KINGDOM OF CAMBODIA

Cambodia Socio-Economic Survey 2009

National Institute of Statistics
Ministry of Planning

Phnom Penh, December 2010

Foreword

It is my pleasure to present the results from the Cambodia Socio Economic Survey (CSES) 2009. The CSES 2009 is the eighth Cambodia Socio Economic Survey conducted by National Institute of Statistics at 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 2009 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 and designed by the staff of NIS with overall technical and management assistance provided by Statistics Sweden, and with Sida funds. The CSES 2009 has filled data gaps in several subject matter areas, which will continue to 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

Ministry of Planning
Phnom Penh, Cambodia
December 2010

Preface

This report on the results of the Cambodia Socio-Economic Survey (CSES) 2009 is produced by the National Institute of Statistics (NIS) of the Ministry of Planning. Since 2007, NIS conducts the socio-economic survey annually. Previous surveys were undertaken in 1993/94, 1996, 1997, 1999, 2004, 2007 and 2008.

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.

H. E. San Sy Than

Director General

National Institute of Statistics,
Ministry of Planning
December 2010

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Executive summary

The Cambodia Socio Economic Survey 2009 (CSES) was conducted by National Institute of Statistics of the Ministry of Planning. (Sponsored by Swedish International Development Agency (Sida) in both financial and technical assistances.) The results from the Cambodia Socio Economic Survey 2009 will serve as essential instruments to assist the Royal Government in diagnosing the problems and designing the most effective policies for reducing poverty and in evaluating the progress of poverty reduction which are the main priorities in "Rectangular Strategy" especially related to MDG[1] and NSDP[2] of the Royal Government of Cambodia.

CSES 2009 was a nationwide representative sample of 12,000 households within 720 sampling units (villages), which divided into 12 monthly samples of 1000 households in 60 villages. The sampling design provided for estimates to be prepared for the other urban and other rural areas and Municipality of Phnom Penh. The survey also estimates for other four ecological zones namely the Plain, Tonle Sap, Coastal and Plateau/Mountain Regions. The 2008 Population Census of Cambodia was used as sampling frame.

CSES 2009 consists of four forms. CSES Form 1-Household Listing Questionnaire, Form 2-Village Questionnaire, Form 3-Household Questionnaire, and Form 4-Diaries Questionnaire. The questionnaires were carefully designed and having some changes from other previous surveys (CSES 2004, 2007, and 2008).

Field enumerators and supervisors were recruited from the National Institute of Statistics (NIS), Ministry of Planning (MOP) and the provincial planning and statistics offices. There were two groups of field enumerators and supervisors have been attended 2-week training courses, while the first group consisting of 125 people were trained in December 2008, and the other 125 people of second group were trained in January 2009. The data collection was carried out throughout the whole calendar year 2009.

Demographic characteristics: the results of Cambodia Socio Economic Survey (CSES) 2009 show that the Cambodia population was estimated to 13.9 million compared to 12.6 million in 2004. The male population was estimated at 6.8 million and female population was 7.1 million. The total estimated households living in Cambodia was estimated at 2.9 million, out of these households, there were 0.5 million living in the urban areas.

Housing conditions: it was observed that in 2009 the percentage of households in Cambodia having access to improved drinking water sources was about 45 percent in wet season and 52 percent in dry season. For improved toilet facilities, the percentage of households having access to was approximately 35 percent.

Agriculture: through the results indicating that 13.2 percent of agricultural land was owned by female headed households and other 86.8 percent owned by male headed households. The main crop productions was grown in Cambodia in 2009, firstly it was cereals estimated to 72.4 percent, secondly followed by fruits, 10.9 percent and thirdly by tubes is 5.7 percent. The percentages of these three main crop productions were very slightly changed compared to 2004.

Education: the literate rate in the population 7 years and over was estimated to 73 percent in 2009, about 67 percent of women and 79 percent of men. About 81 percent of the Cambodian children, aged 6–11 years, were attending primary school in 2009.

[1] United Nations Millennium Development Goals

[2] National Strategic Development Plan

Labour force: the labour force, aged 15–64 years, in Cambodia was estimated to about 7.5 million in 2009. The labour force participation rate (the labour force in relation to the working age population) was about 84 percent in general, about 80 percent for women and 89 percent for men.

Health and nutrition: through the antenatal care, the percent distribution of women living with children under 5 years olds have attended antenatal care at least once during pregnancy for the most recent births was about 82 percent, and the percent distribution among last-born children 0–23 months is about 98 percent having received initial breastfeeding.

Victimization: in 2009 the percentage of households exposed to theft, burglary or robbery in the last 12 months was 2.6, to domestic violence was 0.6 percent and accidents was 4.9 percent. As observed from the results, there were five kinds of violence being exposed by any member of the household, the act of pushing, shaking or throwing something at the victim was 23 percent, act of slapping/striking/beating with hand and with object was 19.2 and 14.6 percent respectively, and act of punching with a fist or with something and act of kicking/dragging was 15.1 and 17.3 percent respectively.

Income: the average monthly income per household in Cambodia 2009 came from different income sources, of which 70 percent from self-employment income (i.e. agriculture, non-agriculture, owner occupied house), 27 percent from wage and salary, 2 percent from transfer received, and other less than 1 percent from property income.

Expenditure: the household expenditure in Cambodia 2009 was calculated using recall data from the household questionnaire. As observed from the results, food and non-alcoholic beverages expensed by household was the largest expenditure item comprising of 49 percent, housing, water, electricity and other fuels item was the second largest expenditure item for households comprising of 19 percent, and health was the third largest expenditure item (10 percent).

1. Introduction

Background

In this report results from the Cambodia Socio-Economic Survey (CSES) 2009 are presented. The tabulations and comments to the results have been produced by the subject matter staff at National Institute of Statistics (NIS) since 1993 seven rounds of the CSES have been conducted. Since 2007 the CSES runs annually. The CSES is a household survey with questions to households and their household members. In the household questionnaire there are a number of modules with questions relating to subject matter areas such as housing conditions, education, economic activities, household production and income, household level and structure of consumption, health, victimization, etc.

Except the Cambodia Socio-Economic Survey several other household surveys/censuses have been conducted by the NIS in the last 15 years, i.e. the General Population Census 1998 and 2008, the Cambodia Demographic and Health Survey (CDHS) 2000 and 2005.

Since 2007 the CSES is funded by The Swedish International Development Agency (Sida). The 2004 survey was funded by UNDP and Statistics Sweden was contracted to provide the technical assistance.

CSES data on household consumption was collected by using the recall method in the first four rounds. The data have been used for calculating poverty estimates with baseline data from the 1993 survey. NIS decided to establish new data on household expenditure/consumption and household production and income, both for poverty assessment and for the National Accounts by adopting the diary method for the CSES 2004. To make it possible to analyse poverty trends it was also decided to include recall modules. The recall modules from the previous CSES were revised. Since the 2004 survey both methods are retained. Poverty estimates have been calculated for 2004 by using both methods respectively[3] Poverty estimates for 2007 have been calculated by using the recall method only. The baseline data used is still from 1993/94[4]

CSES 2009

The CSES 2009 was conducted from January to December 2009, i.e. the calendar year 2009. The monthly sample size was 1,000 household, which means 12,000 households on annual basis. The sampling design has remained the same since CSES 2004 and the sample size in CSES 2009 was the same as in 2004. The sample selected for the 2007 and 2008 is a subsample of 3,600 households of the sample used in 2004 (a monthly sample size of 300 households). The size measures used for the selection were number of households in the village according to the 1998 General Population Census, whereas the CSES 2009 using number of households in the village from the 2008 Population Census.

In order to see the differences since five years ago, this report contains comparisons between CSES 2009 and 2004 when possible. The household questionnaire was intended to be similar to CSES 2004. However some changes in the questions and the field manual have been made with the purpose to improve the quality of data. In the Technical section the changes are briefly described. The changes relating to subject matter areas are described in detail in each chapter separately.

The subject matter areas listed in the table of content in this report have been analysed. Intermediate results were published and discussed in a NIS arranged seminar. In the seminar on 20 October 2010, celebrating the World Statistics Day, eight important subject matter areas were presented. After the seminar, this report was written.

[3] Royal Government of Cambodia. Ministry of Planning (February 2006). A Poverty Profile of Cambodia 2004.

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

Objective of the survey

The main objective of the survey is to collect statistical information about the living conditions of the Cambodian population and the extent of poverty. The survey results 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) and the Neary Rattanak (Strategic plan for gender equality and Empowerment of Women in Cambodia)[5]. Other users are university researchers, analysts, international organisations e.g. the World Bank, ILO, the UN-organisations and NGO's. The National Accounts also uses the information from CSES in its calculations.

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."

Information to the reader

Throughout this report the survey, planned in 2008, carried out in 2009, and analysed in 2010 will be referred to as the CSES 2009.

As the results in this report are estimated values based on a sample, 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 representing too few observations to be published or no observations in the cell.

All statistical surveys contain errors and the results from surveys are not the precise true 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 minimise the total error so that accurate estimates can be produced. NIS has put a large effort in the work of minimising the errors but recommends the reader to be aware of the possibility of deviations from the exact values.

The structure of the report

In this report, all subject matter areas except migration covered in CSES are combined together as one report with many tables produced. A technical section is attached, see Section 11. The technical section describes in detail the sampling design, questionnaire design, field operation as well as it gives a background and introduction to the Cambodia Socio-Economic Survey.

To achieve this successful and comprehensive report, the NIS analysts have made great efforts in the first assessment of the rich CSES data (i.e. producing tables and writing reports), and foreign consultants and experts (Statistics Sweden generally and UNICEF for nutrition) have assisted NIS in this work and also in the coordination of the overall report structures.

[5] Royal Government of Cambodia (2009). Five Years Strategic Plan 2009−2013. Neary Rattanak III.

This report is divided into seven areas. The statistics in each area have been analysed by subject matter staff from NIS. The NIS analysts who have contributed to the Subject Matter Report are:

- *Housing statistics:* by Mr. Tith Vong and Mr. Seng Chenda
- *Agriculture statistics*: by Mr. Kong Seng and Mr. Heang Kanol
- *Education statistics*: by Mr. Ouk Eam and Mr. Lenh Heang
- *Labour statistics*: by Mr. Long Chintha, Mr. Nhem Solyvann and Mr. Noun Nisey Kosal
- *Health and nutrition statistics:* by Mr. Phan Chinda and Mr. Po Mao
- *Victimization statistics:* by Mr. Khieu Khemarin, Ms. Ky Boreth and Ms.Chan Lakhen
- *Income and consumption statistics*: by Mr. Nor Vanndy and Mr.Oeur Sophal

The NIS analysts who have contributed to the technical section are:

- *Background and introduction*: by Mr. Tith Vong and Mr. Mich Kanthul
- *Survey Planning and organisation*: by Mr. Mich Kanthul and Mr.Try Socheat
- *Questionnaire design*: by Mr. Tith Vong
- *Field operations and training*: by Mr. Tith Vong and Mr. Mich Kanthul
- *Data processing*: by Mr. Yib Thavrin and Ms. Tong Chhay Rine
- *Data dissemination*: by Mr. Tith Vong and Mr. Ouk Chay Panhara
- *Sampling design and implementation*: by Mr. Mich Kanthul and Mr.Try Socheat

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 projections[6] the Cambodian population was predicted to be 13 million in 2004 and 15 million in 2010. Relating to the final results from the General Population Census 2008, the Cambodian population was 13,395,682. The tables below show the measured and estimated population and estimated number of households in different censuses and surveys.

In urban areas the estimated population in CSES 2009 was about 0.1 million more compared to the final results from the Population Census 2008. In relation to CSES 2004 the estimated population was almost 10 percent enlarged. Compared with the measured population in the Census 1998 the population increase was estimated to fully fifty percent. It is observed that the estimated population living in rural areas was measured to be five times higher than in urban areas in Census 1998. This has declined to four times when compared to estimates in CSES 2004, Census 2008 and CSES 2009 respectively. From this result, the conclusive evidence is that there was an increase in the level of urbanization in Cambodia. See Table 2.1.

Table 2.1. Measured or estimated Population by urban and rural. In thousands and urban as percent by rural

	Census 1998	CSES 2004	Census 2008	CSES 2009
Cambodia	11,437	12,657	13,395	13,966
Urban	1,795	2,387	2,614	2,722
Rural	9,642	10,269	10,781	11,243
Urban/Rural	18.6	23.2	24.2	24.2

The population of Cambodia distributed by sex and the overall sex ratio according to the four sources is shown in Table 2.2. As observed the sex ratio (men in relation to women) changed from ninety-three percent in Census 1998 to ninety-five percent in Census 2008 as well as in the CSES 2009 but still remained below the point of balance of the sexes. That means that to a greater extent there are more women than men in the Cambodia population than in common.

Table 2.2. Estimated Population by sex. In thousands

	Census 1998	CSES 2004	Census 2008	CSES 2009
Women	5,926	6,530	6,879	7,155
Men	5,511	6,126	6,516	6,811
Both sexes	11,437	12,657	13,395	13,966
Sex ratio	93.0	93.8	94.7	95.2

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

Table 2.3. presents the information on the numbers of households distributed by urban and rural residences in Cambodia. As observed from the results, in urban areas the estimated numbers of households were about half a million in both the Census 2008 and the CSES2009. This is an increase with approximately 10 percent in comparison with the CSES 2004 by fourteen percent compared to the Census 1998 which only accounted barely 0.4 million households. About one out of six households were living in the urban areas all the surveyed years even though a slight decline in the share is measured. Also out of these estimates, the conclusive evidence is that an increase in the level of urbanization in Cambodia occurred. See Table 2.3.

Table 2.3. Estimated number of households by urban and rural. In thousands

	Census 1998	CSES 2004	Census 2008	CSES 2009
Cambodia	2,162.0	2,570.0	2,817.0	2,938.0
Urban	364.0	457.0	506.0	528.0
Rural	1,797.0	2,113.0	2,311.0	2,410.0

In 2009 the majority of the households were headed by men though barely every fifth household on average was headed by women. Households headed by women were somewhat more common in Phnom Penh compared with other domains. Households headed by women were less frequent in the rural areas relative the rest of the domains. Compared to CSES 2004 there were no significant changes in this structure. See Table 2.4.

Table 2.4. Household heads by sex, 2009. Percent.

	CSES 2009		
	Household headed by women	Household headed by men	All households
Cambodia	21.6	78.4	100
Phnom Penh	25.2	74.8	100
Other urban	23.8	76.2	100
Other rural	20.9	79.1	100

In 2009 the majority of the Cambodia population were married/living together. This marital status slightly less frequent in urban domains, Phnom Penh particularly, than in the rural domains. Also households who were living as divorced were more common in urbanised domains. There were differences between households who were living as divorced related to geographical domain and also concerning households who lived as never married/never lived with a partner. Approximately every third household in Cambodia belonged to this latter category. Compared to CSES 2004 there were no significant changes in this geographical structure. See Table 2.5.

Table 2.5. Marital status by geographical domain, 2009. Age 15+. Percent.

	CSES 2009			
	Cambodia	Phnom Penh	Other urban	Other rural
Married/living together	57.8	51.6	54.5	59.2
Divorced/Separated	1.9	2.1	2.4	1.8
Widowed	8.2	7.8	8.0	8.3
Never married/ Never lived with a partner	32.1	38.5	35.1	30.7
Total	100	100	100	100

In 2009 the majority of the Cambodia population were married/living together. Though more men lived as never been married compared to women also a larger part of men than women lived as married/living together. Compared to CSES 2004 there were no significant changes in this structure of marital status. See Table 2.6.

Table 2.6. Marital status by sex, 2009. Age 15+. Percent.

	CSES 2009		
	Women	Men	Both sexes
Married/living together	54.9	61.0	57.8
Divorced/Separated	2.9	0.8	1.9
Widowed	13.5	2.4	8.2
Never married/ Never lived with a partner	28.7	35.8	32.1
Total	100	100	100

In 2009 almost everyone in the Cambodia population was counted as Khmer. The second largest ethnic group counted was Cham. In urban domains Vietnamese was the third largest ethnic group while other ethnicities were counted as third largest group in the other rural domains. Compared to CSES 2004 there were no significant changes in this ethnic structure. See Table 2.7.

Table 2.7. Ethnicity by geographical domains, 2009. Age 15+. Percent.

	CSES 2009			
	Cambodia	Phnom Penh	Other urban	Other rural
Khmer	95.7	97.2	98.2	95.2
Cham	2.4	1.5	1.2	2.7
Chinese	0.1	0.1	0.1	0.1
Vietnamese	0.4	1.2	0.3	0.3
Thai	0.0	-	-	-
Lao	-	-	-	-
Other	1.4	-	-	1.7
Total	100	100	100	100

3. Housing

3.1. Housing Conditions

According to the Cambodia Socio-Economic Survey (CSES 2009) there were about 2.9 million households in Cambodia. The purpose of this chapter is to present statistics on the quality of dwellings occupied by households in 2009.

The housing module contains 26 questions that were answered mostly by the household head. The data collected on housing conditions includes e.g. floor area, rooms used by the household, building materials used in the wall, floor and roof, source of lighting and drinking water, toilet facilities, fuel for cooking, charges on water, light, fuel, sewage and garbage collection, rent paid by tenants, maintenance and minor repairs. In addition, the rent value of owner occupied house was estimated.

In this chapter statistics on housing conditions by geographical domains are presented. In order to see differences on housing conditions in Cambodia during the last 5-year period, the comparisons of results from CSES 2009 with CSES 2004 are importantly needed. Due to changes in the questions, some variables in CSES 2009 are needed to be regrouped to make them comparable to the definitions in CSES 2004. The following questions have been changed in the housing module:

- Wall of dwelling: In CSES 2004, the question asked referred to the primary construction materials of the outer wall and inner wall separately. Whereas the questions in 2009, only primary construction materials of wall of housing/dwelling unit was asked. This changed was introduced in CSES 2007.
- Roof/floor of dwelling: In CSES 2004, the question asked referred to the primary and secondary building materials of roof/floor. Whereas the questions in CSES 2009, only asked about the primary construction materials.
- Energy source of lighting: In CSES 2004, the question on lighting source included six categories namely publicly-provided electricity, privately-provided electricity, battery, kerosene lamp, none and other source, whereas the question in 2009 had seven categories namely publicly-provided electricity/city power, generator, battery, kerosene lamp, candle, none, and other source.
- Energy source of cooking: In CSES 2004, the question on energy source of cooking included ten categories namely firewood, charcoal, firewood and charcoal, liquefied petroleum gas (LPG), kerosene, publicly-provided electricity, gas and electricity, privately-generated electricity, none/don't cook and other source. The question in 2009 had eight categories namely firewood, charcoal, liquefied petroleum gas (LPG), kerosene, publicly-provided electricity/city power, household generator, none/don't cook and other source.
- Source of drinking water: In CSES 2004, the question on source of drinking water had nine categories namely piped in dwelling or on premises, public tap, tube/piped well or borehole, protected dug well, unprotected dug well, pond river or stream, rainwater, tanker truck vendor or bought water and other source. The question in 2009 had 13 categories with more specific details that can be used for measuring improved and unimproved water source.
- Sanitation facilities: In CSES 2004, the question on sanitation facilities had nine categories namely the toilet connected to sewerage, septic tank, pit latrine, other without septic tank, public toilet, shared toilet, open land, none and other facility. In the question in 2009 the household was asked which type of toilet it had within the premises defined into eight categories. If the household did not have any toilet facility in the premises it was asked which type of toilet the household usually used, specified in three categories. All categories are specified in detail and can be used to better capture the concept of improved and unimproved sanitation which is one of the Millennium Development Goals, adopted by the Cambodia government and included in the NSDP.

The questionnaire from CSES 2009 including all sections is attached in appendix 5, 7–9.

Building materials of dwellings (roof, wall, floor)

The materials used in roofs, walls and floors should be importantly considered in order to characterize or qualify a house/dwelling for residential purpose. They can be grouped as hard/permanent or soft/temporary after their capacity to withstand wind and rain. See Table 3.1.– 3.3. for what material is defined as hard/permanent or soft/temporary in roofs, walls and floors.

Roof materials

Based on data on the building materials of roof, it has been observed that households in Cambodia who used hard/permanent materials for roofs has increased from about 71 percent in 2004 to about 84 percent in 2009. Households who used soft/temporary materials for roofs have similarly declined during the same period. Hard/permanent materials such as tiles and galvanized iron/aluminium are the most common roof materials in Cambodia, followed by fibrous cement and concrete. Thatch is the most common soft/temporary materials.

The differences in this quality dimension between geographical domains are considerable. In Phnom Penh almost all households used hard/permanent materials for making roofs both in 2004 and 2009.

The use of hard/permanent material has increased in both other urban and other rural areas, where tiles and Galvanized iron/aluminium roofs constitute the largest shares. About 20 percent of the households in other rural areas have soft/temporary roof material and thatch is the most common one. From these findings one can see that the hard/permanent materials used for making roofs have increased notably since 2004, and can be expected to increase even more in the future as it is considered as a good quality of a building/dwelling (for residential purposes) in Cambodia.

Table 3.1. Occupied dwellings by kind of roof materials and geographical domain, 2004 and 2009. Percent.

Roof materials	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Hard/permanent materials	71.3	98.6	84.6	66.6	83.8	99	95.1	80.8
Tiles	26.7	8.7	19.8	29.5	26.9	10.7	18.4	29.7
Fibrous cement	5.0	11.5	6.7	4.1	7.7	6.5	10.4	7.5
Galvanized iron/aluminium	34.5	41.6	52.2	31.4	44.9	46.1	61.5	42.8
Mixed, predominantly hard/permanent.	0.9	0.4	2.1	0.8	0.5	0.4	1.2	0.5
Concrete	4.2	36.4	3.8	0.8	3.8	35.3	3.6	0.3
Soft/temporary materials	28.8	1.3	15.2	33.5	16.2	0.9	4.8	19.2
Thatch	21.4	0.6	13.1	24.8	15.8	0.6	4.3	18.8
Salvaged materials	0.2	-	0.3	0.2	0.2	0.2	0.1	0.2
Mixed, predominantly soft/temporary	0.6	0.1	0.3	0.6	0.1	0.1	0.3	0.1
Plastic sheet	0.1	0.1	-	0.1	0.1	-	0.1	0.1
Other	6.5	0.5	1.5	7.8	0.0	-	-	0.1
Total percent	100	100	100	100	100	100	100	100

Wall materials

The households in Cambodia who use hard/permanent materials for making walls have increased with about 10 percentage points between 2004 and 2009, while the percentage of the households who used soft/temporary materials have declined correspondingly. Wood/log and plywood were the most used/utilized hard/permanent materials in 2004. In 2009 wood/logs was the most common used hard/permanent wall material and has increase notably since 2004. The use of plywood has decreased remarkably. Bamboo, thatch is the most used soft/temporary materials. Note that the wall materials from ”clay/dung with straw” in 2004, was classified into the category ”other”.

The differences between geographical domains on this quality dimension of dwellings are considerable. In Phnom Penh, almost all households have hard/permanent building materials in the walls of the dwelling both 2004 and 2009.

In other urban and other rural areas, wood/log is the most common materials used for making walls of the building/dwelling in 2009 (50 percent each), followed by the bamboo/thatch, especially for other rural areas. In Phnom Penh, concrete, brick, stone are more common compared to other building material, both years. From these findings, the hard/permanent materials used for making walls can henceforward be expected to increase as it is considered as a good quality of a building material for dwellings (for residential purposes) in Cambodia.

Notes: Wall materials in CSES 2004 were split into two questions that are the “inner wall” and the “outer wall”. For being comparable with CSES 2009, the “outer wall” has been used, provided the share of households has used each category of wall materials from the “inner wall” and the “outer wall” is almost equal. Please see the tables on wall materials of CSES 2004 provided in the appendix 1.

Table 3.2. Occupied dwellings by kind of wall materials and geographical domain, 2004 and 2009. Percent.

Wall materials	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Hard/permanent materials	55.6	98.2	75.6	48.4	65.7	98.4	84.8	59.7
Wood or logs	26.7	9.2	36.2	27.4	47.9	25.0	50.8	50.0
Plywood	17.0	18.0	20.7	16.4	0.6	0.4	1.2	0.5
Concrete, brick, stone	9.7	69.0	14.4	2.6	12.1	69.2	26.2	4.2
Galvanized iron/ aluminium or other metal sheets	2.1	1.8	4.0	1.9	5.0	3.8	6.2	4.9
Fibrous cement/ asbestos	0.1	0.2	0.3	0.1	0.1	-	0.4	0.1
Soft/temporary materials	44.4	1.8	24.4	51.6	34.3	1.5	15.1	40.1
Bamboo, thatch	27.3	0.9	16.0	31.7	33.0	1.2	13.4	38.8
Makeshift, salvaged materials	1.4	0.7	1.4	1.4	0.7	0.1	1.2	0.7
Clay/dung with straw	15.7	0.2	7.0	18.5	0.3	0.2	0.1	0.3
Other					0.3	-	0.4	0.3
Total percent	100	100	100	100	100	100	100	100

Floor materials

The share of the households in Cambodia using hard/permanent building materials for floors has decreased slightly from 2004 to 2009, while households who use soft/temporary materials for making floors have increased somewhat from about 80 percent to 83 percent during the same period. Building materials from wooden planks and bamboo strips are the most common soft/temporary materials both years. Ceramic tiles and cement constitute are the most used hard/permanent materials.

The differences between the geographical domains are also on this quality dimension of dwellings considerable. In Phnom Penh, about 80 percent of the households have used hard/permanent materials for making floors. In other urban soft/temporary building materials are used in larger extent, about two third of the households (64 percent). In other rural more than 90 percent of the households have floors from soft/temporary material, where wooden planks and bamboo strips are the most common floor materials. From these findings, the hard/permanent materials used for making floors have slightly declined though considered as of good quality. Note that in CSES 2004, the wooden planks and bamboo are mixed together as one question.

In summary, there has been a significant change in the building/dwelling materials for roof, wall and floor from soft/temporary category to hard/permanent category the last five years, 2009 compared to 2004. The use of hard/permanent building material for roofs and walls have increased remarkably, by about 13 percentage points and 10 percentage points respectively, while the use for floors have declined slightly by about 3 percentage points. From these results, the conclusive evidence is that the building/dwelling materials used for roof and wall has improved 2009 compared to 2004.

Table 3.3. Occupied dwellings by kind of floor materials and geographical domains, 2004 and 2009. Percent.

Floor materials	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Hard/permanent materials	19.9	86.3	31.4	11.1	16.8	78.7	36.5	7.5
Cement	4.5	13.2	8.0	3.0	7.2	18.1	17.1	4.8
Parquet, polished wood	8.2	15.7	11.4	7.0	1.3	2.1	2.1	1.1
Polished stone, marble	0.1	0.3	0.3	0.0	0.1	0.1	0.3	0.0
Vinyl	0.0	0.2	0.2	-	-	0.1	-	0.0
Ceramic tiles	7.1	56.9	11.5	1.1	8.2	58.3	17.0	1.6
Soft/temporary materials	80.1	13.7	68.5	88.7	83.3	21.4	63.6	92.3
Earth/clay	7.3	2.6	6.9	7.8	7.8	2.2	9.6	8.2
Wooden planks	71.4	8.4	60.2	79.7	50.2	18.3	45.7	54.2
Bamboo strips					25.2	0.7	8.2	29.8
Other	1.4	2.7	1.4	1.2	0.1	0.2	0.1	0.1
Total percent	100	100	100	100	100	100	100	100

Legal status of dwellings

Table 3.4. presents information on the legal status of dwellings in Cambodia 2004 and 2009. It is pointed out that almost all households in Cambodia own their dwellings both 2004 and 2009. The share of households having other arrangements is low. About 3 percent of the households both years 2004 and 2009 did not own but were living in the dwelling without paying rent. For rented dwellings as well as other legal status the shares are low. In other rural areas households owning their dwellings have increased. On the other hand in Phnom Penh and other urban areas ownership of dwellings has declined. In these areas more households rent their dwellings in 2009 compared to 2004.

The number of households who rented their dwellings in Phnom Penh as well as in other urban areas has increased remarkably in 2009 in comparison with 2004. In Phnom Penh, the share of households renting their dwellings has almost doubled from 2004 to 2009 (about 9 percent in 2004 and about 15 in 2009). The share of households renting their dwelling in other urban areas has also increased. In 2004 almost no households rented their dwellings but in 2009 slightly less than 10 percent.

Table 3.4. Occupied dwellings by legal status and geographical domains, 2004 and 2009. Percent.

Legal Status	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Owned by households	94.7	85.7	96.1	94.7	94.2	80.5	85.8	96.7
Not owned but no rent is paid	3.6	5.0	3.3	3.6	3.2	4.1	5.2	2.9
Rented	1.4	9.2	0.3	1.4	2.5	15.3	8.9	0.3
Other	0.2	0.1	0.2	0.2	0.0	0.1	-	0.0
Total percent	100	100	100	100	100	100	100	100

Dwelling space by household

Floor area of occupied dwellings

Table 3.5. presents information on floor areas in all Cambodia, the average dwelling space per household is 43.1 square meters in 2009, almost the same as in 2004. The average floor area of dwellings ranged from about 40 sq. meters per household in other rural areas to 62 sq. meters in Phnom Penh. The share of households living in dwelling with more than 100 sq. meters was about 13 percent in Phnom Penh, 8 percent in other urban areas, and only about 2 percent in other rural areas. The share of households in Cambodia with occupied floor areas less than 20 sq. meters has declined by about 4 percentage points.

Table 3.5. Floor area by geographical domains, 2004 and 2009. Percent.
Average square meters per household.

Floor area	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
–19	12.4	7.3	10.0	13.2	8.5	7.1	7.8	8.8
20–39	43.4	24.6	38.4	46.1	42.0	21.9	35.5	44.9
40–59	25.3	24.1	22.2	25.8	30.4	26.7	24.5	31.5
60–79	9.9	14.8	12.0	9.1	11.3	19.0	16.4	9.8
80–99	4.9	11.4	9.3	3.7	4.5	12.2	7.6	3.3
100–	4.1	17.9	8.1	2.1	3.3	13.0	8.3	1.6
Total	100	100	100	100	100	100	100	100
Average square meters per household	42.8	70.1	51.0	38.8	43.1	61.8	53.9	39.8

Square meters per person

Table 3.6. shows average square meters per person occupied in dwelling 2004 and 2009. In overall Cambodia, the average floor area occupied by one person is almost the same in 2004 and 2009. In Phnom Penh the floor area per person has declined, whereas in other urban and rural areas the floor area has slightly increased.

Table 3.6. Average floor area by geographical domains, 2004 and 2009.
Square meters per person.

	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Average per person	8.7	13.1	9.9	8.0	9.1	11.7	10.7	8.5

Number of rooms per dwelling

Table 3.7. presents information on the number of rooms. Rooms defined in the Cambodia Socio-Economic Surveys included only sitting room and bedrooms and did not include kitchen, toilet, bathroom or garage, etc.

As observed from the results, a majority of Cambodian households occupied one room, about 74 percent in 2004 and 70 percent in 2009, which is a slight decline between the years. The share of households occupying two rooms has increased slightly for the whole country. In Phnom Penh and other urban areas more households are living in dwellings with three or more rooms than households in other rural areas.

In Cambodia the average number of rooms per household in 2009 was 1.4 which was about the same as in 2004. The average number of rooms per household in Phnom Penh, in other urban and other rural areas remained about the same in 2009 as in 2004.

Table 3.7. Numbers of rooms by geographical domains, 2004 and 2009. Percent and average.

Number of rooms	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
One room	74.3	41.5	57.8	80.0	70.1	38.5	54.6	75.4
Two rooms	19.2	32.9	27.2	16.6	22.3	35.1	27.5	20.3
Three rooms	4.4	13.7	9.8	2.7	5.0	14.0	11.4	3.2
Four rooms	1.4	7.3	3.5	0.5	1.6	8.0	3.5	0.7
Five or more rooms	0.7	4.6	1.7	0.1	1.0	4.3	3.0	0.3
Total	100	100	100	100	100	100	100	100
Average number of rooms	1.4	2.0	1.7	1.2	1.4	2.1	1.8	1.3
Average household size	4.9	5.4	5.1	4.8	4.8	5.0	4.8	4.8

Number of persons per room

Table 3.8. shows that the average number of persons per room in overall Cambodia was estimated to 3.6 in 2004 and 3.3 in 2009. As observed, the average number of persons per room in Cambodia has slightly declined.

Table 3.8. Number of persons per room by geographical domains, 2004 and 2009.

	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Number of persons per room	3.6	2.6	3.1	3.9	3.3	2.5	2.7	3.6

Drinking water

One of the Millennium Development Goals adopted by the Royal Government of Cambodia is:

- Overall Target 14: Halve by year 2015 the proportion of people without sustainable access to safe drinking water.

Under this Overall Target there are two sub-targets formulated for the urban and rural populations separately:

- Target 7.10: Increasing the proportion of the rural population with access to safe water source from 24 percent in year 1998 to 50 percent in year 2015.
- Target 7.11: Increasing the proportion of urban population with access to safe water source from 60 percent in year 1998 to 80 percent in year 2015.

For Cambodia, access to water supply services is defined as the availability of an improved water source. An improved water source is not necessarily safe, but an improved source is more likely to provide safe water. Types of improved water sources are defined as follows in CSES 2004 and 2009.

- Piped water in dwelling or on premises is defined as piped water connected with in-house plumbing to one or more taps, e.g. in the kitchen and bathroom. Sometimes called a house connection. Piped water also connected to a tap outside the house in the yard or plot (on premises).
- A public tap/stand pipe is defined as a public water point from which community members may collect water. A stand pipe may also be known as a public fountain or public tap. A public stand pipe can have one or more taps and are typically made of brick work, masonry or concrete.
- A tube well or borehole is defined as a deep hole that has been driven, bored or drilled with the purposes of reaching ground water supplies. Water is delivered from a tube well or borehole through a pump which may be human, animal, wind, electric, diesel or solar-powered.
- A protected dug well is defined as a dug well that is protected from runoff water through a well lining or casting that is raised above ground level and has a platform that diverts spilled water away from the well and is covered so that bird droppings and animals can not fall down the hole.
- Rainwater collection is also considered as improved water if the rainwater catchments tank is completely closed, have a tap to withdraw and have a capacity of at least 3,000 litres.

Main sources of drinking water (wet and dry season) 2009

Table 3.9. presents information on the main sources of drinking water used by households in both wet and dry seasons in 2009. Definition of improved water source includes the four first water sources, “piped in dwelling”, “public tap”, “tube/piped well or borehole” and “protected dug well”. In the whole country, about 45 percent of the households had access to a safe/improved water source in wet season and about 52 percent in dry season. During the wet season more households use rain water which is considered as an unimproved water source if the water is not collected in a special tank, see definition above. Most households who are using rainwater don't have this kind of tanks and therefore they are considered having access to unimproved water source. During the dry season when there is no rainwater available the share of households using other kind of unimproved water sources such as ”pond, river or stream” and vendor-provided water increase.

Table 3.9. Main source of drinking water by season and by geographical domains 2009. Percent.

Water Source	Cambodia	Phnom Penh	Other urban	Other rural
Wet Season				
Improved	45.2	93.4	60.3	38.1
Improved rainwater collection	0.5	-	0.2	0.6
Piped in dwelling or on premises	14.4	89.8	34.7	3.8
Public tap	0.5	-	-	0.6
Tube/piped well or borehole	23.4	1.0	19.6	26.3
Protected dug well	6.4	2.6	5.8	6.9
Unimproved	54.8	6.6	39.7	61.9
Bottled water	0.2	0.1	1.2	0.1
Unprotected dug well	14.2	-	5.7	16.8
Pond, river or stream	12.3	1.7	8.6	13.9
Unimproved rainwater collection	25.3	3.7	18.4	28.5
Vendor-provided water/ Tanker truck provision of water	2.5	1.1	5.6	2.3
Other	0.3	-	0.1	0.3
Total percent	100	100	100	100
Dry Season				
Improved	52.2	93.7	66.6	45.9
Improved rainwater collection	0.1	0.1	0.1	0.1
Piped in dwelling or on premises	15.6	90.2	37.7	4.8
Public tap	0.5	-	0.2	0.6
Tube/piped well or borehole	28.5	1.0	22.4	32.3
Protected dug well	7.4	2.4	6.2	8.1
Unimproved	47.8	6.3	33.4	54.1
Bottled water	0.3	0.1	1.3	0.2
Unprotected dug well	16.3	-	6.2	19.3
Pond, river or stream	22.9	3.6	12.9	26.2
Unimproved rainwater collection	1.4	0.4	1.7	1.5
Vendor-provided water/Tanker truck provision of water	6.5	2.2	11.3	6.4
Other	0.4	-	0.1	0.5
Total percent	100	100	100	100

To be able to make comparison between CSES 2004 and 2009, some variables of drinking water sources of CSES 2009 have been regrouped based on the categories used in CSES 2004. Table 3.10. presents comparable drinking water sources between 2004 and 2009.

In wet season the share of households having access to piped water source in dwelling or on premises in Cambodia has slightly increased while the corresponding share in Phnom Penh has remained unchanged, about 90 percent of the households both years. In dry season, the "piped in dwelling" was also unchanged in Phnom Penh. In other urban areas, the share of households having access to the "piped in dwelling" has increased by about 10 percentage points both in wet season and in dry season. In other rural areas, "rainwater", "tube/piped well or borehole" and "dug wells" (protected and unprotected) had the highest shares compared to other water sources in wet season, both years. In

CSES 2004 there was only one category for dug well. In 2009 there were two categories, one for protected and one for unprotected. In dry season "pond, river or stream" seems to be the main water source and replacing the "rainwater" as the highest share after the "tube/piped well or borehole" and "dug wells (protected and unprotected)".

In conclusion, there were some changes between the years even though the safe/improved water sources (for instance: the" piped water" and "tube/piped well or borehole") are slowly progressing in Cambodia.

Table 3.10. Main source of drinking water by season and by geographical domains, 2004 and 2009. Percent.

	2004				2009			
Water Source	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
				Wet Season				
Piped in dwelling	11.4	89.8	24.5	1.2	14.4	89.8	34.7	3.8
Public tap	0.1	-	0.1	0.1	0.5	-	-	0.6
Tube/piped well or borehole	22.0	2.7	22.9	24.0	23.4	1.0	19.5	26.3
Protected dug well	14.6	0.5	12.1	16.4	6.4	2.6	5.8	6.9
Unprotected dug well	9.5	0.3	5.1	11.1	14.2	-	5.7	16.8
Pond, river or stream	15.7	1.1	11.3	17.8	12.3	1.7	8.6	13.9
Rainwater	22.8	0.8	18.1	25.8	25.8	3.7	18.6	29.0
Tanker truck, vendor	3.4	4.6	5.8	2.9	2.7	1.2	6.8	2.3
Other	0.5	0.1	0.0	0.6	0.3	-	0.1	0.3
Total percent	100	100	100	100	100	100	100	100
				Dry Season				
Piped in dwelling	12.1	90.1	26.6	1.7	15.6	90.2	37.7	4.8
Public tap	0.2	0.1	0.1	0.2	0.5	-	0.2	0.6
Tube/piped well or borehole	26.5	2.6	26.4	29.1	28.5	1.0	22.4	32.2
Protected dug well	17.0	0.5	13.5	19.2	7.4	2.4	6.2	8.1
Unprotected dug well	11.2	0.3	5.6	13.1	16.3	-	6.2	19.3
Pond, river or stream	23.6	1.1	13.7	27.4	22.9	3.6	12.9	26.2
Rainwater	1.4	0.2	0.9	1.6	1.6	0.5	1.8	1.7
Tanker truck, vendor	7.5	4.8	12.8	7.1	6.8	2.3	12.6	6.6
Other	0.6	0.2	0.3	0.7	0.4	-	0.1	0.5
Total percent	100	100	100	100	100	100	100	100

Treatment of water for drinking

Table 3.11. shows that, in 2009 nearly 60 percent of the Cambodian households said that they always treated water for drinking, remaining 15 percent of the households who said that they sometimes treated water for drinking and about 25 percent (one out of four households) who never treated drinking water.

As seen in Table 3.11. the share of households who always treated drinking water in Cambodia has increased from about 53 percent in 2004 to about 60 percent in 2009. The corresponding shares in other urban and other rural areas were also remarkable in increase by about 10 percentage points and 8 percentage points respectively. In Phnom Penh, the share of households who always treated drinking water has decreased.

Table 3.11. Households treating drinking water by geographical domains, 2004 and 2009. Percent.

Treatment of drinking water	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Always treat drinking water	52.9	93.9	65.6	46.8	59.6	89.6	75.1	54.5
Sometimes treat drinking water	14.4	2.8	12.0	16.0	15.0	8.3	10.7	16.3
Never treat drinking water	32.6	3.3	22.4	37.1	25.4	2.1	14.1	29.2
Total percent	100	100	100	100	100	100	100	100

Distance to fetch drinking water sources (wet and dry season)

Table 3.12. classifies the water sources based on distance to fetching water during the two main seasons in Cambodia, wet and dry season. It is observed that almost all households residing in Cambodia had access to water source in a distance of less than 0.25 km (250 meter) from the dwelling in wet season. The share of households who had access to water source in dry season with the same distance was lower than in wet season. The main reason why the share is higher in wet season is that the households in Cambodia, mostly those in the rural areas use rainwater during the wet season.

Almost all households in Phnom Penh had access to a water source in a distance of less than 0.25 km (250 meter) from the dwelling in both seasons. The reason is that most of the households in Phnom Penh used piped water in their dwellings or on premises. Also in other urban areas almost all households had less than 0.25 km to the water source in both seasons in 2009. Compared to 2004 the share of households in other urban areas who had less than 0,25 km in dry season increased with about 10 percentage points in 2009.

Table 3.12. Distance to main drinking water source by geographical domains, 2004 and 2009. Percent.

	2004				2009			
Water Source	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Wet Season								
Less than 0.25 km	97.0	99.9	97.6	96.7	98.2	99.9	98.9	97.9
0.25 to 0.99 km	2.7	0.1	2.2	3.0	1.5	-	0.8	1.7
1.00 to 1.99 km	0.2	-	0.2	0.2	0.3	0.1	0.3	0.3
2.00 to 2.99 km	0.0	-	-	0.0	0.0	-	-	0.0
3 km or more	0.0	-	-	0.0	0.0	-	-	0.0
Total percent	100	100	100	100	100	100	100	100
Dry Season								
Less than 0.25 km	89.5	99.6	87.7	87.7	93.3	99.1	98.1	92.1
0.25 to 0.99 km	7.9	0.4	9.1	9.1	5.1	0.8	1.3	6.0
1.00 to 1.99 km	2.0	-	2.4	2.4	1.2	0.1	0.6	1.3
2.00 to 2.99 km	0.3	-	0.3	0.3	0.3	-	-	0.4
3 km or more	0.3	-	0.4	0.4	0.1	-	-	0.1
Total percent	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

3.2. Sanitation facilities

One of the Millennium Development Goals adopted by the Royal Government of Cambodia is:

- Overall Target 15: Halve by year 2015 the proportion of people without sustainable access to improved sanitation.

Under this Overall Target there are two sub-targets formulated for the urban and rural populations separately:

- Target 7.10: Increasing the proportion of the rural population with access to improved sanitation from 8.6 percent in year 1998 to 30 percent in year 2015.
- Target 7.11: Increasing the proportion of urban population with access to improved sanitation from 49 percent in 1998 to 74 percent in 2015.

Improved sanitation facility is the facility that is private-owned by the household and it can effectively separate human excreta from human contact. Types of improved sanitation facility that the urban and rural populations have access to are defined as follows in CSES 2004 and 2009.

- Pour flush/flush toilet connected to sewerage, septic tank or pit is defined as a flush toilet using a cistern or holding tank for flushing water and has a water seal, which is a U-shaped pipe below the seat or squatting pan, that prevents the passage of flies and odours. A pour flush toilet uses a water seal or a pour flush toilet uses water poured by hand for flushing.
- A pit latrine with slab is defined as that the excreta is deposited without flushing directly into a hole in the ground. Pit latrine can be a ventilated improved pit latrine (VIP).

The main result concerning sanitation facilities is based on the concept ”access to improved/unimproved toilet facilities” as it is one of the goals in the Millennium Development Goals and relating to the NSDP. The definition used in CSES 2009 is based on recommendations from a

Working Group within the Ministry of Rural Development[7]. They also recommend breaking down the analyses in other groups and not only focus on access to improved/unimproved facilities. In appendix 1 a table on toilet facilities based on the recommendation are attached.

Toilet facilities of dwellings

The type of toilet facilities used is a measure of sanitary conditions available. The definition of "improved sanitation facility" includes three types of toilets namely: "pour flush/flush toilet connected to sewerage", "pour flush/flush toilet connected to septic tank or pit", and "pit latrine with slab". Table 3.13. presents information on toilet facilities of the dwelling. In the country as a whole, about one third of the households (35 percent) had access to improved toilet facilities in 2009. Of the households with unimproved toilet facilities (about 65 percent) most households used "open land".

In Phnom Penh, in 2009, almost all households had access to improved toilet facilities, such as "pour flush (or flush) connected to sewerage". The types of toilet facilities defined as improved are mostly within the premises or in the area close to the dwelling. In other urban and other rural areas toilet facilities connected to sewerage are rare. In other rural areas a majority of the households are using "open land".

Table 3.13. Toilet facilities by geographical domains, 2009. Percent.

Type of Facilities	Cambodia	Phnom Penh	Other urban	Other rural
Improved toilets	34.7	98.4	73.5	22.9
Pour flush (or flush) connected to sewerage	9.6	75.5	13.4	1.7
Pour flush (or flush) to septic tank or pit	24.3	21.6	58.7	20.5
Pit latrine with slab	0.8	1.3	1.4	0.7
Unimproved toilets	65.3	1.6	26.5	77.1
Pit latrine without slab or open pit	1.3	-	1.2	1.5
Latrine overhanging field or water	1.6	0.1	1.0	1.8
Public toilet, pit latrine or latrine	1.3	0.6	2.9	1.2
Open land	60.2	0.8	20.1	71.7
Other included in "not improved"	0.8	-	1.3	0.9
Total percent	100	100	100	100

To compare data between CSES 2004 and 2009, some categories in CSES2009 have been regrouped based on the categories given in CSES 2004. Due to these figures in Table 3.13. differs slightly compared to Table 3.14. Table 3.14. presents comparable toilet facilities between 2004 and 2009.

