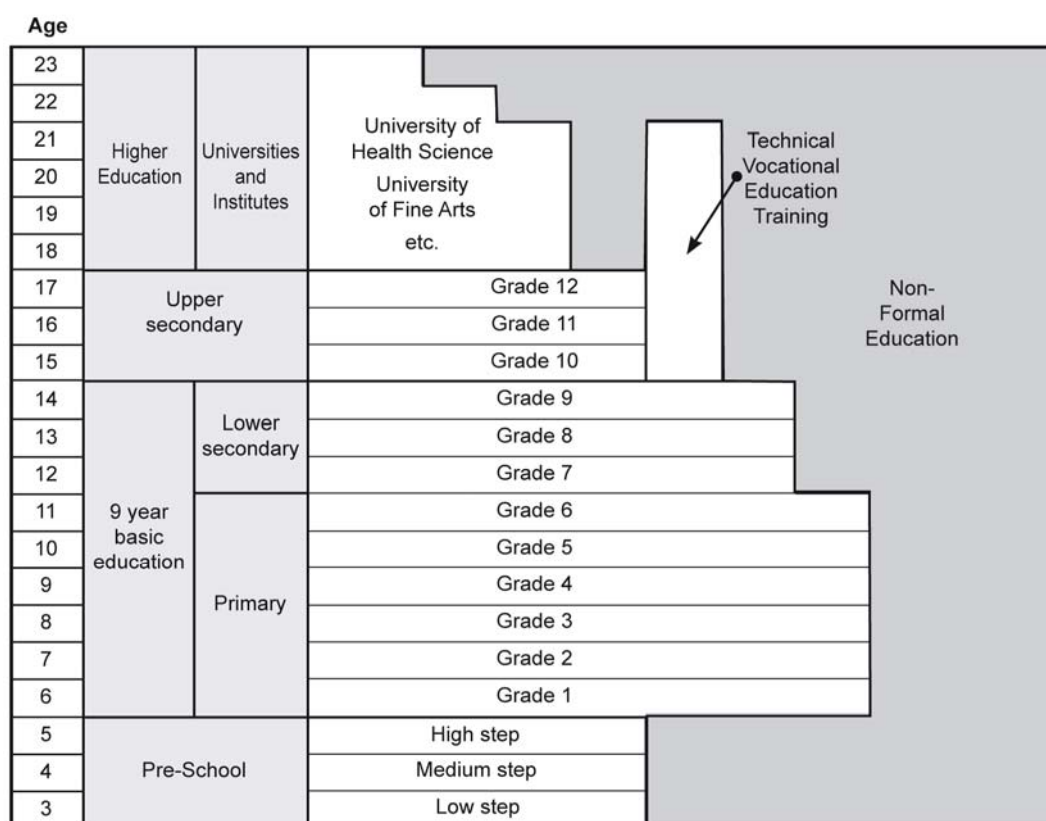
The CSES 2007 includes a module, which makes it possible to produce the indicators on education: Literacy, educational attainment, school attendance/enrolment, and education expenditure. Similar questions have been asked in the previous runs of the survey.

The questions about education were posed to the household head. All household members aged 5 years and over were included. The relevant module from the questionnaire is included in Annex 1.

Official education data for Cambodia is mainly based on administrative information and organized in an Education Management Information System (EMIS). There are also educational modules in other surveys; The Population Census 1998 and 2008, Demographic and Health survey 2000, 2005, and Inter-Censal Population Survey 2004.

Figure 1 shows the structure of the educational system in Cambodia.

Figure 1. Education system in Cambodia



3.1 Literacy

There is a strong relationship between literacy and poverty. Thus, it is important to measure literacy. Literacy is defined as the ability to read and write a simple message in any language.

General literacy

The minimum age for school admission is 6 years but, particularly in rural areas, there are children beginning school later. Therefore it is only meaningful to estimate the literacy rate for the population 7 years and over. To compare internationally, the literacy rate of the population aged 15 years and over (adult literacy) has been estimated.

The results from the CSES 2007 show that somewhat more than 70 percent of the population age 7 years and over was literate. The results on literacy for the population age 7 years and older are shown in Table 4, where also breakdowns by sex and geographical domains are presented.

Table 4. Literacy among population 7 years and over by geographical domain and sex, 2007. Percent.

	Women	Men	Total
Cambodia	66	80	73
Phnom Penh	90	95	92
Other urban	69	82	75
Other rural	63	78	70

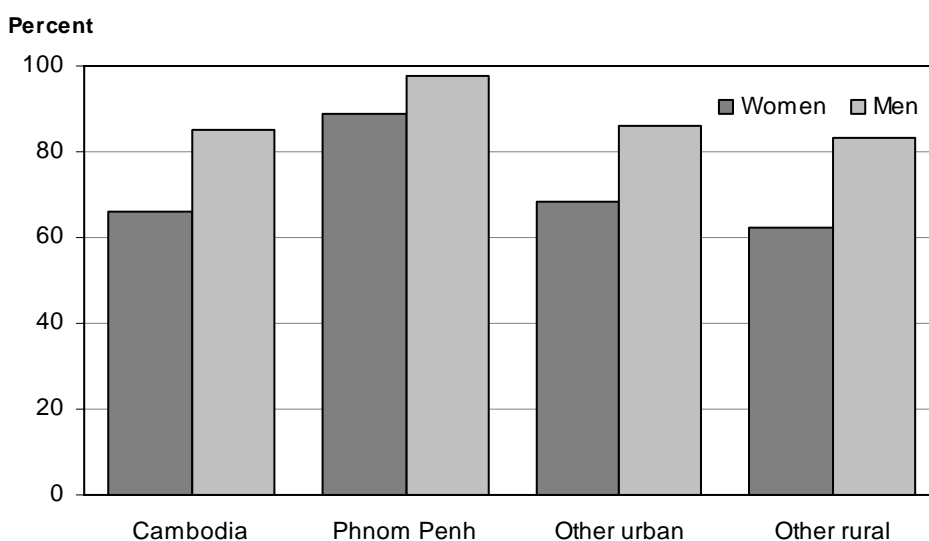
The literacy rate is higher for men than for women in both urban and rural areas with larger differences between women and men in other urban and other rural compared to Phnom Penh. The general literacy rate is highest in Phnom Penh and lowest in other rural areas.

Adult literacy

The adult literacy rate is the share of the population aged 15 years and older who can both read and write a simple message in any language. The adult literacy rate was estimated to about 75 percent, and about 66 and 85 percent for women and men respectively, see Table 5 or Figure 2. The adult literacy rate is highest in Phnom Penh with rates of about 89 percent for women and 98 percent for men. The adult literacy rates were somewhat higher in other urban areas than other rural areas. The rates among men were higher than among women.

Table 5. Adult literacy by geographical domain and sex, 2007. Percent.

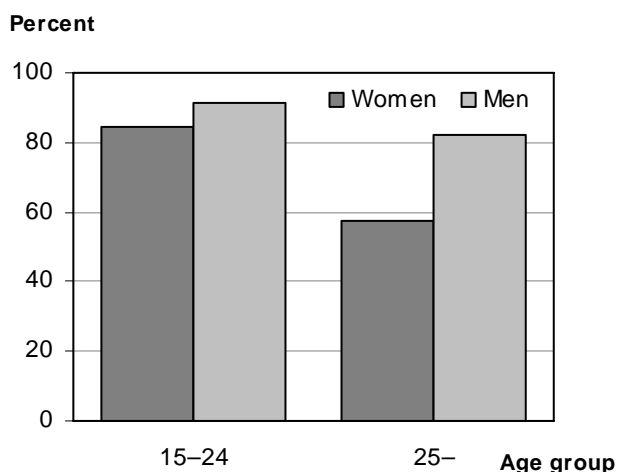
	Women	Men	Total
Cambodia	66	85	75
Phnom Penh	89	98	93
Other urban	69	86	77
Other rural	63	83	72

Figure 2. Adult literacy by geographical domain and sex, 2007. Percent.

In Table 6 and Figure 3 below, the literacy rates for the age groups 15–24 years and 25 and over are presented. There is a large difference between women and men. Of the women 25 years and over about 57 percent can read and write a simple message compared to 82 percent of the men in that age group. Also in the age group 15–24 years the women have a lower rate than men, 84 percent for women compared to 91 percent for men.

Table 6. Adult literacy by age group and sex, 2007. Percent.

	Women	Men	Total
Total 15–	66	85	75
15–24	84	91	88
25–	57	82	69

Figure 3. Adult literacy by age group and sex, 2007. Percent.

Measuring literacy from a question in a household survey is difficult and the results should be regarded as uncertain. Comparability with previous surveys should be made with caution since there have been changes in the survey design. For example the coverage is not the same and in CSES 2004 two questions were introduced (can read and can write) while in previous CSES only one question was asked (can read and write).

3.2 School attendance

Concepts and definitions

Participation rates in education are generally measured by the Gross Enrolment Ratio (GER). This is the ratio of the number of children in school to the population of school-age children. Because of the large number of over-aged children enrolled the GER can be more than 100 percent. The Net Enrolment Ratio (NER) is the ratio of the number of children of the official school age in school to the number of children of official school age in the population. The NER is a more accurate measure of participation but not as widely available as the GER.

The NER, can be calculated both from administrative (EMIS) and survey data; NER as reported through administrative data from schools and Net Attendance Rate (NAR) derived from household surveys or population censuses.

There does not seem to be a clear distinction between enrolment and school attendance in Cambodia. The terms are sometimes used as they mean the same thing. By enrolment we should mean the number of pupils reported by the schools in an annual school census (EMIS). By school attendance we mean that the person/head of the household answer the question(s) on school attendance in surveys.

There are a number of reasons why the data on enrolment and school attendance differs, sometimes there are large differences. One reason could be that a child may be enrolled in school but for a number of reasons not attending, e.g. because he or she helps with the family farm or business or because the school wants to boost enrolment numbers to receive more funds. The opposite is also possible; a child may attend school but is not enrolled e.g. due to incomplete school records.

In a school census normally all government schools are covered but private schools are sometimes not taken into consideration. In a household survey it is likely that the coverage is more complete than in a school census.