It has been seen that, the share of households who had access to toilet facility connected to sewerage in all Cambodia has slightly increased between 2004 and 2009. In other urban areas, the share of households who had access to toilet facility connected to septic tank increased from about 42 percent in 2004 to 58 percent in 2009. In other rural areas, the share of households who used open land was about 70 percent in 2009, which is a decrease from 2004 when about 84 percent of all households in other rural areas did not have any toilet facility ("None") or used "Open land". In conclusion, there are some significant changes over the last 5 years. The improved toilet facilities (for instance: the toilet connected to sewerage and toilet connected to septic tank) are remarkably progressing in Cambodia,

[7] Ministry of Rural Development and Partners (June 3 2008). Access to Water Supply and Sanitation. Definition for use in National Surveys. Partners including Dept. of Rural Water Supply, Dept. of Rural Health Care, Ideas at Work, Tonle Sap Rural Water Supply and Sanitation project, Resource Development International, UNICEF, Water and Sanitation Program, World Health Organisation.

while the use of "Open land" ("Open land" and "None" in CSES 2004) category has dropped during the same period.

Table 3.14. Toilet facilities by geographical domains, 2004 and 2009. Percent.

Type of Facilities	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Connected to sewerage	8.0	79.4	6.3	0.4	9.4	75.5	13.3	1.7
Septic tank	14.6	15.6	41.9	10.9	23.9	21.6	58.2	20.0
Pit latrine	2.2	0.4	2.7	2.3	3.2	-	2.0	3.6
Other without septic tank	1.4	0.3	1.8	1.5	2.3	1.4	2.3	2.4
Public toilet	0.2	0.2	0.4	0.2	1.3	0.6	2.8	1.2
Shared toilet	0.8	1.3	2.9	0.5	-	-	-	-
Open land	40.4	1.4	19.8	47.3	59.1	0.8	19.9	70.2
None	32.1	1.3	23.9	36.5	-	-	-	-
Other	0.3	-	0.3	0.3	0.8	-	1.3	0.8
Total percent	100	100	100	100	100	100	100	100

Energy sources for lighting and cooking

Table 3.15. presents information on the main energy sources for lighting in 2009. About one out of four (26 percent) households in Cambodia used publicly-provided electricity (including city power) for lighting, nearly 40 percent used battery and about 32 percent used kerosene lamp. These three main categories are the most common energy sources for lighting in Cambodia. Almost all households residing in Phnom Penh used electricity as the main source for lighting, and about three out of four (77 percent) households in other urban areas are also served by electricity. Only about 12 percent of the households in other rural areas used electricity.

Table 3.15. Main source of lighting by geographical domains, 2009. Percent.

Sources of lighting	Cambodia	Phnom Penh	Other urban	Other rural
Publicly-provided electricity/ City power	25.6	98.5	76.7	11.5
Generator	1.7	0.4	0.9	1.9
Battery	39.0	0.2	9.2	46.8
Kerosene lamp	31.5	0.3	12.5	37.1
Candle	0.3	-	0.4	0.4
None	0.1	-	-	0.1
Other	1.9	0.5	0.2	2.2
Total percent	100	100	100	100

To compare data in CSES 2004 and 2009 some categories in CSES 2009 have been regrouped based on categories in CSES 2004. Table 3.16. presents comparable energy sources for lighting between 2004 and 2009.

According to data in the table below the share of households who used publicly provided electricity in Cambodia has increased with more ten percentage points from 14 percent in 2004 to 26 percent in 2009. A sharp decrease is also observed in the use of kerosene lamp, by more than 20 percentage points from about 55 percent in 2004 to 32 percent in 2009. The use of battery has subsequently increased for households since 2004, by slightly more than 15 percentage points. The highest increase has taken place in other rural areas, where it is the most common energy source of lighting.

Table 3.16. Main source of lighting by geographical domains, 2004 and 2009. Percent.

Sources of lighting	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Publicly-provided electricity	14.2	87.9	44.0	2.3	25.6	98.5	76.7	11.5
Privately-generated electricity	6.9	9.9	12.3	5.8	1.7	0.4	0.9	1.9
Battery	23.3	0.7	9.7	27.6	39.0	0.2	9.2	46.8
Kerosene lamp	54.6	1.0	33.0	63.2	31.5	0.3	12.5	37.1
None	0.0	0.0	0.1	0.0	0.1	-	-	0.1
Other	1.0	0.3	0.9	1.1	2.2	0.5	0.7	2.6
Total percent	100	100	100	100	100	100	100	100

Energy sources for cooking

One of the Millennium Development Goals, MDG, adopted by the Royal Government of Cambodia is:

- Overall Target 13: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources.

Under this Overall Target, there are a number of sub-targets, of which one is concerning energy for cooking: Wood fuel dependency as defined in the MDG includes the first three sources in Table 3.17. (firewood, charcoal and liquefied petroleum gas (LPG).

Table 3.17. presents information on the main energy sources for cooking in 2009. In all Cambodia, about four out of five households (80 percent) used firewood for cooking, and about 10 percent used charcoal and liquefied petroleum gas (LPG) respectively.

In Phnom Penh, the liquefied petroleum gas (LPG) was the most common energy for cooking, where about 70 percent of the households used LPG, followed by charcoal at 20 percent. In the other urban areas, about half of the households used firewood and charcoal was used by about 28 percent of the households. In other urban areas more than nine out of ten households used firewood (93 percent).

Table 3.17. Main source of cooking by geographical domains, 2009. Percent.

Types of Fuel	2009			
	Cambodia	Phnom Penh	Other urban	Other rural
Firewood	81.4	8.7	49.9	93.1
Charcoal	8.2	20.1	27.5	4.6
Liquefied petroleum gas (LPG)	9.5	69.6	21.0	1.6
Kerosene	0.0	-	-	0.0
Publicly-provided electricity/city power	0.3	1.5	1.4	0.0
Household generator	-	-	-	-
None/don't cook	0.1	0.1	0.1	0.0
Other	0.5	-	-	0.6
Total percent	100	100	100	100

The comparisons of the results on types of fuel for cooking between CSES 2004 and 2009 are not possible due to some differences in questions regarding “firewood and charcoal” and “gas and electricity”. That is why the variables of types of fuel of CSES 2009 could not be regrouped based on the definitions in CSES 2004. The table on types of fuel for cooking in 2004 will be attached in the appendix 1.

4. Agriculture

The agricultural land in the Cambodia Social Economics Survey (CSES) refers to the land that households owned or operated, rented in, rented out, free use of land, etc., to use for vegetable gardening, agricultural or farming activities such as crop cultivation, livestock raising, fishing and fish breeding, and private forestry. This excludes land under permanent pasture, wood or forest and all other non-agricultural land put under residential use or for other enterprise activities.

Private ownership of land was recognised in 1989. Farming households were then invited to apply for title to the land they cultivated. Around 4 million such applications were made, and the intention was that these should be processed urgently by the central cadastre authorities. Households with agriculture as their main occupation received land according to household size and other household characteristics. However, since then, there have been significant socio-economic changes (refugee repatriation, urbanization, economic growth, and population growth) that have placed varied demands on land.

Data from the agricultural module of the CSES is much in demand from primarily Ministry of Agriculture, Forestry and Fisheries (MAFF), national account department at National Institute of Statistics (NIS) and from the World Bank.

Statistics by gender (households headed by women and men respectively) provide information of great importance in many areas. Organizations such as NIS, FAO, MAFF and the Ministry of Women Affairs have also emphasized the use of such presentation.

4.1. Land ownership

Table 4.1. shows that Tonle Sap zone has the largest share of agricultural land in 2009, followed by Plain. Of the total 3,068,000 hectares of agricultural land in Cambodia, approximately 13 percent (407,000 hectares) was owned by women headed households.

Table 4.1. Agricultural land by sex of household head and zone, 2009

Zone	Women		Men		Total
	Thousand hectares	Percent	Thousand hectares	Percent	Thousand hectares
Cambodia	407	13.2	2,661	86.6	3,068
Phnom Penh	1	7.0	24	93.0	26
Plain	172	15.8	918	84.2	1,090
Tonle Sap	147	12.4	1,036	87.6	1,183
Coastal	26	12.9	176	87.1	202
Plateau/Mountain	59	10.4	507	89.6	567

Figure 4.1. Agricultural land by sex of household head and zone, 2009

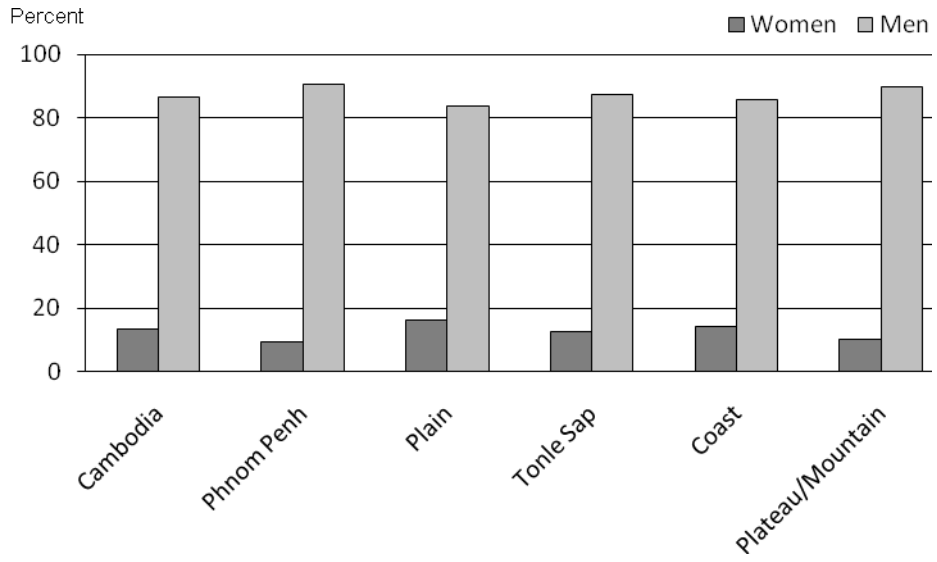


Table 4.2. shows the number of households reporting ownership of agricultural land in the survey. Approximately 47 percent of all households had agricultural land less than 10,000 square meters (10,000 square meters equals 1 hectare). The total estimated number of households having agricultural land was approximately 72 percent of all households in CSES 2009.

Table 4.2. Number of households with agricultural land by area and zone, 2009

Area	Cambodia	Phnom Penh	Plain	Tonle Sap	Coastal	Plateau/ Mountain
	Number in thousand					
Less that 10,000 m^2	994	21	533	222	94	124
10,000 m^2 −19,999 m^2	586	8	253	195	50	81
20,000 m^2 − 29,999 m^2	243	1	84	100	13	46
30,000 m^2 − 39,999 m^2	122	0	38	53	6	25
40,000 m^2 −49,999 m^2	63	1	16	27	3	16
50,000 m^2 − 99,999 m^2	88	1	22	38	3	23
100,000 m^2 −	22	0	4	13	1	4
Total	2,119	32	950	648	170	319
			Percent			
Less that 10,000 m2	46.9	65.9	56.1	34.4	55.3	38.9
10,000 m2 − 19,999 m2	27.7	24.2	26.7	30.0	29.3	25.3
20,000 m2 − 29,999 m2	11.5	1.6	8.8	15.4	7.8	14.5
30,000 m2 − 39,999 m2	5.8	1.3	3.9	8.2	3.5	8.0
40,000 m2 − 49,999 m2	3.0	2.2	1.7	4.2	1.5	5.0
50,000 m2 − 99,999 m2	4.1	4.1	2.3	5.9	2.0	7.1
100,000 m2 −	1.0	0.8	0.4	2.0	0.6	1.2
Total	100	100	100	100	100	100

Table 4.3a. and 4.3b. show that owning land is the most common type of land tenure. The share of owned plots not being rented out was approximately 93 percent in 2004 and around 90 percent in 2009.

Table 4.3a. Number of plots by ownership and zone, 2004

Land tenure	Cambodia	Phnom Penh	Plain	Tonle Sap	Coastal	Plateau/ Mountain
	Number in thousand					
Owned	3,166	11	1,538	978	252	387
Owned, rented out	91	1	56	27	3	4
Rented in	115	0	67	39	2	7
Free use of land	8	0	1	4	2	1
Other tenure	27	0	13	10	2	2
Total	3,408	13	1,675	1,058	260	401
	Percent					
Owned	92.9	87.1	91.8	92.4	96.9	96.4
Owned, rented out	2.7	9.0	3.3	2.5	1.2	1.1
Rented in	3.4	2.2	4.0	3.7	0.6	1.7
Free use of land	0.2	0.0	0.0	0.4	0.6	0.4
Other tenure	0.8	1.7	0.8	0.9	0.8	0.5
Total	100	100	100	100	100	100

Table 4.3b. Number of plots by ownership and zone, 2009

Land tenure	Cambodia	Phnom Penh	Plain	Tonle Sap	Coastal	Plateau/ Mountain
	Number in thousand					
Owned	3,709	26	1,724	1,063	320	576
Owned, rented out	187	10	102	61	5	9
Rented in	148	2	91	40	6	9
Free use of land	56	1	22	26	3	5
Other tenure	6	0	5	0	0	1
Total	4,106	39	1,943	1,190	333	600
	Percent					
Owned	90.3	66.7	88.7	89.3	96.0	96.1
Owned, rented out	4.5	25.7	5.2	5.2	1.4	1.5
Rented in	3.6	5.7	4.7	3.3	1.8	1.5
Free use of land	1.4	2.0	1.1	2.2	0.8	0.8
Other tenure	0.2	0.0	0.3	0.0	0.2	0.1
Total	100	100	100	100	100	100

Households were asked about conflicts concerning their agricultural plots. A conflict refers to any kind of claims for ownership of the land. Table 4.4. shows that about 2 percent had been affected by previous conflicts and that about 1 percent of all plots were subject to an ongoing conflict.

Table 4.4. Number of agricultural plots by conflict and zone, 2009

Conflict situation	Cambodia	Phnom Penh	Plain	Tonle Sap	Coastal	Plateau/ Mountain
			Number in thousand			
Ongoing plot conflict	31	0	11	6	5	9
Previous plot conflict	90	4	33	30	5	18
No plot conflict	3,984	36	1,899	1,154	324	573
Total	4,106	40	1,943	1,190	334	600
			Percent			
Ongoing plot conflict	0.8	0.0	0.6	0.5	1.5	1.5
Previous plot conflict	2.2	10.0	1.7	2.5	1.5	3.0
No plot conflict	97.0	90.0	97.7	97.0	97.0	95.5
Total	100	100	100	100	100	100

4.2 Crop production

Table 4.5. presents figures on crop production for the years 2004 and 2009. Data on activities during wet season, dry season and total are shown. If a particular household grows more than one crop and/or during more than one season, these data will occur in more than one column and/or row in the table. The estimated number of household activities of crop planting 2004 was 1,810,000 in wet season and 641,000 in dry season. The total number of household activities of crop planting in 2009 was slightly higher, estimated at 1,979,000 in the wet season and 738,000 in the dry season.

The most common crop produced in Cambodia is cereals harvested for grain which accounted for 73 percent of all household activities of crop planting. The second most important crop group was fruits and nuts.

Table 4.5. Household activities by main group of crop production and season, 2004 and 2009

Main group of crop production	2004			2009		
	Total	Wet season	Dry season	Total	Wet season	Dry season
			Number of activities in thousand			
Cereal harvested for grain	1,748	1,453	294	1,969	1,627	341
Tubers and leguminous plants	94	54	40	154	75	79
Industrial temporary crops	99	60	39	108	67	41
Vegetables	149	76	73	117	56	61
Fruits and nuts	244	105	139	296	117	179
Industrial permanent crops	92	48	44	73	37	36
Other crop not classified elsewhere	26	14	12	1	1	1
Total	2,451	1,810	641	2,717	1,979	738
			Percent			
Cereal harvested for grain	71.3	80.3	45.9	72.5	82.2	46.2
Tubers and leguminous plants	3.8	3.0	6.2	5.7	3.8	10.7
Industrial temporary crops	4.0	3.3	6.1	4.0	3.4	5.6
Vegetables	6.1	4.2	11.4	4.3	2.8	8.3
Fruits and nuts	10.0	5.8	21.7	10.9	5.9	24.3
Industrial permanent crops	3.8	2.7	6.9	2.7	1.9	4.9
Other crop not classified elsewhere	1.1	0.8	1.9	0.0	0.1	0.1
Total	100	100	100	100	100	100

4.3 Cost of cultivation of crops

Nationally, the total cost for crop production for both seasons are estimated at 1,924,000 Million Riels in 2009. However, there are pronounced differences between the two seasons regarding the amounts spent on cultivation. Table 4.6a. and 4.6b. show the costs by zone for wet and dry season respectively.

The cost for crop production is estimated at 1,264,000 Million Riels in the wet season and 660,000 Million Riels in the dry season. The highest total costs were for "chemical fertilizers etc." at 581,000 Million Riels, followed by "planting materials" at 352,000 Million Riels.

The average shares both wet and dry season of the cost of crop production is shown in figure 4.2.

Figure 4.2. Cost of crop production by cost item, percent

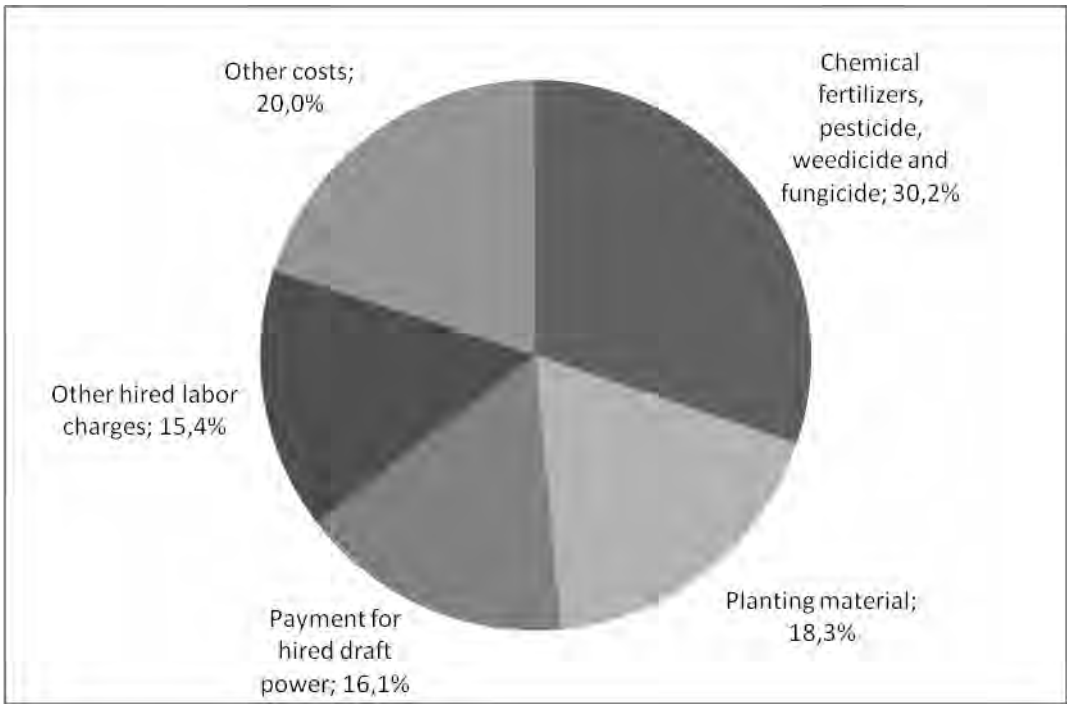


Table 4.6a. Cost of crop production in wet season by cost item and zone, 2009

Cost items	Cambodia	Phnom Penh	Plain	Tonle Sap	Coast	Plateau/ Mountain
			Million Riels			
Planting material	232,000	3,000	84,000	97,000	9,000	40,000
Chemical fertilizers, pesticide, weedicide and fungicide	355,000	1,000	182,000	118,000	30,000	24,000
Animal and plant manure	88,000	0	42,000	22,000	8,000	15,000
Electricity for the farming	1,000	0	1,000	0	0	0
Oil, gas or diesel for the farming	44,000	1,000	15,000	17,000	1,000	9,000
Storage items	32,000	0	11,000	13,000	2,000	5,000
Payment for hired draft power	215,000	1,000	87,000	81,000	14,000	32,000
Other hired labour charges	216,000	5,000	82,000	91,000	11,000	26,000
Irrigation charges	7,000	0	5,000	1,000	0	1,000
Services/technical supports from government and agencies	0	0	0	0	0	0
Transportation of input materials, equipment and products	35,000	0	10,000	14,000	2,000	8,000
Repair and maintenance of farm house, farm equipment, animal shed	12,000	0	7,000	4,000	0	1,000
Rental paid to owner for farm land, farm house, equipment etc.	27,000	1,000	9,000	10,000	1,000	7,000
Total	1,264,000	12,000	536,000	467,000	81,000	168,000
			Percent			
Planting material	18.4	20.3	15.7	20.7	11.3	23.7
Chemical fertilizers, pesticide, weedicide and fungicide	28.1	11.5	34.1	25.2	36.6	14.3
Animal and plant manure	6.9	3.6	7.8	4.8	10.5	8.7
Electricity for the farming	0.1	0.0	0.1	0.0	0.0	0.0
Oil, gas or diesel for the farming	3.5	4.1	2.9	3.7	1.8	5.4
Storage items	2.6	3.0	2.1	2.8	3.0	3.2
Payment for hired draft power	17.0	11.4	16.2	17.3	17.3	18.9
Other hired labour charges	17.1	39.1	15.3	19.5	14.2	15.8
Irrigation charges	0.6	0.0	0.9	0.2	0.5	0.5
Services/technical supports from government and agencies	0.0	0.0	0.1	0.0	0.0	0.0
Transportation of input materials, equipment and products	2.7	1.4	1.9	3.0	2.7	4.9
Repair and maintenance of farm house, farm equipment, animal shed	1.0	0.2	1.3	0.8	0.6	0.6
Rental paid to owner for farm land, farm house, equipment etc.	2.1	5.4	1.6	2.1	1.5	4.1
Total	100	100	100	100	100	100

Table 4.6b. Cost of crop production in dry season by cost item and zone, 2009

Cost items	Cambodia	Phnom Penh	Plain	Tonle Sap	Coast	Plateau/ Mountain
			Million Riels			
Planting material	119,000	0	84,000	25,000	1,000	9,000
Chemical fertilizers, pesticide, weedicide and fungicide	226,000	0	198,000	22,000	2,000	4,000
Animal and plant manure	10,000	0	7,000	2,000	1,000	1,000
Electricity for the farming	1,000	0	1,000	0	0	0
Oil, gas or diesel for the farming	51,000	0	40,000	8,000	0	3,000
Storage items	17,000	0	13,000	3,000	0	1,000
Payment for hired draft power	94,000	0	65,000	20,000	0	9,000
Other hired labour charges	81,000	0	53,000	16,000	0	11,000
Irrigation charges	29,000	0	28,000	1,000	0	0
Services/technical supports from government and agencies	0	0	0	0	0	0
Transportation of input materials, equipment and products	19,000	0	15,000	2,000	0	2,000
Repair and maintenance of farm house, farm equipment, animal shed	1,000	0	1,000	0	0	0
Rental paid to owner for farm land, farm house, equipment etc.	10,000	0	8,000	1,000	0	1,000
Total	659,000	1 ,000	513,000	99,000	5,000	42,000
			Percent			
Planting material	18.1	24.1	16.5	25.0	20.8	21.3
Chemical fertilizers, pesticide, weedicide and fungicide	34.3	17.2	38.6	22.1	37.2	10.2
Animal and plant manure	1.5	2.8	1.4	1.7	15.7	1.7
Electricity for the farming	0.1	0.0	0.1	0.1	0.0	0.0
Oil, gas or diesel for the farming	7.8	15.0	7.9	7.6	2.7	7.1
Storage items	2.5	6.5	2.5	2.7	2.3	2.9
Payment for hired draft power	14.3	6.5	12.7	19.8	7.6	21.7
Other hired labour charges	12.3	13.8	10.3	16.5	7.1	27.4
Irrigation charges	4.5	0.0	5.5	0.8	5.7	0.1
Services/technical supports from government and agencies	0.1	0.0	0.1	0.0	0.0	0.0
Transportation of input materials, equipment and products	2.9	12.1	2.8	2.5	1.0	4.4
Repair and maintenance of farm house, farm equipment, animal shed	0.1	0.7	0.1	0,2	0.0	0.0
Rental paid to owner for farm land, farm house, equipment etc.	1.6	1.3	1.6	1.1	0.0	3.2
Total	100	100	100	100	100	100

4.4 Livestock and poultry

The number of households engaged in raising livestock and poultry was estimated at almost 2,100,000 (72 percent of all households). Table 4.7. shows figures on households by zone and Table 4.8. by sex of household head and zone.

Table 4.7. Number of households raising livestock and poultry by zone, 2009. Thousand.

	Cambodia	Phnom Penh	Plain	Tonle Sap	Coast	Plateau/ Mountain
Households raising livestock and poultry	2,100	14	958	647	162	318
All households	2,939	261	1,198	89	215	376
Percent of all households	71,5	5.3	80.0	72.8	75.6	84.6

Table 4.8. Number of households raising livestock and poultry by sex of head of household and zone, 2009. Thousand.

	Cambodia		Phnom Penh		Plain		Tonle Sap		Coast		Plateau/ Mountain	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Households raising livestock and poultry	396	1,704	2	12	199	759	116	531	29	133	49	269
All households	634	2,305	66	196	282	917	180	709	44	171	63	313
% of all households	62.5	74.0	3.2	6.1	70.8	82.8	64.5	75.0	66.0	78.0	79.0	85.8

Table 4.9a. and 4.9b. show the number of livestock and poultry by type in 2004 and 2009. Note that some households raise several types. In 2009 (Table 4.9b.), the three most common types of livestock/poultry were chicken (57 percent), ducks (26 percent) and cattle (10 percent).

Table 4.9a. Number of livestock and poultry by zone, 2004

Type of livestock and poultry	Cambodia	Phnom Penh	Plain	Tonle Sap	Coastal	Plateau/ Mountain
	Number in thousand					
Cattle	2,969	8	1,197	968	243	552
Buffalos	1,720	0	260	1,322	32	105
Horses, ponies	23	0	16	5	2	0
Pigs	2,331	6	1,182	675	213	254
Sheep	9	0	4	5	0	0
Goats	46	0	36	7	2	2
Chickens	13,139	1,491	5,305	3,478	1,486	1,380
Ducks	4,661	182	2,530	667	1,020	262
Quail	37	1	25	2	5	4
Other	282	0	53	220	9	0
Total	25,216	1,688	10,608	7,349	3,012	2,559
	Percent					
Cattle	11.8	0.5	11.3	13.2	8.1	21.6
Buffalos	6.8	0.0	2.5	18.0	1.1	4.1
Horses, ponies	0.1	0.0	0.2	0.1	0.1	0.0
Pigs	9.2	0.4	11.1	9.2	7.1	9.9
Sheep	0.0	0.0	0.0	0.1	0.0	0.0
Goats	0.2	0.0	0.3	0.1	0.1	0.1
Chickens	52.1	88.3	50.0	47.3	49.3	53.9
Ducks	18.5	10.8	23.9	9.1	33.9	10.2
Quail	0.2	0.1	0.2	0.0	0.2	0.2
Other	1.1	0.0	0.5	3.0	0.3	0.0
Total	100	100	100	100	100	100

Table 4.9b. Number of livestock and poultry by zone, 2009

Type of livestock and poultry	Cambodia	Phnom Penh	Plain	Tonle Sap	Coastal	Plateau/ Mountain
	Number in thousand					
Cattle	3,768	11	1,563	1,134	302	758
Buffalos	711	0	314	236	52	109
Horses, ponies	23	0	18	2	2	1
Pigs	1,860	23	931	440	187	279
Sheep	5	0	4	0	1	0
Goats	58	0	18	3	0	37
Chickens	22,348	106	10,017	6,784	2,550	2,891
Ducks	10,149	11	5,836	2,979	989	334
Quail	2	0	1	1	0	0
Other	28	0	19	7	0	2
Total	38,952	151	18,721	11,586	4,08	4,411
	Percent					
Cattle	9.7	7.1	8.4	9.8	7.4	17.2
Buffalos	1.8	0.0	1.7	2.0	1.3	2.5
Horses, ponies	0.1	0.0	0.1	0.0	0.0	0.0
Pigs	4.8	15.3	5.0	3.8	4.6	6.3
Sheep	0.0	0.0	0.0	0.0	0.0	0.0
Goats	0.2	0.0	0.1	0.0	0.0	0.8
Chickens	57.4	70.2	53.5	58.6	62.5	65.5
Ducks	26.1	7.4	31.2	25.7	24.2	7.6
Quail	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.1	0.0	0.1	0.1	0.0	0.0
Total	100	100	100	100	100	100

The cost for raising livestock and poultry in Cambodia during 2009 was estimated at 736,000 Million Riels. Table 4.10 show that the highest cost of raising livestock and poultry was in the group "Feed for livestock - purchased", estimated at 699,000 Million Riels (95 percent) of the total cost for raising livestock l.

Table 4.10. Cost for raising of livestock and poultry by zone, 2009

Type of cost	Cambodia	Phnom Penh	Plain	Tonle Sap	Coastal	Plateau/ Mountain
	Million Riels					
Feed for livestock - purchased	699,000	9,000	413,000	152,000	51,000	73,000
Hired labour caring for livestock	5,000	1,000	3,000	1,000	0	0
Veterinary services and medicine	29,000	1,000	14,000	8,000	2,000	4,000
Service/technical support from Government/other agencies	1,000	0	0	1,000	0	0
Transport of livestock, livestock products and feed to/from market	2,000	0	1,000	0	0	0
Total	736,000	10,000	432,000	162,000	54,000	78,000
	Percent					
Feed for livestock - purchased	94.9	86.9	95.7	93.9	95.8	93.5
Hired labour caring for livestock	0.7	7.1	0.7	0.7	0.1	0.6
Veterinary services and medicine	4.0	5.9	3.3	4.9	3.8	5.6
Service/technical support from Government/other agencies	0.2	0.0	0.1	0.3	0.3	0.2
Transport of livestock, livestock products and feed to/from market	0.2	0.0	0.3	0.2	0.0	0.1
Total	100	100	100	100	100	100

The household questionnaire included information on the value of livestock and poultry products sold, consumed in the household or given away as gifts, etc. during past 12 months. In this section, the households also reported livestock/poultry currently owned and for each animal/bird an estimated sales value was collected. For each animal/poultry an imputed value for household consumption, barter, gifts, charity, etc. and value of other than meat products (milk, butter, eggs, hide and skin, manure, etc.) was estimated. This section of the questionnaire sometimes proves difficult for the households to estimate.

Table 4.11. shows the value of livestock and poultry "income" in the past 12 months. Ducks stand for over half the total value (52 percent).

Table 4.11. Value of livestock and poultry in the past 12 months by zone, 2009

Type of livestock and poultry	Cambodia	Phnom Penh	Plain	Tonle Sap	Coastal	Plateau/ Mountain
	Million Riels					
Cattle	65,000	0	29,000	17,000	9,000	9,000
Buffalos	10,000	0	6,000	4,000	1,000	0
Horses, ponies	0	0	0	0	0	0
Pigs	9,000	0	8,000	1,000	0	0
Sheep	0	0	0	0	0	0
Goats	0	0	0	0	0	0
Chicken	43,000	27,000	8,000	5,000	1,000	2,000
Ducks	137,000	0	94,000	39,000	3,000	2,000
Quail	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total	265,000	28,000	144,000	66,000	14,000	13,000
	Percent					
Cattle	24.5	0.0	20.1	25.8	64.3	69.2
Buffalos	3.8	0.0	4.2	6.1	7.1	0.0
Horses, ponies	0.0	0.0	0.0	0.0	0.0	0.0
Pigs	3.4	0.0	5.6	1.5	0.0	0.0
Sheep	0.0	0.0	0.0	0.0	0.0	0.0
Goats	0.0	0.0	0.0	0.0	0.0	0.0
Chicken	16.2	96.4	5.6	7.6	7.1	15.4
Ducks	51.7	0.0	65.3	59.1	21.4	15.4
Quail	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0
Total	100	100	100	100	100	100

4.5 Fish cultivation and fisheries

The results show a total estimated number of households participating in fish cultivation and fishing of 1,649,000 (approximately 56 percent of all households). Table 4.12. shows households by zone and Table 4.13. presents figures by sex of household head and zone.

Table 4.12. Number of households with fishing activities by zone, 2009. Thousand.

	Cambodia	Phnom Penh	Plain	Tonle Sap	Coast	Plateau/ Mountain
Households with fishing activities	1,649	3	709	539	131	267
All households	2,939	261	1,198	89	215	376
Percent of all households	56.1	1.2	59.1	60.7	60.9	72.0

Table 4.13. Number of households with fishing activities by sex of household head and zone, 2009. Thousand.

	Cambodia		Phnom Penh		Plain		Tonle Sap		Coast		Plateau/ Mountain	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Households with fishing activities	297	1,352	0	3	145	564	90	450	21	109	41	226
All house-holds	664	2,305	66	196	282	917	180	709	44	171	63	313
Percent of all house-holds	46.8	58.7	0.1	1.5	51.3	61.6	49.8	63.5	48.9	64.0	65.0	72.1

4.6 Forestry and hunting

CSES 2009 estimates that the total number of households participating in forestry and hunting activities was 2,263,000 (77 percent of all households). Table 4.14. presents households by zone and in Table 4.15. data are shown by sex of household head and zone.

Table 4.14. Number of households with forestry and hunting activities by zone, 2009. Thousand.

	Cambodia	Phnom Penh	Plain	Tonle Sap	Coast	Plateau/ Mountain
Households with forestry and hunting activities	2,263	4	1,038	714	166	341
All households	2,939	261	1,198	89	215	376
Percent of all households	77.0	1.4	86.7	80.4	77.2	90.6

Table 4.15. Number of households with forestry and hunting activities by sex of household head and zone, 2009. Thousand.

	Cambodia		Phnom Penh		Plain		Tonle Sap		Coast		Plateau/ Mountain	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Households with forestry and hunting activities	470	1,792	1	3	241	798	139	575	31	134	58	283
All house-holds	634	2,305	66	196	282	917	180	709	44	171	63	313
Percent of all households	74.2	77.8	1.6	1.3	85.5	87.0	77.5	81.1	71.6	78.7	92.0	90.3

Data on forestry and hunting activities by type of activity is shown in Table 4.16. The most common activity in 2009 is collecting firewood (approximately 43 percent) followed by "collecting root crops, fruit and vegetables" (31 percent).

Table 4.16. Number of forestry and hunting activities by type of activity and zone, 2009

	Cambodia	Phnom Penh	Plain	Tonle Sap	Coast	Plateau/ Mountain
	Number in thousand					
Sawing logs	83	0	9	37	6	31
Firewood	2,111	3	993	623	160	331
Wood for charcoal	50	0	0	35	2	7
Rattan, bamboo, palm leaves, other fibrous material	54	0	241	153	22	122
Palm juice	62	0	3	25	2	7
Root crops, fruits and vegetables	1,501	2	688	487	83	240
Herbs	232	0	74	73	14	72
Honey	79	0	21	21	2	35
Wild animals and birds	187	0	35	81	7	6
Other products	18	0	0	5	0	10
Total	4,860	6	2,097	1,540	296	920
	Percent					
Sawing logs	1.7	5.3	0.5	2.4	2.0	3.4
Firewood	43.4	57.1	47.4	40.5	53.8	36.02
Wood for charcoal	1.0	0.0	0.3	2.3	0.7	0.9
Rattan, bamboo, palm leaves, other fibrous material	11.0	0.0	11.5	10.0	7.3	13.3
Palm juice	1.3	0.0	1.3	1.7	0.6	0.8
Root crops, fruits and vegetables	30.9	37.6	32.8	31.6	28.0	26.1
Herbs	4.8	0.0	3.5	4.7	4.6	7.8
Honey	1.6	0.0	1.0	1.4	0.7	3.8
Wild animals and birds	3.9	0.0	1.7	5.3	2.2	6.9
Other products	0.4	0.0	0.2	0.3	0.1	1.1
Total	100	100	100	100	100	100

5. Education

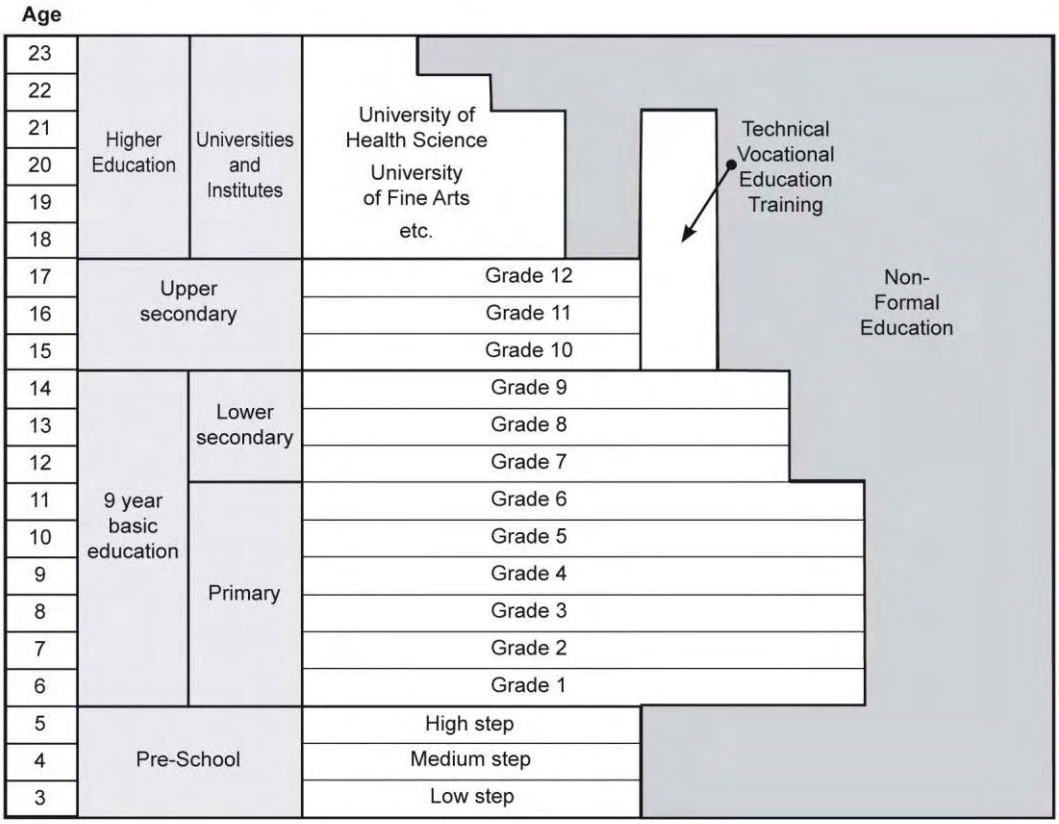
The CSES 2009 includes a module, which makes it possible to produce the indicators on education: Literacy, educational attainment, school attendance/enrolment, Public and private school, and education expenditure. Similar questions have been asked in the previous runs of the survey.

The questions about education were asked to the household head. All household members aged 3 years and over were included. This is a change since previous CSES where questions about education were asked for age 5 and over. The questionnaire is included in appendix 8.

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 and 2005, and Inter-Censual Population Survey 2004.

Figure 5.1. below shows the structure of the educational system in Cambodia.

Figure 5.1. Education system in Cambodia



5.1. 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 to write a simple message in any language in the CSES. Comparability with surveys before 2004 should be made with caution since there has been changes in the survey design and in the definition. Since CSES 2004 two questions are asked to catch these abilities. The first question is phrased "Can..[NAME].. read a simple message in any language?". The second question is phrased "Can ..[NAME]..write a simple message in any language?" In previous CSES's only one question was asked ("Can ..[NAME]..read and write a simple message in any language?").

Differences in the phrasing have an impact on the result. In the Population Census 2008 also two questions were asked. However, they have another meaning than in the CSES. The first question in the Population Census 2008 was phrased "Can the person read and write with understanding in Khmer language?". The second question was phrased "Can the person read and write with understanding in any other language? Therefore the literacy rate in the Population Census 2008 is not comparable to the literacy rate in the CSES.

General literacy

The minimum age for school admission in Cambodia 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 which is done in this report. To be able to make international comparisons, the literacy rate of the population aged 15 years and over (adult literacy) has also been estimated.

The results from the CSES 2009 show that about 73 percent of the population aged 7 years and over were literate. In Table 1 also breakdowns by geographical domains and sex are presented. The general literacy rate is highest in Phnom Penh and lowest in other rural areas.

In 2009 the literacy rate was higher for men than for women in all geographical domains. The largest differences between women and men can be seen in other urban and other rural areas with ten percentage points or more. In Phnom Penh the difference was less than ten percentage points.

Compared to CSES 2004 the literacy rate has increased for both women and men. The rates for women have increased more than for men in all geographical domains, which mean that the gap between women and men has decreased.

Table 5.1. Literacy among population 7 years and over by geographical domains and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Total	Women	Men	Total
Cambodia	60.5	74.8	67.4	66.8	79.1	72.7
Phnom Penh	86.4	95.4	90.7	89.3	96.2	92.5
Other urban	71.9	82.5	77.0	79.9	89.6	84.6
Other rural	55.6	71.1	63.0	62.0	75.7	68.6

Adult literacy

The adult literacy rate is the share of the population aged 15 years and over who can both read and write a simple message in any language. The adult literacy rate was estimated to about 74 percent for all Cambodia. The adult literacy rate is highest in Phnom Penh. More adult men than women are literate see Table 5.2. or Figure 5.2. The adult literacy rates were somewhat higher in other urban areas than other rural areas. The rates among men were higher than among women.

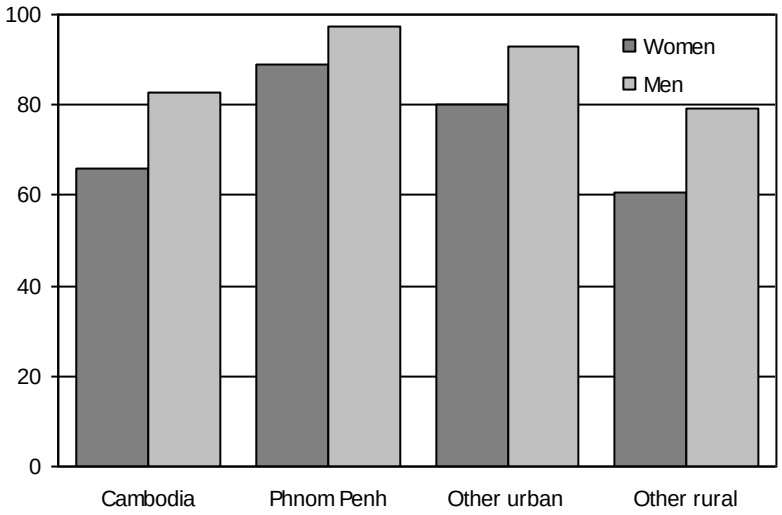
The results from CSES 2004 and 2009 show that the adult literacy rate has increased for both women and men on national level. For men in Phnom Penh where the rate was rather high in 2004 (97

percent), the rate is about the same in 2009. For women the rate has increased in all geographical domains. The literacy rate for both women and men have increased the most in other urban areas.

Table 5.2. Adult literacy by geographical domains and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Total	Women	Men	Total
Cambodia	59.9	80.3	69.4	65.9	82.7	73.9
Phnom Penh	86.6	96.8	91.3	89.0	97.2	92.7
Other urban	71.2	85.9	78.1	80.0	92.8	86.1
Other rural	54.4	77.1	65.0	60.6	79.4	69.5

Figure 5.2. Adult literacy by geographical domain and sex, 2009. Percent.



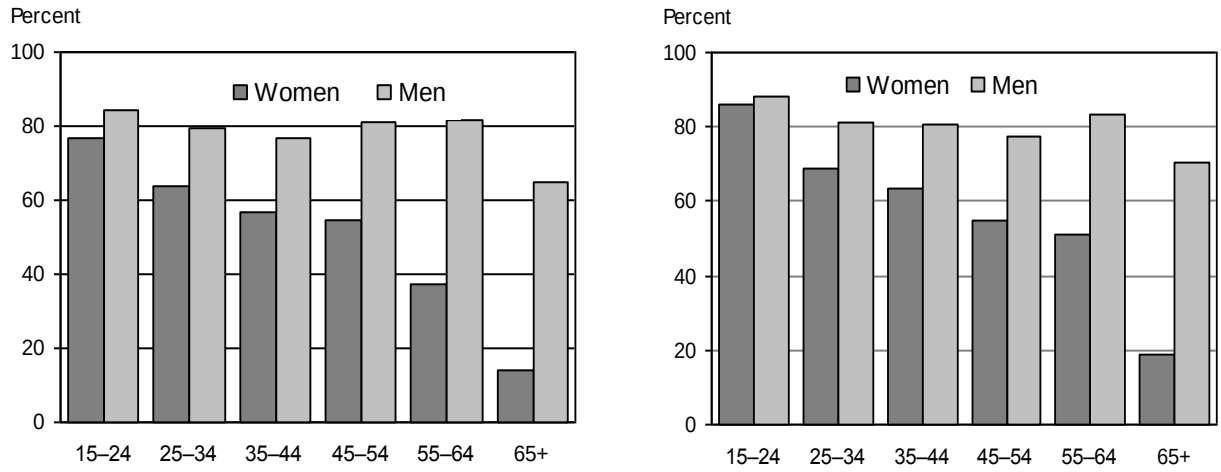
In Table 5.3. below, the adult literacy rates are presented by age groups and sex. In 2009 the adult literacy rate is highest in the youngest age groups with about 87 percent literate and lowest among the oldest, about 40 percent. There is large difference between women and men in all age groups from 25 years and over, especially in the highest age group. In the age group 15–24 years women have almost the same rate as men, which was not the case in 2004.

The adult literacy rate for women in almost all age groups has increased between CSES 2004 and 2009 and the gap between women and men has decreased in all age groups except among the oldest.

Table 5.3. Adult literacy by age group and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Total	Women	Men	Total
Total 15+	59.9	80.3	69.4	65.9	82.7	73.9
15–24	76.8	84.1	80.4	85.8	88.3	87.1
25–34	63.7	79.5	71.4	69.0	81.3	74.9
35–44	56.6	77.0	66.0	63.5	80.6	71.6
45–54	54.6	81.2	65.7	54.6	77.2	64.5
55–64	37.2	81.5	55.8	51.2	83.6	65.1
65+	14.3	64.8	35.1	18.6	70.4	40.1

Figure 5.3. Adult literacy by age group and sex, 2009. Percent.