In this report we follow earlier reports on education in Cambodia and use the terms enrolment and attendance as they mean the same thing.

Never attended school

All persons aged 5 years and over were asked in CSES 2007 if they have ever attended school. The results on school attendance are presented in Table 7 below.

Almost 20 percent of the population 5 years and over have never attended school. There are big differences between geographical domains and sex. Only about 6 percent in Phnom Penh have never attended school, while about 21 percent in other rural areas have never attended school. About 25 percent of women in Cambodia have never attended school compared to 12 percent of men.

Table 7. Persons 5 years and over never attended school by geographical domain and sex , 2007. Percent.

	Women	Men	Total
Cambodia	25	12	19
Phnom Penh	9	3	6
Other urban	20	9	15
Other rural	27	14	21

Currently attending school

All persons aged 5 years and over were asked if they currently are in the “formal” school system. School attendance is defined as attendance at a kindergarten, primary, lower or upper secondary school, technical or professional school, college or university. Even if the person is on holiday he/she is considered as being in the school system. In the tables only persons 5–24 years of age are presented.

In Table 8 below, the rates of women and men who currently are attending school of the persons in the age of 5–24 years are presented. The rate of women in Phnom Penh is lower than in other urban and at the same level as in other rural. Men in Phnom Penh have a higher rate than in other urban and other rural and also compared to women in Phnom Penh.

Table 8. Persons currently attending school of persons 5–24 years of age by geographical domain and sex, 2007. Percent.

	Women	Men	Total
Cambodia	63	68	66
Phnom Penh	62	75	68
Other urban	70	71	70
Other rural	62	67	65

From the CSES 2007 survey, the estimated number of persons attending the formal school system is 3.5 million, about 66 percent of the population aged 5–24 years, comprising 1.8 million boys/men and 1.7 million girls/women. Of this number about 2.4 million or 67 percent were in primary schools. The number of persons in higher education is low. (Table 9)

Table 9. Persons 5–24 years of age who are currently attending school by level and sex, 2007. Percent.

	Women	Men	Total
Pre- primary	2	1	1
Primary	67	67	67
Lower secondary	20	20	20
Upper secondary	9	9	9
Technical/vocational	0	0	0
Under Graduate/Graduate	2	2	2
Other	-	-	-
Total	100	100	100

Of boys and girls attending school in different levels there were some differences between geographical domains, see Table 10 below. In Phnom Penh there are more students in higher education, about 14 percent are attending under graduate/graduate education. In other rural areas almost no students are attending that level.

School attendance in lower secondary education was about 24 percent in Phnom Penh and about 19 percent in rural areas and in primary about 38 and 72 percent respectively (Table 10).

Table 10. Persons 5–24 years of age who are currently attending school by level and geographical domain, 2007. Percent.

	Phnom Penh	Other urban	Other rural
Pre- primary	1	2	1
Primary	38	59	72
Lower secondary	24	21	19
Upper secondary	22	16	6
Technical/vocational	2	0	0
Under Graduate/ Graduate	14	2	1
Other	-	-	-
Total	100	100	100

In Tables 11–13 below, the net enrolment/attendance rates in different levels are presented. The rates are calculated as the number of children of the official school age in school divided by the number of children of official school age in the population, as estimated from the CSES 2007.

Net enrolment rates for girls are the same or higher than for boys. In Table 11, the net enrolment/attendance rates are between 80 and 87 percent. The rates in Phnom Penh and other urban are about the same whereas other rural has a bit lower rates for both women and men.

Table 11. Net enrolment/attendance rates in primary school by geographical domain and sex, 2007. Percent.

	Women	Men	Total
Cambodia	82	81	82
Phnom Penh	87	86	87
Other urban	85	86	85
Other rural	81	80	81

In Table 12, the net enrolment/attendance rates in lower secondary vary much more than for primary school. In Phnom Penh more women and men continue into lower secondary school compared to other urban and other rural.

Table 12. Net enrolment/attendance rates in lower secondary school by geographical domain and sex, 2007. Percent.

	Women	Men	Total
Cambodia	30	27	29
Phnom Penh	61	61	61
Other urban	38	28	34
Other rural	26	23	25

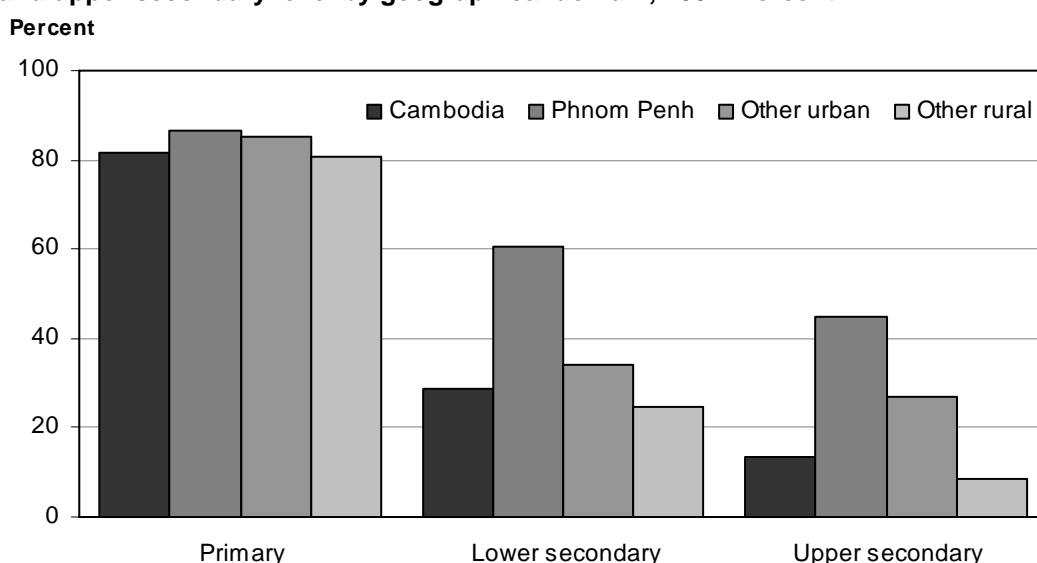
In Table 13, the net enrolment/attendance rates in upper secondary school differ significantly between Phnom Penh and other rural with more than 40 percent enrolled/attending upper secondary in Phnom Penh and less than 10 percent in other rural. In other urban less than one out of three continues to upper secondary school.

Table 13. Net enrolment/attendance rates in upper secondary school by geographical domain and sex, 2007. Percent.

	Women	Men	Total
Cambodia	13	14	13
Phnom Penh	43	47	45
Other urban	32	23	27
Other rural	8	8	8

The information from Tables 11–13 about the total net enrolment/attendance rates in different levels in Phnom Penh, other urban and other rural is also summarized in Figure 4 below for a quick overview. The net enrolment/school attendance in primary school is 80 percent or above in all geographical domains. In Phnom Penh it is more common to continue to secondary school compared to other rural areas.

Figure 4. Net enrolment/attendance rates for primary, lower secondary and upper secondary level by geographical domain, 2007. Percent.



The net enrolment/attendance rates increase until the age of 11 and 12, see Table 14. More than 90 percent attended school in the age of 8 to 13 years old. Beyond the age of 14 years, the enrolment rates decline rapidly confirming that smaller rates of children continue from primary to secondary and post-secondary level of education and training. Up to the age of 12 years girls and boys have almost the same enrolment rates, then the girls enrolment rates drop and are lower than the boys.

Table 14. Net enrolment/attendance rates by age and sex, 2007. Percent.

Age	Women	Men	Total
5-19	69	74	72
5	30	33	31
6	54	56	55
7	81	77	79
8	93	87	90
9	93	95	94
10	97	93	95
11	95	93	94
12	89	93	91
13	91	94	92
14	82	88	85
15	68	79	73
16	55	71	63
17	42	56	49
18	31	46	38
19	21	33	27

Public and private school

Only about 3 percent of persons (aged 5–24) attending schools study at private schools, see Table 15. There are large differences by age. Among students, aged 20–24, about one out of three attends private schools, which indicates that most private educational institutions are in higher education.

Table 15. Attending public and private schools among persons 5–24 years of age who are currently attending school by age group, 2007. Percent.

Age group	Public school	Private school
5–24	97	3
5–9	98	2
10–14	99	1
15–19	97	3
20–24	66	34

Private lessons

About 20 percent of the persons (aged 5–24) attending school take private lessons after school, see Table 16. There are large differences by age, but the gender differences are small.

Table 16. Persons 5–24 years of age who are taking private lessons after school by age and sex, 2007. Percent.

Age group	Women	Men	Total
5–24	24	23	24
5–9	8	9	9
10–14	23	19	21
15–19	47	43	45
20–24	53	48	50

Reasons for not attending school

The question on reasons for not attending school was asked to persons aged 5–17 who are not attending school and about 25 percent of them responded “other reasons“. Part of this is due to the inclusion of 5 year olds whereas the minimum age for admission to school is 6 years. About 23 percent gave the reason that they don’t want to and another 15 percent mentioned they must contribute to the household income as the reason for not attending school. See Table 17 below.

Table 17. Reasons for not attending school among persons 5–17 years of age who are not attending school by sex, 2007. Percent.

	Women	Men	Total
Don't want to	21	26	23
Did not do well in school	6	8	7
No suitable school available/school is too far	9	7	8
No teacher/supplies	1	1	1
High cost of schooling/no money	0	0	0
Must contribute to household income	16	15	15
Must help with household chore	18	13	16
Due to disability	6	3	5
Other	25	27	26
Total	100	100	100

It is of course important to know why the children are not attending school. More detailed data are needed and also in depth analysis.

3.3 Educational attainment

Information on educational attainment was in CSES 2007 collected from persons 5 years and over. Usually educational attainment is published for the population 25 years and over or 25–64 years of age. The results from CSES 2007 are presented for the population from 25 years and over.

The response alternatives in CSES 2007 were aggregated to the classification of educational attainment used in the Population Census 1998. The aggregated response alternatives are given in Table 18. The way the aggregation is done obviously influences the result on education attainment. The classification is described in Section 4.9.