5.2. Educational attainment

In CSES 2009 the question about the highest level of education differs from the question asked in CSES 2004. The main difference compared to 2004 is that the higher education is more specified. This change was introduced in CSES 2007 after a revision of the questionnaire. In 2004 there were several respondents with higher education among those with "other" education.

Educational attainment is published for the population 25 years and over

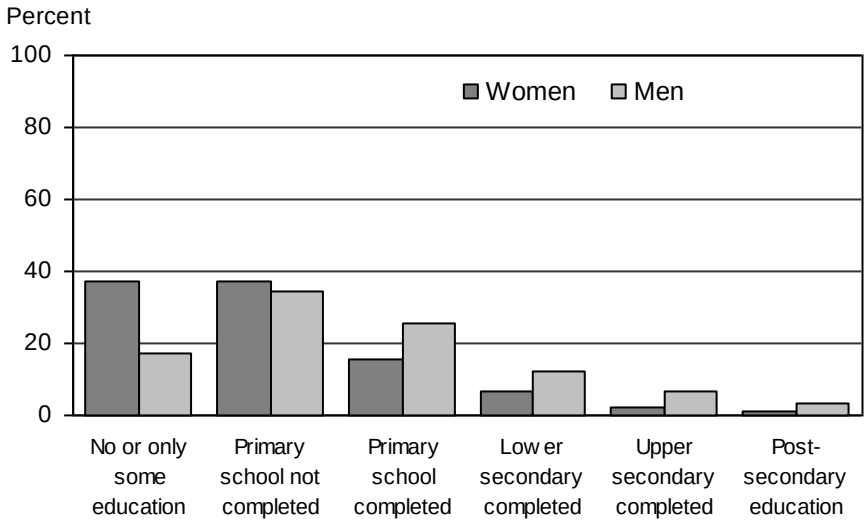
The response alternatives in CSES 2009 are aggregated to the classification of educational attainment used in the CSES 2004. In CSES 2004 the classification is based on the classification used in the Population Census 1998. The aggregated response alternatives are given in Table 5.4. The way the aggregation is done obviously influences the result on educational attainment. The classification used in the CSES is described in Section 11 where also a reference to the definition in Population Census 1998 and 2008 is given.

About 28 percent of the population 25 years and over has no or only little education. According to the CSES the share of persons who has none or only some education decreased between 2004 and 2009. That means that more people have attended school and at least completed one class in primary school. The share of women with none or only some education has decreased more than for men. However, the educational attainment for women is lower than for men. Higher shares of men than women completed secondary and post-secondary education (see Table 5.4. or Figure 5.4.).

Table 5.4. Persons 25 years and over by educational attainment and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Total	Women	Men	Total
No or only some education	43.2	19.9	32.7	37.3	17.5	28.3
Primary school not completed	36.0	34.3	35.2	37.3	34.4	36.0
Primary school completed	12.3	24.8	17.9	15.4	25.7	20.1
Lower secondary completed	5.2	11.0	7.8	6.5	12.4	9.2
Upper secondary completed	1.9	6.2	3.8	2.4	6.4	4.2
Post-secondary education	0.5	2.2	1.3	1.0	3.3	2.0
Other	0.9	1.6	1.2	0.1	0.2	0.1
Total	100	100	100	100	100	100

Figure 5.4. Persons 25 years and over by educational attainment and sex, 2009. Percent.



There are large differences in educational attainment between geographical domains, see Table 5.5. below. In rural areas the share with none or only some education is much higher than in Phnom Penh. In Phnom Penh the shares with secondary and post-secondary level completed are higher than in other rural area. In other urban areas the share with none or only some education has decreased more than in Phnom Penh and in other rural areas.

Table 5.5. Persons 25 and over by educational attainment and geographical domains, 2004 and 2009. Percent.

	2004			2009		
	Phnom Penh	Other urban	Other rural	Phnom Penh	Other urban	Other rural
None or only some education	10.9	25.3	36.9	8.6	16.4	32.8
Primary school not completed	25.0	31.6	37.2	23.1	31.8	38.4
Primary school completed	23.3	22.3	16.5	22.6	25.8	19.0
Lower secondary completed	17.1	11.4	6.0	18.6	15.0	7.1
Upper secondary completed	14.1	7.4	1.9	14.4	8.2	2.2
Post-secondary education	9.0	1.1	0.2	12.7	2.8	0.4
Other	0.7	1.9	1.3	-	0.0	0.2
Total	100	100	100	100	100	100

Almost 36 percent in the population have at least completed primary school which means that they have completed class 6 or higher classes, see Table 5.6. In total about 25 percent of the women and 48 percent of the men have completed primary school or higher levels. The shares decrease by age. Only about six percent of women 65 years or older have completed primary school or higher levels and about one third of the men (33 percent). However, as shown in section 5.1, the literacy rate for women was about 66 percent and for men 83 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 5.6. Persons 25 and over with at least completed primary education by age and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Both sexes	Women	Men	Both sexes
Total 25+	19.9	44.2	30.8	25.2	47.9	35.6
25–34	30.7	52.5	41.2	38.1	55.7	46.5
35–44	17.8	43.1	29.5	28.5	52.1	39.7
45–54	19.9	41.2	28.8	16.0	36.3	24.9
55–64	13.9	43.3	26.3	17.9	45.3	29.6
65+	3.0	24.3	11.8	5.9	32.6	17.0

5.3. School attendance (enrolment)

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 (based on data reported from schools) and school attendance (calculated from surveys or censuses) 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 this report we follow earlier reports on education in Cambodia and use the terms enrolment and attendance equivalently.

Never attended school

In CSES 2009 all persons aged 3 years and over were asked if they have ever attended school. In Table 5.7. below the result is presented for those who are 5 years and over since the results are compared with 2004.

About 20 percent of the population 5 years and over have never attended school. There are big differences between geographical domains and between sexes. Only about 7 percent in Phnom Penh have never attended school, while about 24 percent in other rural areas have never attended school. About 26 percent of women in Cambodia have never attended school compared to 15 percent of men.

Compared to 2004 the shares of those who have never attended school are somewhat lower in 2009, in particular for women. That means that more women and men have attended school some time in their lives.

Table 5.7. Persons 5 years and over never attended school by geographical domains and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Both sexes	Women	Men	Both sexes
Cambodia	30.2	17.5	24.1	25.9	15.0	20.6
Phnom Penh	10.1	2.9	6.7	9.5	3.3	6.6
Other urban	22.4	13.3	18.0	15.8	8.0	12.0
Other rural	33.8	19.8	27.1	29.4	17.3	23.5

Currently attending school

All persons aged 3 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 5.8. below, the shares of women and men aged 5–24 years who are currently attending school are presented. The share of women and men in Phnom Penh are higher than in other urban and in other rural. The share of women in Phnom Penh is higher than men in other rural.

Table 5.8. Persons currently attending school of persons 5–24 years of age by geographical domains and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Both sexes	Women	Men	Both sexes
Cambodia	52.6	59.3	56.0	52.5	57.0	54.8
Phnom Penh	61.7	73.9	67.6	58.7	72.4	65.3
Other urban	55.8	64.9	60.5	56.4	64.1	60.3
Other rural	51.1	57.0	54.1	51.3	54.6	53.0

According to CSES 2009, the estimated number of persons attending the formal school system is about 3.4 million in the population aged 5–24 years, comprising about 1.6 million girls/women and 1.8 million boys/men. Of this number about 2.2 million were in primary schools. The number of persons in higher education is low. Of all students attending school higher shares studied on higher levels in 2009 compared to 2004.

Table 5.9. Persons 5–24 years of age who are currently attending school by level and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Both sexes	Women	Men	Both sexes
Pre- primary	1.1	1.1	1.1	1.4	1.1	1.2
Primary	75.6	73.0	74.2	65.9	63.1	64.4
Lower secondary	15.2	15.9	15.6	18.9	19.3	19.1
Upper secondary	5.7	7.1	6.4	10.0	12.0	11.0
Technical/vocational	0.5	0.6	0.6	0.6	0.5	0.5
Under Graduate/Graduate	1.6	2.2	1.9	3.3	4.0	3.7
Other	0.2	0.3	0.5	-	-	-
Total	100	100	100	100	100	100

Of girls and boys attending school in different levels there are some differences between geographical domains, see Table 5.10 .below. In Phnom Penh there are more students in upper secondary level and higher education. About 17 percent of the population in Phnom Penh attended under graduate/graduate education compared to only about 2 percent in other rural areas.

Table 5.10. also shows that the share of students on higher levels have increased in all geographical domains between 2004 and 2009.

Table 5.10. Persons 5–24 years of age who are currently attending school by level and geographical domains, 2004 and 2009. Percent.

	2004			2009		
	Phnom Penh	Other urban	Other rural	Phnom Penh	Other urban	Other rural
Pre- primary	1.1	0.9	1.2	1.1	1.6	1.2
Primary	40.0	63.5	80.7	41.3	51.7	69.3
Lower secondary	23.3	20.4	13.8	19.5	21.4	18.8
Upper secondary	17.6	12.8	3.9	20.4	18.0	8.8
Technical/vocational	2.7	0.9	0.2	0.8	1.4	0.4
Under Graduate/ Graduate	13.7	1.4	0.3	17.0	5.9	1.6
Other	1.4	0.0	0.1	-	-	-
Total	100	100	100	100	100	100

In Tables 5.11.−5.13. below, the net enrolment/attendance rates at different levels are presented. The rates are calculated as the number of children of the official school age attending school divided by the number of children of official school age in the population (estimated in CSES 2009).

In 2009 the net enrolment/school attendance rate in primary school was about 81 percent (see Table 5.11.). In Phnom Penh the rate was about 90 percent and about 10 percentage points higher than in other rural areas. There were almost no differences in school attendance between girls and boys in primary school except in other urban areas in 2009.

Compared to 2004 the net enrolment/attendance rates for all Cambodia have increased as well as in all geographical domains.

Table 5.11. Net enrolment/attendance rates in primary school by geographical domains and sex, 2004 and 2009. Percent.

	2004			2009		
	Girls	Boys	Total	Girls	Boys	Total
Cambodia	75.9	77.2	76.6	82.1	80.2	81.1
Phnom Penh	87.2	90.1	88.8	89.3	89.9	89.6
Other urban	80.5	80.7	80.6	87.7	81.3	84.5
Other rural	74.5	75.8	75.2	80.9	79.2	80.1

Table 5.12. shows that the net enrolment/attendance rates in lower secondary school vary much more than for primary school both by geographical domains and by sex. In Phnom Penh more girls and boys, aged 12−14 years, continue into lower secondary school compared to children in other urban and other rural areas. However, the share of children in other rural areas has increased to more than double from 2004 until 2009. Also in the other urban areas the net enrolment has increased a great deal by almost 20 percentage points.

Table 5.12. Net enrolment/attendance rates in lower secondary school by geographical domain and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Both sexes	Women	Men	Both sexes
Cambodia	17.5	16.3	16.9	33.1	30.0	31.5
Phnom Penh	57.2	51.8	54.4	66.7	55.9	61.0
Other urban	28.5	26.2	27.3	43.4	45.8	44.7
Other rural	12.5	11.6	12.1	29.1	25.7	27.3

Table 5.13. shows that the net enrolment/attendance rates in upper secondary school differ significantly between Phnom Penh and other areas. About 45 percent were enrolled/attending upper secondary school in Phnom Penh compared to about 13 percent in other rural. In other urban areas less than one out of three (about 32 percent) studied in upper secondary school among those who are 15–17 years.

There are only small differences between women and men. Between 2004 and 2009 the rates have increased in all geographical domains.

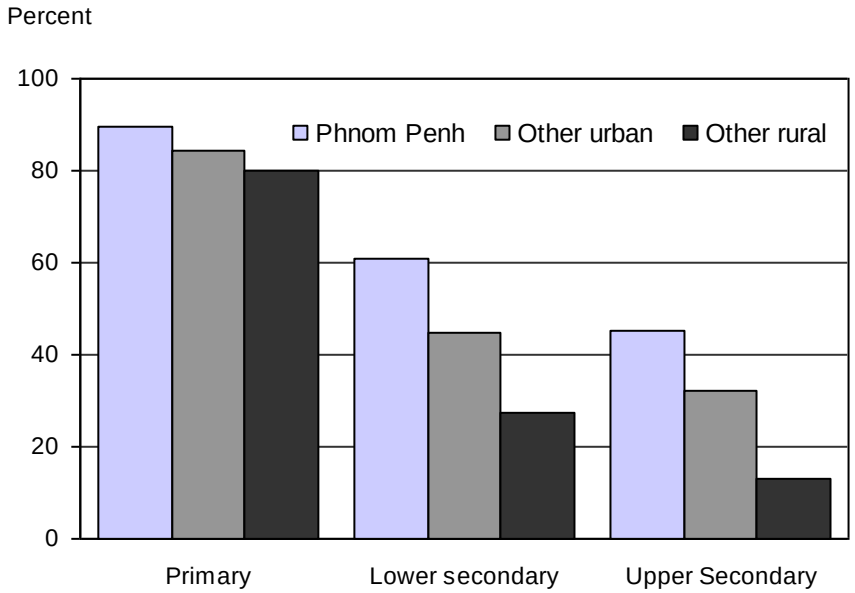
In 2009 the rates in other rural areas are almost three times as high as in 2004, although from a very low level.

Table 5.13. Net enrolment/attendance rates in upper secondary school by geographical domains and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Both sexes	Women	Men	Both sexes
Cambodia	9.7	9.9	9.8	17.4	18.3	17.9
Phnom Penh	37.1	37.5	37.3	43.9	46.9	45.4
Other urban	20.3	21.6	21.0	34.2	30.3	32.1
Other rural	4.1	5.3	4.7	12.1	13.8	13.0

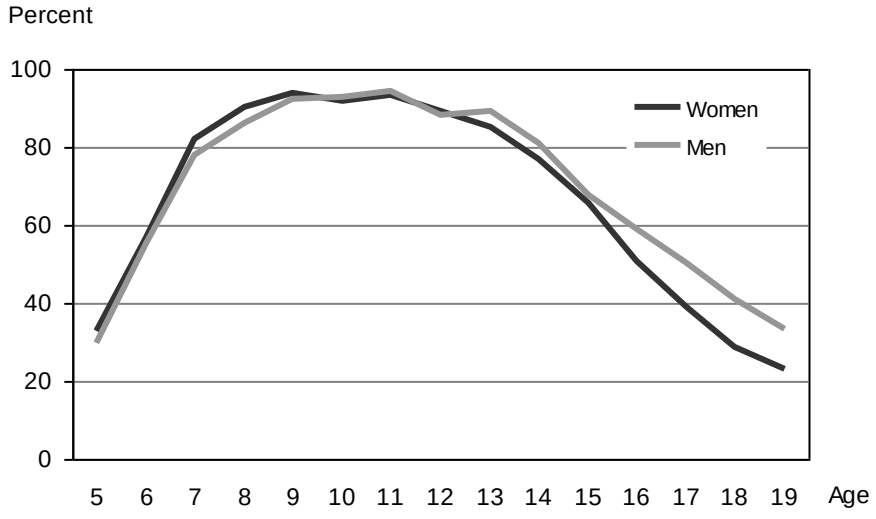
The information from Tables 5.11.–5.13. about the total net enrolment/attendance rates in different levels by geographical domains is also summarized in Figure 5.5 below for a quick overview. The net enrolment/school attendance in primary school is 80 percent or above in all geographical domains. In Phnom Penh it is much more common to continue to secondary school compared to other rural areas.

Figure 5.5. Net enrolment/attendance rates for primary, lower secondary and upper secondary level by geographical domains, 2009. Percent.



The net enrolment/attendance rates increase until the age of 9 and 11, see Figure 5.6. 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 girl's enrolment rates drop and are lower than the boys.

Figure 5.6. Net enrolment/attendance rates by age and sex, 2004. Percent.



Public and private school

Only about 5 percent of persons (aged 5–24) attending schools study at private schools see Table 5.14. There are large differences by age. Among students, aged 20–24, more than 40 percent attends private schools, which indicates that most private educational institutions are in higher education.

The share of students aged 20–24 years who studied in private schools increased between 2004 and 2009.

Table 5.14. Attending public and private schools among persons 5–24 years of age who are currently attending school by age group, 2004 and 2009. Percent.

	2004		2009	
Age group	Public school	Private school	Public school	Private school
5–24	96.6	3.4	95.4	4.6
5–9	97.9	2.1	97.6	2.4
10–14	99.0	1.0	98.8	1.2
15–19	95.8	4.2	94.9	5.1
20–24	64.0	36.0	57.1	42.9

Table 5.15. below shows women and men and the shares who are attending public and private schools respectively. As can be seen in Tables 16 there are no differences between women and men.

Table 5.15. Attending public and private schools among persons 5–24 years of age who are currently attending school by age group, 2004 and 2009. Percent.

	2004		2009	
Age group	Public school	Private school	Public school	Private school
Women	96.6	3.4	95.7	4.3
Men	95.9	4.1	95.2	4.8

Private lessons

About 24 percent of the persons (aged 5–24) attending school take private lessons after school, see Table 5.16. There are large differences by age, but the gender differences are small.

Table 5.16. Persons 5–24 years of age who are taking private lessons after school by age and sex, 2004 and 2009. Percent.

	2004			2009		
	Women	Men	Both sexes	Women	Men	Both sexes
5–24	11.3	12.9	12.1	14.3	15.7	15.0
5–9	6.0	6.2	6.1	9.7	8.5	9.1
10–14	15.9	16.2	16.0	21.6	20.4	21.0
15–19	17.9	19.3	18.7	20.6	23.4	22.1
20–24	3.6	8.3	5.9	4.6	8.7	6.7

Reasons for not attending school

The question on reasons for not attending school was asked to persons aged 3–17 who are not attending school. Table 5.17. below shows the reasons for those who are 6–17 years. The minimum age for admission to school is 6 years. About 18 percent responded “too young“ and even if the official school age start from 6 years many children don't start school at that age. More women than men did not attend school because they must contribute to the household income or help with household chores. More men than women don't want to go to school.

Table 5.17. Reasons for not attending school among persons 6–17 years of age who are not attending school by sex, 2009. Percent.

	Women	Men	Both sexes
Don't want to	11.3	17.5	14.4
Did not do well in school	11.5	13.2	12.4
No suitable school available/school is too far	4.8	4.9	4.8
No teacher/Supplies	1.2	2.0	1.6
High cost of schooling	0.2	0.1	0.1
Must contribute to household income	18.6	13.9	16.2
Must help with household chores	13.3	8.1	10.7
Too poor	15.9	15.9	15.9
Due to disability	3.0	3.2	3.1
Due to long term illness (over 3 months)	0.9	1.0	1.0
Too young	17.4	18.9	18.2
Other	1.8	1.4	1.6
Total	100	100	100

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

5.4. 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 332.788 Riels per school year, see Table 5.18. There are large differences by level. In primary schools, which have the highest share of students, the cost is about 109,060 Riels in average. For education above secondary school, the cost is between 2.0 and 2.9 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 5.18. Average annual expenses by level, 2009.

	Riels
Pre- primary	70,000
Primary	107,000
Lower secondary	277,000
Upper secondary	659,000
Technical/vocational	2,007,000
Under Graduate/ Graduate	2,754,000
Total	324,000

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 5.19. 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 5.19. Average annual expenses by geographical domains, 2009

	Riels
Phnom Penh	1,272,000
Other urban	493,500
Other rural	166,000

The average annual expenses for men are somewhat higher than for women see Table 5.20.

Table 5.20. Average annual expenses by sex, 2009

	Riels
Women	303,000
Men	341,000

6. Labour Force

The special demographic phenomena that Cambodia experienced in the seventies and in the eighties give Cambodia a unique labour market in the 2000s. Between the population census in 1998 and 2008 the population increased from 11.4 million to 13.4 million, an average annual increase of 1.5 percent[8].

According to the Population Census 2008 the dependency ratio was 61 percent. The dependency ratio is defined as the number of children (0–14 years) and elderly (65 and over) divided by the number of people aged 15–64 years, i.e. the dependency ratio is a ratio between those typically not in the labour force (the dependent part) and those typically in the labour force.

Since 2004 a recurrently Cambodia Socio-Economic Survey has been produced by NIS including statistics concerning the labour market. The CSES has been produced 2004, 2007, 2008 and 2009. Every fifth year the CSES is conducted with a large sample, approximately 12 000 households. This relates to CSES 2004 and 2009.

Cambodia has a very young population. In 2009 almost one third (32 percent) of the population was below 15 years according to CSES data. This is a slight decrease compared with the situation in 2004 when approximately 36 percent of the population were below 15 years.

According to the CSES the working age population within the age group 15–64 years increased with almost 1.3 million persons from 2004 until 2009. An annual average of more than three percent. The increase of the working age population has resulted in a decreasing dependency ratio. It has decreased from 67 percent 2004 to 58 percent 2009.

In this report results on labour force participation (economically active) are presented for the years 2004 and 2009 respectively. The labour force consists of those with employment and those who are unemployed (without a job, seeking and available for work). In CSES 2009 the population 15–64 years is adopted as the population of working age since international comparison often focus on this age group. Earlier CSESs has focused on the age 10 years and over. Being able to compare 2009 CSES data with 2004 CSES data the CSES 2004 has been recompiled according to the age group 15–64.

Results are compared not only for Cambodia as a total but also for three geographical domains; Phnom Penh, Other urban and Other rural broken down by gender and age groups.

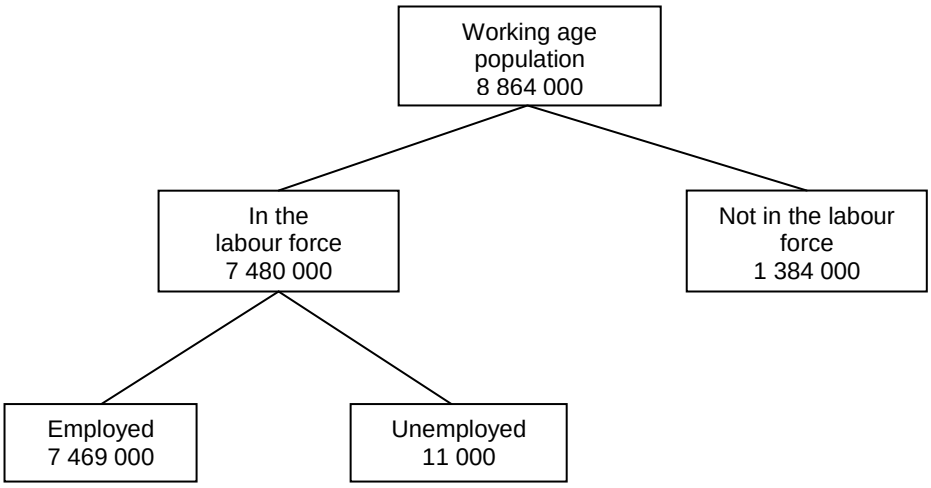
Results on the economically active population based on the Cambodian Population Census 2008 were released in September 2009. The results in this report are different from the results presented in the census report due to different concepts for measuring economic activity (see section 6.1. below).

[8] National Institute of Statistics (2009). General Population Census of Cambodia 2008, National Report on Final Census Results, August, 2009.

6.1. Definitions

Figure 6.1. below shows the relation between the working age population, in the labour force (economically active) and not in the labour force (economically inactive).

Figure 6.1. The labour force in relation to the working age population 15–64 years, 2009.



Working age population

In CSES 2009 the *working age population* is defined as all persons in the age of 15–64 years.

Economically active population

The *economically active population* comprises all persons who furnish the supply of labour for the production of economic goods and services as defined by the United Nations systems of national accounts and balances during a specified time-reference period. According to these systems the production of economic goods and services includes all production and processing of primary products whether for the market, for barter or for own consumption, the production of all other goods and services for the market and, in the case of households which produce such goods and services for the market, the corresponding production for own consumption.

The international manual[9]for labour statistics uses two concepts of the economically active population.

1) The *usually active population* measured in relation to a long reference period, such as one year.

2) The *currently active population* or equivalently the **"**labour force", measured in relation to a short reference period of one week or one day.

In the CSESs the concept "currently active population" is used with reference period "the past seven days". In the recently published results from the Population Census 2008[10] the concept "usually active population" with reference period "the last 12 months" is used.

Economically inactive population

The *economically inactive population* comprises all persons in the working age population who were not **"**economically active", as defined above.

The persons not in the labour force, or equivalently, *population not currently active*, comprises all persons who neither were employed nor unemployed during the brief reference period and hence not currently active because

[9] International Labour Office (1990). Surveys of economically active population, employment, unemployment and underemployment. An ILO manual on concepts and methods. ILO, Geneva, 1990. ISBN 92-2-106516-2

[10] National Institute of Statistics (2009). General Population Census of Cambodia 2008, National Report on Final Census Results, August, 2009.

of attendance at educational institutions, engagement in household duties, retirement or old age, or other reasons such as infirmity or disablement, which may be specified.

The labour force (the currently active population)

The labour force (i.e. the currently active population) comprises all persons who are *employed* or *unemployed*.

Employed

All persons who worked at least one hour during the reference period, the past seven days, or had a job/economic activity from which they were temporary absent are *employed*. Unpaid family workers are included in employed.

Unemployed

According to the international definition[11] the unemployed comprises all persons who during the reference period, the past seven days, were without work, were currently available for work and were actively seeking work. All three criteria must be fulfilled simultaneously.

Not in the labour force (the currently inactive population)

People belonging not in the labour force (i.e. the currently inactive population) comprise all persons who are neither *employed* nor *unemployed,* i.e. do not belong to the labour force. (For example a full time student, homemakers, retired persons etc.)

Labour force participation rate

The *labour force participation rate* is defined as the labour force as a percentage of the working age population in the same age group.

Employment rate

The *employment rate* is defined as the share of the employed population in relation to the working age population.

Unemployment rate

The *unemployment rate* is defined as the share of the unemployed population in relation to the labour force.

Occupation

Occupation refers to the kind of work done during the reference period, the last seven days. Information on occupation provides a description of a person's job. To classify this information, the International Standard Classification of Occupations, ISCO-88[12], has been used.

Industry

The International Standard Industrial Classification of All Economic Activities, ISIC Rev.4.0, was used in the 2009 survey. The International Standard Industrial Classification of All Economic Activities, ISIC rev. 4.0 is

[11] International Labour Office (1990). Surveys of economically active population, employment, unemployment and underemployment. An ILO manual on concepts and methods. ILO, Geneva, 1990. ISBN 92-2-106516-2

[12] http://www.ilo.org/global/What_we_do/Statistics/classifications/lang--en/index.htm

changed considerably compared to the former ISIC rev. 3.1. ISIC now comprises 21 sections, which are then further subdivided into a total of 88 divisions, 238 groups and 419 classes. The added detail has increased considerably the number of these categories compared with ISIC, Rev.3.1. The reason for most of these changes, however, can be roughly divided into three categories:

a) the introduction of new concepts at higher levels (e.g., "information and communication" or "waste management and remediation activities")
b) necessary changes to regroup activities that are residuals of the previous type of changes
c) smaller adjustments and clarifications of concepts at lower levels, typically driven by efforts to enhance comparability.

All changes and adjustments make comparability between the two classification versions impossible even though headings and sections seem to be alike.[13]

Industry refers to the kind of economic activity of the workplace or enterprise where a person worked during the reference period, the last seven days.

The main industries have been grouped into three sectors for which results are presented:

- Agricultural sector (section A in ISIC, Rev.4) (Primary);
  – Agriculture, forestry and fishing
- Industrial sector (sections B–F in ISIC, Rev.4) (Secondary) ;
  – Mining and quarrying,
  – Manufacturing,
  – Electricity, gas, steam and air conditioning supply,
  – Water supply; sewerage, waste management and remediation activities,
  – Construction
- Service sector (sections G–U in ISIC, Rev.4) (Tertiary) ,
  – Wholesale and retail trade; repair of motor vehicles etc.,
  – Transportation and storage,
  – Accommodation and food service activities,
  – Information and communication,
  – Financial and insurance activities,
  – Real estate activities,
  – Professional, scientific and technical activities,
  – Administrative and support service activities,
  – Public administration and defence; compulsory social security,
  – Education,
  – Human health and social work activities,
  – Arts, entertainment and recreation,
  – Other service activities,
  – Activities of households as employers,
  – Activities of extraterritorial organizations and bodies.

Status in employment

Status in employment refers to the status of an economically active person with respect to his or her employment. That is, whether he or she is an employer, own-account worker, employee, unpaid family worker or other.

[13] For more detailed information please look into International Standard Industrial Classification of All Economic Activities Revision 4, Statistical papers, ST/ESA/STAT/SER.M/4/Rev.4,UNITED NATIONS PUBLICATION, ISBN: 978-92-1-161518-0, United Nations New York, 2008

Main and secondary occupation

Two occupations can be reported for the reference period in the CSES, the main occupation and the secondary occupation. In this report occupation, industrial sector and employment status are mainly based on the main occupation.

Highest level of education

The respondents were asked the following question: "What is the highest level of education successfully completed?"

The response alternatives were aggregated to the classification of educational attainment used in the 2008 Population Census, i.e.

- 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

6.2. Labour force (currently active population)

In Table 6.1. below, the labour force participation rate, i.e. the labour force in relation to the working age population (15–64 years) is presented. The table also shows the employment rate and unemployment rate. Employment rate is the share of the employed in relation to the working age population and unemployment rate is the unemployed in relation to the labour force.

Between 2004 and 2009 the population in Cambodia has increased with 1.3 million or 10.3 percent. During the same period the working age population increased almost as much as the population, from 7.6 million to 8.9 million or 16.8 percent. Annual average increase by 3.2 percent. The majority of the increase took place in other rural areas with also increase more rapidly (18 percent) than urban areas, Phnom Penh included (10.4 percent and 15.2 percent respectively).

Contrary the rapid increase the working age population the labour force participation rate growth fairly slowly, by 2.7 percent for Cambodia. In Phnom Penh the labour force participation rate was unchanged. In other urban the labour force participation rate fell by 1.7 percent and other rural areas it raised by 3.5 percent.

Women in Phnom Penh as well as other urban areas have decreased their labour participation since 2004. In all geographical domains the labour force participation rate has increased as a whole. Also for men as a whole there was an increase between the years.

The employment rate has been increased in Cambodia since 2004. In all geographical domains, the employment for men increased with the highest rate in Phnom Penh. Women also increased in all geographical domains except in other urban areas where it in contrary decreased.

Table 6.1. Population and Labour Force, 15–64 years, by sex and geographical domain, 2004 and 2009. Percent

	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Total population	12,657,000	1,209,000	1,393,000	10,056,000	13,967,000	1,383,000	1,428,000	11,156,000
Total working age population	7,589,000	869,000	866,000	5,854,000	8,864,000	1,002,000	955,000	6,907,000
Labour force	6,235,000	596,000	680,000	4,959,000	7,480,000	688,000	737,000	6,055,000
Labour force participation rate								
Both Sexes	82.2	68.6	78.5	84.7	84.4	68.7	77.2	87.7
Women	77.5	63.0	75.3	80.0	80.4	61.5	72.7	84.3
Men	87.4	75.1	82.1	90.1	88.8	77.2	82.1	91.3
Employment rate								
Both Sexes	81.3	65.9	77.3	84.2	84.3	68.5	77.0	87.6
Women	76.6	59.9	74.1	79.5	80.3	61.4	72.6	84.2
Men	86.6	72.9	80.8	89.5	88.6	76.9	81.7	91.2
Unemployment rate								
Both Sexes	1.0	3.9	1.6	0.6	0.1	0.3	0.3	0.1
Women	1.1	4.9	1.6	0.6	0.1	0.2	0.1	0.1
Men	1.0	2.9	1.6	0.6	0.2	0.3	0.4	0.1

For international comparison the labour force participation rate is presented also for the age group 15–64 years. The labour force participation rates in the youngest and the oldest age groups are lower than in other age groups both in 2004 and 2009.

The Cambodia labour force participation rate age 15–64 has increased between 2004 and 2009. The labour force participation rate for women has increased even more than for men, except in the youngest age group where the labour force participation rate has decreased for both women and men.

Table 6.2. Labour force participation rate by age group and sex, 2004 and 2009. Percent

	2004			2009		
Age group	Women	Men	Both sexes	Women	Men	Both sexes
Total 15–64	77.5	87.4	82.2	80.4	88.8	84.4
15–19	71.9	71.7	71.8	69.8	70.4	70.1
20–24	79.5	86.4	82.8	79.4	86.6	82.9
25–34	80.8	95.0	87.7	84.3	96.4	90.1
35–44	82.5	96.0	88.7	87.1	97.7	92.1
45–54	79.5	93.5	85.3	85.1	95.9	89.9
55–64	63.4	83.2	71.7	71.3	86.1	77.6
Of which 15–24	75.5	78.4	76.9	74.4	77.7	76.1

The labour force participation rate were in Cambodia higher for men than women in all age groups except in the youngest where no significant difference in labour force participation rate was noticed (Figure 6.2a. and 6.2b.). This pattern of differences in labour participation remained 2009 comparing with 2004 but the differences have declined in the working age groups 25 years and over but remained unchanged among the youngest age groups.

Figure 6.2a. Labour force participation rate (15–64 years) by age group and sex, 2004. Percent

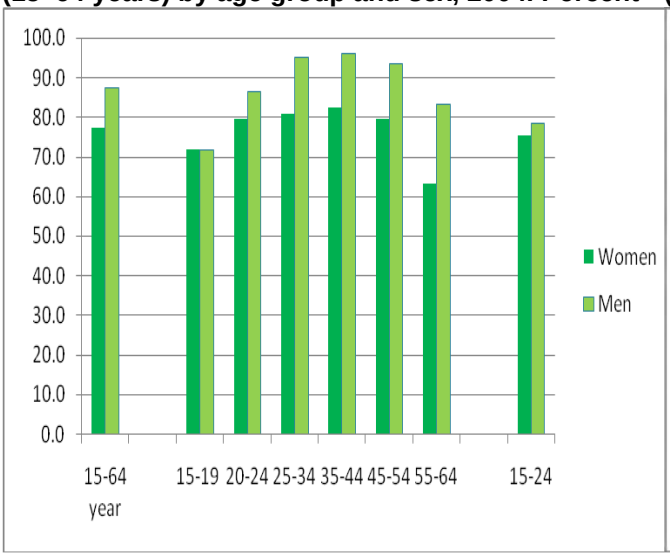
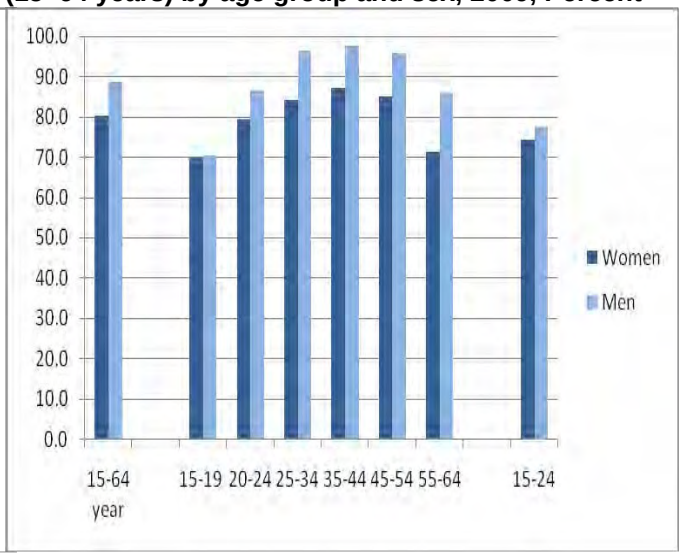


Figure 6.2b. Labour force participation rate (15–64 years) by age group and sex, 2009, Percent



The labour force participation differs between regions in Cambodia. The labour force participation rate is indicated by geographical domain in Table 6.3. In 2009 the labour force participation rate for the working age population 15–64 years have changed in some geographical domains compared with the situation in 2004. In Phnom Penh and in other urban areas the labour force participation rate has decreased contrary to other rural areas where the labour force participation rate increased.

The labour force participation in 2009 in the youngest age groups (15–24 years) has decreased remarkably in Phnom Penh and other urban areas compared to 2004. The labour force participation rate in other rural areas increased with more than 2 percentage points 2009 in relation to 2004.

The labour force participation of old age group 55–64 years has increased notably in Phnom Penh and other rural areas but decreased in other urban areas.

Table 6.3. Labour force participation rate (15–64 year), by age group and geographical domain, 2004 and 2009. Percent

	2004			2009		
Age group	Phnom Penh	Other urban	Other rural	Phnom Penh	Other urban	Other rural
Total 15–64	68.6	78.5	80.0	68.7	77.2	87.7
15–19	38.1	58.4	77.8	34.3	53.3	76.4
20–24	69.4	81.4	80.4	63.5	73.4	87.3
25–34	83.3	85.1	82.0	81.0	85.3	92.2
35–44	83.6	90.8	83.4	83.8	89.5	93.7
45–54	79.1	84.4	82.1	77.7	88.1	91.9
55–64	49.0	73.2	67.7	58.5	70.3	81.8
Of which 15–24	55.0	68.4	79.0	50.0	62.6	81.4

In Table 6.4. the labour force participation rates are presented by sex and geographical domain for the years 2004 and 2009. Compared to 2004 the 2009 working age population (15–64 years) engaged in the labour force has decreased for women in Phnom Penh as well as in other urban areas. In the mean time the labour force participation for men increased in Phnom Penh but remained unchanged in other urban areas. In other rural areas the labour force participation has increased for women as well as for men.

In relation to 2004 it is indicated that the 2009 labour force participation for the youngest age groups (15–24 year) for both sexes has decreased dramatically in other urban areas and Phnom Penh. In other rural areas women and men in the age group 15–19 years have also decreased their labour force participation, whereas in the age group 20–24 years there was an increase.

The labour force involvement by the oldest (55–64 year) has increased noticeably in Phnom Penh for both women and men. For women it was an increase also in other rural areas. In contrary the labour force participation in other urban areas declined for both women and men. It should be noted that the labour force participation in other rural areas has increased for both women and men in the ages between 20–54.

Table 6.4. Labour force participation rate (15–64 year), by age, geographical domain and sex 2004 and 2009. Percent

Age group	2004						2009					
	Phnom Penh		Other urban		Other rural		Phnom Penh		Other urban		Other rural	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Total 15–64	63.0	75.1	75.3	82.1	80.0	90.1	61.5	77.2	72.7	82.1	84.3	91.3
15–19	41.5	34.1	62.5	54.6	77.8	78.9	40.6	27.2	57.1	49.8	75.3	77.4
20–24	73.1	65.3	81.5	81.3	80.4	90.8	64.1	62.8	70.4	76.9	83.5	91.1
25–34	75.3	91.9	78.2	92.5	82.0	95.8	71.0	93.1	79.3	92.2	87.3	97.4
35–44	72.4	96.7	85.0	96.9	83.4	95.8	71.6	97.3	80.9	98.3	90.0	97.7
45–54	65.9	95.1	77.0	94.9	82.1	93.0	63.0	96.0	80.6	96.6	88.8	95.8
55–64	35.2	67.1	63.3	86.0	67.7	85.3	44.7	75.4	61.6	82.1	76.8	88.5
of which 15–24	58.2	51.4	71.4	65.3	79.0	84.2	53.5	45.8	63.6	61.6	79.1	83.5

6.3. Education of the labour force

The working age population (15–64 years) engaged in the labour force by age and level of education is presented in Table 6.5a. and 6.5b. below. In general 84 percent or 5,255,000 persons with primary schooling (some education and primary school not completed and primary school completed) participated in the total labour force. According to educational statistics more young people attain school, which over time decreases the share of the Cambodian population engaged in the labour force with no or only some education as they enter the labour force.

The share in labour force participation in ages 15–64 years distributed by highest level of education accomplished has declined for persons with none or only some education and primary school not completed.

The share of the population engaged in the labour force with highest level of education in primary school completed, lower secondary completed, upper secondary completed and post-secondary education accomplished has increased 2009 compared with 2004. The same situation is also indicated in the youngest age group 15–24 years with 29 percent (2004) to 36 percent (2009) of primary school completed and 11 percent (2004) to 17 percent (2009) of lower secondary completed.

It should be noted that in those levels of education in primary school completed, lower secondary completed and Post-secondary education, the labour force participation has increased among age group 15–19 years to 35–44 years only.

Table 6.5a. Labour force participation rate (15–64 year), by age and level of education, 2004. Percent

Age Group	None or only some education	Primary school not completed	Primary school completed	Lower secondary completed	Upper secondary completed	Post-secondary education	Other/ un-known	Total
Labour force	1,478,000	2,330,000	1,447,000	579,000	271,000	91,000	40,000	6,235,000
Total 15– 64	23.7	37.4	23.2	9.3	4.4	1.5	0.6	100
15–19	14.0	41.6	33.6	9.4	1.3	0.1	0.1	100
20–24	18.4	35.1	24.6	12.0	7.1	2.5	0.3	100
25–34	22.3	34.9	24.5	9.1	6.7	2.2	0.4	100
35–44	28.7	39.6	18.9	7.3	3.4	1.4	0.7	100
45–54	30.1	38.9	15.8	9.5	3.2	1.2	1.4	100
55– 64	38.6	30.7	16.9	8.3	3.0	0.4	2.0	100
of which 15–24	16.2	38.3	29.1	10.7	4.2	1.3	0.1	100

Table 6.5b. Labour force participation rate (15–64 year), by age and level of education, 2009. Percent

Age Group	None or only some education	Primary school not completed	Primary school completed	Lower secondary completed	Upper secondary completed	Post-secondary education	Other/ un-known	Total
Labour force	1,513,000	2,623,000	1,950,000	890,000	343,000	154,000	7,000	7,480,000
Total 15–64	20.2	35.1	26.1	11.9	4.6	2.1	0.1	100
15–19	9.4	31.3	40.9	17.0	1.2	0.3	0.0	100
20–24	12.7	29.6	31.1	16.4	7.4	2.9	0.0	100
25–34	19.1	34.0	25.3	11.5	6.5	3.5	0.0	100
35–44	23.2	36.2	22.9	10.1	5.2	2.2	0.1	100
45–54	31.1	43.7	14.9	7.0	2.1	1.0	0.2	100
55–64	31.9	37.4	18.7	8.0	2.8	1.0	0.2	100
of which 15–24	11.0	30.4	35.9	16.7	4.3	1.6	0.0	100

Table 6.6a. and 6.6b. present the labour force participation rate by age, highest level of education and sex for 2004 and 2009. The tables also show that the working age population (15–64 years) with none or only some education and primary school not completed engaged in the labour force were larger for women than men both 2004 and 2009.

In the youngest age groups 15–24 the same pattern with decreased labour force participation rate for persons with none or only some education and primary school not completed level of education are shown. In 2009 the labour force participation by level of education in none or only some education and primary school not completed have decreased for women as well as for men.

The labour force of working age population (15–64 years) with higher level of education from Primary school completed to Post-secondary education the share of women were less than men in both 2004 and 2009. However, the labour force participation for those in the same high level of education have increased for women as well as for men in term of comparison between the years.

It is evident among almost age groups of 15–19 years to 35–44 years that there have been changes towards higher shares of labour force participation for persons in lower secondary, upper secondary and post-secondary education level of education completed in 2009 compared to 2004.

The tables indicate the comparison of labour force participation in young age group (15–24 years), where there also has been a remarkable increase for both women and men, mainly in upper secondary level of education completed.

Table 6.6a. Labour force participation rate (15–64 year), by age, level of education and sex, 2004. Percent

Age Group	None or only some education		Primary school not completed		Primary school completed		Lower secondary completed		Upper secondary completed		Post-secondary education		Other/Not known	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Total 15–64	30.9	16.5	39.5	35.2	18.6	27.8	6.9	11.7	2.7	6.0	0.8	2.1	0.5	0.8
15–19	16.0	12.0	42.3	40.8	31.5	35.6	8.8	9.9	1.2	1.3	0.1	0.2	0.1	0.0
20–24	21.8	15.1	37.7	32.6	23.3	25.8	9.2	14.7	5.8	8.4	2.0	3.0	0.1	0.4
25–34	27.7	17.4	40.4	29.9	20.0	28.5	6.5	11.4	3.9	9.1	1.0	3.3	0.5	0.3
35–44	37.5	19.9	43.4	35.7	12.0	25.9	4.6	9.9	1.1	5.7	0.8	2.0	0.6	0.9
45–54	40.8	17.4	38.5	39.4	10.4	22.2	6.6	12.9	2.1	4.4	0.5	2.0	1.1	1.7
55–64	59.1	17.2	25.8	35.7	7.6	26.7	4.6	12.3	1.2	4.8	-	0.9	1.7	2.5
Of which														
15–24	18.9	13.5	40.0	36.7	27.4	30.7	9.0	12.3	3.5	4.8	1.0	1.6	0.0	0.0

Table 6.6b. Labour force participation rate (15–64 year), by age, level of education and sex, 2009. Percent

Age Group	None or only some education		Primary school not completed		Primary school completed		Lower secondary completed		Upper secondary completed		Post-secondary education		Other/Not known	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Total 15–64	26.1	14.4	37.6	32.5	22.9	29.2	9.1	14.7	2.9	6.2	1.3	2.9	0.1	0.1
15–19	9.7	9.1	30.2	32.2	41.7	40.2	16.7	17.3	1.3	1.1	0.4	0.2	-	0.0
20–24	13.7	11.8	32.8	26.7	32.0	30.2	12.5	20.0	5.9	8.7	3.1	2.7	0.1	0.0
25–34	24.0	14.4	38.2	30.0	23.0	27.6	8.6	14.3	4.1	8.7	2.1	4.9	-	0.0
35–44	30.2	16.1	41.3	31.2	18.0	27.9	7.0	13.2	2.7	7.7	0.7	3.7	0.1	0.1
45–54	40.7	20.2	44.0	43.2	9.3	21.2	4.4	10.1	1.1	3.2	0.3	1.8	0.2	0.3
55–64	46.5	15.7	36.9	38.1	10.6	27.7	4.7	11.6	1.0	4.8	0.2	1.8	0.1	0.4
Of which														
15–24	11.7	10.4	31.5	29.4	36.8	35.2	14.5	18.7	3.6	4.9	1.8	1.4	0.0	0.0

6.3. Employment status

In CSES2009[14] persons who currently worked the past seven days in contribution for their own household, that is operating her or his own enterprise (e.g. farmers cultivating their own land, small shop keeper or small restaurants) without payment or income of any kind are classified as own account worker or self-employed. The reclassification mainly affects women.