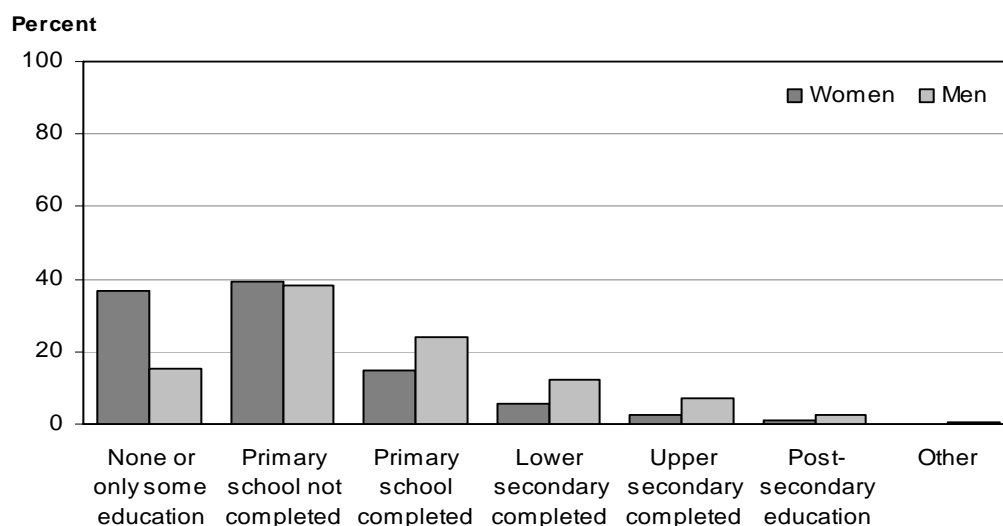
Educational attainment

Somewhat more than 25 percent of the population 25 years and over has no or only little education, women about 37 percent and men 15 percent. Higher shares of men than women complete secondary and post-secondary education see Table 18 or Figure 5.

Table 18. Persons 25 years and over by educational attainment and sex, 2007. Percent.

	Women	Men	Total
No or only some education	37	15	27
Primary school not completed	39	38	39
Primary school completed	15	24	19
Lower secondary completed	6	12	9
Upper secondary completed	2	7	5
Post-secondary education	1	3	2
Other	0	0	0
Total	100	100	100

Figure 5. Persons 25 years and over by educational attainment and sex, 2007. Percent.



There are large differences in educational attainment between geographical domains, see Table 19 below. Educational attainment in secondary and post-secondary level is much higher in Phnom Penh than in other rural area.

Table 19. Persons 25 and over by educational attainment and geographical domain, 2007. Percent.

	Phnom Penh	Other urban	Other rural
None or only some education	9	23	30
Primary school not completed	23	35	42
Primary school completed	23	18	19
Lower secondary completed	18	13	7
Upper secondary completed	15	9	2
Post-secondary education	12	2	0
Other	0	0	0
Total	100	100	100

Almost 35 percent have at least completed primary school, see Table 20. The percentage with at least completed primary education decreases with age. Only about 5 percent of women 65 years or older have completed primary school and 33 percent of the men. In total about 24 percent of the women and 46 percent of the men have completed primary school. However, as shown in section 3.1, the literacy rate for women was about 66 percent and for men 85 percent. This indicates that even though women and men do not complete primary school, many of them have learned how to read and write a simple message.

Table 20. Persons 25 and over with at least completed primary education by age and sex, 2007. Percent.

Age group	Women	Men	Total
Total 25–	24	46	34
25–34	35	51	43
35–44	26	51	38
45–54	21	37	28
55–64	13	44	26
65–	5	33	16

3.4 Educational expenses

The amounts incurred as educational expenses during the last school year for each household member attending the formal school system, taking private lessons after school or following non-formal classes were recorded separately. The total expenses include the following seven categories:

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

Educational expenses

The average total educational expenses is estimated to about 170,000 riels per school year, see Table 21. There are large differences by level. In primary schools, which have the highest share of students, the cost is about 60,000 riels in average. For education above secondary school, the cost is between 1.4 and 1.8 million riels in average. At higher levels one will find more school fees and tuition expenses which could explain the large differences in cost between different levels.

Table 21. Average annual expenses by level, 2007

	Riels
Pre- primary	58,000
Primary	60,000
Lower secondary	182,000
Upper secondary	419,000
Technical/vocational	1,402,000
Under Graduate/ Graduate	1,854,000
Total	170,000

As the composition of education is very different in different geographical domains it follows that the average expenses differ a lot. Phnom Penh has a higher share in levels above primary school and more private schools. In Table 22 the average annual expenses are presented for Phnom Penh, other urban and other rural areas. There are large differences in expenses between Phnom Penh and the rest of Cambodia.

Table 22. Average annual expenses by geographical domains, 2007

	Riels
Phnom Penh	729,000
Other urban	262,000
Other rural	81,000

The average expenses by sex are about the same, see Table 23.