Table 6.7. shows the employed population (15–64 years) by employment status. The employment status is in the tables based on main occupation. The total employed population in working age (15–64 years) has increased with approximately 1,298,000 persons or 17 percent 2009 compared to 2004. Between the two years (2004 and 2009), the share of employed women as well as men increased almost equally.

The total employed population as paid employee increased from 24 percent in 2004 to 27 percent in 2009. It may be related to extension/increased demand for labour in garment factory and other service sector. The share of paid employed women increased slightly higher than for men.

Concerning the new classification in CSES 2009 of own account worker/self-employed, the share of women in this employment status has increased quite greatly in 2004 (34 percent) compared to 2009 (52 percent). Contrary to the share of main occupation for men classified as own account worker/self-employed, which was quite unchanged.

The share of persons classified as unpaid family worker is also affected by the changed definition in 2009. The shares have been decreased rapidly, especially in relation to the share of women which has more than halved compared to 2004.

Table 6.7. Employment status, main occupation (15–64 year), by sex, 2004 and 2009. Percent

	2004			2009		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Employed population, number	3,079,000	3,092,000	6,171,000	3,713,000	3,752,000	7,466,000
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Paid employee	19.6	29.2	24.4	22.8	30.9	26.9
Employer	0.1	0.1	0.1	0.3	0.3	0.3
Own account worker/self-employed	34.4	47.5	41.0	52.4	46.1	49.2
Unpaid family worker	49.0	29.1	39.0	24.5	22.6	23.5
Other/Don't know	2.3	1.7	2.0	0.1	0.1	0.1

The amount of employed population by geographical domain is indicated in Table 6.8. for 2004. The employed population has increased in all geographical domains. In general the amount of employed persons increased with 1,296,000 2009 compared to 2004.

The amount employed population in other rural areas were much higher than in Phnom Penh and in other urban areas with an increase by 23 percent, 20 percent and 10 percent in respectively.

From 2004 to 2009 the share in paid employment slightly increased in both other urban and rural domains but in Phnom Penh the share of paid employed almost remained unchanged.

The shares of employer among the employed population remained fairly unchanged in all geographical domains 2009 in comparison with 2004, still comprising very few employers.

[14] In CSES 2008 and before they were classified as unpaid family workers.

Table 6.8. Employment status, main occupation (15–64 year), by geographical domain, 2004 and 2009. Percent

	2004			2009		
	Phnom Penh	Other urban	Other rural	Phnom Penh	Other urban	Other rural
Employed population, number	573,000	669,000	4,928,000	686,000	735,000	6,045,000
Total percent	100	100	100	100	100	100
Paid employee	52.4	31.7	20.2	53.2	36.1	22.8
Employer	0.0	0.2	0.1	0.2	0.5	0.3
Own account worker/self-employed	28.6	39.2	42.7	32.5	43.9	51.7
Unpaid family worker	20.2	33.7	42.0	14.0	19.4	25.1
Other/Don't know	1.8	1.8	2.1	0.2	0.1	0.0

A general observation in all geographical domains, in comparison between 2004 and 2009, is the increased number of employed persons for both women and men indicated in Table 6.9a. and 6.9b. The relative increased number of women and men in other rural areas were quite similar increasing with approximately 18 percent respectively. Phnom Penh was also showing the same pattern, where the relative change in employed population for women and men increased equally by 16 percent.

The proportion of women and men as employer was not much changed in Phnom Penh or the other rural areas 2009 in comparison with 2004. There were changed shares for paid employed women in other urban areas with increase from approximately 24 percent (2004) to 31 percent (2009) but for men it remained unchanged, 40 percent (2004) and 41 percent (2009).

The changed classification of own account worker/self-employed, did not affect the shares by sex in some areas between the two years. The proportion of own account worker/self-employed for Phnom Penh has increased for both women and men. For other urban and other rural areas the share has increased only for women. Contrary for men in those areas the share of own account worker/self-employed decreased quite remarkably.

It is evident that due to the reclassification the share of unpaid family worker has decreased in all areas for both women as well as for men.

Table 6.9a. Employment status, main occupation (15–64 year) by geographical domain and sex, 2004. Percent

	Phnom Penh		Other urban		Other rural	
	Women	Men	Women	Men	Women	Men
Employed population, number	280,000	294,000	339,000	331,000	2,461,000	2,467,000
Total percent	100	100	100	100	100	100
Paid employee	43.1	61.3	23.8	39.7	16.4	24.0
Employer	0.0	0.0	-	0.3	0.1	0.1
Own account worker/ self-employed	32.1	25.2	37.6	40.9	34.2	51.1
Unpaid family worker	24.2	16.3	41.8	25.5	52.9	31.1
Other/Don't know	2.3	1.4	2.4	1.2	2.3	1.8

Table 6.9b. Employment status, main occupation (15–64 year) by geographical domain and sex, 2009. Percent

	Phnom Penh		Other urban		Other rural	
	Women	Men	Women	Men	Women	Men
Employed population, number	335,000	351,000	362,000	373,000	3,016,000	3,029,000
Total percent	100	100	100	100	100	100
Paid employee	44.1	61.8	30.9	41.2	19.5	26.1
Employer	0.2	0.1	0.5	0.4	0.3	0.4
Own account worker/ self-employed	38.1	27.2	47.2	40.7	54.6	48.9
Unpaid family worker	17.5	10.6	21.2	17.6	25.6	24.7
Other/Don't know	0.1	0.3	0.2	0.1	0.0	0.1

6.4. Employment by occupation

The employment by occupation according to CSES 2009 is indicated in Table 6.10. The results show the total employed population (15–64 years) by main occupation for women and men. Generally almost half of the population in Cambodia were employed as skilled agricultural, forestry and fishery workers. This held for both women and men. Barely twice as many women than men were employed as service and sales workers while almost 30 percent more men than women were employed in elementary occupations. All together two thirds of the Cambodian population were employed in these three occupation categories. In the other occupational categories fairly small shares were employed. Some smaller differences between women and men were measured with an exception for plant and machine operators and assemblers and in armed forces where the employed share of men was ten times higher than the share of women.

Table 6.10. Employed Population (15–64 year) by main occupation and sex, 2009. Percent.

Main occupation	Women	Men	Both sexes
Armed forces occupations	0.1	1.2	0.7
Manager	0.2	0.8	0.5
Professionals	2.0	3.1	2.5
Technicians and associate professionals	0.5	1.2	0.9
Clerical support workers	1.5	2.4	1.9
Service and sales workers	19.6	9.8	14.7
Skilled agricultural, forestry and fishery workers	47.8	48.1	48.0
Craft and related worker	13.8	10.0	11.9
Plant and machine operators and assemblers	0.5	5.4	3.0
Elementary occupations	13.9	17.8	15.9
Total	100	100	100

Table 6.11. presents the employed population by main occupation and geographical domain for 2009. The shares of employed population by main occupation vary with references to geographical domains. Phnom Penh relative other urban and other rural areas the conditions for skilled service occupations seemed to be somewhat better off indicating higher shares of managers, professionals, clerical support workers for example. In other rural areas on the other hand manual work counts for a large part of the employment by occupation like skilled agricultural, forestry and fishery workers and elementary occupations.

Table 6.11. Employed Population (15–64 year) by main occupation and geographical domain, 2009. Percent.

Primary occupation	Phnom Penh	Other urban	Other rural
Armed forces occupations	2.3	1.3	0.4
Manager	1.5	0.5	0.4
Professionals	7.2	5.9	1.6
Technicians and associate professionals	3.7	1.6	0.5
Clerical support workers	11.3	4.6	0.6
Service and sales workers	38.4	31.7	10.0
Skilled agricultural, forestry and fishery workers	1.8	19.8	56.6
Craft and related worker	19.5	14.3	10.8
Plant and machine operators and assemblers	7.9	7.1	1.9
Elementary occupations	6.3	13.2	17.3
Total	100	100	100

The share of employed population by main occupation in Phnom Penh, other urban and other rural areas by sex is described in Table 6.12. for 2009.

In Phnom Penh the share of employment by occupation differed between women and men considerably. About 50 percent of all women in Phnom Penh were employed in occupations related to services and sales which is almost twice as large share for men (27 percent). About 20 percent of women as well as men were employed as craft and related workers. More than ten times larger were the share of men occupied as plant and machine operators than the share of women. This pattern remained in the other urban areas.

In the rural areas the differences between women and men are not that obvious though twice as big share of women were occupied as Service and sales workers. Regardless sex barely 60 percent was occupied as skilled agricultural, forestry and fishery workers in the rural areas.

Table 6.12. Employed Population (15–64 year), by main occupation, geographical domain and sex, 2009. Percent.

	Phnom Penh		Other urban		Other rural	
	Women	Men	Women	Men	Women	Men
Armed forces occupations	0.6	4.0	0.0	2.5	0.0	0.8
Manager	0.9	2.2	0.3	0.8	0.1	0.7
Professionals	6.0	8.4	5.6	6.2	1.1	2.1
Technicians and associate professionals	2.4	4.9	1.1	2.1	0.3	0.7
Clerical support workers	9.5	13.0	2.8	6.4	0.4	0.7
Service and sales workers	50.1	27.3	41.9	21.7	13.6	6.3
Skilled agricultural, forestry and fishery workers	2.2	1.4	19.3	20.3	56.3	56.9
Craft and related worker	21.9	17.1	15.3	13.3	12.8	8.8
Plant and machine operators and assemblers	1.2	14.2	1.0	13.0	0.4	3.4
Elementary occupations	5.2	7.4	12.5	13.8	15.0	19.5
Total	100	100	100	100	100	100

6.5. Employment by Industry

In the following tables employment by industrial sector is presented. Industrial sector is based on industry for the main occupation.

The total employment by industry sector is presented in Table 6.13. In general, for most of the employment rates in all sectors no or very small differences were measured between women and men. In Phnom Penh and other urban areas the share of employment in service sector was highest with 77 percent and 58 percent respectively. For other rural areas the share of employment in agriculture sector was highest. In other urban areas, about one forth of employment was in agriculture sector.

Table 6.13. Employed population 15–64 year by industrial sector (main occupation) and sex, 2004 and 2009. Percent.

	2004			2009		
Industrial sector (main occupation)	Women	Men	Total	Women	Men	Total
Employed population, number	3,297,000	3,509,000	6,806,000	3,715,000	3,754,000	7,469,000
Total percent	100	100	100	100	100	100
Agriculture (Primary)	55.5	57.0	56.3	57.8	57.4	57.6
Industry (Secondary)	14.4	13.0	13.7	16.2	15.5	15.9
Services (Tertiary)	30.1	29.9	30.0	26.0	27.0	26.5

Table 6.14. Employed population 15–64 year by industrial sector (main occupation) and geographical domain, 2004 and 2009. Percent.

	2004			2009		
Industrial sector (main occupation)	Phnom Penh	Other urban	Other rural	Phnom Penh	Other urban	Other rural
Employed population, number	595,000	737,000	5,474,000	686,000	735,000	6,048,000
Total percent	100	100	100	100	100	100
Agriculture (Primary)	1.2	35.9	65.0	1.9	24.0	68.0
Industry (Secondary)	17.3	11.4	13.6	21.2	17.8	15.0
Services (Tertiary)	81.4	52.7	21.4	76.9	58.3	17.0

Both in other urban and other rural areas there are no or very small differences for women and men in the share of employment in agriculture, industry and services sector. The employment rate for men was higher in service sectors. Contrary the share was higher for women than men in the industry sector.

Table 6.15a. Employed population 15–64 year by industrial sector (main occupation), geographical domain and sex, 2004. Percent.

Industrial sector (main occupation)	Phnom Penh		Other urban		Other rural	
	Women	Men	Women	Men	Women	Men
Employed population, Number	283,000	311,000	366,000	371,000	2,647,000	2,827,000
Total percent	100	100	100	100	100	100
Agriculture (Primary)	0.9	1.6	35.9	35.9	64.1	65.9
Industry (Secondary)	20.6	14.3	11.4	11.5	14.1	13.1
Services (Tertiary)	78.5	84.1	52.8	52.6	21.8	21.0

Table 6.15b. Employed population 15–64 year by industrial sector (main occupation), geographical domain and sex, 2009. Percent.

Industrial sector (main occupation)	Phnom Penh		Other urban		Other rural	
	Women	Men	Women	Men	Women	Men
Employed population, Number	335,000	351,000	362,000	373,000	3,018,000	3,030,000
Total percent	100	100	100	100	100	100
Agriculture (Primary)	2.4	1.5	23.8	24.1	68.0	68.0
Industry (Secondary)	22.7	19.8	18.1	17.4	15.2	14.8
Services (Tertiary)	74.9	78.7	58.1	58.4	16.7	17.2

7. Health and Nutrition

In this chapter the main data on disability, illnesses, health care seeking, maternal and child health are summarized. When possible comparison with CSES 2004 is done.

The interviews on health were done by trained, non-medical interviewers. The health questions were asked in the third week of the month in CSES 2009. In CSES 2004 the health questions were asked in the last week.

For 2009, the health module were separated into five parts: "Maternal health", "Child health", "Health Check of children under 5", "Health care seeking and expenditure", and "Disability".

The questionnaire is included in appendix 8.

7.1. Disabilities in the population of private households

Disability is defined as a restriction or lack of ability to perform an activity in the manner or within the range considered as normal for a human being. It is a condition in which a person has a problem with his/her body, mind or behaviour that limits his/her ability to participate normally in work, school, or ordinary social life. It is a permanent or long-term condition and should not include a temporary illness or injury.

The survey information was collected by asking household heads about each household member. There have been some changes in the disability module in the questionnaire. In 2004 the question was phrased "Does ..[NAME].. have any disability?" and in 2009 the question was changed to "Does..[NAME].. have any of the following?". It was the same options both years "Difficulty seeing, difficulty hearing,…" See questionnaire in appendix 8. The change was done to make the question easier to understand and therefore get more reliable results. During the training the enumerators got information about the concept of disability provided by a Handicap Organization in Cambodia. Deleting the word "disability" in the question might have impact on the result. Difficulties might have been interpreted as less severe than disabilities. In 2009 there was also a new question where the enumerator asked if the difficulty was mild, moderate or severe. In the questionnaire on disability/difficulty only three kinds of difficulties was asked. If the person had more than three difficulties, the three main (most important) difficulties should be reported.

Prevalence of disabilities

From CSES the estimate of the disabled population 2009 is about 6 percent of the total non-institutional population of Cambodia, see Table 7.2. In absolute numbers there are about 879,000 persons who have one or more difficulties.

Note that severely disabled living in institutional households are not included in the survey. The most severely disabled are covered by this survey only if they live in a private household.

The estimates show a much higher share of the population with disability/difficulty than previous CSES which is discussed below. The recently published Population Census 2008 also shows lower shares. The definition of disability in the Population Census 2008 differs a lot from the definition used in the CSES. In Census 2008, the definition of disability focuses on physical or mental disability rather than on functional limitation or activity restriction caused by impairment (CSES 2009). For example, the definition of seeing disability in Census 2008 is: "A person who could not see at all (had no

perception of light) or had blurred vision even with the help of glasses was considered as having disability in seeing or as visually disabled…".[15]

Table 7.1. shows the prevalence of different types of disabilities/difficulties. .The respondent could report up to three difficulties (the most important ones if more than three). The table shows the share of population having at least one disability/difficulty in 2004 and 2009. The types refer to the first reported difficulty. In 2009 the shares were much higher than the year 2004. These differences can depend on the changes in the question. As mentioned above the questions asked in CSES 2004 used the word "disability" and in CSES 2009 only the word "difficulty" was used. Difficulty might have been interpreted as less severe than "Disability" and can have an impact on the estimated figures and the higher shares in 2009. Table 7.1. also shows that the seeing disability/difficulty is the most common difficulty both years.

Table 7.1. Persons (in the non-institutional population) with at least one disability/difficulty by age, 2004 and 2009. Percent

Type of difficulty	Disability 2004	Difficulty 2009
Seeing	1.5	4.0
Hearing	0.5	1.2
Speaking	0.2	0.3
Moving	1.0	1.6
Feeling or sensing*	0.4	0.4
Psychological	0.3	0.4
Learning	0.0	0.1
Fits	0.1	0.1

* 2004: "Feeling", 2009: "Feeling or sensing"

In the following only results from 2009 survey are presented due to the changes in the questionnaire.

Table 7.2. shows that the prevalence of disability/difficulty increases by age. In the youngest age group (0–14 years) only about 1 percent had disabilities/difficulties while in the oldest age group (60 years and over) more than one third had disabilities/difficulties (about 36 percent).

Table 7.2. Persons (in the non-institutional population) with at least one difficulty by age, 2009. Percent.

Age group	Women	Men	Both Sexes
All	6.5	6.1	6.3
0–14	1.0	1.2	1.1
15–29	1.9	2.3	2.1
30–44	5.0	5.8	5.4
45–59	14.9	16.5	15.6
60+	35.4	35.8	35.6

[15] National Institute of Statistics (2009). General Population Census of Cambodia 2008, National Report on Final Census Results, August, 2009.

Degree of difficulties

In CSES 2009, the information on the degree of disability/difficulties was collected in a new question. The interviewer asked for each reported difficulty if it was mild, moderate or severe. Table 7.3. below shows the level of the most common difficulties (seeing, moving and hearing) in 2009. In the population about 4 percent have seeing difficulties (see Table 7.1. above). About half have a mild degree of the seeing difficulty (2 percent in the population). Having severe seeing difficulty is quite rare (about 0.3 percent in the population). For moving and hearing difficulties it is more common with moderate and severe degree.

Table 7.3. Degree of most common difficulties, 2009. Percent of population

Type of difficulty	mild	moderate	severe
Seeing	2.1	1.6	0.3
Moving	0.4	0.8	0.4
Hearing	0.4	0.6	0.2

Cause of difficulties

The questionnaire mentioned 18 different causes. The interviewer asked about the cause for each reported difficulty. Table 7.4. shows the main causes of disabilities/difficulties in the total non-institutional population whatever kind of disability/difficulty. Overall, old age and disease are reported as the major causes of disabilities/difficulties, about 3 percent in the population reported old age and about 2 percent disease. Women suffers difficulty caused by old age and disease more than men, Men reported somewhat higher shares than women for causes like mine/UXO or war injuries, and traffic or work accidents.

Table 7.4. Some causes of difficulties, 2009. Percent of population

	Mine/UXO or war injuries	Traffic or work accidents	Disease	Old age	Congenital
Women	0,1	0,3	1,9	3,4	0,5
Men	0,6	0,7	1,6	2,4	0,7
Both Sexes	0,4	0,5	1,8	2,9	0,6

7.2. Illness, injury or other health problem in the last 30 days

In CSES 2009 household heads were asked about each household member whether they had been sick or had an illness and/or injury in the last 30 days.

In CSES 2004 the question included other health problem. In 2009 this question was changed and related only to illness or injury. In the 2009 questionnaire there was a separate question which asked if there had been any other reason to go to the health facility or seek health care. Because of these changes it is not possible to compare the health status between 2004 and 2009. Also other questions have been changed (see Technical Section 11.3. Questionnaire design). In this section only result from CSES 2009 is presented.

About 14 percent in the Cambodian population had an illness/injury at any time in the last 30 days, see Table 7.5. Of the women about 16 percent had an illness or injury and of the men about 13 percent. In absolute numbers this means that close to 2.1 million Cambodians had health problems. In the last 30 days the share is lower in Phnom Penh than in other urban and other rural areas.

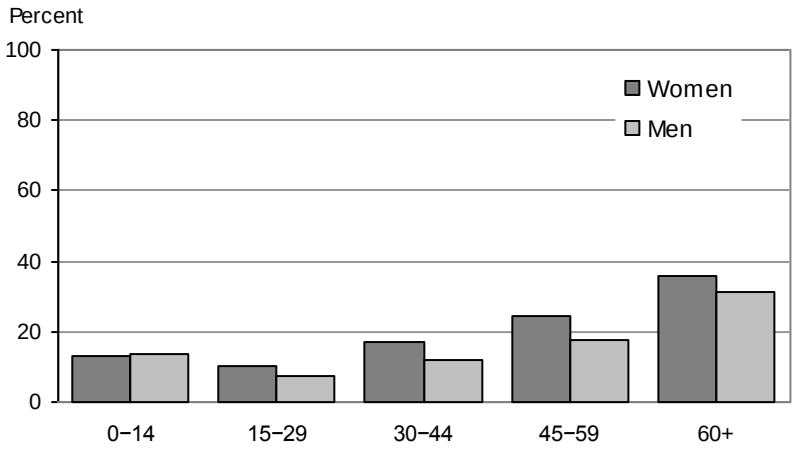
Table 7.5. Illness/injury in the population the last 30 days, 2009. Percent

	Women	Men	Both sexes
Cambodia	16.1	12.7	14.4
Phnom Penh	11.5	8.4	10.1
Other urban	15.1	11.3	13.2
Other rural	16.8	13.3	15.1

Figure 7.1. shows the age and sex pattern of illness and injury in the population the last 30 days. Health problems are highest among elderly people. For example the share of elderly 60 years and over that had an illness or injury during the last 30 days is about 34 percent.

In the youngest age group women's and men's health problems seems to be on the same level. From 15 years and over more women have health problem than men.

Figure 7.1. Illness/injury the last 30 days by age and sex, 2009. Percent of population



Health care visits

A question was asked about how many times a person sought care because of illness/injury or other health problem. Table 7.6. shows that about 14 percent of the population have sought care once or more in the last 30 days, more women than men. The share of persons with one or more health care visit was somewhat higher in other rural areas than in Phnom Penh. About 15 percent of the population in other rural and about 11 percent in Phnom Penh sought care.

Table 7.6. Health care visits (one or more visits) last 30 days by geographical domain and sex, 2009. Percent of population

	Women	Men	Both sexes
Cambodia	16.3	12.5	14.4
Phnom Penh	13.0	9.3	11.3
Other urban	15.8	11.4	13.7
Other rural	16.8	13.0	14.9

About half of those who sought care during the last 30 days did so only once.

The elderly sought care more than younger people see Table 7.7. One third of the population in age 65 and over sought care at least once in the last 30 days (33 percent) compared to one of ten in age group 15−29 (9 percent). Women in all ages sought care more than men. The tendency is also that women seek care more times than men.

Table 7.7. Health care visits last 30 days by sex and age, 2009. Percent of population

	Once	2−5 times	6 times or more	Once or more
Women	8.2	7.6	0.4	16.3
0−14	7.3	5.5	0.2	13.0
15−29	5.7	4.8	0.2	10.7
30−45	8.6	8.1	0.6	17.4
45−60	10.9	12.4	1.0	24.3
60+	16.2	18.3	1.0	35.5
Men	6.1	6.1	0.3	12.5
0−14	7	6.3	0.2	13.5
15−29	4	2.8	0.2	7.0
30−45	5	5.9	0.4	11.3
45−60	8.2	8.9	0.5	17.6
60+	11.8	17.4	0.8	30.1
Both sexes	7.2	6.9	0.4	14.4
0−14	7.1	5.9	0.2	13.2
15−29	4.8	3.8	0.2	8.8
30−45	6.9	7.0	0.5	14.5
45−60	9.7	10.9	0.8	21.4
60+	14.3	17.9	0.9	33.2

Provider of health care

Any household members who had health problems and sought care were asked what kind of care that was sought for the treatment (provider). A first question was asked about the provider for the first treatment and for those who had more than one treatment in the last 30 days there was also a question about the last provider. The different kind of care providers were grouped in public, private, self care and traditional care (see definition in Section 10.6.). (In CSES 2004 the respondent was asked which provider was "usually used").

Table 7.8. shows the first provider sought among those who needed care for illness, injury or other health problem the last 30 days. About 40 percent used self care as the first treatment. There were no differences between women and men.

Table 7.8. The first provider of health care among those who were seeking care last 30 days by sex, 2009. Percent of persons seeking care

	Public	Private	Self care*	Traditional care	Total
Both sexes	20.1	34.3	42.2	3.4	100
Women	20.6	34.7	41.4	3.3	100
Men	19.3	33.8	43.3	3.6	100

* Self Care includes visit in home/office of trained health worker/nurse, visit of trained health worker/nurse, Shop selling drugs/market

Phnom Penh had the highest share of persons seeking care by private providers the first time. Four out of five (about 82 percent) sought private care (Table 7.10). In other rural areas only about 27 percent sought private care.

Table 7.9. The first provider of health care among those who were seeking care last 30 days by geographical domain, 2009. Percent of persons seeking care

	Public	Private	Self care*	Traditional care	Total
Cambodia	20.1	34.3	42.2	3.4	100
Phnom Penh	13.8	81.6	3.4	1.3	100
Other urban	17.2	55.4	25.0	2.3	100
Other rural	21.0	27.4	47.9	3.8	100

*) Self Care includes visit in home/office of trained health worker/nurse, visit of trained health worker/nurse, Shop selling drugs/market

About half of those who sought care for health problems did that more than once (see Table 7.7. above). In appendix 3 tables for the last/most recent provider are presented.

7.3 Maternal Health

Antenatal Care

To ensure the health and safety of mothers during pregnancy, WHO recommends that pregnant women see a trained health worker at least four times prior to delivery. It is recommended that women seek antenatal care (ANC) within the first three months of pregnancy and that they continue on a monthly basis in order to identify problems early. These visits should include, among others, a check of the woman's vital signs, tetanus immunizations if she has not received the recommended minimum, and iron/folate supplementation to counteract deficiencies associated with pregnancy.

Among the women surveyed in the CSES 2009, more than four in five (82 percent) reported that they received ANC from someone at least once during their last pregnancy. The proportion of women reporting ANC usage is highest among women aged 20–34 years (83 percent). ANC usage is higher in Phnom Penh in all age groups (average 96 percent).

The data were also disaggregated by educational attainment. It is important to note that the method used for determining maternal education attainment for the next three sections differs slightly from that used in other parts of this report. Because there were an insufficient number of women in the uppermost educational categories, educational attainment was collapsed into three subsets: None, Primary, and Secondary or higher. Women were considered to have Primary educational status if they had completed any grade from 1–6; in the same manner, women were considered to have Secondary educational status if they had completed any grade from 7–12 or any additional schooling above grade 12. This method is consistent with that used by the Cambodia Demographic and Health Survey and the data are therefore considered comparable.

Breaking down ANC usage by maternal education found that women with higher levels of education have a better chance of receiving antenatal care during pregnancy.

Table 7.10. Antenatal care. Percent distribution of women with living children less than 5 years old by ANC status during pregnancy for the most recent birth.

Characteristic	Attended at least once	Number of women
Mother's age at birth		
<20	78.2	330
20–34	83.4	3,317
35–49	79.2	698
Region		
Phnom Penh	95.5	341
Other Urban	93.0	432
Other Rural	79.9	3,577
Mother's education		
None	70.9	1,195
Primary	83.5	2,078
Secondary and higher	93.4	1,075
Total	82.3	4,350

The CSES 2009 also assessed women on their tetanus immunization status during their most recent pregnancy. Being fully immunized before delivery can protect a mother's baby from neonatal tetanus. Of the women surveyed, 81 percent reported that they were fully immunized against tetanus prior to their most recent birth. This includes 70 percent who received 2 or more injections during their most recent pregnancy; it also includes 10 percent who either received 1 injection during the most recent pregnancy and 1 prior, or had received 5 or more tetanus injections in her lifetime. There was very little difference in these rates based on mother's age. Somewhat surprising was the finding that women living in Phnom Penh had the lowest rates of protection, although at 76 percent this is not likely a significant difference. Finally, mothers with no education had a TT protection rate of 73 percent, while those with secondary or higher education were at 85 percent.

Table 7.11. Tetanus Toxoid Injections. Percent distribution of women with living children under 5 years old by number of tetanus toxoid injections during last pregnancy and prior to last birth.

	Protected			Not Protected				
Characteristic	2+ TTI during last pregnancy	1 TTI during last pregnancy, plus one additional prior	No TTI during last pregnancy, but 5+ TTI lifetime	1 TTI during last pregnancy, but none before	No TTI during last pregnancy, less than 5 TTI lifetime	Total	Number of women	Percentage of last births protected against neonatal tetanus
Mother's age at birth								
15–19	66.5	13.3	2.0	2.9	15.3	100	331	81.8
20–29	71.1	9.3	1.2	2.8	15.7	100	2,671	81.5
30–39	69.3	7.4	1.4	3.3	18.6	100	1,099	78.1
40–49	70.1	6.9	1.2	5.0	16.8	100	248	78.1
Region								
Phnom Penh	66.6	9.3	0.2	2.1	21.9	100	341	76.1
Other Urban	74.2	8.0	1.4	4.4	12.0	100	432	83.6
Other Rural	70.1	9.1	1.4	3.0	16.4	100	3,577	80.6
Mother's education								
None	63.1	8.8	1.4	3.2	23.4	100	1,195	73.4
Primary	72.3	8.8	1.3	3.1	14.6	100	2,078	82.4
Secondary and higher	74.2	9.7	1.1	2.9	12.1	100	1,075	85.0
Total	70.2	9.0	1.3	3.0	16.5	100	4,350	80.5

The final aspect of antenatal care that the CSES 2009 assessed was the level of micronutrient supplementation during pregnancy. Among the women surveyed, 85 percent reported that they had taken iron/folate tablets or syrup during their most recent pregnancy. Women aged 20–29 reported the highest level of supplementation at 88 percent; older women were least likely to take iron/folate supplements at 76 percent. Women with the highest level of education reported the highest level of supplementation at 94 percent.

Table 7.12. Maternal Micronutrients. Percent distribution of women with living children under 5 years old by micronutrient status during pregnancy for the most recent birth.

Characteristic	Took iron tablets or syrup	Took intestinal parasite drugs	Suffered night blindness [1]	Received Vitamin A dose post-partum [2]	Received iron supplement post-partum [3]	Number of women
Mother's age at birth						
15–19	83.6	41.2	2.2	58.8	52.1	331
20–29	87.9	44.3	2.1	61.4	56.8	2,671
30–39	80.7	42.8	1.8	57.7	53.2	1,099
40–49	75.5	42.6	1.3	57.1	51.9	248
Region						
Phnom Penh	91.1	31.3	1.1	68.7	63.0	341
Other Urban	93.2	51.4	1.2	70.9	63.6	432
Other Rural	83.6	44.0	2.2	58.0	53.5	3,577
Mother's education						
None	74.3	37.7	2.1	50.9	45.5	1,195
Primary	87.1	45.5	2.0	60.4	56.3	2,078
Secondary and higher	93.5	46.8	1.9	69.8	64.4	1,075
Total	85.0	43.6	2.0	60.0	55.2	4,350

[1]Adjusted figure -- does not include women who had difficulty seeing during daylight.

[2] Within 6 weeks after delivery

[3]Within 8 weeks after delivery

Delivery Care

Women can successfully manage or avoid many of the dangers associated with delivery by giving birth in the presence of a skilled birth attendant. Health workers with appropriate training can recognize the signs of complications and help reduce the risk of infection.

Among the women surveyed in the CSES 2009, 46 percent reported delivering their most recent birth at either a public or private facility. This represents almost a doubling of the rate reported in the CDHS 2005. Those women aged 20–34 years were the most likely to deliver at a facility; 48 percent of the deliveries occurred at a health facility. Ninety-one percent of women living in Phnom Penh reported delivering at a health facility, while those with secondary or higher education reported delivering at a facility in two-thirds of the cases. Women who accessed ANC during their pregnancy were more than twice as likely to deliver at a health facility (52 percent) as those who did not (21 percent).

Table 7.13. Place of Delivery. Percent distribution of women with living children under 5 years old by place of delivery for the most recent birth.

Characteristic	Health Facility		Home	Other	Total	Number of women
	Public Sector	Private Sector				
Mother's age at birth						
<20	35.9	5.8	57.8	0.5	100	330
20–34	40.7	7.7	51.3	0.3	100	3,315
35–49	32.9	5.6	61.3	0.3	100	698
Region						
Phnom Penh	65.2	26.0	8.5	0.3	100	341
Other Urban	55.9	16.1	27.9	0.2	100	432
Other Rural	34.7	4.4	60.5	0.4	100	3,575
Mother's education						
None	30.6	2.5	66.5	0.4	100	1,194
Primary	38.0	5.8	56.1	0.2	100	2,078
Secondary and higher	51.0	15.4	33.1	0.5	100	1,074
Antenatal Care						
Yes	43.8	7.9	47.9	0.3	100	3,587
No	17.0	3.9	78.8	0.2	100	761
Total	39.1	7.2	53.4	0.3	100	4,350

The CSES 2009 also asked mothers about who had assisted them with the delivery of their most recent pregnancy. They were prompted to identify all of the people present during the delivery – these responses were then collated and ranked hierarchically, with the most trained person receiving the highest rank.

Among all women questioned, 71 percent reported that a trained health professional assisted with the delivery (i.e. a doctor, nurse, or midwife). Women aged 20–34 years were again the most likely to have delivered under optimal conditions, with 73 percent reporting a trained health professional in attendance. There was also a considerable distinction between women delivering in urban and rural areas, with trained health professionals attending 98 percent of births in Phnom Penh compared to just 56 percent in rural areas. The biggest contributor to unskilled attendance was delivery at home: less than half (47 percent) of these births were attended by a professional.

Table 7.14. Assistance during delivery. Percent distribution of women with living children under 5 years old by person providing assistance during delivery for the most recent birth.

Characteristic	Doctor	Nurse	Midwife	Traditional Birth Attendant	Friend/ Other	No one	Total	Number of women
Mother's age at birth								
<20	18.1	12.9	36.1	32.3	0.6	0.0	100	330
20–34	22.2	12.4	38.0	26.5	0.8	0.1	100	3,317
35–49	16.4	9.7	38.4	35.1	0.4	0.0	100	698
Region								
Phnom Penh	57.5	15.6	25.1	1.7	0.0	0.0	100	341
Other Urban	33.8	15.7	41.9	8.4	0.2	0.0	100	432
Other Rural	16.1	11.2	38.7	33.1	0.8	0.1	100	3,577
Mother's education								
None	13.7	9.8	31.7	44.3	0.5	0.1	100	1,195
Primary	19.0	11.7	40.6	27.8	0.9	0.0	100	2,078
Secondary and higher	33.4	15.1	40.0	10.8	0.8	0.0	100	1,075
Place of Delivery								
Private	57.4	13.4	27.1	0.9	1.1	0.1	100	321
Public	35.0	19.2	44.0	0.9	0.9	0.0	100	1,694
Home	5.6	6.5	35.1	52.3	0.6	0.0	100	2,318
Other	68.2	12.8	12.6	0.0	6.4	0.0	100	15
Total	21.0	12.0	37.9	28.3	0.7	0.0	100	4,348

7.4 Child Health

Vaccinations

In the CSES 2009, mothers were asked to show the interviewer the yellow vaccination cards of all children aged less than two years. The interviewer then recorded the dates on which the various vaccinations were received. A child was considered fully vaccinated if he or she had received a BCG vaccination against tuberculosis, three doses of DPT vaccine to prevent diphtheria, pertussis, and tetanus, at least three doses of polio vaccine, and one dose of measles vaccine. The CSES 2009 findings differ from other national surveys in that it did not use the mother's recall in cases where no vaccination card was available. As such, these results represent the coverage rate as measured exclusively from the cards.

Among all children aged 12–23 months, 78 percent had verifiably received a BCG vaccination to protect against tuberculosis. Among children whose mother had a secondary or higher education, 85 percent had received BCG, while only 67 percent of children whose mothers had no education received BCG.

This pattern continued rather consistently across the other immunizations as well. Among all children 12–23 months old, 61 percent had received the Hep0 vaccination, 56 percent had received three doses of DPT vaccination, and 59 percent had received the measles vaccination. Based solely on recordings from vaccination cards, just 46 percent of children 12–23 months had received the full set of basic vaccinations. Even here, children of the most educated mothers were more likely to be fully immunized (56 percent) than those children whose mothers had no education (35 percent).

Table 7.15. Vaccinations. Percent distribution of children 12–23 months old who received specific vaccines at any time before the survey (according to vaccination card).

Characteristic	BCG	Hep0	DPT 1	DPT 2	DPT 3+	Measles	All basic vaccinations*	Percentage with vaccination card seen	Total Number of children
Sex									
Male	76.5	60.3	75.3	59.8	51.3	57.1	42.0	78.4	547
Female	78.9	61.9	78.6	66.5	60.5	61.6	50.7	80.3	521
Region									
Phnom Penh	83.2	63.1	83.2	68.0	59.2	62.0	46.7	83.2	84
Other Urban	77.9	51.7	77.2	62.7	56.0	68.8	53.0	79.3	102
Other Rural	77.1	61.8	76.2	62.6	55.4	58.0	45.4	78.9	882
Mother's education									
None	67.0	50.0	65.9	51.1	42.1	49.1	34.8	68.1	342
Primary	81.6	66.0	80.8	68.5	61.3	60.2	49.6	83.7	485
Secondary and higher	84.8	66.9	84.7	69.0	64.0	71.7	55.5	86.2	241
Total	77.7	61.1	76.9	63.1	55.8	59.3	46.2	79.3	1,068

*) BCG, DPT3, and Measles

Prevalence and Treatment of Diarrhoea

Children afflicted by disease are at risk of becoming malnourished due to their bodies' increased nutrient requirements to fight the disease and a reduced ability to absorb these nutrients from their diet during the disease. Furthermore, malnourished children are more susceptible to diseases than their well-nourished peers, often creating a cycle of sickness and malnutrition from which the child is unable to recuperate completely, thereby permanently reducing her growth potential. The CSES 2009 also asked mothers to report whether their child had suffered from diarrhoea at any point in the two weeks prior to the survey.

Of the children assessed, 17 percent were reported to have had diarrhoea during this time frame. Children aged 6–8 months were affected the most, with 1 in 4 (27 percent) having diarrhoea in the two weeks prior to the survey. Children in Phnom Penh had diarrhoea at half the rate (10 percent) as those children living in rural areas (17 percent).

Among those children who reportedly had diarrhoea, more than two-thirds (68 percent) received some form of oral rehydration treatment, either through an ORS packet or a homemade solution. The treatment rates do not appear to be affected largely by location or maternal education levels.

Table 7.16. Prevalence and Treatment of Diarrhoea. Percent distribution of children 0–59 months old who had diarrhoea in the two weeks preceding the survey and percent distribution by type of treatment received.

			Among children with diarrhoea in the past 2 weeks, type of treatment received:			
Characteristic	Diarrhoea in the past 2 weeks	Number of children	Fluid made from oralyte packet	Home fluid of porridge water or cooked rice with salt/sugar	Either treatment	Number of children
Sex						
Male	16.4	2,925	31.4	60.6	67.9	489
Female	16.8	2,690	33.1	60.0	68.5	450
Age in Months						
0–5	17.7	607	33.9	33.3	50.0	108
6–8	26.9	325	32.0	64.1	74.6	87
9–11	24.8	280	32.5	71.1	77.8	72
12–17	21.0	585	36.5	73.4	79.6	127
18–23	23.1	472	33.9	68.8	75.3	110
24–35	15.8	1,072	27.5	55.5	62.1	169
36–47	12.3	1,093	35.5	65.1	71.0	136
48–59	10.1	1,007	27.2	61.8	66.1	102
Region						
Phnom Penh	9.6	429	49.5	57.3	72.1	41
Other Urban	15.0	550	41.6	64.3	76.4	85
Other Rural	17.4	4,636	30.4	60.1	67.2	813
Mother's education						
None	19.5	1,567	29.3	57.1	64.4	306
Primary	16.4	2,584	28.5	62.9	69.7	430
Secondary and higher	13.3	1,300	44.7	57.3	69.7	177
Total	16.6	5,441	32.2	60.3	68.2	939

7.5. Child Nutrition

Infant and Young Child Feeding

Infant and young child feeding (IYCF) guidelines recommend exclusive breastfeeding for the first six months of a child's life because a mother's breast milk contains all the nutrients a growing child needs for this stage of their development and contains protection against infections and pathogens in the environment. Beginning at six months, children should continue breastfeeding and be supplemented with appropriate complementary foods to supply their increasing energy and nutrient requirements. The frequency of these complementary feeds should increase with age. IYCF guidelines recommend breastfeeding for all children up to 2 years and beyond to encourage healthy physical and mental development.

The CSES 2009 asked mothers about their breastfeeding practices with their youngest child 0–23 months of age. Ninety-eight percent of women reported that they had ever breastfed their youngest child. This figure did not change based on location, maternal education, or place of delivery, suggesting that breastfeeding is nearly universal in Cambodia.

These women were also asked how long after birth they began breastfeeding. Almost one-third (32 percent) reported that they began breastfeeding within one hour following birth, which is the recommended period. Women who delivered in a public facility were slightly more likely to initiate breastfeeding within the first hour (37 percent) compared to women who delivered at a private facility (23 percent) or at home (30 percent). Similarly, women who were assisted by a trained health professional were more likely to initiate breastfeeding early (35 percent) than those assisted by an untrained TBA (25 percent).

Table 7.17. Initial Breastfeeding. Percent distribution of last-born children 0–23 months old who were ever breastfed, and if so, percent distribution by time initiated.

	Among last-born children:		Among last-born children ever breastfed, time to initiate breastfeeding:			
Characteristic	Ever breastfed	Number of children	Within 1 hour of birth	Within 1 day of birth	After first day	Number of children
Sex						
Women	97.6	1,085	33.5	89.9	10.1	1,055
Men	98.2	1,172	31.4	88.0	12.0	1,149
Region						
Phnom Penh	95.8	180	27.5	92.4	7.6	173
Other Urban	96.7	224	29.5	93.2	6.8	216
Other Rural	98.3	1,853	33.2	88.0	12.0	1,815
Mother's education						
None	97.6	669	29.9	84.3	15.7	650
Primary	99.0	1,022	34.6	90.9	9.1	1,008
Secondary and higher	96.5	566	31.4	90.5	9.5	546
Place of Delivery						
Private	98.4	173	23.1	85.9	14.1	170
Public	97.9	945	36.8	92.3	7.7	921
Home	98.7	1,042	30.0	86.4	13.6	1,027
Other	100.0	9	20.9	89.5	10.5	9
Place of Delivery						
Health Professional	98.2	1,599	34.9	90.8	9.2	1,566
TBA	98.9	554	25.3	83.7	16.3	547
Other	94.7	17	43.0	87.2	12.8	15
Total	98.3	2,257	32.4	88.9	11.1	2,204

When observing breastfeeding status by age, some very interesting patterns emerge from the data. While practically all children under six months are being breastfed, water and other liquids, including infant formula, are being introduced to many of these children at an early age. As many households do not have access to safe drinking water, this mixed feeding practice represents a major risk factor for diarrhoea and by extension, malnutrition. The breastfeeding rate among children 12–15 months (85 percent) and 20–23 months (56 percent) are consistent with regional findings.

Table 7.18. Breastfeeding Status by Age. Percent distribution of last-born children 0–23 months old ever breastfed by current breastfeeding status.

		Breastfeeding and consuming*:			
Age in Months	Not Breastfeeding	Water, juice, etc.	Formula, other milk, etc.	Currently Breastfeeding	Number of children
0–1	1.2	23.9	16.6	98.8	165
2–3	4.7	36.5	17.7	95.3	213
4–5	3.5	43.4	18.9	96.5	220
6–8	6.0	68.1	23.9	94.0	319
9–11	6.9	69.8	25.6	93.1	281
12–17	21.2	80.1	25.0	78.8	572
18–23	40.7	81.3	27.3	59.3	440
0–3	3.1	30.9	17.2	96.9	378
0–5	3.3	35.5	17.8	96.7	598
6–9	5.9	67.1	23.4	94.1	412
12–15	14.8	80.7	25.5	85.2	385
12–23	29.6	80.5	25.9	70.4	1,012
20–23	44.3	85.4	31.1	55.7	275

* Note that this category is not hierarchical.

Child Nutritional Status

The nutritional status of children is a comprehensive measure that reflects the living conditions of the household and the community and national development. Inadequate nutrition is a direct result of insufficient or inappropriate food intake, or repeated infectious diseases, or a combination of both. It results in increased risk of illnesses and death. Anthropometric measurements of height and weight of children can be thought of as outcome measures, together with infant and child mortality, of children's health.

Nutritional indicators from the CSES 2009 are difficult to assess, particularly those dependent on child height and length measurements. As is the case in nearly all large household surveys, ensuring the highest level of accuracy for height and length measurements was particularly difficult. Nonetheless, it was still possible to use the weight-for-age data from the CSES 2009 to provide an overview of malnutrition in Cambodia.

The indicators used to measure the nutritional status of children less than five years are computed by comparing the heights and weights of surveyed children with a reference population of healthy children compiled by the World Health Organization. The WHO Growth Standards represent the ideal growth patterns of breastfed children from different countries throughout the world. By comparing surveyed children under five to this reference population, it is possible to assess if they are growing as expected or falling behind. Children falling more than 2 standard deviations (SD) from the mean of the WHO reference population are said to have moderate malnutrition (e.g., wasting, underweight, or

stunting, depending on the specific anthropometry measurements being used). Those falling more than 3 SD from the mean of the WHO reference population are said to have severe malnutrition. Two other metrics normally reported along with these data are the mean z-scores and the standard deviation of those z-scores, which provide an additional angle for interpreting the nutrition findings.

Nationally, almost one-third (30 percent) of Cambodian children under five years are underweight (and thus under-nourished). Similar to findings from previous national surveys (and in line with trends observed worldwide), Cambodian children's weight begins to falter especially after the first 5 months of life, which is roughly the time children become dependent on additional food sources beyond their mother's breast milk. This problem continues to amplify with time, so that while just 16 percent of 0–5 month-olds are underweight, fully 37 percent of 48–59 month-olds are the same.

Likewise, children living in rural parts of Cambodia had a higher prevalence of underweight (31 percent) than children living in urban parts of the country (Phnom Penh: 22 percent; other urban: 23 percent). The children of women who attained secondary education or higher were less likely to be underweight (24 percent) than the children of women with no education (34 percent). There was no significant difference in underweight rates of boys (31 percent) and girls (29 percent).

Table 7.19. Nutritional Status of Children. Percent distribution of children 0–59 months old classified as malnourished according to the anthropometric indices: weight-for-age.