Table 23. Average annual expenses by sex, 2007

	Riels
Women	167,000
Men	173,000

4 About the Cambodia Socio-Economic Survey

4.1 Background and Introduction

The Cambodia Socio-Economic Survey (CSES) has been conducted by the National Institute of Statistics (NIS) in 1993/94, 1996, 1997, 1999 and 2004. Since 2007 NIS conducts the CSES annually. The CSES is a household survey covering many areas relating to poverty and living conditions. Questions are asked for the household and for the household members.

The CSES is a sample survey and the sample used in 2007 is a subsample of the sample used in 2004.

In the 2004 survey the diary method for collecting data about household expenditure/consumption and household income was introduced. As the recall method has been used in the previous rounds it was decided to include also the recall modules. Both methods are retained in the annual CSES.

The following main areas have been surveyed in the previous survey rounds and in the annual CSES as well:

1. Level and structure of household expenditure/consumption, including poverty
2. Household production and cash income-earning activities by the labour force
3. Education and literacy
4. Health and access to medical care
5. Housing and amenities
6. Family and social relations, including gender and vulnerability issues.

In CSES 2007 some changes have been introduced in the household questionnaire.

4.2 Objective of the survey

The main objective of the survey is to collect statistical information about living conditions of the Cambodian population and the extent of poverty. The survey can be used for identifying problems and making decisions based on statistical data.

The main user is the Royal Government of Cambodia (RGC) as the survey supports monitoring the National Strategic Development Plan (NSDP) by different socio-economic indicators. Other users are university researchers, analysts, international organizations e.g. the World Bank and NGO's. The World Bank has published a report on poverty profile and social indicators using CSES 2007 data⁵.

4.3 Sampling

The sampling design in the CSES survey is a three-stage design. In stage one a sample of villages is selected, in stage two an Enumeration Area (EA) is selected from each village selected in stage one, and in stage three a sample of households is selected from each EA selected in stage two. The sampling designs used in the three stages were:

Stage 1: A stratified systematic πps ⁶ sample of villages was selected. Strata were defined by provinces and the urban/rural classification of villages. The size measure used in the systematic πps sampling was the number of households in the village according to the population census 1998.

⁵ World Bank (2009). Poverty profile and trends in Cambodia, 2007 - Findings from the Cambodia Socio-Economic Survey (CSES). Report No. 48618-KH.

⁶ Systematic sampling with probabilities proportional to size.

Stage 2. One EA was selected by Simple Random Sampling (SRS), in each village selected in stage 1.

Stage 3. In each selected EA a sample of households was selected by systematic sampling.

The design described above was used for the CSES 2004 survey.⁷ In 2007, a subsample of the villages, or EAs, in the 2004 sample was selected by SRS. The villages and EAs surveyed in 2007 were thus included in the sample in both years. In each selected EA a sample of households was selected by systematic sampling. The selected households in 2007 are not necessarily the same as those included in the sample in 2004.

The selection of households in stage three was done in field by first listing the households in the selected EA, and then selecting a systematic sample of households. Selected households were observed during one calendar month. The allocation of the households over the months in 2007 was done so that each village in the 2007 sample was observed in the same calendar month as in 2004.

The sample size in 2007 was 360 villages or 3,600 households, compared to the sample for the 2004 survey of 720 villages or 12,000 households.

Some provinces were excluded, due to cost and other reasons, in the sample for 2007. The estimates are however, adjusted for the under coverage error caused by excluding those provinces.

4.4 Estimation

Totals and ratios such as means or proportions are estimated for the total population or for subgroups of the population, i.e. domains of study. The domains are defined by, for instance, age groups or sex. In the CSES 2007 the sample size is not large enough for a detailed breakdown on e.g. provinces. Means and proportions are estimated by first estimating totals and then calculating the ratio of two estimated totals.

In order to estimate population totals or totals in domains from a sample, weights are needed. An estimator of a population total of a variable is the sum of the weighted variable values for the observed sample units.

The weights are determined by the sampling design, design weights, and adjusted for nonresponse and other imperfections such as under coverage or, adjusted to improve the precision of estimates. In CSES 2007, the design weights were adjusted using preliminary data on the number of persons and households from the population census 2008 and also the Neupert population projections⁸.

⁷ National Institute of Statistics (2005b). Cambodia Socio-Economic Survey 2004. Technical report on Survey Design and Implementation. September, 2005.

⁸ National Institute of Statistics (2005a). Cambodia Inter-Censal Population Survey 2004. Demographic Estimates and Revised Population Projections. June, 2005.

4.5 Questionnaires

Four different questionnaires or forms were used in the CSES 2007:

1. Household listing form

The listing of households was used for sampling households, see section 4.3.

2. Village questionnaire

The village questionnaire was responded by the village leader or a representative of the village leader. The questions are about economy and infrastructure, crop production, health, education, retail prices, rental and sales prices of land etc.

3. Household questionnaire

The household questionnaire was responded by the head of the household, spouse of the head of the household or of another adult household member.

The household questionnaire includes questions about housing conditions, crop production and other agricultural activities, liabilities, durable goods, construction activities and income from other sources than economic activity.

The household questionnaire also includes questions for each household member about education and literacy, migration, current economic activity and employment, health, smoking, HIV/AIDS awareness, and victimization. Some of these questions were responded by the head of household/spouse and some were responded by each household member.