	Weight-for-age (Underweight)				
Characteristic	< -3SD (severe)	<-2SD (moderate)	Mean z-score	SD	Number of children
Sex					
Male	10.6	31.2	-1.36	1.37	2,784
Female	8.4	27.8	-1.25	1.35	2,604
Age in Months					
0–5	6.3	16.1	-0.46	1.66	600
6–8	7.8	20.0	-0.82	1.46	316
9–11	6.2	19.1	-0.95	1.35	275
12–17	7.7	23.4	-1.03	1.37	574
18–23	6.9	28.2	-1.28	1.25	469
24–35	10.9	33.2	-1.50	1.25	1,066
36–47	12.0	35.6	-1.60	1.17	1,087
48–59	11.4	37.4	-1.70	1.14	1,001
Region					
Phnom Penh	7.1	21.9	-0.86	1.54	421
Other Urban	5.8	22.9	-1.10	1.26	531
Other Rural	10.2	31.0	-1.37	1.34	4,436
Total	9.6	29.6	-1.30	1.36	5,388

8. Victimization

In this section findings from the CSES about crime, victimization and feelings of safety is presented. The areas studied include victimization by violence, victimization by theft/burglary/robbery (property crimes), victimization by accidents, and feelings of safety. The prevalence and incidence for households and persons have been broken down in different subgroups defined by demographic characteristics and/or geographical areas.

The reference period is not the same for all questions included in this report. The questions on violence, property crimes and accidents refer to victimization in the last 12 months and the questions on safety on the present situation 31 December, see appendix 8.

The questions about violence were asked to each household member (for children the parents were asked), while the questions about property crimes, accidents and safety were asked to the household head. The questionnaire is included in appendix 8.

The main questions dealt with in this section are:

- How many households and/or persons in Cambodia are victimized by violence and property crimes?
- How many households in Cambodia are victimized by accidents?
- How many households in Cambodia feel safe from crime?
- What differences in the above can be found when comparing different subpopulations and different years?

In some of the tables results are presented for both CSES 2004 and CSES 2009. However, since some response alternatives were changed between the two surveys some results are only presented for 2009 (see Technical, Chapter 11).

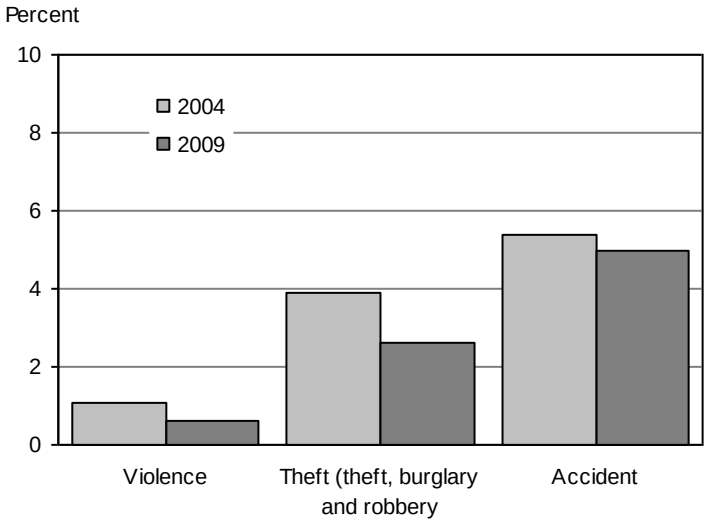
8.1 Victimization in total

The total number of victimized persons or households in CSES is not to be seen as the total number of victims or victimized households in Cambodia. The study does not cover all crimes and a study like this underestimates crime because many people don't feel comfortable telling about their experiences. Moreover, some experiences defined by the victim as crimes may in fact not be a crime in the criminal code.[16] Nevertheless, the data presented in Figure8.1. are, compared to other victimization studies around the world who share the same limitations, of relatively high quality.

About one percent of the individuals in both 2004 and 2009 reported being a victim of violence that caused injury, see Figure 8.1. Though it seems to be differences between the years they are not statistically significant due to few observations. About twice as many of the households were victimized by property crimes (theft, burglary or robbery) and about five percent of the households were victimized by accidents both of years. This corresponds to about 100,000 victims of violence. The number of households victimized by accidents was estimated to approximately 140,000.

[16] See e.g. Manual on victimization surveys, note by the United Nations Economic Commission for Europe-United Nations Office on Drugs and Crime Task Force on Victim Surveys (2009).

Figure 8.1. Victimized individuals/households.



8.2 Persons victimized by violence

In this section victimization by violence that caused injury is studied in more detail. Questions were asked to all persons, therefore the share of persons are presented. In the following CSES results on differences according to sex, kind of violence, violence in different geographical area, violence in different population groups, repeated violence, relation to the perpetrator and reporting behaviour will be in focus.

Table 8.1. shows that of all persons victimized by violence, more than one half were women both in 2004 and 2009.

Table 8.1. Victim of violence that caused injury by sex. Percent.

	2004			2009		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Victimized persons in percent of total population	1.1	1.1	1.1	0.5	0.6	0.6
Number of victimized persons	74,000	65,000	139,000	45,000	34,000	79,000
Share of women and men of all victimized persons	53.2	46.8	100	57.0	43.0	100

The share of victimized persons with a need of medical care seemed to have increased for men. See Table 8.2.

Table 8.2. Victim of violence that caused injury by sex that needed medical care by sex. Percent.

	2004			2009		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Victimized persons in percent of total population	1.1	1.1	1.1	0.5	0.6	0.6
Number of victimized persons	74,000	65,000	139,000	45,000	34,000	79,000
Medical care needed in percent of all victimized persons	18.7	12.7	15.9	21.3	27.9	24.2
Share of women and men of all victimized persons who needed medical care	67.7	37.3	100	51.7	49.3	100

Type of violence

The CSES also gives the possibility to study the share of different kinds of violence.

The most frequent type of violence according to 2009 survey was “Push you, shake you, or throw something at you”. The second most frequent was “Slap/Strike/Beat you with hand “and the third was “Kick you or drag you” (see Table 8.3.).

Table 8.3. Violent events by type of violence. Percent.

All types of violent events	100
Violent events by type of violence	
Push you, shake you, or throw something at you.	23.0
Slap/Strike/Beat you with hand	19.2
Kick you or drag you.	17.3
Punch you with a fist or with something that could hurt you.	15.1
Slap/Strike/Beat you with object	14.6
Twist your arm.	5.3
Other (Attack you with a knife, gun or other type of weapon, Rape, forced to have sexual intercourse when you did not want to, Try to strangle you or burn you and other)	5.5

As shown in Table 8.4. women were in majority in all but one type of violence “Slap/Strike/Beat you with object”.

Table 8.4. Violent events by type of violence and sex. Percent

	Women	Men
All types of violent events	57.0	43.0
Violent events by type of violence		
Push you, shake you, or throw something at you.	62.1	37.9
Slap/Strike/Beat you with hand	58.0	42.0
Kick you or drag you.	64.6	35.4
Punch you with a fist or with something that could hurt you.	57.8	42.2
Slap/Strike/Beat you with object	42.1	57.9
Twist your arm.	52.2	47.8
Other (Attack you with a knife, gun or other type of weapon, Rape, forced to have sexual intercourse when you did not want to, Try to strangle you or burn you and other)	67.5	32.5

Geographical areas

The geographical differences are shown in Table 8.5. and 8.6. In Table 8.5. by urban versus rural areas the results indicates that more people reported to be victims of violence in the rural than in the urban areas.

Table 8.5. Victim of violence that caused injury by geographical domain and sex.

	2004			2009		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Urban	0.9	1.1	1.0	0.4	0.3	0.4
Rural	1.3	1.1	1.2	0.7	0.5	0.6

If data is distributed by zone, Phnom Penh seemed to have the lowest share of victimized persons, while Plateau and Mountain had the highest in 2009, see Table 8.6. The pattern changed between the two years.

Table 8.6. Victim of violence that caused injury by zone

	2004			2009		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Phnom Penh	0.1	0.3	0.2	0.4	0.3	0.4
Plain	1.5	1.4	1.4	0.6	0.5	0.5
Tonle Sap	1.3	1.1	1.1	0.7	0.5	0.6
Coast	0.8	1.1	0.9	0.8	0.3	0.6
Plateau and Mountain	0.6	0.5	0.6	0.6	0.8	0.7

Marital status, ethnicity, education and literacy

According to CSES 2004 divorced or separated persons had a higher risk of being victimized of violence than the other groups of marital status. The pattern seemed to be different for CSES 2009, see Table 8.7.

Table 8.7. Victim of violence that caused injury and marital status, 15 years and over.

	2004			2009		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Never married	0.4	1.1	0.8	0.1	0.5	0.3
Married/Live together	1.5	0.6	1.0	1.2	0.5	0.8
Widowed	0.5	–	0.5	0.2	–	0.2
Divorced/ Separated	3.2	–	3.1	1.0	–	0.8

The risk of victimization was a bit higher for people who could not read and write, see Table 8.8. This was true both the years 2004 and 2009. Also the higher educational level completed the lower the risk of being a victim of violence.

Table 8.8. Victim of violence that caused injury by adult literacy and highest level of education, 15 years and over.

	2004	2009
Can read and write	0.8	0.5
Cannot read and write	1.3	1.0
No or only some education	1.2	1.1
Primary school not completed	1.0	0.7
Primary school completed	0.7	0.4
Secondary school and higher	0.5	0.3
Other	–	–

Repeated victimization of violence and relation to the perpetrator

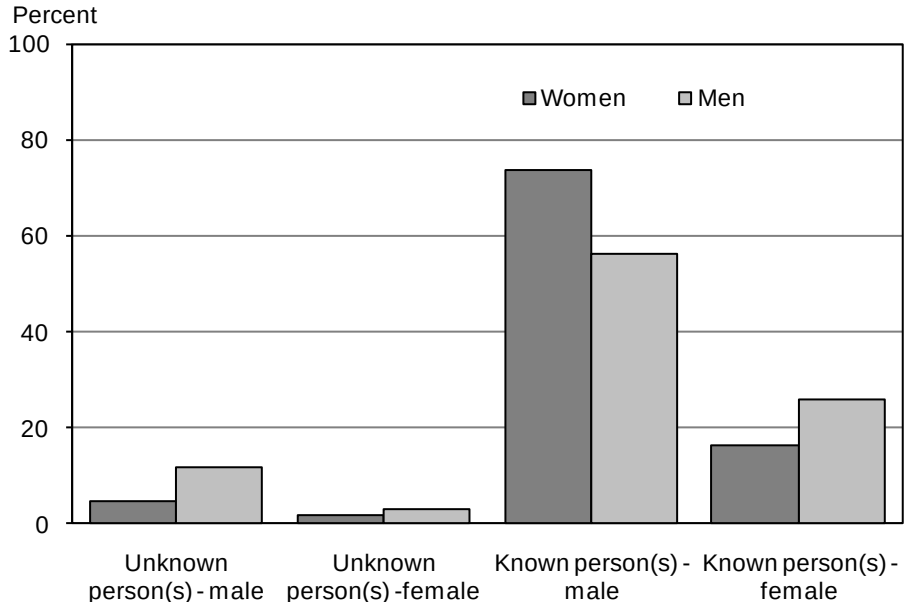
About 60 percent of the victims of violence were victimized more than once in both 2004 and 2009, see Table 8.9. The share of women who were victimized repeatedly was larger than the share of men, both in 2004 and 2009 surveys.

Table 8.9. Repeated Victimization by sex (Percent)

	2004			2009		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Repeated victimization (>1)	70.0	63.6	67.0	64.1	50.2	58.1
Victimized once	29.1	35.7	32.2	35.9	49.7	41.8
Victimized twice	20.9	21.6	21.2	26.4	21.4	24.2
Victimized three times	23.4	16.3	20.1	9.7	9.0	9.4
Victimized 4–9 times	15.1	15.7	15.4	11.0	9.4	10.3
Victimized 10 or more times	10.6	10.1	10.3	16.8	10.3	14.1
All victimized person	100	100	100	100	100	100

Violence by unknown perpetrators represents a minor part of all violence, close to 90 percent of the violent acts were committed by a known perpetrator, see Figure 8.2. There was also a tendency that victimized women more seldom were victimized by unknown perpetrators than victimized men.

Figure 8.2. Victim of violence that caused injury, by relation to the perpetrator, by sex.



Reporting violence and court procedure of crimes of violence

Approximately only 20 percent of persons subjected to violence that caused injuries did report the acts.

Table 8.10. Victim of violence that caused injury and reporting the violence

	2004			2009		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Victimized persons in % of total population	1.1	1.1	1.1	0.5	0.6	0.6
Number of victimized persons	74,000	65,000	139,000	45,000	34,000	79,000
Victimized persons who reported a violent crime in % of all victimized persons	20.7	11.9	16.6	25.2	22.9	24.2

In Table 8.10. and 8.11. the distribution of victims of violence who reported a crime is presented. The share of persons who reported the crime to some authority (police, village leader or other) in 2009 seemed higher in rural areas than in urban areas for men but equal for women.

Table 8.11. Victim of violence who reported a crime to the authorities by geographical domain and sex. Percent.

	2004			2009		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Urban	18.5	9.7	13.5	20.0	4.4	13.2
Rural	20.9	12.3	17.0	25.9	25.8	25.9

As seen in Table 8.10. above and in Table 8.12. below, about 20 percent of the victims reported the violence in 2004 as well as in 2009. The report rate was higher for women both years. Table 8.12. shows the shares of reporting to the police and the village leader respectively. It was more common to report the violence to the village leader than to the police. More than two thirds of those who reported the violence did it to the village leader and about one third to the police (2009). More women reported to the village leader. Only about 20 percent of the victimized women who reported violence turned to the police. Among those who reported a violent act only about 12 percent ended up in court both 2009 and 2004. For men the share that went to court was much higher than for women, both years.

Table 8.12. Reported violent events by sex. Percent.

	2004			2009		
	Women	Men	Both sexes	Women	Men	Both sexes
Persons victimized by violence in percent	1.1	1.1	1.1	0.6	0.5	0.6
Persons who reported a crime in percent of all victimized persons	20.7	11.9	16.6	25.2	22.9	24.2
All persons who reported a crime in percent	100	100	100	100	100	100
Persons who reported to the police in percent of all persons who reported a crime	26.7	52.6	35.4	18.1	51.9	31.7
Persons who reported to the village leader in percent of all persons who reported a crime	72.0	42.5	62.1	81.9	45.1	67.1
Persons who reported to other authority in percent of all persons who reported a crime	1.3	4.9	2.5	–	–	–
Event gone to court procedure in percent of persons who reported a crime	7.5	22.3	12.5	8.0	16.8	11.6

8.3. Households victimized by property crimes

In this section the concept property crime is used which consists of theft, burglary and robbery crimes. The questions were asked to the household head. Therefore, the share of households victimized by property crimes was estimated. Although this section doesn't cover as many different aspects as the section on violence, the results are interesting. Firstly we look at the different kind of thefts asked about in CSES; robbery, burglary and theft. After this, level of reporting, differences in reporting between geographical areas will be studied.

Of all households about 3 percent in 2009 were victimized by property crimes. Besides the prevalence measure there was information on different events. It was much more common with thefts than burglary or robbery. About 64 percent of all events were theft events in 2009. Burglary constituted about 33 percent of all events, and robbery only about 3 percent. Theft events seemed to be less frequent in 2009 than in 2004 and burglary events seemed to have increased see Table 8.13.

Table 8.13. Victimization by property crimes. Percent.

	2004	2009
Household victimized by property crimes in percent of all households	3.9	2.6
All events, percent	100	100
Theft in percent of all events	71.2	63.8
Burglary in percent of all events	25.8	32.9
Robbery in percent of all events	3.1	3.3

The rate of victimized households appeared higher in urban than in rural areas in 2004 but no difference was estimated in 2009. In general it looks like the share of property crimes declined slightly.

Table 8.14. Victimization by property crimes. Percent.

	2004	2009
Victimized household in percent of all households	3.9	2.6
Victimized households in percent of all households living in		
Urban	5.9	2.5
Rural	3.5	2.6

Reporting property crimes and court procedure

About 30 percent of all property crimes were reported to some authority (referring to the police, the village leader or other authority), see Table 8.15. It was more common to report serious crimes. More than 70 percent of all robbery events were reported, while about 25 percent of theft events.

The level of reporting property crimes according to the CSES is not comparable with reporting of violence because they represent different kinds of objects concerned of reporting. As the questions about violence were asked for all persons in the household the share of *persons* that reported the event is calculated. For reported property crimes the share of reported events by the *households* is compiled.

Table 8.15. Reported theft, burglary and robbery events

	2004	2009
Property crimes reported to some authorities in % of all property crimes	29.8	29.6
Theft events reported in % of all theft events	24.1	24.8
Burglary events reported in % of all burglary events	40.4	34.6
Robbery events reported in % of all robbery events	72.9	72.7

Reporting these events shows different results in relation to urbanity between the two studies. In 2004 the reporting rate was highest in urban areas. In 2009 on the other hand, the reporting rate was considerably lower in the urban areas compared with the rural areas.

Table 8.16. Reported property crimes by geographical domain. (Percent)

	2004	2009
Property crimes reported to some authorities in % of all property crimes	29.8	29.6
Property crimes reported in % of all property crimes in households in		
Urban	31.1	17.4
Rural	29.3	32.2

Reporting and court procedure

The share of theft events reported by the households (to some authority) was around 30 percent both years. The reporting to the police seemed to have gone down while the reporting to the village leader increased. The share of cases gone to court procedure was low and it appeared even lower in the latter survey.

Table 8.17. Reported property crimes. Percent.

	2004	2009
Property crimes reported to some authority in % of all property crimes	29.8	29.6
Property crimes reported to the police in % of all reported property crimes	50.3	47.5
Property crimes reported to the village leader in % of all reported property crimes	45.7	51.3
Property crimes reported to other authorities in % of all reported property crimes	3.9	1.1
Property crimes gone to court procedure in % of all reported property crimes	9.7	5.6

8.4. Feeling of safety

The respondent in this section was the head of household or spouse of the head of household. The respondent was asked whether he/she felt safe from crime and violence in the neighbourhood referring to security for the whole household. The respondent was also asked if he/she felt he/she could rely on local police to protect his/her family and property (see the questionnaire in appendix 8 for the exact wording). The characteristics in this section refer to the head of household.

In general, the results from CSES 2009 indicate that about 67 percent of the Cambodian household heads felt safe from crime and violence in their neighbourhood, see Table 8. 18. The result also indicates that more head of households felt safer in 2009 compared to 2004. No notable differences were found between men and women.

About 60 percent of the household heads in 2009 trusted the local police being able to protect them against crime. A higher share of the household heads trusted the police in 2009 survey compared to 2004. There were no notable differences according to sex of head of household.

Table 8.18. Feeling of safety from crime and violence and trust in police protection by sex of head of household. Percent.

	Households headed of women		Households headed of men		All household	
	2004	2009	2004	2009	2004	2009
Feeling safe from crime and violence in neighbourhood	58.0	66.8	56.6	67.3	56.9	67.2
Trusting the local police for protection	49.9	61.9	50.4	60.6	50.3	60.9

Urban areas had the highest share of household heads feeling safe from crime and violence in the neighbourhood. About four out of five household heads in urban areas were feeling safe according to CSES 2009. In the rural areas the share of feeling safe was more than 10 percentage points lower. The feeling of safety increased between 2004 and 2009 in all areas, see Table 8.19.

Table 8.19. Feeling of safety by geographical domains. Percent.

	2004	2009
Heads of household feeling safe from crime and violence in neighbourhood in % of all heads of households	56.9	67.1
Heads of household feeling safe from crime and violence in neighbourhood in % of all heads of households in		
Urban	61.2	70.6
Rural	56.0	66.4

Table 8.20. shows that almost two third of the household heads were trusting the local police for protection against crime in 2009. The trust in local police seemed to be almost the same regardless living in urban or rural area. The share of heads of household trusting the local police appeared to have increased, especially in the rural areas according the two surveys.

Table 8.20. Trusting the local police for protection by geographical domains. Percent.

	2004	2009
Heads of household trusting the local police for protection in % of all heads of households	50.3	60.9
Heads of household trusting the local police for protection in % of all heads of households in		
Urban	55.0	59.9
Rural	49.3	61.1

8.5. Households victimized by accidents

Five percent of all Cambodians were victimized by accidents in 2009 and almost six percent in 2004. Besides these prevalence measures also information on different events are available. Figure 8.3. below shows that most of the incidents took place in traffic related situations. The second most common place for the accident was at home and the third at work. It is also worth noting that somewhat more accidents happened at home in 2009 compared to 2004.

Figure 8.3. Accidents by location of accident. Percent.

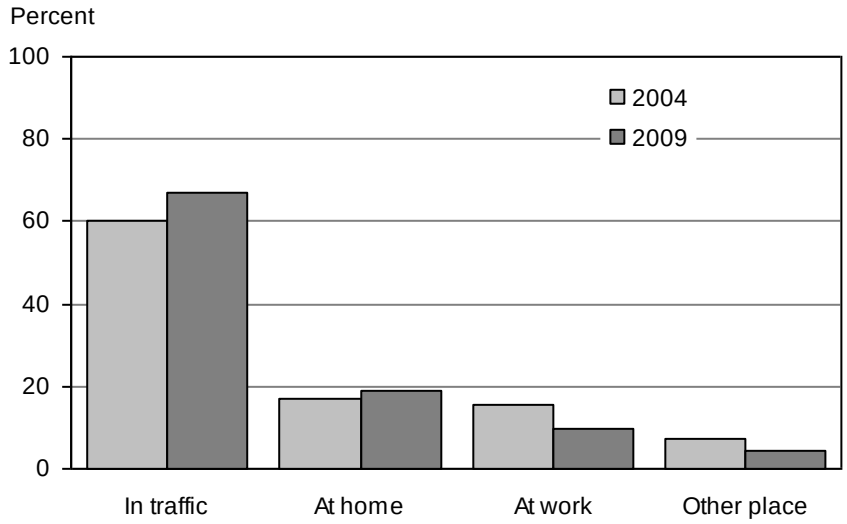


Table 8.21. shows that of all accidents where medical care was needed in 2009, about 69 percent were traffic accidents. This is an increase since the 2004 survey. Traffic accidents were also the largest group of accidents where it took one month or more to heal, about 55 percent in 2009. The second largest group was accidents at home where about 30 percent took one month or more to heal. Both these groups increased between 2004 and 2009.

From Table 8.21. it is also given that the events where medical care were needed happened slightly more often in traffic for 2009 but less often at work in relation to 2004. The incidents that took more than four weeks to heal were 2009 more frequently happening at home or in traffic than 2004. This indicates that relatively more of the sever accidents took place in the traffic and at home. At the same time work accidents seemed slightly less common in 2009 compared to 2004.

Table 8.21. Accidents, need of medical care and time to heal by location of accident. Percent.

Location of accident	Events (accidents)		Medical care needed (accidents)		Time to heal one month or more	
	2004	2009	2004	2009	2004	2009
All locations	100	100	100	100	100	100
In traffic	60.4	66.8	60.6	68.7	51.3	56.2
At home	16.8	19.0	15.0	18.0	21.9	29.1
At work	15.4	9.8	16.4	9.3	13.4	11.9
Other place	7.5	4.4	8.0	4.0	13.4	2.9

9. Household Income and Consumption

9.1 Income in Cambodia

Since 1999 there has not been any income statistics published from the CSES survey. The quality of the income data has been an issue. The quality has become better but it still has its weaknesses. In countries like Cambodia where self-employment in small businesses and agriculture is common it is very difficult to gather accurate income data. There is no depreciation of investments like tools and animals resulting in a rather large number of households with negative income. Also income tends to fluctuate substantially during the year. There are a number of methodological issues to address before reliable income statistics can be produced from the CSES. Still you have to start somewhere and the statistics produced are reasonably reliable to give useful information about the differences between regions in Cambodia and also about how Cambodians earn their living. But keep in mind that the results should be handled with caution.

Most households have income from self-employment

In Cambodia most households have some kind of income from self employment. Income from self employment is also the main source to the total income, representing about two thirds of the total income. This also includes the value of own consumption from own production of goods. Not surprisingly income from agriculture is the main income in rural Cambodia and non-agriculture income is the main source of income in Phnom Penh and other urban Cambodia. Although income from self employment is important to most households in Cambodia it's not the only source of income as the households depend on other incomes as well. A little bit less than half of the households in Cambodia have income from employment. Wages and salaries represent roughly one third of the total income. In Phnom Penh 70 percent of the households have an income from employment. Still, this income is just around 40 percent of the total income. It's very common for households with income from employment to also have income from self-employment. Very few households have income from employment as their only source of income.

The capital market for household seems very small, representing only 0.5 percent of the total income.

In Cambodia there are very small amounts for social insurance or universal or means-tested social benefits from the government. Together with private transfers they represent up to 3 percent of the total income.

Current transfers paid include different taxes on income and regular cash transfers to private households and for charities. Most of transfers paid are reported as transfers for charities. According to the survey only one third of the households have reported any transfers paid. The average amount is 1 percent of the total income.

Table 9.1a. Income composition, average per month in thousand Riels

Source of income	Cambodia		Phnom Penh		Other urban		Other rural	
	KHR (thousands)	Share %	KHR (thousands)	Share %	KHR (thousands)	Share %	KHR (thousands)	Share %
Primary income	727	97	1,986	97	1,057	96	550	98
Salary	241	32	765	38	381	35	167	30
Self employment	482	65	1,203	59	664	60	382	68
Income agriculture	162	22	22	1	64	6	189	34
Income non-agriculture	250	34	878	43	503	46	152	27
Income own house *)	70	9	304	15	98	9	41	7
Property income	4	0	17	1	12	1	2	0
Transfers received	19	3	54	3	43	4	13	2
Total income	747	100	2,039	100	1,101	100	563	100
Transfers paid/negative income	11	1	24	1	13	1	10	2
Disposable income	736	99	2,016	99	1,089	99	554	98

*) income own house adjusted to max = 1000000 per month, P99-value for Cambodia - > 1 percent of the households have been adjusted.

% - Shares to total

KHR - in Value of Khmer Riels Currency

Table 9.1b. Income composition, average per month in US Dollars

Source of income	Cambodia		Phnom Penh		Other urban		Other rural	
	USD	Share %	USD	Share %	USD	Share %	USD	Share %
Primary income	177	97	484	97	258	96	134	98
Salary	59	32	187	38	93	35	41	30
Self employment	118	65	293	59	162	60	93	68
Income agriculture	39	22	5	1	16	6	46	34
Income non-agriculture	61	34	214	43	123	46	37	27
Income own house *	17	9	74	15	24	9	10	7
Property income	1	0	4	1	3	1	0	0
Transfers received	5	3	13	3	11	4	3	2
Total income	182	100	497	100	269	100	137	100
Transfers paid/negative income	3	1	6	1	3	1	2	2
Disposable income	179	99	492	99	265	99	135	98

*) income own house adjusted to max = 1000000 per month, P99-value for Cambodia - > 1 percent of the households have been adjusted.

% - Shares to total

USD - in Value of US Dollars

Disposable income

The disposable income varies considerably between the different areas in Cambodia. The average household income is 179 USD per month. In Phnom Penh the average household income is 492 USD. The average household income in Phnom Penh is almost twice as large as in the other urban Cambodia and more than three times larger as in rural Cambodia.

There is a problem comparing household incomes between households of different size and composition as a large household in fact have a lower standard with the same income as a smaller

household. The economic well-being might also be influenced by how many adults and how many children there are in each household. In this report the income per capita is used.

The differences between the regions remain if instead of the household disposable income the per capita income is used.

Table 9.2. Disposable income, average values per month in thousand Riels and in USD

	Values in thousand Riels per month		Values in USD per month	
	per household	per capita	per household	per capita
Cambodia	736	158	179	39
Phnom Penh	2,016	414	492	101
Other urban	1,089	234	265	57
Other Rural	554	121	135	30

The mean value doesn't give a fair picture of the income level for the typical Cambodian household. The mean value gets inflated by a few households with large incomes. Most Cambodian households have an income well below the mean value. Table 9.3. shows the income for the household in the middle of the distribution, the median value, for the different regions in Cambodia. Also the median disposable income is considerably higher in Phnom Penh than in the other regions.

Table 9.3. Disposable income, median values per month in thousand Riels and in USD

	Values in thousand Riels		Values in USD	
Regions	per household	per capita	per household	per capita
Cambodia	384	87	94	21
Phnom Penh	1,258	268	307	65
Other urban	632	141	154	34
Other Rural	323	73	79	18

The disposable income is unevenly distributed in Cambodia. Table 9.4. shows the population divided in five equally large groups (quintiles) by income. The 20 percent with the highest disposable income (quintile 5) have more than 60 percent of the total income. The households in quintile 5 have a disposable income per capita that is 26 times larger than the 20 percent of the households with the lowest income.

Table 9.4. Quintiles by disposable income per capita. Average values per month in thousand Riels and in USD.

	Cambodia			Phnom Penh			Other urban			Other rural		
Quin-tiles	Thousand Riels	USD	share %	Thousand Riels	USD	share %	Thousand Riels	USD	share %	Thousand Riels	USD	share %
1	19	5	2	82	20	4	33	8	3	17	4	3
2	49	12	6	177	43	8	90	22	8	43	10	7
3	88	21	11	271	66	13	143	35	12	74	18	12
4	148	36	19	405	99	20	238	58	20	121	30	20
5	488	119	62	1,140	278	55	667	163	57	352	86	58

In Table 9.5. the income distribution in Cambodia is presented by percentiles, where P05 represents the value that delimits the 5 percent of the households with the lowest income, P10 is the value that delimits the 10 percent with the lowest income and so on. P50, the median, represent the household in the middle of the income distribution.

A majority of the Cambodian households have a low income. In fact more than half of the Cambodian households have a disposable income per capita less than one USD per day.

The income that delimits the top ten percent of the households with the largest incomes, P90, is roughly 16 times larger than the income that delimits the bottom ten percent, P10. Within the regions the distance is somewhat smaller.

Table 9.5. Disposable Income per Capita 2009 per month by percentile in thousand Riels and in USD

	Cambodia		Phnom Penh		Other urban		Rural areas	
Percentiles	Thousand Riels	USD	Thousand Riels	USD	Thousand Riels	USD	Thousand Riels	USD
P05	11	3	60	15	16	4	10	2
P10	20	5	89	22	36	9	18	4
P25	41	10	154	37	78	19	36	9
P50 Median	87	21	268	65	141	34	73	18
P75	168	41	448	109	271	66	136	33
P90	315	77	796	194	492	120	230	56
P95	478	117	1,142	279	683	167	325	79

Definitions and methodological discussion

Income concepts

The main base to define income composition and income distribution for household has been Recommendations on Household Income Statistics from Canberra Expert Group published in 2001. The recommendations from the Canberra group have also been an essential background for other countries and organizations in their ways to try to harmonize methods and definitions for statistics on household income and distribution.

Employee income

Employee income deals with wages and salaries. Most of the values are given in cash amounts but to some extent there exists payment in kind. In CSES the interviewer will ask for both cash and non-cash payments.

Income from self-employment

Income from self-employment is the largest income among household in Cambodia. It might also be the income for which it is most difficult to get a reliable estimate. This income is divided into three components - from Agriculture, from Non-Agriculture and from Owner occupied houses. The problems in all three components are in both estimating the revenue and the costs for the activity.

Calculation of self-employment comes from the view of unincorporated enterprises surplus or deficit from inputs and outputs. For this reason one would look upon the flows of expenditure and receipts in this business. Since there are no bookkeeping in the households one has to rely on data from the interviews of both receipts/income and expenditure/costs for the households as a business.

One of the main problems is how to get a proper value of own consumption of goods produced in own production. The quantities as well as the value/price of these quantities are very hard to estimate.

It is also a problem with expenditure for investments. There are no rules for depreciations, i.e. how to make expenditures for investments divided into several years. Thus, one will find that for several

households expenditures for one year might be higher than receipts and estimated value of own consumption of own production. In these cases one can talk about deficit or negative income.

A special problem arises how to estimate income from owner-occupied dwellings and houses (imputed rent). The theory behind income from owner-occupied house is that a household who is living in a mortgage-free house has a higher level of living (financially), than an otherwise identical household who rents their accommodation. The proper way is to estimate imputed rent for a dwelling or house and from this imputed rent to withdraw expenses connected to the object. Since it is obvious that data are missing to make a fair calculation one ought to make another alternative for imputed rent less actual costs. The method that is used in CSES originates from the view that income from owner occupied house can be treated as an investment and that one can look for an alternative investment of the capital in the owner occupied house. This alternative investment can be the long-term return from Government bonds. Income from owner-occupied dwellings and houses is calculated by subtract the remaining debt from the market value of the dwelling. This value is multiplied by the long-term interest for Government bonds. A problem with this method is that it can yield unreasonable high estimates of imputed rent in large cities with high land values. In Cambodia this is the case in Phnom Penh. To prevent unreasonable high values of imputed rent to distort the results, imputed rent is limited to a maximum 12 million Riels per year[17].

Property income
The capital market for household seems very small in Cambodia. Income less expenses from rentals has been included in property income. The guidelines from Canberra group make this as an option.

Current transfers received
In Cambodia there are very small amounts for social insurance or universal or means-tested social benefits from the government. In the interview there are questions about other transfers from private households or from Non Governmental Organizations, NGOs. The main source is private transfers from other households both domestic and abroad. No social insurance benefits from employers' schemes are reported.

Total income
Total income is the sum from all different primary incomes and different transfers.

Current transfers paid
Current transfers paid should include different taxes on income and regular cash transfers to private households and for charities. Most of transfers paid are reported as transfers for charities. Social insurance contributions are not reported, either from employer or from employees.

Disposable income
Disposable income is the result when transfers paid, sometimes mentioned as negative transfers, has been withdrawn from the total income.

[17] In CSES-2009 one percent of the households had an imputed rent larger than 12 million riels before the adjustment was done.

Equalization of income

To get a fair picture on the economic well-being you must collect data for households. It is obvious that all persons don't have an income by themselves but rely on income from other people in the household. This is certainly the case for children and elderly. This is true for any country. Therefore we collect income data for the household. However, there is a problem comparing households with different size and composition as a large household in fact have a lower standard with the same income as a smaller household. The economic well-being might also be influenced by how many adults and how many children there are in each household. One can argue that children cost less than adult to maintain. Furthermore, one can argue that there ought to be some economies of scale in households. A two-person household may not pay twice the amount compared to an one-person household for their living if one takes into account that in the two-person household share some of the consumption of durable goods like TV, mopeds, cars and alike. In this report we equalize the income per capita. This means that there are no economies of scales in the household and that children will cost as much as adult to maintain.

Recall versus Diary

The CSES data has been collected both as recall data and as data from a diary. An ongoing discussion is what method is to be preferred or if there should be a combination of both. A special report handles this issue[18]. For the purpose to look on the two methods for measuring income, an investigation was carried out. Checking was done to compare data in CSES with National Accounts. This investigation ended in using recall data for income data and diary for negative transfers as taxes, transfers to other households and for charity. For these expenditures there existed no recall data. The reasons for this decision were that it is more relevant to use data for a whole year for income and expenditure for production costs and income for agriculture sector. Also with comparison with National Accounts it looked more stable. This is also in accordance to the recommendations in the report *Guidelines for Constructing Consumption Aggregates for Welfare Analysis*, which says that it's hard to collect income data from diaries in countries where income from agriculture is important as the income tends to fluctuate a lot over the seasons.[19]

Dealing with negative incomes

Since there are no rules for depreciations in Cambodia, i.e. how to make expenditures for investments divided into several years. It's not unusual for households to have deficits or negative incomes. Almost 4 percent of all households have a disposable income less than 0. For households with income from agriculture and non-agriculture, around 8 percent of the household have negative income. In this work negative incomes have been replaced by 4000 Riels, around 1 USD. This method takes away the problem with negative incomes but still give us the opportunity to measure activity in each sector, which wouldn't be the case if we replaced the negative numbers with 0.

Data cleaning

The results are very sensitive to the incomes in the very top of the distribution. Therefore a manual check of households with very high incomes has been carried through. Some errors were found and corrected which had a great influence of the results. Both the mean values and the gini-coefficient decreased remarkably after the corrections were done.

[18] Johansson,Follow-up on the Diary vs Recall issue and new plans, 2008

[19] Deaton, Zaidi, Guidelines for Constructing Consumption Aggregates For Welfare Analysis ,p 14

Consumption versus income – underestimation of income

The results show that the mean disposable income is significant lower than the mean for total consumption. Empirical literature on the relationship between income and consumption show that consumption does not fluctuate as much as income over a period of time. Consumption is less variable over the period of a year and much more stable than income, especially in agricultural economies and therefore easier to estimate in a survey.[20] If we assume that the consumption data is accurate this indicates that the income is underestimated. In countries like Cambodia where self-employment in small businesses and agriculture is common it is very difficult to gather accurate income data. There is no depreciation of investments like tools and animals resulting in a rather large number of households with negative income. As mentioned above negative income is dealt with in a rough way by replacing the negative income with a small positive value of 1 USD per year. Still there are reasons to think that income from self-employment is underestimated. Also there might be households that are unwilling to give a correct value believing that it will attract attention from tax-authorities. Evidence from other countries show that too little income is captured in surveys, especially this is the case with property income, as households with high income is more unwilling to answer[21].

Different price levels

The price levels differ between the regions in Cambodia. The prices are generally higher in Phnom Penh and Other urban regions than in the rural parts of the country. Unfortunately there are no data that gives information of the size of the price difference. In this report no adjustment has been done regarding price differences. This means that the differences between the regions are somewhat overestimated if you use income as a measurement of the standard of living.

9.2. Household Consumption

The collection of data on household consumption in the Socio-Economic Survey is used for measuring living standard and monitoring and analysing poverty.

Consumption data in the 2009 survey was collected using recall questions in the household questionnaire. Consumption data was also collected in a Diary where all expenditure transactions and consumption of own produced goods during the survey month were reported. The diary method was introduced in CSES 2004. For calculating poverty estimates the recall data was used all years. However, for 2004 poverty estimates were calculated using both methods[22]. The most recent presentation of Poverty Estimates was carried out by the World Bank[23].

The result presented in this chapter is compiled from recall data. The household questionnaire had two sets of questions, one for food expenditure/consumption and the second set for non-food expenditure. The questionnaire was designed to collect data on purchase in cash, consumption of own production, consumption of items received as wages in kind. It also included gifts, free collection and barter, and in kind expenditure. The food section comprised 20 items covering all food, including alcoholic, tobacco, and food taken away from home, prepared meals bought outside and eaten at home. The non-food section embraced 13 items covering all non-food expenditure except housing. Expenditure on housing was collected in the Housing module. The reference period for food items was the last seven days. For non-food items the reference period varied from last month to last 12 month (see the Questionnaire in appendix 8).

[20] Deaton, Zaidi, Guidelines for Constructing Consumption Aggregates For Welfare Analysis ,p 14

[21] The Canberra group, Final report and Recommendations, Ottawa 2001, p 54

[22] Royal Government of Cambodia, Ministry of Planning (February 2006). A Poverty Profile of Cambodia 2004.

[23] 2009 poverty profile and trend in Cambodia findings from the 2007 Cambodia Socio-Economic Survey (CSES) World Bank (2009).

In this report the monthly consumption is calculated. The consumption concept used in this report differ from the calculation of consumption for poverty estimates where adjustments for price differences, rental values etc is done, see section Definition and World Bank report.

Average monthly consumption

The average household consumption amount in Cambodia was 1,119 thousand Riels (273 USD) per month. The household consumption amount varied a lot between the different geographical domains. In Phnom Penh the average household consumption amount was almost three times higher than in other rural areas.

The differences between geographical domains remained when comparing per capita consumption.

Table 9.6. Average Monthly Household and Per Capita Consumption, 2009

	Consumption in thousand Riels		Consumption in US Dollar	
	Per Household	Per Capita	Per Household	Per Capita
Cambodia	1,119	254	273	62
Phnom Penh	2,466	538	601	131
Other urban	1,553	351	379	86
Other rural	920	212	225	52

Exchange Rate: 1$ = 4100 Riels

Consumption composition

In Table 9.7a. and 9.7b. below the consumption per capita for different items is presented. Almost half of the total consumption was consumption of food. In Phnom Penh the food share of the total consumption was lower than in other urban areas which in turn were lower than other rural areas. Housing was a substantial part of total consumption. In Phnom Penh the consumption of housing was almost twice as high as in other rural areas.

Table 9.7a. Consumption composition, 2009 Average Monthly value in Riels per capita

	Cambodia		Phnom Penh		Other urban		Other rural	
	Value in thousand Riels	% of total	Value in thousand Riels	% of total	Value in thousand Riels	% of total	Value in thousand Riels	% of total
Food and non-alcoholic beverages	124	49	207	39	158	45	111	52
Alcohol and tobacco	6	2	5	1	8	2	6	3
Clothing and footwear	7	3	10	2	9	2	6	3
Housing, water, electricity	50	19	169	31	81	23	33	15
Furnishing etc	3	1	6	1	5	1	2	1
Health	19	8	16	3	19	5	20	9
Transportation	12	5	38	7	16	5	9	4
Communication	5	2	14	3	9	3	3	1
Recreation and culture	3	1	12	2	5	2	2	1
Education	5	2	26	5	10	3	3	1
Miscellaneous goods	21	8	35	6	31	9	18	9
Total	254	100	538	100	351	100	212	100

Table 9.7b. Consumption composition, 2009 Average Monthly value in USD per capita

	Cambodia		Phnom Penh		Other urban		Other rural	
	USD	% of total	USD	% of total	USD	% of total	USD	% of total
Food and non-alcoholic beverages	30.2	48.7	50.6	38.6	38.6	45.1	27.0	52.3
Alcohol and tobacco	1.4	2.3	1.2	0.9	1.9	2.2	1.4	2.7
Clothing and footwear	1.6	2.6	2.5	1.9	2.1	2.5	1.5	2.8
Housing, water, electricity	12.1	19.5	41.3	31.4	19.9	23.2	8.0	15.4
Furnishing etc	0.7	1.1	1.5	1.2	1.2	1.4	0.5	1.0
Health	4.7	7.6	3.8	2.9	4.7	5.4	4.8	9.3
Transportation	3.0	4.8	9.2	7.0	4.0	4.7	2.2	4.3
Communication	1.1	1.8	3.4	2.6	2.2	2.6	0.7	1.4
Recreation and culture	0.7	1.2	2.9	2.2	1.3	1.6	0.4	0.8
Education	1.3	2.1	6.3	4.8	2.3	2.7	0.7	1.3
Miscellaneous goods	5.1	8.3	8.5	6.5	7.4	8.7	4.5	8.7
Total	62.1	100	131.2	100	85.6	100	51.7	100

Exchange Rate: 1$ = 4100 Riels

Table 9.8. shows the population divided in five equally large groups (quintiles) by total consumption. Quintile 5 who is the 20 percent of the population with the highest consumption stood for almost half of the total consumption. The 20 percent of households with the highest consumption (quintile 5) had an monthly average consumption per capita that was more than five times higher than the average consumption in the group of household with the lowest consumption (quintile 1).

Table 9.8. Quintiles by Consumption per capita. Average values per month

	Cambodia			Phnom Penh			Other urban			Other rural		
Quintiles	Value in thousand Riels	USD	share in %	Value in thousand Riels	USD	share in %	Value in thousand Riels	USD	share in %	Value in thousand Riels	USD	share in %
1	97	24	8	218	53	8	127	31	7	93	23	9
2	144	35	11	333	81	12	198	48	11	135	33	13
3	192	47	15	430	105	16	281	68	16	174	43	16
4	269	66	21	576	140	21	393	96	22	231	56	22
5	570	139	45	1,136	277	42	758	185	43	427	104	40

Exchange Rate: 1$ = 4100 Riels

Table 9.9. shows the total monthly consumption in Cambodia in million Riels and million USD. The table also shows the distribution of total consumption in different geographical domains. About 80 percent of all households lived in other rural areas, but their share of the total consumption was lower (about 67 percent). The 9 percent of Cambodians who lived in Phnom Penh accounted for about 20 percent of the total consumption.

As shown before about half of the total consumption was food consumption.

Table 9.9. Total monthly consumption and food consumption.

	Household		Total monthly household consumption			Monthly food consumption		Food share of total consumption
	Number	%	Value in million Riels	Value in million USD	%	Value in million Riels	Value in million USD	%
Cambodia	2,939,000	100	3,289,052	802	100	1,646,253	402	50
Phnom Penh	261,000	9	644,663	157	20	252,910	62	39
Other urban	285,000	10	442,190	108	13	204,429	50	46
Other rural	2,392,000	81	2,202,199	537	67	1,188,914	290	54

Exchange Rate: 1$ = 4100 Riels

Durable goods

According to the CSES 2009 the most common durable goods owned by households in Cambodia was a bicycle. Two thirds of all households owned a bicycle 2009 which was a slightly larger share compared to 2004. The increase in owning bicycles is due to an increased ownership in the rural areas.

Television was the second most common durable goods owned by the Cambodian households in 2009. Owing a television increased with 30 percent in both other urban and other rural areas. In Phnom Penh the increased ownership of televisions increased by less than ten percent. On the other hand almost all households in Phnom Penh already owned a television already 2004 but only 40 percent of the other rural households.

Compared to 2004 the share of households owning a cell phone increased more than two times in general to about 40 percent. In other rural areas the share of households owning a cell phone increased more than five times but from a fairly low rate (about 6 percent). In 2009 about every third rural household owned a cell phone.

Table 9.10. Selected items of Durable goods owned by households

	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Radio	36.1	43.0	38.9	34.9	42.5	41.3	45.2	42.3
Television	46.3	89.6	59.8	39.8	59.6	96.1	80.1	53.1
Video tape/Recorder/ player*)	6.7	28.9	14.7	3.3	28.7	60.3	47.2	23.1
Stereo	23.5	55.9	32.8	18.7	13.5	39.9	16.0	10.3
Cell phone	14.1	70.3	32.2	5.7	43.8	92.5	70.1	35.3
Satellite dish	0.5	0.7	0.6	0.4	1.0	1.9	2.5	0.7
Bicycle	63.1	44.6	59.0	65.6	67.7	44.7	61.1	71.0
Motorcycle	29.1	74.3	44.1	22.3	49.0	86.0	66.8	42.8
Car	3.0	18.9	7.0	0.8	3.8	20.4	8.4	1.5
Jeep/Van	0.5	2.2	1.1	0.3	1.0	2.5	2.5	0.7
PC	2.0	18.0	2.1	0.2	3.4	25.2	7.1	0.5

*) In CSES 2009 VHS/DVD was included

Grouping

The grouping of items follows the questionnaire, except for domestic salaries and gambling. Domestic salaries are included in Furniture, household operation etc. Gambling is excluded to be consistent with the income concept where income from Gambling and lotteries is excluded in total income.

For “Housing” charges on water, sewage, wastewater disposal, garbage collection and fuel for lighting and cooking are included as well as paid rent. For owner occupied houses the household was asked to estimate the value for rent of a similar house. Expenditure spent on maintenance and minor repairs is also included. All this data are collected in the Housing module.

Food share are calculated as the share of total consumption. Food includes all food items, non-alcoholic and alcoholic beverages.

10. Definitions and Classifications

10.1. Geographical levels of disaggregation

Besides presentations for Cambodia as a whole this report contains different levels of geographical disaggregation.

The geographical disaggregation relates to the disaggregation used in the Census 2008[24]. For the2008 Census the following criteria to every commune treated as urban was applied:

a) Population density exceeding 200 per km^2.
b) Percentage of male employment in agriculture below 50 percent.
c) Total population of the commune should exceed 2,000.

Degree of urbanisation

The most overarching decomposition next to the country as a whole is disaggregation in two parts, so to speak degree of urbanisation;

− Urban
− Rural

Geographical domains

The most frequent "geographical" decomposition used in this report is into geographical domains that is;

− Phnom Penh
− Other urban
− Other rural,

where Phnom Penh includes both urban and rural areas.

Zones

The third level rarely used in this report for geographical decomposition next to the country as a whole is disaggregation into zones;

− Phnom Penh	Phnom Penh
− Plains	Kampong Cham; Kandal; Prey Veng; Svay Rieng; Takeo
− Tonle Sap	Banteay Meanchey; Battambang; Kampong Thom; Siem Reap; Kampong Chhnang/Pursat
− Coast	Kampot; Other Coastal (*Sihanoukville, Kep and Koh Kong*)
− Plateau/Mountain	Kampong Speu; Other Plateau/Mountain (*Kratie, Mondul Kiri, Preah Vihear, Ratanak Kiri, Stung Treng, Otdar Meanchey and Pailin*)

[24] General Population Census of Cambodia 2008. National Report on Final Census Results. August 2009.

Provinces

The fourth most detailed level only used in the Health and Education sections[25] in this report for geographical decomposition is disaggregation into provinces. Cambodia is divided into 24 provinces.

- Banteay Meanchey
- Battambang
- Kampong Cham
- Kampong Chhnang
- Kampong Speu
- Kampong Thom
- Kampot
- Kandal
- Koh Kong
- Kratie
- Mondul Kiri
- Phnom Penh
- Preah Vihear
- Prey Veng
- Pursat
- Ratanak Kiri
- Siem Reap
- Preah Sihanouk
- Stung Treng
- Svay Rieng
- Takeo
- Otdar Meanchey
- Kep
- Pailin

10.2. Age

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

10.3. Household

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

- People living in institutions such as long term hospitals, prisons, monasteries, military quarters.
- Diplomatic and UN households in the country.
- 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.

10.4. Labour Market

Working age population

In CSES 2009 the *working age population* is defined as all persons in the age of 15–64 years.

Economically active population

The *economically active population* comprises all persons who furnish the supply of labour for the production of economic goods and services as defined by the United Nations systems of national accounts and balances during a specified time-reference period. According to these systems the production of economic goods and services includes all production and processing of primary products whether for the market, for barter or for own consumption, the production of all other goods and services for the market and, in the case of households which produce such goods and services for the market, the corresponding production for own consumption.

[25] In each section provinces are grouped but differently one of the two sections. For further information see the section respectively.

The international manual[26] for labour statistics uses two concepts of the economically active population.

1) The *usually active population* measured in relation to a long reference period, such as one year.
2) The *currently active population* or equivalently the **"**labour force", measured in relation to a short reference period of one week or one day.

In the CSESs the concept "currently active population" is used with reference period "the past seven days". In the recently published results from the Population Census 2008[27] the concept "usually active population" with reference period "the last 12 months" is used.

Economically inactive population

The *economically inactive population* comprises all persons in the working age population who were not **"**economically active", as defined above.

The persons not in the labour force, or equivalently, *population not currently active*, comprises all persons who neither were employed nor unemployed during the brief reference period and hence not currently active because of attendance at educational institutions, engagement in household duties, retirement or old age, or other reasons such as infirmity or disablement, which may be specified.

The labour force (the currently active population)

The labour force (i.e. the currently active population) comprises all persons who are *employed* or *unemployed*.

Employed

All persons who worked at least one hour during the reference period, the past seven days, or had a job/economic activity from which they were temporary absent are *employed*. Unpaid family workers are included in employed.

Status in employment

Status in employment refers to the status of an economically active person with respect to his or her employment. That is, whether he or she is an employer, own-account worker, employee, unpaid family worker or other.

Main and secondary occupation

Two occupations can be reported for the reference period in the CSES, the main occupation and the secondary occupation. In this report occupation, industrial sector and employment status are mainly based on the main occupation.

Unemployed

According to the international definition[28] the unemployed comprises all persons who during the reference period, the past seven days, were without work, were currently available for work and were actively seeking work. All three criteria must be fulfilled simultaneously.

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[26] International Labour Office (1990). Surveys of economically active population, employment, unemployment and underemployment. An ILO manual on concepts and methods. ILO, Geneva, 1990. ISBN 92-2-106516-2

[27] National Institute of Statistics (2009). General Population Census of Cambodia 2008, National Report on Final Census Results, August, 2009.

Not in the labour force (the currently inactive population)

People belonging not in the labour force (i.e. the currently inactive population) comprise all persons who are neither *employed* nor *unemployed,* i.e. do not belong to the labour force. (For example a full time student, homemakers, retired persons etc.)

Labour force participation rate

The *labour force participation rate* is defined as the labour force as a percentage of the working age population in the same age group.

Employment rate

The *employment rate* is defined as the share of the employed population in relation to the working age population.

Unemployment rate

The *unemployment rate* is defined as the share of the unemployed population in relation to the labour force.

10.5. Income

Income concepts

The main base to define income composition and income distribution for household has been Recommendations on Household Income Statistics from Canberra Expert Group published in 2001. The recommendations from the Canberra group have also been an essential background for other countries and organizations in their ways to try to harmonize methods and definitions for statistics on household income and distribution.

Employee income

Employee income deals with wages and salaries. Most of the values are given in cash amounts but to some extent there exists payment in kind. In CSES the interviewer will ask for both cash and non-cash payments.

Income from self-employment

Income from self-employment is the largest income among household in Cambodia. It might also be the income for which it is most difficult to get a reliable estimate. This income is divided into three components - from Agriculture, from Non-Agriculture and from Owner occupied houses. The problems in all three components are in both estimating the revenue and the costs for the activity.

Calculation of self-employment comes from the view of unincorporated enterprises surplus or deficit from inputs and outputs. For this reason one would look upon the flows of expenditure and receipts in this business. Since there are no bookkeeping in the households one has to rely on data from the interviews of both receipts/income and expenditure/costs for the households as a business.

One of the main problems is how to get a proper value of own consumption of goods produced in own production. The quantities as well as the value/price of these quantities are very hard to estimate.

[28] International Labour Office (1990). Surveys of economically active population, employment, unemployment and underemployment. An ILO manual on concepts and methods. ILO, Geneva, 1990. ISBN 92-2-106516-2

It is also a problem with expenditure for investments. There are no rules for depreciations, i.e. how to make expenditures for investments divided into several years. Thus, one will find that for several households expenditures for one year might be higher than receipts and estimated value of own consumption of own production. In these cases one can talk about deficit or negative income.

A special problem arises how to estimate income from owner-occupied dwellings and houses (imputed rent). The theory behind income from owner-occupied house is that a household who is living in a mortgage-free house has a higher level of living (financially), than an otherwise identical household who rents their accommodation. The proper way is to estimate imputed rent for a dwelling or house and from this imputed rent to withdraw expenses connected to the object. Since it is obvious that data are missing to make a fair calculation one ought to make another alternative for imputed rent less actual costs. The method that is used in CSES originates from the view that income from owner occupied house can be treated as an investment and that one can look for an alternative investment of the capital in the owner occupied house. This alternative investment can be the long-term return from Government bonds. Income from owner-occupied dwellings and houses is calculated by subtract the remaining debt from the market value of the dwelling. This value is multiplied by the long-term interest for Government bonds. A problem with this method is that it can yield unreasonable high estimates of imputed rent in large cities with high land values. In Cambodia this is the case in Phnom Penh. To prevent unreasonable high values of imputed rent to distort the results, imputed rent is limited to a maximum 12 million Riels per year[29].

Property income

The capital market for household seems very small in Cambodia. Income less expenses from rentals has been included in property income. The guidelines from Canberra group make this as an option.

Current transfers received

In Cambodia there are very small amounts for social insurance or universal or means-tested social benefits from the government. In the interview there are questions about other transfers from private households or from Non Governmental Organizations, NGOs. The main source is private transfers from other households both domestic and abroad. No social insurance benefits from employers' schemes are reported.

Total income

Total income is the sum from all different primary incomes and different transfers.

Current transfers paid

Current transfers paid should include different taxes on income and regular cash transfers to private households and for charities. Most of transfers paid are reported as transfers for charities. Social insurance contributions are not reported, either from employer or from employees.

Disposable income

Disposable income is the result when transfers paid, sometimes mentioned as negative transfers, has been withdrawn from the total income.

[29] In CSES-2009 one percent of the households had an imputed rent larger than 12 million riels before the adjustment was done.

10.6. Classifications

Educational attainment

Education concerns the highest level of education successfully completed aggregated to the classification of educational attainment used in the 2008 Population Census[30], i.e.

- 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

Occupation

Occupation refers to the kind of work done during the reference period, the last seven days. Information on occupation provides a description of a person's job. To classify this information, the International Standard Classification of Occupations, ISCO-88[31], was used.

Industry

The International Standard Industrial Classification of All Economic Activities, ISIC Rev.4.0, was used in the 2009 survey. The International Standard Industrial Classification of All Economic Activities, ISIC rev. 4.0 is considerably changed compared to the former ISIC rev. 3.1. ISIC now comprises 21 sections, which are then further subdivided into a total of 88 divisions, 238 groups and 419 classes. The added detail has increased the number of these categories considerably compared with ISIC, Rev.3.1. The reason for most of these changes, however, can be roughly divided into three categories:

a) the introduction of new concepts at higher levels (e.g., “information and communication” or “waste management and remediation activities”)

[30] National Institute of Statistics (2009). General Population Census of Cambodia 2008, National Report on Final Census Results, August 2009.

[31] http://www.ilo.org/global/What_we_do/Statistics/classifications/lang--en/index.htm.

b) necessary changes to regroup activities that are residuals of the previous type of changes
c) smaller adjustments and clarifications of concepts at lower levels, typically driven by efforts to enhance comparability.

All changes and adjustments make comparability between the two classification versions almost impossible even though headings and sections seem to be alike.[32]

Industry refers to the kind of economic activity of the workplace or enterprise where a person worked during the reference period, the last seven days.

The main industries are grouped into three sectors for which results are presented:

- Agricultural sector (section A in ISIC, Rev.4) (Primary);
  - Agriculture, forestry and fishing
- Industrial sector (sections B–F in ISIC, Rev.4) (Secondary) ;
  - Mining and quarrying,
  - Manufacturing,
  - Electricity, gas, steam and air conditioning supply,
  - Water supply; sewerage, waste management and remediation activities,
  - Construction
- Service sector (sections G–U in ISIC, Rev.4) (Tertiary) ,
  - Wholesale and retail trade; repair of motor vehicles etc.,
  - Transportation and storage,
  - Accommodation and food service activities,
  - Information and communication,
  - Financial and insurance activities,
  - Real estate activities,
  - Professional, scientific and technical activities,
  - Administrative and support service activities,
  - Public administration and defence; compulsory social security,
  - Education,
  - Human health and social work activities,
  - Arts, entertainment and recreation,
  - Other service activities,
  - Activities of households as employers,
  - Activities of extraterritorial organizations and bodies.

Health provider

Refers to the first provider that was consulted due to health reasons and if more than one consultation was done in the past 30 days it refers to the last/most recent provider.

Health providers are aggregated into the four following groups

- Public care:
  - National hospital (PP)
  - Provincial hospital (RH)
  - District hospital (RH)
  - Health centre

[32] For more detailed information please look into International Standard Industrial Classification of All Economic Activities Revision 4, Statistical papers, ST/ESA/STAT/SER.M/4/Rev.4,UNITED NATIONS PUBLICATION, ISBN: 978-92-1-161518-0, United Nations New York, 2008.

  - Health post
  - Provincial or Community based rehabilitation centre
  - Other public
- Private care:
  - Private hospital
  - Private clinic
  - Private pharmacy
- Self care:
  - Visit in Home/Office of trained health worker/nurse
  - Visit of trained health worker/nurse
  - Other private medical
  - Shop selling drugs/market
- Traditional care:
  - Kruk Khmer/Magician
  - Monk/religious leader
  - Traditional birth attendant

Crops

The NIS classification of crops, based on FAO classification, provides a grouping into 23 groups. However, to get more reliable estimates six main groups are used, namely:

1. Cereals (including mainly rice and other grains),
2. Tubers and leguminous plants (including tubers, roots and bulk crop, and leguminous plants mainly for grain excluding soybean and groundnut),
3. Industrial temporary crops (including sugar crops, oilseed crops, spices, condiments, aromatic and medicinal plants, fibre crops, and other industrial crops),
4. Vegetables (including leafy or stem vegetables, fruit-bearing vegetables, root, bulb and tuberous vegetables, leguminous vegetables harvested green, other vegetables, and special horticultural cultivation),
5. Fruits and nuts (including citrus fruit, other cultivated fruits, and edible nuts), and
6. Industrial permanent crops (including spices and aromatic crops, rubber and tanning crops, and flower crops).

11. Technical Section on Survey Design and Implementation

11.1. Background and introduction

The Cambodia Socio-Economic Surveys (CSES) were 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. The sample size in CSES 2004 was 12,000 household on annual basis. CSES 2009, from which the result in this report is computed, has the same sample size as CSES 2004. CSES 2007 and 2008 have a smaller sample size, both a subsample of the sample used in CSES 2004. It is intended to conduct a large sample survey every fifth year.

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.

A main principle for statistical system building is to look upon any survey as a follow-up of previous surveys to measure change over time as well as a preparation for future rounds of the survey.

During the planning of CSES 2009 it was recognised that comparability between the CSES 2009 and 2004 must be ensured to the largest possible extent. The sampling design is the same. However, there have been changes in the questionnaire with the purpose of improving the questions to get more reliable data. Therefore it is not possible to compare the result in some of the modules, i.e. the health modules. In section 4.3 below more information of the changes is given and also in the introductions to the result from each subject matter area in chapter 3.

Scope of the survey

Poverty reduction is a major commitment by the Royal Government of Cambodia. Accurate statistical information about the living standards of the population and the extent of poverty is an essential instrument to assist the Government in diagnosing the problems, in designing effective policies for reducing poverty and in monitoring and evaluating the progress of poverty reduction. The Millennium Development Goals (MDG) has been adopted by the Royal Government of Cambodia and a National Strategic Development Plan (NSDP) has been developed. The MDGs are also incorporated into the "Rectangular Strategy of Cambodia".

Cambodia is still a predominantly rural and agricultural society. The vast majority of the population get their subsistence in households as self-employed in agriculture. The level of living is determined by the household's command over labour and resources for own-production in terms of land and livestock for agricultural activities, equipments and tools for fishing, forestry and construction activities and income-earning activities in the informal and formal sector. Data to calculate household production were obtained from the household questionnaire and the diaries as well as data from the labour force module.

Understanding poverty in Cambodia is to understand the reasons for low productivity in household production. All CSES rounds have included some (small or large) module to capture household ownership of land, tools etc. for the production.

Low consumption level of most Cambodian households makes poverty, nutrition and food security into urgent social concerns. The household recall questions and the diaries capture household consumption including both bought and own-produced items for the poverty line calculations.

Cambodia has a very young population. Access to schooling and quality of schooling available is of great concern for the future of the country. The modules on school enrolment and level of education used in CSES's are in line with international recommendations.

Cambodia still has high mortality and high morbidity in infectious diseases. Vaccination and other preventive medical programs as well as access to medical care are important social concerns. Illness is one of the potentially important causes of differences in productivity and poverty between households.

Improved infrastructure in transport and communication is needed to increase access to markets for agricultural and other products. This kind of data has mainly been captured in the village questionnaire.

Housing conditions, including access to drinking water and sanitation, have very high priority as well as health and environmental concerns.

Large households and female-headed households are characteristics of the Cambodian society. The economic level of members of households is a function of the dependency ratio and other characteristics of the household to which they belong.

The CSES support the system of National Accounts by providing data needed on value added in household (informal sector) production. CSES data makes it possible to estimate the GDP share of private consumption from the user side or in terms of household production's from the production side.

Population change at national, regional and local levels are due to births, deaths, migration and family formation and dissolution. The 1998 and 2008 Population Censuses of Cambodia were major achievements re-establishing statistics of the population stock. There is a need to follow demographic developments closely. All the previous CSES's have registered the demographic characteristics of the population as to age, sex, marital status and migration.

11.2. Survey Planning and organisation

NIS formed a Core Group in 2006 for managing the CSES's which since then has been working with the CSES 2007, 2008 and 2009. The Core group for the CSES 2009 consisted of ten persons (including technical staff) with different responsibilities in the running CSES. The Core Group was responsible for all survey planning and activities. The group was also engaged in establishing and carrying out monitoring schemes during the fieldwork, in arranging workshop/seminar for questionnaire designing, data analysing, dissemination of the results, and for reporting to the Statistical Advisory Committee. The Core Group were responsible for the allocation and utilisation of funds and in solving logistical problems during the course of the survey.

As the most important part of the organisation of the CSES 2009, 200 enumerators and 50 supervisors were recruited in late 2008 and were subject to intensive training for the fieldwork. Some additional enumerators and supervisors were also trained to be able to replace those who resigned during the field work.

A list of NIS survey staff and survey advisors is provided in appendix 6.

11.3. Questionnaire design

The CSES 2009 questionnaires are based on the questionnaires in CSES 2004–2008 with the intention to as far as possible keep the comparability between the surveys. The questionnaires were updated and some questions of each module were also changed based on the experience and evaluation of the questionnaires of CSES 2004, 2007 and 2008. A meeting with the users and stakeholders (e.g. some relevant line ministries, International Organisations such as UNFPA, UNDP and WB) together with a large group within NIS were also conducted for discussing, revising and finalising the CSES 2009 questionnaires. A systematic review question by question was done. The changes in the questionnaires are briefly described below.

No pilot survey was carried out in CSES 2009, because the formats and standards of questions are almost similar to the previous surveys (CSES 2004, 2007 and 2008). There were just minor changes in some questions, a few questions were added or removed as referred to comments and suggestions from the users and stakeholders. The translation of the CSES 2009 questionnaires and manuals from English to Khmer was not a problem because they were just reviewed and improved following the Khmer formats and standards of questions from previous surveys (CSES 2004, 2007 and 2008).

According to the NIS time plan, the translation of the questionnaires and manuals had to be completed by late November 2008. A limited number of questionnaires were printed to be used during the training of the first group of supervisors and interviewers and the first interview month. The training took place the last two weeks in December 2008 for the first group as their fieldwork started 1 January 2009. Some minor errors in the household questionnaire were found during the training. A revised version of the questionnaire was printed and used during the training of the second group in late January 2009. Their fieldwork started 1 February 2009.

The set of questionnaires contains four forms/questionnaires:

1. Household listing form
2. Village questionnaire
3. Household questionnaire
4. Dairy sheet

1. Household listing form

The Household listing and mapping were done prior to the sampling. During the household listing the enumerator recorded household information on e.g. location, number of members and principal economic activity.

2. Village questionnaire

The Village questionnaire was used to gather basic common information on:

1. Demographic information
2. Economy & Infrastructure
3. Rainfall & Natural disasters
4. Education
5. Health
6. Retail prices (food and non-food items)
7. Employment & Wages
8. Access to common property resources during the last 5 years
9. Sale prices of agricultural land in the village
10. Recruitment of children for work outside the village

Section 6 in the Village questionnaire was revised to better capture the local prices. A review of items included in previous CSES was done. A new list following the 53 food and 27 non-food items with highest weights in CPI was constructed. By mistake the items for gasoline and firewood were excluded in the list. For users who need retail price information for these items are recommended to make use of the price information in the CPI.

3. Household questionnaire

The following modules were included in the Household questionnaire:

01. Initial visit
    01A. List of household member
    01B. Food, beverages and tobacco consumption during the last 7 days
    01C. Recall non-food expenditures
    01D. Vulnerability
02. Education & Literacy
03. Information on migration (includes past and current migration)
04. Housing
05. Household economic activities
    05A.Land ownership
    05B.Production of crops
    05C.Cost of cultivation of crops
    05D.Inventory of crops (crop storage)
    05E.Inputs and outputs of livestock and poultry raising activities
    05F.Inputs and outputs from fish cultivation and fishing/trapping of aquatic products
    05G.Inputs and outputs from forestry and hunting
    05H.List of household non-agricultural economic activities
06. Household liabilities
07. Household income from other sources
08. Construction activities
09. Durable goods
10. Maternal health (Last pregnancy and delivery)
11. Child health (youngest child and all children under 2)
12. Health check of children under 5
13. Health care seeking and expenditure
    13A.Subsidised household healthcare
    13B.Illness and health care expenditure
14. Disability
15. Current economic activities (activity status during the past seven days)
16. Usual economic activity (activity in the past 12 months)
17. Victimization
    17A.Household security
    17B.Victim of theft
    17C.Victim of accidents
    17D.Victim of violence
18. Summary of presence in the household

In the following modules questions were changed compared to the previous CSES's. This might affect comparability:

Module 01C. Recall Non-Food (Module 07 in CSES 2004).
In CSES 2007 a set of items from CSES 1999 was included to the list of items used in CSES 2004.

Module 01D. Vulnerability (Module 09 in CSES 2004).
A module on household food security was adopted in CSES 2004 as relevant to the Cambodia situation. The module included questions on number of weeks of hunger or starvation in the preceding calendar year. The sections about food security (Rice consumption and Other food) were deleted in CSES 2007.

Module 02 Education and Literacy.
To measure Literacy some changes were made in CSES 2004 questionnaire. In previous CSES rounds there were only one question to capture literacy (Can … read and write a simple message in any language). Since CSES 2004 there are two questions, one asking about the ability to read … and a second question asking about the ability to write a simple message in any language.

Module 03. Information on migration (Module 02 in CSES 2004)
The migration module was omitted in CSES 2007 and 2008. A new revised module has been included in CSES 2009.

Module 04. Housing (Module 03 in CSES 2004)
The standard module for Housing conditions used in the CSES 2004 questionnaire was considered adequate. In CSES 2007 and the recently conducted CSES 2009 the questions about drinking water and sanitation were improved to better capture the development in these areas. The categories in the questions about drinking water (wet and dry season) and toilet facilities were revised to better describe access to improved water sources and sanitation according to definitions provided by the Water and Sanitation Project[33].

Module 05. Household economic activities (Module04 in CSES 2004)
− A. Land ownership.
The module was revised in CSES 2009. Some of the questions were the same as in CSES 2004 other were changed to capture the values of plots (rental value, value to purchase etc). In CSES 2007 some categories for type of land were introduced to be more in line with international definitions.

− B. Crop production and C. Cost of Cultivation of Crop. .
Some minor changes were done in CSES 2007, where a question about cultivated area was added.

− D. Inventory of crops
The section was introduced in CSES 2007 on request from National Accounts

− E. Inputs and outputs of livestock raising activities.
Minor changes were done in CSES 2007. A question about livestock currently owned was added and the reference period for the stock of livestock and its value was changed from 12 months ago to 31 December last year.

− F. Inputs and outputs from fish cultivation and fishing/trapping of aquatic products.
Minor changes were done in CSES 2007.

Module 09. Durable goods (Module 07A in CSES 2004).
The items were reviewed. In CSES 2007 the text was changed in about 10 items.

Module 10. Maternal health (Module 10 in CSES 2004)
The structure of maternal and child health questions were revised each year since CSES 2004. There were also changes in some questions. Questions about fertility were omitted in CSES 2007.

Module 11. Child health, youngest child and all children under 2 (Module 10 in CSES 2004)
See Maternal health above.

Module 12. Health check of children under 5 (Module 12 in CSES 2004). The module was omitted in CSES 2008 and reintroduced in CSES2009. As described above the structure of maternal health and child health question as well as changes in questions were done in the CSES respectively.

Module 13.Health care seeking and expenditure (Module 14 in CSES 2004)
The health module used in the CSES 2004 had a recall of illness for the last four weeks. In CSES 2009 the Health module was changed to better capture the health situation in Cambodia and in particular the cost for treatment. A new section on subsidised household healthcare was introduced. The section on "llness and health care expenditure" initiated in the CSES 2009 had a recall of illness for the last 30 days (the same as in CDHS). The section comprises revised questions from the previous CSES's.

[33] Ministry of Rural Development and Partners (June 3 2008). Access to Water Supply and Sanitation. Definition for use in National Surveys. Partners including Dept. of Rural Water Supply, Dept. of Rural Health Care, Ideas at Work, Tonle Sap Rural Water Supply and Sanitation project, Resource Development International, UNICEF, Water and Sanitation Program, World Health Organisation.

Module 14.Disability (Module 14 −Health in CSES 2004)
A separate module for disability questions was introduced in CSES 2009 and it is mainly based on the structure of questions developed internationally[34].

Module 15.Current economic activities (Module 13 in CSES 2004).
The previous two sections (activity status and main occupation during the last 7 days) were put together in one section in CSES 2009. The instructions to the questions and the coding were developed and improved. The categories for type of employer and employment status follow the categories used in Population Census 2008. For employment status the classification as own account worker were revised (see chapter 11).

Module 16.Usual economic activity (Module 13 in CSES 2004)
This module was omitted in CSES 2007 and revised and reintroduced in CSES 2009. The questions follow the questions asked in Population Census 2008.

Module 17.Victimization (Module 16 in CSES 2004)
The module was omitted in CSES 2008. In CSES 2009 some minor changes were done.

For detailed information on the changes, look into the specific questionnaires.

4. The Diary sheet (diary method)

a. Diary for expenditure & consumption of own-production
b. Diary for household income & receipts

Minor changes were done in "kind of income" and "purpose of expenditure".

CSES 2009 village, household and diary questionnaires are attached in appendix 7−9. Enumerator and supervisor manuals are not attached. They can however be obtained at NIS. All questionnaires from CSES 2004 are available at NIS Website.

11.4. Field operations and training

Enumerator and supervisor training
Prior to the start of the fieldwork intensive interviewer and supervisor training were carried out.

The 200 interviewers and 50 supervisors recruited were split into two groups, each group consisting of 100 interviewers and 25 supervisors. The two groups alternated so that the first group did their fieldwork during odd survey months (i.e. January, March, May, July, September, and November 2009) while the second group covered the even survey months (i.e. February, April, June, August, October, and December 2009).

The training was designed with this in mind. The first group was trained in December 2008 while the second group was trained in January 2009 using premises at the NIS head office. Training of the first and second group was provided in Khmer by the appointed NIS core group and was assisted by Sida consultants. The supervisors and interviewers were jointly trained for two weeks over the 4 forms of questionnaires.

During the training a special session on Gender issues relating to data collection was provided by Ministry of Women's Affair (supported by UNDP). Yet another session was held by the Cambodian Disabled People's Organization to get the enumerators better understanding the concept and definitions of disability. The Working Group on Water and Sanitation provided useful training material on the definition on improved water sources and sanitation.

[34] Disability Classification Working Group (September 2008). Recommendations on the questions relating to disability in the 2009 Cambodian Socio-Economic Survey //Kolla mail om vilka som var med//

Training manuals are extensive and are not attached. They can however be obtained at NIS.

Field operations
Interviewers and supervisors were initially divided into teams consisting of five persons (one supervisor and four interviewers), making in total 50 teams for the fieldwork. Each month 25 teams were working in the field with a workload of 10 households per interviewer. In urban areas four PSU's[35] ("villages") were allocated to one team while in rural areas two PSU's were allocated. The fieldwork plan was designed in order to gather information from about 40 households monthly per team.

For a given month the team arrived in the village three days before the first day of the interview month to tend to preparatory tasks like discussing with village authorities, filling in the Household Listing Form and thereafter sample those households to be interviewed.

The Village Form was filled in by the supervisor.

The Household Questionnaire had 17 sections that were filled in by the interviewer during the first visit to the household, and in the following four weeks according to the following scheme:

During a survey month different questions were asked in 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 household incomes.
- Week 3. Questions about construction, durable goods, health (maternal, child, general and disability)
- Week 4. Questions about current economic activities, usual economic activities and Victimization

When the month ended, the team went back to the NIS headquarter in Phnom Penh.

Questionnaires from the same PSU were delivered to the NIS team for editing and coding by the supervisor in a packet including all the documents used and produced in the fieldwork, such as maps, enumeration lists and questionnaires.

appendix 6 contains an example (the first survey month) from the allocation of teams to PSU's.

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

Monitoring
Any survey of the CSES dimensions needs a comprehensive system for quality management and monitoring. Only then errors can be found in time to avoid quality problems later in the data process.

The CSES management group within NIS therefore set up a monitoring scheme to be implemented from the very beginning. The monitoring team included five NIS staff. The DG of NIS has spent 2–3 days monthly while other members of NIS core group (3–4 staff) were in the field for two weeks on the average. At times other officials from NIS or the Ministry participated.

Inspections entailed both announced and unannounced visits. Every team was visited at least once during their fieldwork period. There were numerous purposes of these visits. One important intention was to get a disciplinary effect on supervisors and enumerators from their knowledge inspections must be expected throughout the fieldwork, including also the very end of the diary month. Important was also to give feedback and encouragement to fieldworkers as well to complement training by advice and suggestions as to sort out any problem that might occurred in the course of fieldwork. Another

[35] Primary Sampling Unit

area of concern was to ensure that the household listing and sampling was done in accordance with the procedures that were prescribed.

In appendix 6 an example of the Field Supervision Plans is included (for January 2009). Field Supervision Plans for other months look very much the same.

11.5. Data processing

In late 2006 and beginning of 2007 a new system for data processing and storage were introduced for the Cambodia Socio Economic Survey (CSES). It includes a relational database system for storing CSES data in SQL format and an application framework developed in-house for data-entry. Since NIS staff already was familiar with Visual Basic and Microsoft SQL Server database software the transition from previous data processing system was feasible. A modern network infrastructure within the NIS was also implemented to host the new CSES system and facilitate for concurrent data-entry.

The application and storage platform developed in 2006 and supervised by Statistics Sweden consultancy has since been used consecutively for all CSES data processing from 2007 and onwards.

The database contains data tables for all modules comprising the CSES household, village and diary questionnaires. There are also code-tables used for data integrity controls during data-entry and tables for data management including error lists. In all the database counts a total of 185 tables divided by:

Table	Count
Data tables	39
Code tables	129
Management tables	17

To facilitate for easier data retrieval there are also a set of views or virtual tables available in the database.

Data in the system is for the most part processed by three distinct application components all developed in Microsoft Visual Basic 6.0.

- The CSES editing component: is used for entering household information from cover page of questionnaire such as; PSU number, household number and number of members in household.
- The CSES entry component: is used for entering data from each CSES module. This is the main component for data processing.
- The CSES management component: is used to correct errors and view information about operator statistics.

All database modules as well as application components have since 2008 been maintained and improved by staff from the NIS ICT department.

Work flow of CSES data processing system

Step 1	Questionnaires sent from field operators arrives monthly at NIS and is taken care of by data processing staff
Step 2	Questionnaires are updated with appropriate codes for household identification. They are checked and edited for any apparent errors or misunderstandings from the field operator. All changes are written to the questionnaire.
Step 3	Data about number of rows for each module are entered into the management module. As well as number of households per PSU. These practices are to ensure that all data rows are entered.

Step 4	Data-entry of all modules including Household, Diary and Village.
Step 5	After finished data entry an iterative error correction phase is started and run from the database server. Any errors from data controls are visible in the management module.

Training:
In December 2008, the data processing team participated in a training course for enumerators and supervisors. The main objective of the training was to identify anomalies in the questionnaire and also discuss certain ideas raised during training sessions to avoid and reduce future mistakes. From January 2009 and onwards, the supervisor for data editing and coding took part in reviewing problems raised by instructors and enumerators encountered during fieldwork interviews.

Data editing and coding:
The NIS team commenced their work of checking and coding in beginning of February after the first month of fieldwork was completed. Supervisors from the field delivered questionnaires to NIS. Sida project experts and NIS Survey Manager helped solving relevant matters that became apparent when reviewing questionnaires on delivery.

Basic instructions
All questionnaires from each PSU were delivered to editors and coders by supervisor. The editors and coders were responsible for handling the questionnaires from the brought from the field supervisor's until finishing the process of checking and coding. When checking and coding a red pen was used in the questionnaire.

How the workflow is organised at the office:
Data editing and coding is an important part of the overall data processing for CSES. In brief, the implementation of data editing and coding comprise the following functions:

- When a field supervisor delivered questionnaires from a PSU the delivery contained a set of mappings, listings, village questionnaires, household questionnaires and diary forms. Editors and coders started checking each PSU including mapping information and all other forms. Field supervisor had to wait for editor and coder's checking. If any problem occurred, editor had to immediately ask field supervisor to correct the error.
- After corrections were completed, editor started the coding process. The code to be used included e.g. crop-code, occupation, industry code, income and expenditure code, and unit code. When editor encountered a mistake which could not be corrected directly by editor it had to be discussed with the supervisor or called back to enumerator.
- After checking and coding was finished, the data editor staff put all documents from the PSU into a designated box labelled with the PSU number and sent it to the data-entry operator.
- In case the data-entry operator encountered any mistakes caused by checking and coding, the operator sent the questionnaire back for re-edit and checking.
- Editing and coding proceeds every month and is done one week before data entry starts.

11.6. Data dissemination

NIS has a dynamic website where NIS reports and tables are stored so all users can access it easily. The NIS website (http://www.nis.gov.kh) consists of results from various censuses and surveys, periodical publications (such as CPI, National Accounts), and other documents which are released by NIS. However, most information available on NIS website for downloading is in static format.

NADA Toolkit (a Web based application tool): Contains documentation (Meta Data) for various surveys. It is available on-line and can be used to prepare documentation in XML format and also be used together with micro data. However, at the moment micro data can only be accessed by micro data

release on CD after a formal request to Ministry of Planning. This procedure is the preferred way of disseminating data to the NIS website and to make the final e.g. CSES results and metadata available.

SuperCROSS: NIS transforms most survey and census data to a centralised storage repository using SQL Server. To further facilitate for users to retrieve and tabulate information stored in databases it is decided to implement a Data warehouse solution with the SuperSTAR software suite at the NIS. The SuperCROSS (client tool) is very useful within the organisation especially for all subject matter teams as well as some line ministries.

Other software's of importance for tabulating results are Stata, SPSS and Microsoft Excel.

Some CSES indicators are also presented in CamInfo, which is Cambodia's socio-economic database system where CamInfo is used to monitor progress towards the Millennium Development Goals.

Preliminary results from CSES 2009 were presented and discussed at a seminar in Hotel Phnom Penh on 20 October 2010, celebrating the first World Statistics Day (WSD). More than 200 participants from Provincial Planning Departments, Ministry of Planning, other line ministries, international organisations, NGOs and Universities attended the seminar. In the Seminar the seven subject matter reports of CSES 2009 were presented and discussed. The reports were written and presented at the WSD by separate analysts of NIS.

11.7. Sampling design

In this section the sampling design and the sample selection for CSES 2009, is described. The sampling design for the 2009 survey is the same as that used for the CSES 2004. The sampling design for the 2004 CSES is described in for instance National Institute of Statistics (2005a).

The sampling frame for the 2009 survey is based on preliminary data from the General Population Census conducted in 2008. The sample is selected as a three stage cluster sample with villages in the first stage, enumeration areas in the second stage and households in the third.

The Sampling Frame

Preliminary data from the General Population Census 2008 was used to construct the sampling frame for the first stage sampling, i.e. sampling of villages. All villages except 'special settlements' were included in the frame. In all, the first stage sampling frame of villages consisted of 14,073 villages, see Appendix 1. Compared to previous years the frame used for the 2009 survey based on the census 2008 was more up to date than in previous surveys which were based on the population census 1998.

The following variables were used from the census; Province code, province name, district code, district name, commune code, commune name, village code, village name, urban-rural classification of villages, the number of households per village and, the number of enumeration areas in the village.

In the second-stage Enumeration Areas (EA) are selected in each selected village. In most villages only one EA was selected but in some large villages more than one was selected.

For the third stage, the sampling of households, a frame was constructed in field. For selected EAs the census map of the village, including EAs and residences, was given to enumerator who updated the map and listed the households in the selected EA. A sample of households was then selected from the list.

Stratification

The sampling frame of villages was stratified by province and urban and rural. There are 24 provinces and each village is classified as either urban or rural which means that in total we have 48 strata, see Appendix 1. Each stratum of villages was sorted by district, commune and village code.

Sampling

The sampling design in the CSES 2009 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 systematic πps sample of villages, Primary Sampling Units (PSUs) was selected from each stratum,

i.e. without replacement systematic sampling with probabilities proportional to size. The size measure used was the number of households in the village according to the sampling frame.

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

As mentioned above, in a few large villages more than one EA was selected.

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

The selection of villages and EAs were done at NIS while the selection of households in stage three was done in field. As mentioned in section 1.1 all households in selected EAs were listed by the enumerator. The sample of households was then selected from the list.

Sample sizes and allocation

The sample size of PSUs, were, as in the 2004 survey, 720 villages (or EAs). In urban villages 10 households were selected and in rural 20 households. In all 12,000 households were selected.

Urban and rural villages were treated separately in the allocation. The allocation was done in two steps. First the sample sizes for urban and rural villages in the frame were determined and then sample sizes for the provinces within urban and rural areas were determined, i.e. the strata sample sizes.

The total sample size was divided into to two, one sample size for urban villages and the other for rural villages. The calculation of the sample sizes for urban and rural areas were done using the proportion of consumption in the two parts of the population. Data on consumption from the CSES 2007 survey was used. The resulting sample sizes for urban villages was 240 and for rural 480. (Some adjustments of the calculated sample sizes were done, resulting in the numbers 240 and 480).

Allocation of the total sample size on the strata within urban and rural areas respectively, was done in the following way. The sample size, i.e. the number of PSUs, villages, selected from stratum *h*, is proportional to the number of households in stratum *h*, i.e.

$$n_{Ih} = n_I \cdot \frac{M_h}{\sum_{h=1}^{H} M_h} \qquad (1.1)$$

where,

n_h is the sample size in stratum *h*, i.e. the number villages selected in stratum *h*,

n_I is the total sample size of villages for urban or rural villages,

H is the number of strata in urban or rural areas,

M_h is the number of households in stratum *h* according to the frame.

As mentioned above, the sample size calculations are done separately for urban and rural villages, i.e. for strata with urban villages (1.1) is used with $n_I = 240$ and $\sum_{h=1}^{H} M_h$ is the number of households in urban villages in the frame and for rural villages (1.1) is used with $n_I = 480$ and $\sum_{h=1}^{H} M_h$ is the number of households in rural villages in the frame.

Monthly samples

In section 1.3 the selection of the annual sample was described. The annual sample was divided into 12 monthly samples of equal sizes. The monthly samples consisted of 20 urban and 40 rural villages. The division of the annual sample into monthly samples was done so that as far as possible each province would be represented in each monthly sample. Since the sample size of villages in some provinces is smaller than 12, all provinces were not included in all monthly samples. Also, the outline of the fieldwork with teams of 4 enumerators and one supervisor puts constraints on how to divide the annual sample into monthly samples. The supervisors must travel between the villages in a team and therefore the geographical distance between the villages surveyed by a team cannot be too large.

11.8. Estimation

Totals, ratios such as means or proportions were estimated for the population or for subgroups of population, i.e. domains of study. The domains were defined by e.g. region or sex. Means and proportions were estimated by first estimating totals and then calculating the ratio of two estimated totals. To estimate totals from a sample survey weights are needed.

Weights for the 2009 CSES

The weights are determined by the sampling design, design weights, and adjusted for nonresponse and other deficiencies such as under coverage and, to improve the precision of the estimates.

The design weight for household *k* in the selected enumeration area *hij* is given by

$$w_{hijk} = \frac{M_h}{n_h \cdot M_{hi}} \cdot \frac{E_{hi}}{1} \cdot \frac{M_{hij}}{m_{hij}} \qquad (2.1)$$

where,

M_h is the number of households in stratum *h* according to the frame,

M_{hi} is the number of households in village *hi* according to the frame,

n_h is the number of villages selected from stratum *h*,

E_{hi} is the number of enumeration areas in village *hi*,

M_{hij} is the number of households in EA *hij* according to the listing of households by the enumerator and,

m_{hji} is the number of households interviewed in EA *hij*

Some of the EAs have boundaries that are difficult to identify in field. In such cases there is a risk that the enumerator wrongly includes households outside the EA or excludes households within the EA. In some very large EAs the enumerator did not list all households so the number of households in the selected EA was unknown. To avoid these problems the weights were instead calculated by

$$w_{hijk} = \frac{M_h}{n_h \cdot M_{hi}} \cdot \frac{M^*_{hi}}{m_{hij}} \qquad (2.2)$$

where M_{hi}^* is the number of households in village *hi* according to the village chairman. Note that, in villages with only one EA the right-hand sides of (2.1) and (2.2) coincide. In villages where the EAs are of approximately the same size the right-hand sides of (2.1) and (2.2) are approximately equal. The same adjustment of the design weights were done in the 2004 survey, see National Institute of Statistics (2005a).

The weights calculated by (2.2) lead to underestimated population size. The sampling frame was constructed from a preliminary version of the population census 2008 and, the number of households per village in the frame differs from the final version. The weights were therefore adjusted using population projections and the census 2008. The population projections available at the time when the weights were calculated were preliminary and only available for age groups and sex. Therefore, also information from the census, such as population per province and household size was used to adjust the weights. Using the resulting adjusted weights, the population size is estimated to 13,966,718, and the number of households is estimated to 2,938,650.

Weights for the 2004 CSES

Results for the CSES 2004 survey were presented in 2005, see e.g. National Institute of Statistics (2005b). The results for 2004 presented in this report differ from the results presented in 2005. The reason for this is that the weights that were used for the earlier results were adjusted using the, at that time, available population projections, Neupert, R. (2005), which later turned out to overestimate the population size. The 2004 weights were re-calculated when data from the population census 2008 was available and in this report we have used these new weights.

Table 11.1. Sample allocation to strata

Province	Number of villages in the frame			Sample sizes		
	Urban	Rural	Total	Urban	Rural	Total
01 Banteay Meanchey	53	587	640	18	23	41
02 Battambang	84	703	787	20	34	54
03 Kampong Cham	88	1,671	1,759	14	75	89
04 Kampong Chhnang	26	542	568	4	20	24
05 Kampong Speu	66	1,293	1,359	4	28	32
06 Kampong Thom	22	745	767	4	26	30
07 Kampot	23	459	482	4	24	28
08 Kandal	100	983	1,083	16	46	62
09 Koh Kong	16	119	135	4	4	8
10 Kratie	20	240	260	4	12	16
11 Mondul Kiri	4	95	99	2	1	3
12 Phnom Penh	572	122	694	106	3	109
13 Preah Vihear	10	202	212	2	5	7
14 Prey Veng	16	1,121	1,137	4	48	52
15 Pursat	27	476	503	2	17	19
16 Ratanak Kiri	7	234	241	2	5	7
17 Siemreap	52	874	926	12	28	40
18 Sihanoukville	15	79	94	6	5	11
19 Stung Treng	5	129	134	2	5	7
20 Svay Rieng	12	678	690	2	25	27
21 Takeo	12	1,104	1,116	2	37	39
22 Oddar Meanchey	16	272	288	2	7	9
23 Kep	2	14	16	2	1	3
24 Pailin	11	72	83	2	1	3
	1,259	12,814	14,073	240	480	720*

*) In practice there are only 716, because two villages in the Banteay Meanchey province are very large and more than EA was selected in these villages.

References:

National Institute of Statistics (2005a). Cambodia Socio-Economic Survey 2004, Technical Report on Survey Design and Implementation

National Institute of Statistics (2005b). Summary Subject Matter Report. Cambodia Socio-Economic Survey 2004. Phnom Penh, August 2005.

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

Neupert R. (2010). Preliminary Population projections. Unpublished.

Appendix

1. Housing condition Tables
2. Education Tables
3. Health Tables
4. Staff members in the CSES 2009
5. Listing form of Households in the Village
6. Village Questionnaire
7. Household Questionnaire
8. Diary Sheets
9. Team allocation. Distribution of Sample Villages by province, month and team (January 2009)

Appendix 1. Housing condition Tables

Table 1.1. Occupied dwellings by kind of inner wall materials and geographical domain, 2004. Percent.

Inner wall materials	Cambodia	Phnom Penh	Other urban	Other rural
Bamboo, Thatch	27.1	1.0	15.7	31.5
Wood or logs	26.5	9.5	36.3	27.1
Plywood	17.3	17.8	20.8	16.8
Concrete, brick, stone	9.8	68.7	14.7	2.7
Galvanized iron or aluminium	1.9	1.4	3.5	1.8
Fibrous cement	0.1	0.2	0.3	0.1
Makeshift, salvaged or improvised materials	1.4	0.7	1.4	1.5
Other	15.8	0.6	7.3	18.6
Total	100	100	100	100

Table 1.2. Occupied dwellings by kind of outer wall materials and geographical domain, 2004. Percent.

Outer wall materials	Cambodia	Phnom Penh	Other urban	Other rural
Bamboo, Thatch	27.3	0.9	16.0	31.7
Wood or logs	26.7	9.2	36.2	27.4
Plywood	17.0	18.0	20.7	16.4
Concrete, brick, stone	9.7	69.0	14.4	2.6
Galvanized iron or aluminium	2.1	1.8	4.0	1.9
Fibrous cement	0.1	0.2	0.3	0.1
Makeshift, salvaged or improvised materials	1.4	0.7	1.4	1.4
Other	15.7	0.2	7.0	18.5
Total	100	100	100	100

Table 1.3. Toilet facilities[36] by geographical domain, 2009. Percent.

Type of Facilities	Cambodia	Phnom Penh	Other urban	Other rural
Open defecation (no facility)	60.2	0.8	20.1	71.7
Use of public or shared latrine	1.3	0.6	2.9	1.2
Use of unimproved (but not shared) options	3.8	0.1	3.5	4.2
Use of improved options	34.7	98.4	73.5	22.9
Total	100	100	100	100

[36]Ministry of Rural Development and Partners (June 3 2008). Access to Water Supply and Sanitation. Definition for use in National Surveys. Partners including Dept. of Rural Water Supply, Dept. of Rural Health Care, Ideas at Work, Tonle Sap Rural Water Supply and Sanitation project, Resource Development International, UNICEF, Water and Sanitation Program, World Health Organisation.