The questions in the first part of the household questionnaire are posed during the initial visit to the household. This part includes questions about e.g. the household member's age, sex, marital status, relation to head of household, and questions about household expenditure/consumption of food and non-food items.

During a survey month different questions have been asked different weeks according to the following:

- Week 1. Questions about education, migration, and housing
- Week 2. Questions about economic activity, agricultural and non-agricultural business, household liabilities and other incomes.
- Week 3. Questions about construction, durable goods, and child health
- Week 4. Questions about current economic activities, health and victimization

4. Diary sheet

The diary sheet on daily household expenditure, including value of own production, and income have been filled in during the entire month.

4.6 Data collection and field work

The fieldwork started in October 2006 and finished in the end of December 2007. The results in this report are based on data from the calendar year 2007, i.e. only 12 of the 15 survey months are included in the estimation.

Supervisors and enumerators were recruited by NIS and trained for the field work. The training took place at NIS in Phnom Penh. A comprehensive field manual was used during the training and the field work.

Each fieldwork team consisted of one supervisor and three enumerators. For each selected village one enumerator was assigned as responsible and carried out interviews of ten households in the village.

Altogether 30 enumerators and 10 supervisors, divided into 10 teams carried out the fieldwork at the same time. Two groups of teams were formed and alternated monthly so that each interviewer and supervisor worked in the field every second month.

For a given month the team arrived in the village 2–3 days before the first day of the month for preparatory tasks like discussing with village authorities, filling in the Household listing form and sampled the households to be interviewed.

The supervisor was the leader of the team and was responsible for the coordination of the interviews, collaboration with local authorities, and checking of the questionnaires during the interview month. If errors were found in the responses the enumerator was required to re-interview. The supervisor was also responsible for the village questionnaire and the interview of the village leader or representative of the village leader.

Any survey of the CSES dimensions needs a comprehensive system of quality management and monitoring. The CSES management group within NIS therefore is using a careful monitoring scheme. The monitoring team included four NIS staff including top ranked NIS officers. The supervision took place during the last two weeks of the interview month.

Before going to the villages the teams were briefed and introduced to adjustments of the interviewing procedure that had to be made as a result of monitoring activities and feed-back from the data processing.

4.7 Data processing

The data processing was done at NIS in Phnom Penh using the SQL data management system that verifies the data entry operation. A team of data editors, data coders and data entry staff was formed. The data editors were checking the questionnaires before the data entry and also took care of errors to ensure that entered data were consistent with the collected data in the questionnaires or diaries. Before the data entry the coders also put relevant codes in the questionnaire and diary.

4.8 Comparability

Comparisons of the results from the 2007 CSES with previous surveys, CSES 1993/94, 1996, 1997 and 1999, are not recommended due to differences in the survey design.

The CSES 2004 was conducted from November 2003 to January 2005, and the 2007 survey from October 2006 to December 2007. The monthly sample sizes were 1,000 households in the 2004 survey and 300 households in the 2007 survey. Concerning CSES 2004 the results presented in 2005⁹ were based on both the 12 months and the 15 months samples, whereas in this report all estimates presented are based on the 12 month sample, i.e. the calendar year 2007.

The weights used in the reports from CSES 2004 are adjusted by using the preliminary population projections¹⁰ which give over estimated population counts. The weights in CSES 2007 are adjusted by using the preliminary result from 2008 Population Census. A recalculation of the weights in CSES 2004 will be made for the coming analyses to obtain higher comparability between CSES 2004 and the surveys conducted from 2007 and onwards.

⁹ National Institute of Statistics (2005). Cambodia Socio-Economic Survey 2004, Summary Subject Matter Report, September 2005.

¹⁰ Neupert R.F.(2005). New Demographic Estimates and Updated Projections for Cambodia. UNDP.

4.9 Definitions

Geographical domains

The geographical domains used in this report are

1. Phnom Penh
2. other urban
3. other rural,

where Phnom Penh includes both urban and rural areas.

Age

Age is defined as completed years at the initial visit to the household.

Household

The survey covers private households with one or more persons. Nomadic households are included in principal. Households excluded from the survey are:

1. People living in institutions such as long term hospitals, prisons, monasteries, military quarters.
2. Diplomatic and UN households in the country.
3. Armed forces in military bases.

A household is defined as a group of persons, or a single person, who usually live together and have a common arrangements for food, such as using a common kitchen or a common food budget. The persons may be related to each other or may be non-relatives, including servants or other employees, staying with the employer.

Educational attainment

The respondent were asked the following question: “What is the highest level ... successfully completed?”

The response alternatives were aggregated to the classification of educational attainment used in the 1998 Population Census.

No or only some education:

- Pre-school/Kindergarten
- No class completed/Never attended school

Primary school not completed:

- Class one to five completed

Primary school completed:

- Class six to eight completed

Lower secondary school completed:

- Class nine to eleven completed
- Lower secondary school certificate

Upper secondary school completed:

- Class twelve completed
- Upper secondary school certificate
- Technical/vocational pre-secondary diploma/certificate

Post-secondary education:

- Technical/vocational post-secondary diploma/certificate
- College/university undergraduate
- Bachelor degree (B.A., BSc)
- Masters degree (M.A., MSc)
- Doctorate degree (PhD)

Other:

- Other

4.10 Confidentiality

The Statistics Law Article 22 specifies matters of confidentiality. It explicitly says that all staff working with statistics within the Government of Cambodia “shall ensure confidentiality of all individual information obtained from respondents, except under special circumstances with the consent of the Minister of Planning. The information collected under this Law is to be used only for statistical purposes.”