Table 1.4. Toilet facilities by geographical domains, 2004 and 2009. Percent.

Type of Facilities	2004				2009			
	Cambodia	Phnom Penh	Other urban	Other rural	Cambodia	Phnom Penh	Other urban	Other rural
Connected to sewerage	8.0	79.4	6.3	0.4	9.4	75.5	13.3	1.7
Septic tank	14.6	15.6	41.9	10.9	23.9	21.6	58.2	20.0
Pit latrine	2.2	0.4	2.7	2.3	3.2	-	2.0	3.6
Other without septic tank	1.4	0.3	1.8	1.5	2.3	1.4	2.3	2.4
Public toilet	0.2	0.2	0.4	0.2	1.3	0.6	2.8	1.2
Shared toilet	0.8	1.3	2.9	0.5	-	-	-	-
Open land	40.4	1.4	19.8	47.3	59.1	0.8	19.9	70.2
None	32.1	1.3	23.9	36.5	-	-	-	-
Other	0.3	-	0.3	0.3	0.8	-	1.3	0.8
Total percent	100	100	100	100	100	100	100	100

CSES 2009 has been regrouped to be comparable with CSES 2004.

Table 1.5. Type of fuel for cooking by geographical domain, 2004. Percent.

Types of Fuel	Cambodia	Phnom Penh	Other urban	Other rural
Firewood	83.0	7.8	57.9	94.4
Charcoal	6.3	23.3	20.2	2.6
Firewood and Charcoal	2.1	6.5	6.9	1.0
Liquefied petroleum gas	6.5	54.5	11.2	0.7
Kerosene	0.1	0.4	-	0.0
Publicly-provided electricity	0.2	1.0	0.5	0.0
Gas and electricity	0.7	5.7	1.5	0.1
Privately-generated electricity	0.1	-	0.1	0.0
None/don't cook	0.0	0.0	-	0.0
Other	1.1	0.7	1.6	1.1
Total	100	100	100	100

Appendix 2. Education Tables

Tab 2.1a. Literacy (7+) by geographical domains, age and sex, 2004

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia						
7 + year	3 429 000	3 901 000	7 330 000	60.5	74.8	67.4
7–9	162 000	176 000	338 000	35.3	35.2	35.3
10–14	679 000	688 000	1 366 000	76.5	73.9	75.1
15–24	1 117 000	1 210 000	2 327 000	76.8	84.1	80.4
25–34	526 000	615 000	1 141 000	63.7	79.5	71.4
35–44	443 000	514 000	958 000	56.6	77.0	66.0
45–54	326 000	349 000	675 000	54.6	81.2	65.7
55–64	133 000	212 000	345 000	37.2	81.5	55.8
65+	43 000	137 000	179 000	14.3	64.8	35.1
Phnom Penh						
7 + year	501 000	495 000	996 000	86.4	95.4	90.7
7–9	19 000	19 000	38 000	67.1	73.7	70.3
10–14	58 000	66 000	124 000	93.5	95.4	94.5
15–24	174 000	159 000	333 000	95.3	98.8	96.9
25–34	83 000	79 000	162 000	92.0	95.4	93.6
35–44	66 000	65 000	130 000	84.6	97.0	90.4
45–54	63 000	59 000	123 000	85.8	97.7	91.1
55–64	29 000	31 000	60 000	68.9	95.5	80.4
65+	9 000	18 000	27 000	39.0	85.1	60.6
Other urban areas						
7 + year	452 000	485 000	937 000	71.9	82.5	77.0
7–9	21 000	27 000	48 000	46.4	50.0	48.3
10–14	82 000	87 000	170 000	87.9	85.2	86.5
15–24	148 000	148 000	296 000	85.2	89.1	87.1
25–34	65 000	70 000	135 000	75.3	86.8	80.9
35–44	60 000	66 000	127 000	69.7	81.5	75.4
45–54	47 000	43 000	90 000	68.6	89.3	77.2
55–64	22 000	29 000	50 000	50.8	86.9	66.6
65+	7 000	15 000	22 000	22.7	65.4	40.1
Other rural areas						
7 + year	2 476 000	2 921 000	5 397 000	55.6	71.1	63.0
7–9	122 000	131 000	252 000	31.7	31.0	31.3
10–14	539 000	534 000	1 073 000	73.6	70.3	71.9
15–24	795 000	903 000	1 698 000	72.4	81.2	76.8
25–34	378 000	466 000	845 000	58.3	76.4	67.0
35–44	317 000	383 000	701 000	51.3	73.8	61.6
45–54	216 000	247 000	463 000	47.4	76.8	59.6
55–64	83 000	152 000	235 000	30.3	78.2	50.2
65+	26 000	104 000	131 000	10.8	62.3	31.7

Tab 2.1b. Literacy (7+) by geographical domains, age and sex, 2009

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia						
7 + year	4 138 000	4 569 000	8 707 000	66.8	79.1	72.7
7–9	207 000	191 000	398 000	46.3	41.0	43.6
10–14	641 000	662 000	1 303 000	84.4	81.3	82.8
15–24	1 312 000	1 394 000	2 706 000	85.8	88.3	87.1
25–34	763 000	826 000	1 588 000	69.0	81.3	74.9
35–44	526 000	601 000	1 126 000	63.5	80.6	71.6
45–54	389 000	432 000	821 000	54.6	77.2	64.5
55–64	233 000	283 000	516 000	51.2	83.6	65.1
65+	67 000	181 000	248 000	18.6	70.4	40.1
Phnom Penh						
7 + year	589 000	552 000	1 141 000	89.3	96.2	92.5
7–9	25 000	27 000	52 000	81.4	80.0	80.7
10–14	51 000	58 000	109 000	97.4	97.2	97.3
15–24	172 000	146 000	319 000	96.2	99.0	97.5
25–34	138 000	116 000	254 000	95.5	96.5	96.0
35–44	76 000	78 000	154 000	87.5	97.9	92.5
45–54	67 000	62 000	129 000	83.6	97.5	89.8
55–64	45 000	42 000	87 000	82.7	94.7	88.1
65+	15 000	22 000	37 000	47.2	91.5	66.2
Other urban areas						
7 + year	512 000	538 000	1 050 000	79.9	89.6	84.6
7–9	28 000	23 000	50 000	63.3	55.6	59.6
10–14	61 000	67 000	128 000	89.9	87.2	88.4
15–24	159 000	158 000	317 000	93.9	95.7	94.8
25–34	99 000	98 000	197 000	83.4	94.2	88.5
35–44	74 000	81 000	155 000	80.6	91.9	86.1
45–54	50 000	56 000	106 000	72.7	91.1	81.3
55–64	32 000	33 000	66 000	63.9	88.1	74.2
65+	9 000	22 000	31 000	30.2	82.8	54.8
Other rural areas						
7 + year	3 037 000	3 479 000	6 516 000	62.0	75.7	68.6
7–9	155 000	141 000	296 000	41.5	36.1	38.7
10–14	530 000	537 000	1 066 000	82.7	79.2	80.9
15–24	980 000	1 089 000	2 069 000	83.1	86.1	84.7
25–34	525 000	612 000	1 137 000	62.4	77.3	69.6
35–44	376 000	442 000	818 000	57.9	76.5	66.7
45–54	272 000	314 000	586 000	48.3	72.3	58.7
55–64	155 000	208 000	363 000	44.5	81.0	60.0
65+	43 000	137 000	180 000	14.4	66.4	35.6

Tab 2.2a. Literacy (7+) by province and sex, 2004

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia 7+	3 429 000	3 901 000	7 330 000	60.5	74.8	67.4
Phnom Penh	501 000	495 000	996 000	86.4	95.4	90.7
Kampong Cham	420 000	497 000	917 000	56.5	72.4	64.1
Kandal	397 000	415 000	812 000	72.5	83.3	77.6
Prey Veaeng	219 000	273 000	492 000	50.5	71.0	60.1
Svay Rieng	123 000	153 000	275 000	56.2	78.2	66.6
Takaev	213 000	253 000	466 000	58.2	75.4	66.4
Banteay Mean Chey	173 000	205 000	379 000	61.0	76.8	68.6
Bat Dambang	283 000	317 000	599 000	67.9	80.1	73.8
Kampong Thum	146 000	164 000	310 000	54.1	64.8	59.3
Siem Reab	182 000	212 000	394 000	49.9	63.4	56.4
Other Tonle Sap	997 000	1 139 000	2 136 000	58.5	72.2	65.1
Coastal	233 000	273 000	505 000	57.0	71.0	63.8
Kampong Speu	165 000	200 000	365 000	55.2	72.0	63.3
Mountain	162 000	202 000	364 000	44.7	57.3	50.9

Tab 2.2b. Literacy (7+) by province and sex, 2009

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia 7+	4 138 000	4 569 000	8 707 000	66.8	79.1	72.7
Phnom Penh	589 000	552 000	1 141 000	89.3	96.2	92.5
Kampong Cham	471 000	537 000	1 007 000	61.5	75.0	68.1
Kandal	426 000	459 000	886 000	72.0	83.6	77.6
Prey Veaeng	271 000	314 000	585 000	61.6	78.2	69.5
Svay Rieng	149 000	166 000	316 000	66.0	81.8	73.5
Takaev	269 000	309 000	578 000	68.8	84.0	76.2
Banteay Mean Chey	199 000	223 000	422 000	63.1	75.7	69.2
Bat Dambang	329 000	364 000	694 000	70.0	80.7	75.2
Kampong Thum	189 000	196 000	385 000	63.8	71.2	67.4
Siem Reab	246 000	286 000	532 000	61.4	74.9	68.0
Other Tonle Sap	271 000	299 000	570 000	66.8	78.5	72.5
Coastal	282 000	327 000	609 000	63.5	78.4	70.7
Kampong Speu	202 000	235 000	437 000	61.3	78.0	69.3
Mountain	243 000	302 000	545 000	52.7	65.7	59.2

Tab 2.3a. Adult literacy (15+) by geographical domains, age and sex, 2004

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia						
15 + year	2 589 000	3 037 000	5 626 000	59.9	80.3	69.4
15–24	1 117 000	1 210 000	2 327 000	76.8	84.1	80.4
25–34	526 000	615 000	1 141 000	63.7	79.5	71.4
35–44	443 000	514 000	958 000	56.6	77.0	66.0
45–54	326 000	349 000	675 000	54.6	81.2	65.7
55–64	133 000	212 000	345 000	37.2	81.5	55.8
65+	43 000	137 000	179 000	14.3	64.8	35.1
Phnom Penh						
15 + year	424 000	410 000	834 000	86.6	96.8	91.3
15–24	174 000	159 000	333 000	95.3	98.8	96.9
25–34	83 000	79 000	162 000	92.0	95.4	93.6
35–44	66 000	65 000	130 000	84.6	97.0	90.4
45–54	63 000	59 000	123 000	85.8	97.7	91.1
55–64	29 000	31 000	60 000	68.9	95.5	80.4
65+	9 000	18 000	27 000	39.0	85.1	60.6
Other urban areas						
15 + year	349 000	371 000	719 000	71.2	85.9	78.1
15–24	148 000	148 000	296 000	85.2	89.1	87.1
25–34	65 000	70 000	135 000	75.3	86.8	80.9
35–44	60 000	66 000	127 000	69.7	81.5	75.4
45–54	47 000	43 000	90 000	68.6	89.3	77.2
55–64	22 000	29 000	50 000	50.8	86.9	66.6
65+	7 000	15 000	22 000	22.7	65.4	40.1
Other rural areas						
15 + year	1 816 000	2 256 000	4 072 000	54.4	77.1	65.0
15–24	795 000	903 000	1 698 000	72.4	81.2	76.8
25–34	378 000	466 000	845 000	58.3	76.4	67.0
35–44	317 000	383 000	701 000	51.3	73.8	61.6
45–54	216 000	247 000	463 000	47.4	76.8	59.6
55–64	83 000	152 000	235 000	30.3	78.2	50.2
65+	26 000	104 000	131 000	10.8	62.3	31.7

Tab 2.3b. Adult literacy (15+) by geographical domains, age and sex, 2009

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia						
15 + year	3 289 000	3 716 000	7 005 000	65.9	82.7	73.9
15–24	1 312 000	1 394 000	2 706 000	85.8	88.3	87.1
25–34	763 000	826 000	1 588 000	69.0	81.3	74.9
35–44	526 000	601 000	1 126 000	63.5	80.6	71.6
45–54	389 000	432 000	821 000	54.6	77.2	64.5
55–64	233 000	283 000	516 000	51.2	83.6	65.1
65+	67 000	181 000	248 000	18.6	70.4	40.1
Phnom Penh						
15 + year	514 000	467 000	980 000	89.0	97.2	92.7
15–24	172 000	146 000	319 000	96.2	99.0	97.5
25–34	138 000	116 000	254 000	95.5	96.5	96.0
35–44	76 000	78 000	154 000	87.5	97.9	92.5
45–54	67 000	62 000	129 000	83.6	97.5	89.8
55–64	45 000	42 000	87 000	82.7	94.7	88.1
65+	15 000	22 000	37 000	47.2	91.5	66.2
Other urban areas						
15 + year	424 000	448 000	872 000	80.0	92.8	86.1
15–24	159 000	158 000	317 000	93.9	95.7	94.8
25–34	99 000	98 000	197 000	83.4	94.2	88.5
35–44	74 000	81 000	155 000	80.6	91.9	86.1
45–54	50 000	56 000	106 000	72.7	91.1	81.3
55–64	32 000	33 000	66 000	63.9	88.1	74.2
65+	9 000	22 000	31 000	30.2	82.8	54.8
Other rural areas						
15 + year	2 352 000	2 801 000	5 153 000	60.6	79.4	69.5
15–24	980 000	1 089 000	2 069 000	83.1	86.1	84.7
25–34	525 000	612 000	1 137 000	62.4	77.3	69.6
35–44	376 000	442 000	818 000	57.9	76.5	66.7
45–54	272 000	314 000	586 000	48.3	72.3	58.7
55–64	155 000	208 000	363 000	44.5	81.0	60.0
65+	43 000	137 000	180 000	14.4	66.4	35.6

Tab 2.4a. Adult literacy (15+) by province and sex, 2004

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia 15+	2 589 000	3 037 000	5 626 000	59.9	80.3	69.4
Phnom Penh	424 000	410 000	834 000	86.6	96.8	91.3
Kampong Cham	310 000	380 000	690 000	54.8	76.8	65.1
Kandal	301 000	316 000	617 000	71.1	86.8	78.4
Prey Veaeng	162 000	217 000	379 000	48.5	78.0	61.9
Svay Rieng	90 000	120 000	210 000	54.7	84.8	68.7
Takaev	156 000	199 000	355 000	57.3	81.9	68.9
Banteay Mean Chey	124 000	151 000	275 000	58.0	80.4	68.5
Bat Dambang	207 000	230 000	438 000	66.8	83.5	74.6
Kampong Thum	115 000	129 000	244 000	56.2	71.4	63.4
Siem Reab	134 000	169 000	303 000	48.9	70.6	59.1
Other Tonle Sap	741 000	868 000	1 609 000	58.0	77.7	67.2
Coastal	167 000	209 000	376 000	54.8	76.9	65.2
Kampong Speu	123 000	159 000	283 000	55.1	80.1	66.8
Mountain	115 000	158 000	273 000	43.4	63.8	53.2

Tab 2.4b. Adult literacy (15+) by province and sex, 2009

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia 15+	3 289 000	3 716 000	7 005 000	65.9	82.7	73.9
Phnom Penh	514 000	467 000	980 000	89.0	97.2	92.7
Kampong Cham	370 000	425 000	795 000	60.7	77.8	68.8
Kandal	349 000	384 000	733 000	71.0	87.1	78.6
Prey Veaeng	218 000	250 000	468 000	61.1	83.0	71.2
Svay Rieng	116 000	137 000	253 000	64.3	86.3	74.6
Takaev	202 000	245 000	447 000	66.0	86.2	75.7
Banteay Mean Chey	153 000	184 000	337 000	61.5	79.7	70.3
Bat Dambang	254 000	304 000	558 000	67.7	84.4	75.9
Kampong Thum	147 000	161 000	307 000	62.8	74.2	68.3
Siem Reab	188 000	223 000	411 000	59.0	76.0	67.2
Other Tonle Sap	215 000	240 000	455 000	66.6	82.4	74.1
Coastal	223 000	264 000	486 000	63.6	84.0	73.3
Kampong Speu	160 000	196 000	356 000	60.9	83.6	71.7
Mountain	181 000	237 000	418 000	50.7	69.6	59.9

Tab 2.5a. Persons (5+) never attended school by geographical domain, age and sex, 2004

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia						
5 + year	1 789 000	958 000	2 748 000	30.2	17.5	24.1
5–14	316 000	337 000	653 000	19.7	19.7	19.7
15–24	254 000	166 000	420 000	17.5	11.5	14.5
25–34	236 000	133 000	369 000	28.6	17.2	23.1
35–44	288 000	131 000	419 000	36.8	19.7	28.9
45–54	241 000	73 000	314 000	40.3	16.9	30.5
55–64	205 000	46 000	251 000	57.3	17.6	40.6
65+	249 000	73 000	323 000	82.9	34.9	63.1
Phnom Penh						
5 + year	60 000	16 000	75 000	10.1	2.9	6.7
5–14	8 000	5 000	12 000	7.4	4.2	5.7
15–24	6 000	1 000	8 000	3.4	0.8	2.2
25–34	4 000	2 000	7 000	4.6	2.8	3.8
35–44	8 000	2 000	10 000	10.7	2.8	7.1
45–54	9 000	1 000	10 000	11.7	1.7	7.2
55–64	11 000	1 000	12 000	25.3	3.5	15.9
65+	14 000	3 000	17 000	60.4	16.2	39.6
Other urban areas						
5 + year	146 000	82 000	228 000	22.4	13.3	18.0
5–14	22 000	27 000	49 000	13.8	14.5	14.2
15–24	21 000	14 000	35 000	12.2	8.6	10.4
25–34	17 000	11 000	27 000	19.3	13.2	16.3
35–44	22 000	13 000	35 000	25.9	15.9	21.1
45–54	20 000	5 000	25 000	28.9	10.9	21.4
55–64	20 000	5 000	25 000	46.7	14.1	32.4
65+	24 000	8 000	31 000	72.9	33.8	57.0
Other rural areas						
5 + year	1 584 000	861 000	2 444 000	33.8	19.8	27.1
5–14	286 000	305 000	591 000	21.3	21.6	21.5
15–24	227 000	150 000	377 000	20.6	13.5	17.0
25–34	215 000	120 000	335 000	33.1	19.6	26.6
35–44	257 000	116 000	374 000	41.6	22.4	32.8
45–54	213 000	67 000	279 000	46.6	20.7	35.9
55–64	175 000	40 000	215 000	63.9	20.5	45.9
65+	211 000	62 000	274 000	86.4	37.3	66.4

Tab 2.5b. Persons (5+) never attended school by geographical domain, age and sex, 2009

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia						
5 + year	1 684 000	912 000	2 596 000	25.9	15.0	20.6
5–14	247 000	278 000	524 000	16.4	17.4	16.9
15–24	161 000	133 000	294 000	10.5	8.4	9.5
25–34	264 000	147 000	411 000	23.9	14.5	19.4
35–44	247 000	120 000	367 000	29.9	16.0	23.3
45–54	282 000	111 000	392 000	39.5	19.8	30.8
55–64	203 000	54 000	257 000	44.6	15.8	32.3
65+	281 000	70 000	351 000	77.6	27.5	56.8
Phnom Penh						
5 + year	65 000	20 000	84 000	9.5	3.3	6.6
5–14	8 000	8 000	16 000	7.6	6.8	7.2
15–24	6 000	1 000	7 000	3.2	0.9	2.2
25–34	6 000	3 000	9 000	3.9	2.8	3.4
35–44	9 000	1 000	11 000	10.9	1.8	6.5
45–54	12 000	2 000	14 000	14.5	2.9	9.4
55–64	8 000	2 000	11 000	15.5	5.1	10.8
65+	16 000	2 000	18 000	49.5	7.6	31.4
Other urban areas						
5 + year	106 000	51 000	156 000	15.8	8.0	12.0
5–14	15 000	20 000	35 000	10.8	13.4	12.1
15–24	9 000	5 000	13 000	5.1	2.9	4.0
25–34	15 000	4 000	19 000	12.4	4.2	8.6
35–44	14 000	7 000	22 000	15.8	8.2	12.1
45–54	17 000	5 000	22 000	25.2	7.6	17.0
55–64	16 000	5 000	21 000	31.4	13.8	23.9
65+	20 000	4 000	24 000	64.9	16.6	42.3
Other rural areas						
5 + year	1 514 000	842 000	2 355 000	29.4	17.3	23.5
5–14	224 000	250 000	473 000	17.7	18.8	18.2
15–24	146 000	127 000	273 000	12.4	10.0	11.2
25–34	244 000	139 000	383 000	28.9	17.6	23.5
35–44	223 000	111 000	334 000	34.4	19.2	27.3
45–54	253 000	104 000	357 000	44.8	24.0	35.7
55–64	178 000	46 000	225 000	51.1	18.0	37.1
65+	245 000	64 000	310 000	81.8	31.2	61.2

Tab 2.6a. Persons (5+) never attended school by province and sex, 2004

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia 5+	1 789 000	958 000	2 748 000	30.2	17.5	24.1
Phnom Penh	60 000	16 000	75 000	10.1	2.9	6.7
Kampong Cham	275 000	150 000	425 000	35.3	20.8	28.3
Kandal	128 000	62 000	190 000	22.3	11.9	17.3
Prey Veaeng	160 000	68 000	228 000	35.1	17.0	26.6
Svay Rieng	73 000	29 000	102 000	31.9	13.8	23.3
Takaev	108 000	44 000	153 000	28.2	12.6	20.7
Banteay Mean Chey	96 000	51 000	147 000	32.4	18.2	25.5
Bat Dambang	110 000	61 000	171 000	25.3	14.6	20.1
Kampong Thum	100 000	67 000	167 000	35.1	25.0	30.2
Siem Reab	151 000	94 000	246 000	39.8	26.8	33.5
Other Tonle Sap	574 000	336 000	909 000	32.1	20.1	26.3
Coastal	124 000	66 000	190 000	29.1	16.3	22.9
Kampong Speu	106 000	55 000	161 000	33.4	18.8	26.4
Mountain	181 000	132 000	313 000	47.5	35.1	41.3

Tab 2.6b. Persons (5+) never attended school by province and sex, 2009

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia	1 684 000	912 000	2 596 000	25.9	15.0	20.6
Phnom Penh	65 000	20 000	84 000	9.5	3.3	6.6
Kampong Cham	235 000	135 000	370 000	29.2	17.7	23.6
Kandal	132 000	62 000	194 000	21.3	10.8	16.3
Prey Veaeng	125 000	62 000	187 000	27.0	14.6	21.1
Svay Rieng	67 000	26 000	92 000	28.1	12.0	20.5
Takaev	100 000	43 000	142 000	24.4	11.1	17.9
Banteay Mean Chey	88 000	49 000	137 000	26.6	15.8	21.4
Bat Dambang	129 000	72 000	202 000	26.3	15.3	20.9
Kampong Thum	83 000	58 000	141 000	26.9	20.4	23.8
Siem Reab	141 000	89 000	229 000	33.5	22.0	27.8
Other Tonle Sap	114 000	60 000	174 000	26.6	14.9	20.9
Coastal	124 000	59 000	183 000	26.6	13.3	20.2
Kampong Speu	83 000	40 000	122 000	23.9	12.4	18.4
Mountain	200 000	137 000	336 000	40.6	28.1	34.4

Tab 2.7a. Persons (5–24) currently attending school by geographical domain, age and sex, 2004

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia						
5 –24 year	1 612 000	1 867 000	3 479 000	52.6	59.3	56.0
5–9	454 000	493 000	947 000	63.1	63.5	63.3
10–14	783 000	839 000	1 622 000	88.3	90.1	89.2
15–19	329 000	440 000	769 000	43.3	55.9	49.7
20–24	45 000	95 000	140 000	6.5	14.6	10.4
Phnom Penh						
5 –24 year	177 000	201 000	378 000	61.7	73.9	67.6
5–9	35 000	38 000	73 000	83.2	88.4	85.8
10–14	58 000	68 000	127 000	94.7	98.6	96.7
15–19	60 000	57 000	117 000	70.0	79.2	74.2
20–24	23 000	39 000	62 000	24.2	43.3	33.3
Other urban areas						
5 –24 year	188 000	227 000	414 000	55.8	64.9	60.5
5–9	49 000	57 000	107 000	72.0	71.4	71.7
10–14	85 000	95 000	181 000	90.8	93.1	92.0
15–19	46 000	64 000	109 000	49.8	63.8	57.0
20–24	7 000	10 000	17 000	8.8	15.3	11.8
Other rural areas						
5 –24 year	1 247 000	1 439 000	2 686 000	51.1	57.0	54.1
5–9	370 000	398 000	768 000	60.8	60.9	60.8
10–14	640 000	675 000	1 315 000	87.4	88.9	88.2
15–19	223 000	320 000	543 000	38.3	51.9	45.3
20–24	15 000	46 000	61 000	2.8	9.4	6.0

Tab 2.7b. Persons (5–24) currently attending school by geographical domain, age and sex, 2009

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia						
5 –24 year	1 593 000	1 808 000	3 401 000	52.5	57.0	54.8
5–9	533 000	534 000	1 067 000	71.3	68.6	69.9
10–14	663 000	723 000	1 386 000	87.2	88.8	88.1
15–19	331 000	443 000	775 000	41.4	51.2	46.5
20–24	65 000	107 000	172 000	9.0	15.0	12.0
Phnom Penh						
5 –24 year	166 000	190 000	356 000	58.7	72.4	65.3
5–9	44 000	47 000	90 000	85.7	85.8	85.8
10–14	50 000	58 000	108 000	95.0	97.6	96.4
15–19	49 000	55 000	103 000	59.8	77.6	68.1
20–24	24 000	30 000	54 000	24.3	38.9	30.8
Other urban areas						
5 –24 year	174 000	202 000	375 000	56.4	64.1	60.3
5–9	57 000	53 000	110 000	79.8	73.5	76.6
10–14	59 000	71 000	130 000	87.1	92.9	90.2
15–19	46 000	60 000	106 000	53.2	64.3	59.0
20–24	12 000	17 000	29 000	14.7	23.5	18.8
Other rural areas						
5 –24 year	1 253 000	1 416 000	2 670 000	51.3	54.6	53.0
5–9	432 000	434 000	867 000	69.2	66.6	67.9
10–14	555 000	594 000	1 148 000	86.6	87.6	87.1
15–19	237 000	329 000	565 000	37.4	46.9	42.4
20–24	29 000	60 000	89 000	5.4	10.6	8.0

Tab 2.8a. Persons (5–24) currently attending school by province, age and sex, 2004

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia	1 612 000	1 867 000	3 479 000	52.6	59.3	56.0
Phnom Penh	177 000	201 000	378 000	61.7	73.9	67.6
Kampong Cham	194 000	234 000	429 000	49.7	57.7	53.8
Kandal	165 000	188 000	353 000	55.1	62.2	58.7
Prey Veaeng	114 000	130 000	245 000	51.8	57.7	54.8
Svay Rieng	59 000	73 000	132 000	51.6	61.3	56.5
Takaev	118 000	137 000	255 000	58.7	66.6	62.7
Banteay Mean Chey	79 000	91 000	170 000	50.3	55.2	52.8
Bat Dambang	128 000	150 000	278 000	55.2	59.3	57.4
Kampong Thum	73 000	88 000	161 000	47.1	56.6	51.9
Siem Reab	94 000	107 000	201 000	46.2	51.3	48.8
Other Tonle Sap	481 000	554 000	1 034 000	50.4	56.0	53.3
Coastal	126 000	140 000	266 000	55.2	59.2	57.2
Kampong Speu	88 000	103 000	190 000	52.1	59.4	55.8
Mountain	91 000	106 000	197 000	45.4	48.8	47.2

Tab 2.8b. Persons (5–24) currently attending school by province, age and sex, 2009

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia	1 593 000	1 808 000	3 401 000	52.5	57.0	54.8
Phnom Penh	166 000	190 000	356 000	58.7	72.4	65.3
Kampong Cham	189 000	206 000	395 000	50.4	52.3	51.3
Kandal	138 000	168 000	307 000	50.9	56.7	53.9
Prey Veaeng	103 000	126 000	229 000	52.8	59.0	56.0
Svay Rieng	55 000	61 000	116 000	53.4	54.9	54.2
Takaev	111 000	138 000	250 000	57.4	66.0	61.9
Banteay Mean Chey	84 000	91 000	175 000	52.2	53.9	53.1
Bat Dambang	119 000	125 000	244 000	50.1	50.5	50.3
Kampong Thum	84 000	81 000	165 000	57.3	53.9	55.6
Siem Reab	105 000	118 000	223 000	51.0	54.6	52.9
Other Tonle Sap	110 000	124 000	234 000	51.6	55.8	53.7
Coastal	125 000	148 000	272 000	54.8	61.2	58.1
Kampong Speu	88 000	104 000	192 000	51.5	59.2	55.4
Mountain	117 000	127 000	244 000	46.0	48.7	47.4

Tab 2.9a. Persons (5–24) currently attending school by level and sex, 2004

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia						
Pre-School	18 000	20 000	39 000	1.1	1.1	1.1
Primary (Grades 1–6)	1 216 000	1 360 000	2 577 000	75.5	72.9	74.1
Lower secondary (Grades 7–9)	245 000	296 000	541 000	15.2	15.9	15.6
Upper secondary (Grades 10–12)	92 000	132 000	223 000	5.7	7.1	6.4
Technical/Vocational	8 000	11 000	20 000	0.5	0.6	0.6
Under Graduate/Graduate	25 000	40 000	65 000	1.6	2.2	1.9
Other	5 000	6 000	12 000	0.3	0.3	0.3
Total	1 610 000	1 866 000	3 476 000	100	100	100
Phnom Penh						
Pre-School	3 000	2 000	4 000	1.5	0.8	1.1
Primary (Grades 1–6)	67 000	83 000	151 000	38.2	41.4	39.9
Lower secondary (Grades 7–9)	46 000	42 000	88 000	25.9	21.0	23.3
Upper secondary (Grades 10–12)	32 000	35 000	66 000	18.0	17.2	17.5
Technical/Vocational	6 000	4 000	10 000	3.4	2.0	2.7
Under Graduate/Graduate	20 000	31 000	52 000	11.5	15.6	13.7
Other	3 000	4 000	7 000	1.6	2.1	1.8
Total	177 000	201 000	378 000	100	100	100
Other urban areas						
Pre-School	2 000	2 000	4 000	1.0	0.8	0.9
Primary (Grades 1–6)	118 000	145 000	263 000	63.0	63.8	63.5
Lower secondary (Grades 7–9)	40 000	45 000	85 000	21.2	19.8	20.4
Secondary (Grades 10–12)	24 000	29 000	53 000	12.5	12.9	12.8
Technical/Vocational	1 000	3 000	4 000	0.6	1.2	0.9
Under Graduate/Graduate	3 000	3 000	6 000	1.5	1.4	1.4
Other	0	0	1 000	0.2	0.1	0.1
Total	188 000	227 000	414 000	100	100	100
Other rural areas						
Pre-School	14 000	17 000	31 000	1.1	1.2	1.1
Primary (Grades 1–6)	1 031 000	1 133 000	2 163 000	82.7	78.8	80.6
Lower secondary (Grades 7–9)	160 000	209 000	369 000	12.8	14.5	13.7
Upper secondary (Grades 10–12)	36 000	68 000	104 000	2.9	4.7	3.9
Technical/Vocational	1 000	4 000	6 000	0.1	0.3	0.2
Under Graduate/Graduate	2 000	6 000	8 000	0.2	0.4	0.3
Other	2 000	2 000	4 000	0.2	0.1	0.2
Total	1 246 000	1 438 000	2 684 000	100	100	100

Tab 2.9b. Persons (5–24) currently attending school by level and sex, 2009

	Number			Percent		
	Women	Men	Both Sexes	Women	Men	Both Sexes
Cambodia						
Pre-school	22 000	21 000	42 000	1.4	1.1	1.2
Primary (Grades 1–6)	1 049 000	1 141 000	2 190 000	65.9	63.1	64.4
Secondary (Grades 7–9)	302 000	349 000	650 000	18.9	19.3	19.1
High School (Grades 10–12)	159 000	216 000	375 000	10.0	12.0	11.0
Technical/Vocational	9 000	9 000	18 000	0.6	0.5	0.5
Under Graduate/Graduate	52 000	72 000	125 000	3.3	4.0	3.7
Other	-	-	-	-	-	-
Total	1 593 000	1 808 000	3 401 000	100	100	100
Phnom Penh						
Pre-school	2 000	2 000	4 000	1.3	0.9	1.1
Primary (Grades 1–6)	67 000	79 000	147 000	40.6	41.8	41.3
Secondary (Grades 7–9)	33 000	37 000	69 000	20	19	19
High School (Grades 10–12)	34 000	38 000	72 000	21	20	20
Technical/Vocational	2 000	1 000	3 000	1	1	1
Under Graduate/Graduate	28 000	32 000	60 000	17	17	17
Other	-	-	-	-	-	-
Total	166 000	190 000	356 000	100	100	100
Other urban areas						
Pre-school	2 000	3 000	6 000	1.4	1.7	1.6
Primary (Grades 1–6)	93 000	101 000	194 000	53.5	50.2	51.7
Secondary (Grades 7–9)	33 000	47 000	80 000	19	23	21
High School (Grades 10–12)	30 000	37 000	67 000	17	18	18
Technical/Vocational	3 000	2 000	5 000	2	1	1
Under Graduate/Graduate	12 000	10 000	22 000	7	5	6
Other	-	-	-	-	-	-
Total	174 000	202 000	375 000	100	100	100
Other rural areas						
Pre-school	17 000	15 000	33 000	1.4	1.1	1.2
Primary (Grades 1–6)	889 000	960 000	1 849 000	70.9	67.8	69.3
Secondary (Grades 7–9)	236 000	265 000	501 000	19	19	19
High School (Grades 10–12)	95 000	141 000	236 000	8	10	9
Technical/Vocational	5 000	5 000	10 000	0	0	0
Under Graduate/Graduate	12 000	30 000	42 000	1	2	2
Other	-	-	-	-	-	-
Total	1 253 000	1 416 000	2 670 000	100	100	100

Appendix 3. Health Tables

Table 3.1. Persons with illnesses who were able and those who were not able to do their usual activities because of illness last 30 days, 2009

	Number of persons with illnesses			
	...who did not have a usual activity	...who could do their usual activities	…who could not do their usual activities	Total number of persons with illnesses
Women				
0+	191,000	825,000	135,000	1,152,000
0−14	105,000	168,000	9,000	283,000
15−29	10,000	186,000	30,000	226,000
30−44	6,000	175,000	27,000	208,000
45−59	16,000	186,000	37,000	239,000
60+	53,000	111,000	32,000	196,000
Men				
0+	151,000	594,000	116,000	861,000
0−14	113,000	183,000	17,000	312,000
15−29	6,000	129,000	26,000	161,000
30−44	4,000	104,000	24,000	132,000
45−59	4,000	103,000	22,000	130,000
60+	25,000	75,000	27,000	127,000
Both Sexes				
0+	342,000	1,419,000	251,000	2,013,000
0−14	218,000	351,000	26,000	595,000
15−29	16,000	314,000	56,000	386,000
30−44	10,000	279,000	50,000	340,000
45−59	21,000	289,000	59,000	369,000
60+	78,000	186,000	60,000	323,000
Women				
Cambodia	191,000	825,000	135,000	1,152,000
Phnom Penh	14,000	65,000	5,000	84,000
Other urban	19,000	79,000	12,000	109,000
Other rural	159,000	682,000	118,000	958,000
Men				
Cambodia	151,000	594,000	116,000	861,000
Phnom Penh	9,000	42,000	4,000	55,000
Other urban	15,000	53,000	11,000	79,000
Other rural	128,000	498,000	101,000	727,000
Both sexes				
Cambodia	342,000	1,419,000	251,000	2,013,000
Phnom Penh	23,000	107,000	9,000	139,000
Other urban	33,000	132,000	23,000	188,000
Other rural	286,000	1,180,000	219,000	1,685,000

Table 3.2. Utilization of healthcare for other reason than illness/injury in the last 30 days, 2009

	Number					
	Antenatal care	Delivery	Postnatal care	Vitamin A or deworming	Other	Total number of persons
Women						
0+	26,000	5,000	22,000	22,000	159,000	234,000
0−14	0	-	-	16,000	34,000	50,000
15−29	16,000	3,000	11,000	2,000	30,000	62,000
30−44	6,000	2,000	8,000	1,000	29,000	47,000
45−59	2,000	0	2,000	1,000	37,000	43,000
60+	1,000	0	0	1,000	28,000	31,000
Men						
0+	-	-	-	18,000	123,000	141,000
0−14	-	-	-	15,000	37,000	52,000
15−29	-	-	-	1,000	24,000	25,000
30−44	-	-	-	0	23,000	23,000
45−59	-	-	-	1,000	23,000	23,000
60+	-	-	-	2,000	17,000	18,000
Both Sexes						
0+	26,000	5,000	22,000	40,000	282,000	375,000
0−14	0	-	-	31,000	71,000	102,000
15−29	16,000	3,000	11,000	3,000	54,000	87,000
30−44	6,000	2,000	8,000	2,000	52,000	69,000
45−59	2,000	0	2,000	2,000	60,000	66,000
60+	1,000	0	0	3,000	45,000	50,000
Women						
Cambodia	26,000	5,000	22,000	22,000	159,000	234,000
Phnom Penh	1,000	0	-	0	27,000	29,000
Other urban	3,000	0	2,000	3,000	16,000	25,000
Other rural	21,000	4,000	20,000	19,000	115,000	180,000
Men						
Cambodia	-	-	-	18,000	123,000	141,000
Phnom Penh	-	-	-	1,000	17,000	17,000
Other urban	-	-	-	2,000	11,000	13,000
Other rural	-	-	-	15,000	96,000	111,000
Both sexes						
Cambodia	26,000	5,000	22,000	40,000	282,000	375,000
Phnom Penh	1,000	0	-	1,000	43,000	46,000
Other urban	3,000	0	2,000	5,000	27,000	38,000
Other rural	21,000	4,000	20,000	34,000	211,000	291,000

Table 3.3. Number of health care visits among persons with illness or injury in the last 30 days, 2009

	Number of persons				
	Once	2–5 times	6 or more times	Once or more	Total Population
Women					
0+	586,000	546,000	28,000	1,164,000	7,155,000
0−14	158,000	118,000	3,000	280,000	2,165,000
15−29	127,000	107,000	5,000	239,000	2,238,000
30−44	105,000	99,000	8,000	212,000	1,223,000
45−59	107,000	121,000	8,000	238,000	980,000
60+	89,000	100,000	4,000	195,000	549,000
Men					
0+	416,000	413,000	16,000	848,000	6,811,000
0−14	162,000	146,000	3,000	313,000	2,319,000
15−29	88,000	63,000	3,000	155,000	2,226,000
30−44	56,000	65,000	4,000	126,000	1,112,000
45−59	61,000	66,000	3,000	131,000	745,000
60+	48,000	71,000	3,000	123,000	410,000
Both Sexes					
0+	1,001,000	959,000	45,000	2,012,000	13,967,000
0−14	320,000	264,000	7,000	593,000	4,484,000
15−29	215,000	171,000	8,000	394,000	4,464,000
30−44	161,000	164,000	11,000	338,000	2,335,000
45−59	168,000	188,000	11,000	369,000	1,725,000
60+	137,000	172,000	7,000	318,000	959,000
Women					
Cambodia	586,000	546,000	28,000	1,164,000	7,155,000
Phnom Penh	55,000	39,000	1,000	95,000	730,000
Other urban	57,000	54,000	3,000	115,000	728,000
Other rural	473,000	453,000	25,000	954,000	5,698,000
Men					
Cambodia	416,000	413,000	16,000	848,000	6,811,000
Phnom Penh	36,000	24,000	0	61,000	654,000
Other urban	42,000	36,000	2,000	80,000	700,000
Other rural	338,000	353,000	14,000	707,000	5,458,000
Both sexes					
Cambodia	1,001,000	959,000	45,000	2,012,000	13,967,000
Phnom Penh	92,000	63,000	1,000	156,000	1,383,000
Other urban	99,000	90,000	4,000	195,000	1,428,000
Other rural	811,000	806,000	39,000	1,662,000	11.156,000

Table 3.4. Health care visits among persons with illness or injury in the last 30 days, 2009. Percent.

	Percent of total population				
	Once	2–5 times	6 or more times	Once or more	Total population
Women					
0+	8.2	7.6	0.5	16.3	7,155,000
0−14	7.3	5.5	0.2	13.0	2,165,000
15−29	5.7	4.8	0.2	10.7	2,238,000
30−44	8.6	8.1	0.7	17.4	1,223,000
45−59	10.9	12.4	0.9	24.3	980,000
60+	16.2	18.3	0.9	35.5	549,000
Men					
0+	6.1	6.1	0.3	12.5	6,811,000
0−14	7.0	6.3	0.2	13.5	2,319,000
15−29	4.0	2.8	0.2	7.0	2,226,000
30−44	5.0	5.9	0.5	11.3	1,112,000
45−59	8.2	8.9	0.4	17.6	745,000
60+	11.8	17.4	0.7	30.1	410,000
Both Sexes					
0+	7.2	6.9	0.4	14.4	13,967,000
0−14	7.1	5.9	0.2	13.2	4,484,000
15−29	4.8	3.8	0.2	8.8	4,464,000
30−44	6.9	7.0	0.6	14.5	2,335,000
45−59	9.7	10.9	0.8	21.4	1,725,000
60+	14.3	17.9	0.9	33.2	959,000
Women					
Cambodia	8.2	7.6	0.4	16.3	7,155,000
Phnom Penh	7.6	5.3	0.0	13.0	730,000
Other urban	7.9	7.4	0.4	15.8	728,000
Other rural	8.3	8.0	0.4	16.8	5,698,000
Men					
Cambodia	6.1	6.1	0.5	12.5	6,811,000
Phnom Penh	5.6	3.7	0.0	9.3	654,000
Other urban	6.0	5.1	0.6	11.4	700,000
Other rural	6.2	6.5	0.5	13.0	5,458,000
Both sexes					
Cambodia	7.2	6.9	0.3	14.4	13,967,000
Phnom Penh	6.6	4.5	0.0	11.3	1,383,000
Other urban	6.9	6.3	0.3	13.7	1,428,000
Other rural	7.3	7.2	0.3	14.9	11.156,000

Table 3.5. The first provider of health care in the last 30 days, 2009.

	Number of persons who sought care				
	Public	Private	Self care	Traditional care	Total number of persons who have sought care
Women					
0+	240,000	403,000	481,000	38,000	1,162,000
0−14	52,000	85,000	137,000	6,000	280,000
15−29	58,000	80,000	92,000	9,000	239,000
30−44	48,000	73,000	83,000	8,000	212,000
45−59	48,000	87,000	92,000	10,000	237,000
60+	34,000	78,000	77,000	5,000	194,000
Men					
0+	164,000	286,000	366,000	31,000	847,000
0−14	70,000	89,000	146,000	7,000	312,000
15−29	22,000	58,000	66,000	9,000	155,000
30−44	22,000	48,000	49,000	7,000	125,000
45−59	25,000	52,000	51,000	3,000	131,000
60+	25,000	39,000	55,000	4,000	123,000
Both Sexes					
0+	403,000	689,000	848,000	69,000	2,009,000
0−14	122,000	175,000	283,000	13,000	593,000
15−29	80,000	138,000	158,000	18,000	394,000
30−44	69,000	121,000	132,000	15,000	337,000
45−59	73,000	139,000	143,000	13,000	368,000
60+	59,000	117,000	132,000	9,000	318,000
Women					
Cambodia	240,000	403,000	481,000	38,000	1,162,000
Phnom Penh	13,000	77,000	3,000	2,000	95,000
Other urban	21,000	63,000	29,000	2,000	115,000
Other rural	206,000	263,000	449,000	34,000	952,000
Men					
Cambodia	164,000	286,000	366,000	31,000	847,000
Phnom Penh	8,000	50,000	2,000	0	61,000
Other urban	13,000	45,000	20,000	2,000	80,000
Other rural	142,000	191,000	344,000	28,000	706,000
Both sexes					
Cambodia	403,000	689,000	848,000	69,000	2,009,000
Phnom Penh	21,000	127,000	5,000	2,000	156,000
Other urban	34,000	108,000	49,000	5,000	195,000
Other rural	348,000	454,000	794,000	62,000	1,658,000

Table 3.6. The first provider of health care in the last 30 days, 2009.