4.11 Contact person

Contact person for this report is Mr. Ouk Eam, Deputy Director of Social Statistics Department.

Annex 1. Module on Education and Literacy

02. EDUCATION AND LITERACY

Respondent: all household members aged 5 years and older

WEEK 1

Please provide information on all members aged 5 years and older who usually reside in this household.

ID NUMBER	Can ..[NAME]... read a simple message in any language?	Can ..[NAME]... write a simple message in any language?	Has ..[NAME]... ever attended school?	How many years has ...[NAME]... attended school?	What is the highest level ..[NAME]... successfully completed?	Is ..[NAME]... currently in the school system?	What's ..[NAME]'s... current grade?
	1 = Yes 2 = No	1 = Yes 2 = No	1 = Yes 2 = No (=> 11)	Enter completed number of years	98 = Don't know 88 = No class completed 0 = Pre-school/Kindergarten 1 = Class one completed 2 = Class two completed... 11 = Class eleven completed 12 = Class twelve completed 13 = Lower Secondary school certificate 14 = Upper secondary school certificate 15 = Technical/vocational pre-secondary diploma/certificate 16 = Technical/vocational post-secondary diploma/certificate 17 = College/university undergraduate 18 = Bachelor degree (B.A., BSc, etc.) 19 = Masters degree (M.A., MSc, etc) 20 = Doctorate degree (PhD) 21 = Other (Specify)	1 = Yes 2 = No (=>>11) If the child is on holidays, he/she is considered in the school system	0 = Pre-school/Kindergarten 1 = Class one 2 = Class two... 11 = Class eleven 12 = Class twelve 13 = Technical/vocational pre-secondary diploma/certificate 14 = Technical/vocational post-secondary diploma/certificate 15 = College/university undergraduate studies 16 = Postgraduate studies
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
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15							

02. EDUCATION AND LITERACY (CONTINUED)

Respondent: all household members aged 5 years and older

WEEK 1

ID NUMBER	Is the school public or private? 1 = Public 2 = Private	Is ..[NAME].. currently taking private lessons after school? (languages, math, science, music, sports)? 1=Yes 2=No <input type="checkbox"/> =>>12	If below 18 years of age: Why is ..[NAME].. not attending (has never attended) school? 1=Don't want to 2=Did not do well in school 3=No suitable school available/school is too far 4=No teacher/Supplies 5=High cost of schooling/No money 6=Must contribute to household income 7=Must help with household chores 8=Due to disability/illness 9=Other (specify)	Has ..[NAME].. ever attended non-formal class? 1 = Yes 2 = No (=>> 15)	Is ..[NAME].. currently attending non-formal classes? 1 = Yes 2 = No (=>> 15)	What kind of non-formal class is ..[NAME].. currently attending? 1 = Literacy programmes (6 months) 2 = Vocational training (Tailoring, motor repairing, Khmer classical music training, hairdressing, pottery...etc. 3 = Post literacy programmes (Agricultural training includes such as planting vegetable, mushrooms, raising fish, animal.. 4 = Foreign Languages 5 = Others (Specify)
	(1)	(9)	(10)	(11)	(12)	(13)
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02. EDUCATION AND LITERACY (CONTINUED)

Respondent: all household members aged 5 years and older

WEEK 1

ID NUMBER	If yes in (col.7 or col. 10 or col.13), please fill up columns 15a-15h, otherwise, leave it blank and continue with next person. What were the educational expenses for ..[NAME]..during the past school year including the expense on non-formal education and private lesson? Write 0 if no expenses							
	A. School fees	B. Tuition	C. Text books	D. Other school supplies	E. Allowances for children studying away from home	F. Transport cost	G. Gifts to teachers, building fund etc.	H. TOTAL
	RIELS	RIELS	RIELS	RIELS	RIELS	RIELS	RIELS	RIELS
(1)	(15a)	(15b)	(15c)	(15d)	(15e)	(15f)	(15g)	(15h)
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For more information

INTERNET

www.nis.gov.kh is the NIS web site for official statistics produced by NIS and other institutions and ministries within the Royal Government of Cambodia. The web site is the best place to start for access to summary data from the latest publications, and information about the NIS and other statistical units of the Royal Government.

Reference Library

A range of NIS reference publications are available for use by data users at the NIS Data User Service Center.

Information Service

The NIS staff at the Data Users Service Center can assist users in addressing their data requirements. NIS publications are available for sale and subscriptions services can be arranged. Special data services are also available, on a user pays basis.

Contact Details

Data Users Service Center
National Institute of Statistics, Ministry of Planning
#386, Monivong boulevard, Phnom Penh, Cambodia
E-mail: census@camnet.com.kh
Telephone: (855) 23 210 791
Facsimile: (855) 23 213 650

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