	Percent of persons who sought care				
	Public	Private	Self care	Traditional care	Total number of persons who have sought care
Women					
0+	20.6	34.7	41.4	3.3	1,162,000
0−14	18.6	30.4	48.9	2.1	280,000
15−29	24.5	33.4	38.4	3.7	239,000
30−44	22.5	34.4	39.2	3.9	212,000
45−59	20.3	36.6	38.8	4.2	237,000
60+	17.3	40.1	39.9	2.7	194,000
Men					
0+	19.3	33.8	43.3	3.6	847,000
0−14	22.3	28.6	46.7	2.3	312,000
15−29	14.1	37.4	42.6	5.9	155,000
30−44	17.4	38.1	39.2	5.4	125,000
45−59	19.2	39.6	38.7	2.4	131,000
60+	20.4	32.0	44.2	3.4	123,000
Both Sexes					
0+	20.1	34.3	42.2	3.4	2,009,000
0−14	20.5	29.5	47.8	2.2	593,000
15−29	20.4	35.0	40.1	4.6	394,000
30−44	20.6	35.8	39.2	4.5	337,000
45−59	19.9	37.7	38.8	3.6	368,000
60+	18.5	37.0	41.6	3.0	318,000
Women					
Cambodia	20.6	34.7	41.4	3.3	1,162,000
Phnom Penh	13.8	81.3	3.2	1.8	95,000
Other urban	18.1	54.7	25.1	2.1	115,000
Other rural	21.6	27.6	47.2	3.6	952,000
Men					
Cambodia	19.3	33.8	43.3	3.6	847,000
Phnom Penh	13.7	82.0	3.7	0.6	61,000
Other urban	16.0	56.5	24.8	2.7	80,000
Other rural	20.2	27.1	48.8	4.0	706,000
Both sexes					
Cambodia	20.1	34.3	42.2	3.4	2,009,000
Phnom Penh	13.8	81.6	3.4	1.3	156,000
Other urban	17.2	55.4	25.0	2.3	195,000
Other rural	21.0	27.4	47.9	3.8	1,658,000

Table 3.7. The last/most recent provider of health care in the last 30 days, 2009

	Number of persons who sought care				
	Public	Private	Self care	Traditional care	Total number of persons who have sought care
Women					
0+	106,000	213,000	226,000	26,000	571,000
0−14	22,000	42,000	55,000	2,000	121,000
15−29	24,000	39,000	44,000	5,000	111,000
30−44	23,000	40,000	37,000	6,000	106,000
45−59	23,000	50,000	49,000	8,000	129,000
60+	15,000	42,000	42,000	5,000	103,000
Men					
0+	77,000	157,000	177,000	17,000	427,000
0−14	31,000	46,000	67,000	3,000	148,000
15−29	9,000	29,000	25,000	4,000	67,000
30−44	11,000	28,000	26,000	4,000	70,000
45−59	12,000	27,000	29,000	2,000	70,000
60+	13,000	26,000	29,000	4,000	73,000
Both Sexes					
0+	183,000	371,000	402,000	42,000	998,000
0−14	53,000	88,000	122,000	5,000	269,000
15−29	32,000	68,000	69,000	9,000	178,000
30−44	34,000	69,000	63,000	9,000	176,000
45−59	35,000	77,000	77,000	10,000	199,000
60+	28,000	68,000	71,000	9,000	176,000
Women					
Cambodia	106,000	213,000	226,000	26,000	571,000
Phnom Penh	5,000	33,000	1,000	1,000	40,000
Other urban	8,000	33,000	15,000	2,000	57,000
Other rural	94,000	148,000	210,000	23,000	474,000
Men					
Cambodia	77,000	157,000	177,000	17,000	427,000
Phnom Penh	5,000	18,000	0	1,000	24,000
Other urban	5,000	24,000	9,000	1,000	38,000
Other rural	67,000	116,000	168,000	15,000	366,000
Both sexes					
Cambodia	183,000	371,000	402,000	42,000	998,000
Phnom Penh	10,000	51,000	1,000	2,000	64,000
Other urban	13,000	56,000	24,000	2,000	95,000
Other rural	161,000	264,000	377,000	38,000	840,000

Table 3.8. The last/most recent provider of health care in the last 30 days, 2009

	Percent of persons who sought care				
	Public	Private	Self care	Traditional care	Total number of persons who have sought care
Women					
0+	18.6	37.4	39.5	4.5	571,000
0−14	18.2	34.8	45.3	1.7	121,000
15−29	21.2	35.2	39.1	4.5	111,000
30−44	21.9	38.1	34.6	5.4	106,000
45−59	17.5	38.8	37.8	5.9	129,000
60+	14.4	40.3	40.4	5.0	103,000
Men					
0+	18.0	36.8	41.3	3.9	427,000
0−14	21.2	31.3	45.6	1.9	148,000
15−29	13.2	43.5	37.4	5.9	67,000
30−44	15.9	40.9	37.9	5.3	70,000
45−59	17.3	38.6	41.1	3.1	70,000
60+	18.5	36.2	39.6	5.7	73,000
Both Sexes					
0+	18.3	37.1	40.3	4.2	998,000
0−14	19.9	32.9	45.5	1.8	269,000
15−29	18.2	38.3	38.5	5.0	178,000
30−44	19.5	39.2	35.9	5.4	176,000
45−59	17.4	38.7	38.9	4.9	199,000
60+	16.1	38.6	40.1	5.3	176,000
Women					
Cambodia	18.6	37.4	39.5	4.5	571,000
Phnom Penh	11.5	83.2	2.7	2.7	40,000
Other urban	14.2	57.1	26.0	2.7	57,000
Other rural	19.7	31.2	44.2	4.9	474,000
Men					
Cambodia	18.0	36.8	41.3	3.9	427,000
Phnom Penh	21.4	75.1	0.9	2.6	24,000
Other urban	12.6	62.3	23.0	2.0	38,000
Other rural	18.3	31.7	45.8	4.2	366,000
Both sexes					
Cambodia	18.3	37.1	40.3	4.2	998,000
Phnom Penh	15.2	80.1	2.0	2.6	64,000
Other urban	13.6	59.2	24.8	2.4	95,000
Other rural	19.1	31.4	44.9	4.6	840,000

Table 3.9. Persons with disabilities. First mentioned difficulty, 2009

	Any kind of difficulty		Seeing difficulty		Moving difficulty		Total population	Observations with any kind of difficulty
	Number	Percent of total population	Number	Percent of total population	. Number	Percent of total population		
Women								
0+	466,000	6.5	309,000	4.3	62,000	0.9	7,155,000	1,909
0−14	21,000	1.0	5,000	0.2	5,000	0.2	2,165,000	86
15−29	43,000	1.9	13,000	0.6	9,000	0.4	2,238,000	176
30−44	61,000	5.0	32,000	2.6	14,000	1.1	1,223,000	247
45−59	146,000	14.9	107,000	10.9	15,000	1.6	980,000	590
60+	195,000	35.4	153,000	27.9	19,000	3.4	549,000	810
Men								
0+	413,000	6.1	236,000	3.5	87,000	1.3	6,811,000	1,668
0−14	28,000	1.2	4,000	0.2	8,000	0.4	2,319,000	112
15−29	51,000	2.3	13,000	0.6	14,000	0.6	2,226,000	207
30−44	65,000	5.8	31,000	2.8	15,000	1.3	1,112,000	261
45−59	123,000	16.5	77,000	10.3	31,000	4.2	745,000	487
60+	147,000	35.8	110,000	26.9	18,000	4.5	410,000	601
Both Sexes								
0+	878,000	6.3	545,000	3.9	149,000	1.1	13,967,000	3,577
0−14	49,000	1.1	9,000	0.2	14,000	0.3	4,484,000	198
15−29	94,000	2.1	26,000	0.6	23,000	0.5	4,464,000	383
30−44	125,000	5.4	63,000	2.7	29,000	1.2	2,335,000	508
45−59	269,000	15.6	184,000	10.7	47,000	2.7	1,725,000	1,077
60+	342,000	35.6	264,000	27.5	37,000	3.9	959,000	1,411
Women								
Cambodia	466,000	6.5	309,000	4.3	62,000	0.9	7,155,000	1,909
Phnom Penh	48,000	6.6	41,000	5.6	3,000	0.4	730,000	191
Other urban	44,000	6.1	28,000	3.8	6,000	0.9	728,000	200
Other rural	373,000	6.6	241,000	4.2	53,000	0.9	5,698,000	1,518
Men								
Cambodia	413,000	6.1	236,000	3.5	87,000	1.3	6,811,000	1,668
Phnom Penh	33,000	5.1	26,000	4.0	2,000	0.3	654,000	126
Other urban	38,000	5.4	24,000	3.4	7,000	1.0	700,000	171
Other rural	342,000	6.3	185,000	3.4	78,000	1.4	5,458,000	1,371
Both sexes								
Cambodia	878,000	6.3	545,000	3.9	149,000	1.1	13,967,000	3,577
Phnom Penh	82,000	5.9	67,000	4.8	5,000	0.4	1,383,000	317
Other urban	82,000	5.7	52,000	3.6	13,000	0.9	1,428,000	371
Other rural	715,000	6.4	427,000	3.8	131,000	1.2	11.156,000	2,889

Table 3.10. Degree of seeing difficulties, 2009. Persons who have mentioned the disablement as first, second or third difficulty

	Seeing difficulty		of which (percent of total population)			Total population	Observations with Seeing difficulty
	Number	Percent of total population	mild	moderate	severe		
Women							
0+	316,000	4.4	2.3	1.8	0.3	7,155,000	1,296
0−14	5,000	0.2	0.1	0.1	0.0	2,165,000	20
15−29	13,000	0.6	0.3	0.2	0.1	2,238,000	51
30−44	33,000	2.7	1.5	1.0	0.1	1,223,000	131
45−59	109,000	11.1	7.3	3.4	0.4	980,000	442
60+	157,000	28.5	12.7	13.7	2.1	549,000	652
Men							
0+	241,000	3.5	1.8	1.4	0.3	6,811,000	975
0−14	4,000	0.2	0.0	0.1	0.0	2,319,000	17
15−29	14,000	0.6	0.2	0.3	0.1	2,226,000	55
30−44	31,000	2.8	1.5	1.0	0.3	1,112,000	125
45−59	78,000	10.5	6.2	3.4	0.9	745,000	311
60+	114,000	27.8	12.5	12.9	2.5	410,000	467
Both Sexes							
0+	557,000	4.0	2.1	1.6	0.3	13,967,000	2,271
0−14	9,000	0.2	0.1	0.1	0.0	4,484,000	37
15−29	27,000	0.6	0.3	0.2	0.1	4,464,000	106
30−44	64,000	2.8	1.5	1.0	0.2	2,335,000	256
45−59	187,000	10.8	6.8	3.4	0.6	1,725,000	753
60+	271,000	28.2	12.6	13.3	2.3	959,000	1,119
Women							
Cambodia	316,000	4.4	4.4	0.0	4.4	7,155,000	1,296
Phnom Penh	41,000	5.6	5.6	0.0	5.6	730,000	160
Other urban	29,000	3.9	3.9	0.0	4.0	728,000	131
Other rural	247,000	4.3	4.3	0.0	4.3	5,698,000	1,005
Men							
Cambodia	241,000	3.5	3.5	0.0	3.5	6,811,000	975
Phnom Penh	26,000	4.0	4.0	0.0	4.0	654,000	99
Other urban	25,000	3.5	3.5	0.0	3.6	700,000	116
Other rural	190,000	3.5	3.5	0.0	3.5	5,458,000	760
Both sexes							
Cambodia	557,000	4.0	4.0	0.0	4.0	13,967,000	2,271
Phnom Penh	67,000	4.8	4.8	0.0	4.8	1,383,000	259
Other urban	53,000	3.7	3.7	0.0	3.7	1,428,000	247
Other rural	437,000	3.9	3.9	0.0	3.9	11.156,000	1,765

Table 3.11. Degree of moving difficulties, 2009. Persons who have mentioned the disablement as first, second or third difficulty

	Moving difficulty		of which (percent)			Total population	Observations with Moving difficulty
	Number	Percent of total population	mild	moderate	severe		
Both Sexes							
0+	226,000	1.6	0.4	0.8	0.4	7,155,000	927
0−14	15,000	0.3	0.1	0.1	0.1	2,165,000	59
15−29	26,000	0.6	0.2	0.3	0.2	2,238,000	107
30−44	34,000	1.5	0.3	0.7	0.4	1,223,000	141
45−59	61,000	3.5	0.8	1.8	0.9	980,000	247
60+	89,000	9.3	2.4	4.8	2.2	549,000	373
Women							
0+	103,000	1.4	0.4	0.7	0.4	6,811,000	429
0−14	6,000	0.3	-	-	-	2,319,000	20
15−29	10,000	0.4	0.2	0.1	0.1	2,226,000	42
30−44	16,000	1.3	0.3	0.6	0.4	1,112,000	67
45−59	23,000	2.4	0.8	1.0	0.6	745,000	96
60+	49,000	8.9	2.5	4.5	1.8	410,000	204
Men							
0+	122,000	1.8	0.4	0.9	0.5	13,967,000	498
0−14	10,000	0.4	0.1	0.1	0.2	4,484,000	39
15−29	16,000	0.7	0.1	0.4	0.2	4,464,000	65
30−44	18,000	1.6	0.4	0.8	0.4	2,335,000	74
45−59	37,000	5.0	0.9	2.8	1.3	1,725,000	151
60+	40,000	9.9	2.2	5.1	2.6	959,000	169
Both sexes							
Cambodia	226,000	1.6	0.4	0.8	0.4	7,155,000	927
Phnom Penh	9,000	0.6	0.2	0.3	0.1	730,000	36
Other urban	21,000	1.5	0.4	0.7	0.4	728,000	99
Other rural	196,000	1.8	0.4	0.9	0.5	5,698,000	792
Women							
Cambodia	103,000	1.4	0.4	0.7	0.4	6,811,000	429
Phnom Penh	6,000	0.8	0.3	0.2	0.2	654,000	24
Other urban	10,000	1.4	0.6	0.5	0.3	700,000	49
Other rural	87,000	1.5	0.4	0.7	0.4	5,458,000	356
Men							
Cambodia	122,000	1.8	0.4	0.9	0.5	13,967,000	498
Phnom Penh	3,000	0.4	-	0.3	-	1,383,000	12
Other urban	11,000	1.6	0.3	0.8	0.4	1,428,000	50
Other rural	108,000	2.0	0.4	1.0	0.6	11.156,000	436

Table 3.12. Degree of hearing difficulties, 2009 Persons who have mentioned the disablement as first, second or third difficulty

	Hearing difficulty		of which (percent)			Total population	Observations with Hearing difficulty
	Number	Percent of total population	mild	moderate	severe		
Women							
0+	92,000	1.3	0.4	0.7	0.2	7,155,000	381
0–14	4,000	0.2	-	-	-	2,165,000	17
15–29	8,000	0.3	0.1	0.1	0.1	2,238,000	31
30–44	9,000	0.7	0.2	0.3	0.2	1,223,000	35
45–59	20,000	2.0	0.7	1.1	0.2	980,000	81
60+	52,000	9.4	2.8	5.4	1.2	549,000	217
Men							
0+	79,000	1.2	0.4	0.6	0.2	6,811,000	322
0–14	4,000	0.2	-	-	-	2,319,000	15
15–29	9,000	0.4	0.1	0.1	0.1	2,226,000	36
30–44	11,000	1.0	0.4	0.4	0.2	1,112,000	42
45–59	13,000	1.8	0.6	1.0	0.2	745,000	54
60+	42,000	10.3	3.2	5.7	1.5	410,000	175
Both Sexes							
0+	171,000	1.2	0.4	0.6	0.2	13,967,000	703
0–14	8,000	0.2	0.0	0.1	0.0	4,484,000	32
15–29	16,000	0.4	0.1	0.1	0.1	4,464,000	67
30–44	19,000	0.8	0.3	0.4	0.2	2,335,000	77
45–59	33,000	1.9	0.7	1.0	0.2	1,725,000	135
60+	94,000	9.8	3.0	5.5	1.3	959,000	392
Women							
Cambodia	92,000	1.3	0.4	0.7	0.2	7,155,000	381
Phnom Penh	7,000	1.0	0.6	0.3	0.1	730,000	33
Other urban	7,000	1.0	0.5	0.4	0.1	728,000	33
Other rural	77,000	1.4	0.4	0.8	0.2	5,698,000	315
Men							
Cambodia	79,000	1.2	0.4	0.6	0.2	6,811,000	322
Phnom Penh	4,000	0.7	0.4	-	-	654,000	17
Other urban	5,000	0.7	0.4	0.3	0.0	700,000	25
Other rural	69,000	1.3	0.4	0.7	0.2	5,458,000	280
Both sexes							
Cambodia	171,000	1.2	0.4	0.6	0.2	13,967,000	703
Phnom Penh	12,000	0.9	0.5	0.3	0.1	1,383,000	50
Other urban	13,000	0.9	0.4	0.4	0.1	1,428,000	58
Other rural	147,000	1.3	0.4	0.7	0.2	11.156,000	595

Table 3.13. Some causes of disabilities/difficulties 2009

	Number					Total population
	Mine/UXO or war injuries	Traffic or work accidents	Disease	Old age	Congenital	
Number						
Woman	6,000	20,000	137,000	241,000	37,000	7,155,000
Men	44,000	45,000	108,000	163,000	48,000	6,811,000
Both Sexes	50,000	66,000	245,000	404,000	84,000	13,967,000
0+	50,000	66,000	245,000	404,000	84,000	13,967,000
0−14	-	-	10,000	0	26,000	4,484,000
15−29	-	14,000	30,000	-	26,000	4,464,000
30−44	11,000	16,000	52,000	9,000	16,000	2,335,000
45−59	30,000	22,000	82,000	120,000	10,000	1,725,000
60+	7,000	12,000	71,000	274,000	6,000	959,000
Percent of population						
Woman	0.1	0.3	1.9	3.4	0.5	
Men	0.6	0.7	1.6	2.4	0.7	
Both Sexes	0.4	0.5	1.8	2.9	0.6	
0+	0.4	0.5	1.8	2.9	0.6	
0−14	-	-	0.2	0.0	0.6	
15−29	-	0.3	0.7	-	0.6	
30−44	0.5	0.7	2.2	0.4	0.7	
45−59	1.7	1.2	4.8	7.0	0.6	
60+	0.7	1.3	7.4	28.5	0.7	

Table 3.14. Antenatal care Percent distribution of women with living children under 5 years old by ANC status during pregnancy for the most recent birth, CSES 2009.

Province	Attended at least once	Number of women
Cambodia	82.3	4,350
Banteay Mean Chey	86.2	224
Kampong Cham	75.7	625
Kampong Chhnang	75.0	140
Kampong Speu	84.0	244
Kampong Thom	83.9	197
Kandal	87.5	401
Kratie	64.0	125
Phnom Penh	95.5	341
Prey Veng	81.5	358
Pursat	86.5	105
Siem Reap	88.9	281
Svay Rieng	92.3	177
Takeo	88.0	281
Otdar Mean Chey	81.6	62
Battambang/Krong Pailin	86.5	328
Kampot/Krong Kep	69.7	182
Sihanouk/Koh Kong	85.2	108
Preah Vihear/Steung Treng	57.7	95
Mondul Kiri/Rattanak Kiri	39.9	76

Table 3.15. Tetanus Toxoid Injections Percent distribution of women with living children under 5 years old by number of tetanus toxoid injections during last pregnancy and prior to last birth, CSES 2009.

	Protected			Not Protected				
Province	2+ TTI during last pregnancy	1 TTI during last pregnancy, plus one additional prior	No TTI during last pregnancy, but 5+ TTI lifetime	1 TTI during last pregnancy, but none before	No TTI during last pregnancy, less than 5 TTI lifetime	Total	Number of women	Percentage of last births protected against neonatal tetanus
Cambodia	70.2	9.0	1.3	3.0	16.5	100.0	4,350	80.5
Banteay Mean Chey	77.0	7.7	1.9	2.6	10.8	100.0	224	86.6
Kampong Cham	67.4	8.7	1.7	4.6	17.5	100.0	625	77.9
Kampong Chhnang	71.0	2.1	3.7	1.4	21.9	100.0	140	76.7
Kampong Speu	72.2	7.9	0.8	1.2	18.0	100.0	244	80.9
Kampong Thom	77.3	7.7	1.5	2.2	11.3	100.0	197	86.5
Kandal	79.5	6.4	0.5	4.4	9.3	100.0	401	86.3
Kratie	67.3	3.8	0.8	0.6	27.4	100.0	125	72.0
Phnom Penh	66.6	9.3	0.2	2.1	21.9	100.0	341	76.1
Prey Veng	75.2	5.1	0.5	4.3	14.9	100.0	358	80.8
Pursat	63.0	16.8	3.9	5.8	10.5	100.0	105	83.7
Siem Reap	63.2	15.6	1.3	4.0	15.9	100.0	281	80.1
Svay Rieng	52.1	32.1	0.0	2.7	13.1	100.0	177	84.3
Takeo	80.3	6.8	1.3	1.7	9.9	100.0	281	88.4
Otdar Mean Chey	72.0	2.2	1.7	0.0	24.1	100.0	62	75.9
Battambang/Krong Pailin	73.1	9.4	2.2	3.1	12.1	100.0	328	84.8
Kampot/Krong Kep	62.2	10.1	0.5	3.5	23.7	100.0	182	72.8
Sihanouk/Koh Kong	84.2	3.8	1.6	2.7	7.8	100.0	108	89.6
Preah Vihear/Steung Treng	68.6	6.5	1.4	2.3	21.1	100.0	95	76.6
Mondul Kiri/ Rattanak Kiri	27.4	4.1	2.1	1.2	65.1	100.0	76	33.7

Table 3.16. Maternal Micronutrients Percent distribution of women with living children under 5 years old by micronutrient status during pregnancy for the most recent birth, CSES 2009.

Province	Took iron tablets or syrup	Took intestinal parasite drugs	Suffered night blindness [1]	Received Vitamin A dose post-partum [2]	Received iron supplement post-partum [3]	Number of women
Cambodia	85.0	43.6	2.0	60.0	55.2	4,350
Banteay Mean Chey	88.1	48.6	1.2	58.3	51.6	224
Kampong Cham	81.6	29.4	2.0	48.5	45.3	625
Kampong Chhnang	71.4	45.7	2.9	67.1	55.1	140
Kampong Speu	85.9	45.0	0.9	64.7	62.5	244
Kampong Thom	86.6	56.5	2.1	57.6	52.2	197
Kandal	91.6	43.5	2.0	56.2	57.1	401
Kratie	73.0	47.2	1.3	54.9	46.8	125
Phnom Penh	91.1	31.3	1.1	68.7	63.0	341
Prey Veng	89.6	53.6	1.8	62.7	61.5	358
Pursat	96.1	73.5	3.1	61.5	61.9	105
Siem Reap	81.3	45.3	2.3	69.8	56.9	281
Svay Rieng	92.5	51.4	3.6	62.5	57.4	177
Takeo	94.5	41.2	1.2	67.8	62.4	281
Otdar Mean Chey	70.6	39.8	0.0	53.9	54.9	62
Battambang/Krong Pailin	90.7	56.6	3.9	71.9	65.2	328
Kampot/Krong Kep	79.8	38.7	0.5	39.9	36.3	182
Sihanouk/Koh Kong	92.7	49.6	1.2	64.9	64.5	108
Preah Vihear/Steung Treng	62.5	36.7	5.2	54.2	38.6	95
Mondul Kiri/Rattanak Kiri	29.4	6.2	3.4	32.1	29.4	76

[1] Adjusted figure -- does not include women who had difficulty seeing during daylight.

[2] Within 6 weeks after delivery

[3] Within 8 weeks after delivery

Table 3.17. Place of Delivery Percent distribution of women with living children under 5 years old by place of delivery for the most recent birth, CSES 2009.

Province	Health Facility					Number of women
	Public Sector	Private Sector	Home	Other	Total	
Cambodia	39.1	7.2	53.4	0.3	100.0	4,350
Banteay Mean Chey	39.0	7.1	53.9	0.0	100.0	224
Kampong Cham	28.1	9.1	62.3	0.5	100.0	625
Kampong Chhnang	42.4	1.8	55.8	0.0	100.0	140
Kampong Speu	28.0	8.7	63.2	0.0	100.0	243
Kampong Thom	28.4	1.8	69.8	0.0	100.0	197
Kandal	46.4	12.3	40.4	0.9	100.0	401
Kratie	19.6	0.0	80.4	0.0	100.0	125
Phnom Penh	65.2	26.0	8.5	0.3	100.0	341
Prey Veng	30.3	3.1	66.4	0.3	100.0	358
Pursat	27.5	7.6	65.0	0.0	100.0	105
Siem Reap	65.9	1.1	33.0	0.0	100.0	280
Svay Rieng	30.1	1.3	67.5	1.1	100.0	177
Takeo	58.8	6.8	34.0	0.3	100.0	281
Otdar Mean Chey	45.1	6.1	48.7	0.0	100.0	62
Battambang/Krong Pailin	33.6	4.2	61.9	0.3	100.0	328
Kampot/Krong Kep	15.5	3.8	79.5	1.2	100.0	182
Sihanouk/Koh Kong	53.0	7.4	39.6	0.0	100.0	108
Preah Vihear/Steung Treng	24.6	0.4	75.0	0.0	100.0	95
Mondul Kiri/Rattanak Kiri	22.2	0.2	77.6	0.0	100.0	76

Table 3.18. Assistance during delivery Percent distribution of women with living children under 5 years old by person providing assistance during delivery for the most recent birth, CSES 2009.

Province	Doctor	Nurse	Midwife	Traditional Birth Attendant	Friend/ Other	No one	Total	Number of women
Cambodia	21.0	12.0	37.9	28.3	0.7	0.0	100.0	4,348
Banteay Mean Chey	13.1	16.5	41.9	24.1	4.4	0.0	100.0	224
Kampong Cham	22.1	8.5	33.6	34.3	1.5	0.0	100.0	625
Kampong Chhnang	11.0	17.6	48.7	21.9	0.8	0.0	100.0	140
Kampong Speu	16.3	10.2	42.6	30.6	0.4	0.0	100.0	244
Kampong Thom	14.8	5.6	23.9	55.7	0.0	0.0	100.0	197
Kandal	30.3	14.2	42.2	13.3	0.0	0.0	100.0	401
Kratie	11.8	2.6	34.6	48.8	2.2	0.0	100.0	125
Phnom Penh	57.5	15.6	25.1	1.7	0.0	0.0	100.0	341
Prey Veng	16.7	13.5	31.5	38.0	0.0	0.3	100.0	358
Pursat	9.4	7.9	46.5	35.1	1.0	0.0	100.0	105
Siem Reap	30.3	13.1	27.6	28.3	0.8	0.0	100.0	281
Svay Rieng	12.5	18.8	37.4	31.3	0.0	0.0	100.0	177
Takeo	19.5	12.8	56.9	9.7	1.0	0.0	100.0	281
Otdar Mean Chey	2.3	13.6	38.7	43.6	0.0	1.8	100.0	62
Battambang/Krong Pailin	13.7	16.3	48.0	22.0	0.0	0.0	100.0	328
Kampot/Krong Kep	7.3	2.7	55.7	33.7	0.6	0.0	100.0	182
Sihanouk/Koh Kong	16.8	23.1	38.7	21.4	0.0	0.0	100.0	108
Preah Vihear/Steung Treng	9.9	1.7	25.6	61.9	0.9	0.0	100.0	95
Mondul Kiri/Rattanak Kiri	10.4	0.0	16.2	73.4	0.0	0.0	100.0	76

Table 3.19. Nutritional Status of Children Percent distribution of children 0–59 months old classified as malnourished according to the anthropometric indices: weight-for-age, CSES 2009.

	Weight-for-age				
Province	< -3SD	<-2SD	Mean z-score	SD	Number of children
Cambodia	9.6	29.6	-1.30	1.36	5,388
Banteay Mean Chey	7.8	19.2	-1.12	1.23	268
Kampong Cham	10.2	30.9	-1.39	1.31	794
Kampong Chhnang	12.4	33.9	-1.37	1.58	177
Kampong Speu	10.7	34.7	-1.42	1.48	307
Kampong Thom	7.6	27.3	-1.22	1.42	237
Kandal	6.1	27.6	-1.19	1.28	495
Kratie	9.3	35.2	-1.46	1.37	151
Phnom Penh	6.9	21.9	-0.86	1.56	421
Prey Veng	9.3	32.5	-1.50	1.17	428
Pursat	14.4	27.9	-1.31	1.32	132
Siem Reap	8.6	26.8	-1.28	1.28	371
Svay Rieng	6.9	25.4	-1.36	1.08	232
Takeo	8.8	31.6	-1.38	1.27	341
Otdar Mean Chey	10.3	26.0	-1.11	1.40	78
Battambang/Krong Pailin	9.0	29.5	-1.34	1.39	400
Kampot/Krong Kep	11.8	32.6	-1.29	1.50	229
Sihanouk/Koh Kong	11.0	26.3	-1.27	1.37	127
Preah Vihear/Steung Treng	19.5	44.2	-1.83	1.46	113
Mondul Kiri/Rattanak Kiri	21.8	49.9	-1.71	1.47	87

Appendix 4. Staff Members in the CSES 2009

Project staff

Name	Designation
Mr. Tith Vong	Survey coordinator in charge of questionnaire
Mr. Mich Kanthul	Survey coordinator in charge of sampling, account
Mr. Khin Sovorlak	Survey coordinator in charge of field work, admin.
Mr. Lay Chhan	Assistant survey coordinator in charge of questionnaire
Mr. Try Socheat	Assistant survey coordinator in charge of sampling, account
Mr. Oukchay Panhara	Database and network developer and coordinator
Mr. Yib Thavrin	Database and network developer and coordinator
Mr. Sam Soksotheavuth	Database and network developer and coordinator
Mr. Mak Sovichea	Database and network developer and coordinator
Mr. Moeng Tithyaroth	Web site developer

Data Processing Staff

No.	Name	Designation
1	Ms. Tong Chhay Rine	Data Processing supervisor
2	Mss. Mak Chantanary	Data editor
3	Mr. Nim Saomony	Data editor
4	Mr. Linh Heang	Data editor
5	Mr. Khin Bunna	Data editor
6	Ms. Nong Sokhunteavy	Data editor
7	Mr. Vong Sina	Data editor
8	Mr. Chhon Chhim	Data editor
9	Mrs. Heng Vichet	Data editor
10	Ms. Nhem Srey	Data editor
11	Mrs. Chim Sayot	Data editor
12	Mr. Chea Eng	Data editor
13	Mss. Phoung Vichny	Data editor
14	Mrs. Khieu Madary	Data entry operator
15	Mr. Khieu Khemrin	Data entry operator
16	Mrs. Eng Sophoan	Data entry operator
17	Mr. Try Ritthea	Data entry operator
18	Mss. Rin Sitha	Data entry operator
19	Ms. Ouk Morokat	Data entry operator
20	Mr. Oukchay Panharith	Data entry operator
21	Mss. Choun Sokunthea	Data entry operator
22	Mss. Sor Sophea	Data entry operator
23	Mr. Phork Sophea	Data entry operator
24	Mr. Hean Nhornhem	Data entry operator
25	Mss. Hang Chariya	Data entry operator
26	Ms. Khon Naren	Data entry operator
27	Mr. Sim Sopheak	Data entry operator
28	Mr. Vy Vithialy	Data entry operator
29	Mr. Bun Tha	Data entry operator
30	Mrs. Mao Vannoeun	Data entry operator
31	Mrs. Mey Sokhantey	Data entry operator

Field Workers

No	Name	Position	Batch
1	Mr. Chea Sothy	Supervisor	Batch I
2	Mr. Chhom Pisith	Supervisor	Batch I
3	Mr. Duch Chamroeun	Supervisor	Batch I
4	Mr. Eat Vanna	Supervisor	Batch I
5	Mr. Eng Nareth	Supervisor	Batch I
6	Mr. Heang Sovithiea	Supervisor	Batch I
7	Mr. Ka Den	Supervisor	Batch I
8	Mr. Ke Chantra	Supervisor	Batch I
9	Mr. Men Rith	Supervisor	Batch I
10	Mr. Noun Silout	Supervisor	Batch I
11	Mr. Ouk Eam	Supervisor	Batch I
12	Mr. Ouk Sarem	Supervisor	Batch I
13	Mr. Ouk Ty	Supervisor	Batch I
14	Mr. Pov Setha	Supervisor	Batch I
15	Mr. Prak Tith	Supervisor	Batch I
16	Mr. Ros Punlork	Supervisor	Batch I
17	Mr. Ros Sary	Supervisor	Batch I
18	Mr. Seung Van	Supervisor	Batch I
19	Mr. So Vannack	Supervisor	Batch I
20	Mr. Soeung Sarath	Supervisor	Batch I
21	Mr. Sous Say	Supervisor	Batch I
22	Mr. Tes Phuoth	Supervisor	Batch I
23	Mr. Vat Sophan	Supervisor	Batch I
24	Mr. Yim Oeun	Supervisor	Batch I
25	Ms. Ky Boreth	Supervisor	Batch I
26	Mr. Bin Chanthea	Supervisor	Batch II
27	Mr. Cheam Kim Im	Supervisor	Batch II
28	Mr. Chin Dina	Supervisor	Batch II
29	Mr. Men Nirintivorn	Supervisor	Batch II
30	Mr. Moeung Rado	Supervisor	Batch II
31	Mr. Moeung Sam	Supervisor	Batch II
32	Mr. Nhem Solyvann	Supervisor	Batch II
33	Mr. Nuth Chea	Supervisor	Batch II
34	Mr. Phauk Chansetha	Supervisor	Batch II
35	Mr. Pov Sam Ol	Supervisor	Batch II
36	Mr. Roeurn Sothea	Supervisor	Batch II
37	Mr. Ros Sarith	Supervisor	Batch II
38	Mr. Samreth Chantharo	Supervisor	Batch II
39	Mr. Sing Kea	Supervisor	Batch II
40	Mr. So Sokhim	Supervisor	Batch II
41	Mr. Sok Borith	Supervisor	Batch II
42	Mr. Sok Sovannarong	Supervisor	Batch II
43	Mr. Tith Polin	Supervisor	Batch II
44	Mr. Yan Kong	Supervisor	Batch II
45	Mr. Yi Dany	Supervisor	Batch II
46	Mr. Yim Rath	Supervisor	Batch II
47	Ms. Im Sothea	Supervisor	Batch II
48	Ms. Sao Kimhy	Supervisor	Batch II
49	Ms. Sok Chanthet	Supervisor	Batch II
50	Ms. Som Sariem	Supervisor	Batch II
51	Mr. Bet Nara	Enumerator	Batch I
52	Mr. Chan Tara	Enumerator	Batch I
53	Mr. Chea Phengly	Enumerator	Batch I
54	Mr. Chhean Sothea	Enumerator	Batch I
55	Mr. Chhorn Theara	Enumerator	Batch I
56	Mr. Chhun Saovy	Enumerator	Batch I
57	Mr. Chiv Samoeun	Enumerator	Batch I
58	Mr. Chum Oeurn	Enumerator	Batch I
59	Mr. Det Chamnan	Enumerator	Batch I
60	Mr. Dor Chankour	Enumerator	Batch I
61	Mr. Duong Samon	Enumerator	Batch I
62	Mr. Eam Hour	Enumerator	Batch I
63	Mr. Ek Vann Phann Nara	Enumerator	Batch I
64	Mr. Em Boroth	Enumerator	Batch I

65	Mr. Em Sambong	Enumerator	Batch I
66	Mr. Em Sean	Enumerator	Batch I
67	Mr. Eng Ratana	Enumerator	Batch I
68	Mr. Gnep Chhieng	Enumerator	Batch I
69	Mr. Ham Sam Ath	Enumerator	Batch I
70	Mr. Heou Kiny	Enumerator	Batch I
71	Mr. Ho Dalina	Enumerator	Batch I
72	Mr. Hoeung Sovann	Enumerator	Batch I
73	Mr. Hou Nhim	Enumerator	Batch I
74	Mr. In Saron	Enumerator	Batch I
75	Mr. Ith Chhoeung Y	Enumerator	Batch I
76	Mr. Kang Vivath	Enumerator	Batch I
77	Mr. Keo Bunchhav	Enumerator	Batch I
78	Mr. Keo Sam Onn	Enumerator	Batch I
79	Mr. Kheng Sarath	Enumerator	Batch I
80	Mr. Lao Kimchheak	Enumerator	Batch I
81	Mr. Leang Hour	Enumerator	Batch I
82	Mr. Leang Vichet	Enumerator	Batch I
83	Mr. Len Sovanna	Enumerator	Batch I
84	Mr. Liv Touchvesna	Enumerator	Batch I
85	Mr. Ly Chheang Ky	Enumerator	Batch I
86	Mr. Mak Phirum	Enumerator	Batch I
87	Mr. Mann Rathkunthak Muny	Enumerator	Batch I
88	Mr. Megn Saren	Enumerator	Batch I
89	Mr. Mek Sopheak	Enumerator	Batch I
90	Mr. Men Mach	Enumerator	Batch I
91	Mr. Moeung Tha	Enumerator	Batch I
92	Mr. Mom Ouddam	Enumerator	Batch I
93	Mr. Mon Chandara	Enumerator	Batch I
94	Mr. Mon Rathdoungchivy	Enumerator	Batch I
95	Mr. Net Visal	Enumerator	Batch I
96	Mr. Ngoun Leapsou	Enumerator	Batch I
97	Mr. Nguon Nor	Enumerator	Batch I
98	Mr. Nhek Vuthy	Enumerator	Batch I
99	Mr. Non Chenda	Enumerator	Batch I
100	Mr. Nop Sopheak	Enumerator	Batch I
101	Mr. Nuon Sarap	Enumerator	Batch I
102	Mr. Nuth Nysaiy	Enumerator	Batch I
103	Mr. Nuth Pito	Enumerator	Batch I
104	Mr. Oeurn Sam Ol	Enumerator	Batch I
105	Mr. Ong Narieng	Enumerator	Batch I
106	Mr. Ou Sarin	Enumerator	Batch I
107	Mr. Ou Thavin	Enumerator	Batch I
108	Mr. Ouch Seng	Enumerator	Batch I
109	Mr. Pen Sopha	Enumerator	Batch I
110	Mr. Phann Sokha	Enumerator	Batch I
111	Mr. Pich Hout	Enumerator	Batch I
112	Mr. Prak Sokhan	Enumerator	Batch I
113	Mr. Prak Sokhy	Enumerator	Batch I
114	Mr. Rin Vuthy	Enumerator	Batch I
115	Mr. Ros Vantry	Enumerator	Batch I
116	Mr. Sam Lin	Enumerator	Batch I
117	Mr. Sam Rith Samon	Enumerator	Batch I
118	Mr. Samut Sotha	Enumerator	Batch I
119	Mr. Sann Varthanak	Enumerator	Batch I
120	Mr. Sao Prum Vuthy	Enumerator	Batch I
121	Mr. Sat Run	Enumerator	Batch I
122	Mr. Sek Rithy	Enumerator	Batch I
123	Mr. Sem Tara	Enumerator	Batch I
124	Mr. Seng Sereirath	Enumerator	Batch I
125	Mr. Seng Sovanang	Enumerator	Batch I
126	Mr. Seng Vanna	Enumerator	Batch I
127	Mr. Sinn Samnang	Enumerator	Batch I
128	Mr. So Sarim	Enumerator	Batch I
129	Mr. Sok Sarith	Enumerator	Batch I
130	Mr. Sou Davin	Enumerator	Batch I
131	Mr. Souk Soeurn	Enumerator	Batch I

132	Mr. Soun Bunrong	Enumerator	Batch I
133	Mr. Soung Nith	Enumerator	Batch I
134	Mr. Soy Sarun	Enumerator	Batch I
135	Mr. Srun Lo	Enumerator	Batch I
136	Mr. Suon Reng	Enumerator	Batch I
137	Mr. Tan Sopheak	Enumerator	Batch I
138	Mr. Tek Hach	Enumerator	Batch I
139	Mr. Tep Channary	Enumerator	Batch I
140	Mr. Thong Vandeth	Enumerator	Batch I
141	Mr. Tim Bunthan	Enumerator	Batch I
142	Mr. Tin Bunthoeun	Enumerator	Batch I
143	Mr. Tith Saphoun	Enumerator	Batch I
144	Mr. Toeng Sopheap	Enumerator	Batch I
145	Mr. Tong Kin	Enumerator	Batch I
146	Mr. Touch Minear	Enumerator	Batch I
147	Mr. Troeung South	Enumerator	Batch I
148	Mr. Van Khan	Enumerator	Batch I
149	Mr. Veun Thy	Enumerator	Batch I
150	Mr. Vong Vanthy	Enumerator	Batch I
151	Mr. Chan Naroun	Enumerator	Batch II
152	Mr. Chea Kimleng	Enumerator	Batch II
153	Mr. Chey Satha	Enumerator	Batch II
154	Mr. Chhay Kuntheany	Enumerator	Batch II
155	Mr. Chhiv Sam Oeun	Enumerator	Batch II
156	Mr. Chhoun Navuth	Enumerator	Batch II
157	Mr. Chuom Chanthan	Enumerator	Batch II
158	Mr. Din Dila	Enumerator	Batch II
159	Mr. Heng Bunheang	Enumerator	Batch II
160	Mr. Heng Vichet	Enumerator	Batch II
161	Mr. Hok Pherun	Enumerator	Batch II
162	Mr. Ith Mary	Enumerator	Batch II
163	Mr. Keo Sopheap	Enumerator	Batch II
164	Mr. Khem Sokhan	Enumerator	Batch II
165	Mr. Khem Sovann	Enumerator	Batch II
166	Mr. Koeung Sokcheat	Enumerator	Batch II
167	Mr. Koeut Chamroeun	Enumerator	Batch II
168	Mr. Kong Leangheng	Enumerator	Batch II
169	Mr. Kong Vichet	Enumerator	Batch II
170	Mr. Koung Leangheng	Enumerator	Batch II
171	Mr. Lim Houng	Enumerator	Batch II
172	Mr. Ly Venghak	Enumerator	Batch II
173	Mr. Mak Ravuth	Enumerator	Batch II
174	Mr. Man Pheareak	Enumerator	Batch II
175	Mr. Meanchan Sokheng	Enumerator	Batch II
176	Mr. Meas Chantevea	Enumerator	Batch II
177	Mr. Meas Ratha	Enumerator	Batch II
178	Mr. Min Khoeun	Enumerator	Batch II
179	Mr. Min Sameth	Enumerator	Batch II
180	Mr. Mol Yoeurn	Enumerator	Batch II
181	Mr. Nget Ketya	Enumerator	Batch II
182	Mr. Nheb Phirun	Enumerator	Batch II
183	Mr. Nong Pang	Enumerator	Batch II
184	Mr. Ouch Chamnap	Enumerator	Batch II
185	Mr. Ourn Sambo	Enumerator	Batch II
186	Mr. Phat Puthy	Enumerator	Batch II
187	Mr. Phay Piseth	Enumerator	Batch II
188	Mr. Phou Phiny	Enumerator	Batch II
189	Mr. Pok Chiv	Enumerator	Batch II
190	Mr. Rath Sinat	Enumerator	Batch II
191	Mr. Sa Chivan	Enumerator	Batch II
192	Mr. San Sophat	Enumerator	Batch II
193	Mr. Sao Nara	Enumerator	Batch II
194	Mr. Say Dineth	Enumerator	Batch II
195	Mr. Sem Pothy	Enumerator	Batch II
196	Mr. Seng Sereirath	Enumerator	Batch II
197	Mr. Seng Bunsen	Enumerator	Batch II
198	Mr. So Somol	Enumerator	Batch II

199	Mr. So Thearith	Enumerator	Batch II
200	Mr. Sorn Rathana	Enumerator	Batch II
201	Mr. Sos Vanny	Enumerator	Batch II
202	Mr. Soun Heng	Enumerator	Batch II
203	Mr. Sum Neang	Enumerator	Batch II
204	Mr. Svay Samnang	Enumerator	Batch II
205	Mr. Thoeu Thok	Enumerator	Batch II
206	Mr. Thong Khuon	Enumerator	Batch II
207	Mr. Tieng Vantha	Enumerator	Batch II
208	Mr. Tom Roeun	Enumerator	Batch II
209	Mr. Uch Vuthy	Enumerator	Batch II
210	Mr. Yan Chumnit	Enumerator	Batch II
211	Mr. Yi Sophal	Enumerator	Batch II
212	Mr. Yim Mony	Enumerator	Batch II
213	Mr. Yoas Phean	Enumerator	Batch II
214	Mrs. Eam Vanna	Enumerator	Batch II
215	Mrs. Koh Andeth	Enumerator	Batch II
216	Mrs. Lim Leakhena	Enumerator	Batch II
217	Mrs. Net Sophy	Enumerator	Batch II
218	Mrs. Ou Phary	Enumerator	Batch II
219	Mrs. Ou Sinay	Enumerator	Batch II
220	Mrs. Ros Sopheap	Enumerator	Batch II
221	Mrs. Yan Sophun	Enumerator	Batch II
222	Ms. Ben Sinuo	Enumerator	Batch II
223	Ms. Bou Bandol	Enumerator	Batch II
224	Ms. Chun Phally	Enumerator	Batch II
225	Ms. Khun Sreynith	Enumerator	Batch II
226	Ms. Nay Sey Ha	Enumerator	Batch II
227	Ms. Ouch Voleak	Enumerator	Batch II
228	Ms. Oum Phany	Enumerator	Batch II
229	Ms. Pen Sinachinda	Enumerator	Batch II
230	Ms. Phuon Chamran	Enumerator	Batch II
231	Ms. Soeung Chantha	Enumerator	Batch II
232	Ms. Tan Charya	Enumerator	Batch II
233	Mss. Leng Vannak	Enumerator	Batch II
234	Mss. Ran Canara	Enumerator	Batch II
235	Mss. Sek Noeun	Enumerator	Batch II
236	Mr. Yay Sophen	Enumerator	Batch II
237	Mr. Yim Kosal	Enumerator	Batch II
238	Mrs. Huon Nireak	Enumerator	Batch II
239	Mrs. Long Chandara	Enumerator	Batch II
240	Mrs. Long Leakena	Enumerator	Batch II
241	Mrs. Ngeth Rey	Enumerator	Batch II
242	Mrs. On Sithon Kiri	Enumerator	Batch II
243	Mrs. Sou Rom	Enumerator	Batch II
244	Ms. Korm Sok Panha	Enumerator	Batch II
245	Ms. Korm Sophea	Enumerator	Batch II
246	Ms. Kry Sopheap	Enumerator	Batch II
247	Ms. Nhoung Kunthea	Enumerator	Batch II
248	Ms. Ouk Sovanny	Enumerator	Batch II
249	Ms. Phou Vinay	Enumerator	Batch II
250	Ms. Yin Narom	Enumerator	Batch II

Drivers

No.	Name
1	Mr. Song Lok
2	Mr. Mich Kimsoern

Appendix 5

CONFIDENTIAL

All information collected in this survey is strictly confidential and will be used for statistical purposes only

Royal Government of Cambodia

Ministry of Planning

National Institute of Statistics

HSES FORM 1

HOUSEHOLD SOCIO-ECONOMIC SURVEY 2009

LISTING OF HOUSEHOLDS IN THE VILLAGE

I. IDENTIFICATION INFORMATION	**Enter code**	***II. INTERVIEW INFORMATION***										
Province / City		Date of Listing	Day			Month			Year			
District / Khan		Interviewer's Name						I D				
Commune/ Sangkat		Interviewer's Signature										
Sample Village/ Mondol		Date of Supervision	Day			Month			Year			
Zone		Supervisor's Name							I D			
Sector (Urban=1, Rural=2)		Supervisor's Signature										
Number of Sample Village		Remarks										
Total No. of Households Reported by Village Leader												

III. DATA PROCESSING INFORMATION

For Official Use Only

Manual Data Processing			
Name of manual processing staff:		Supervisor's Name:	
No. of households to be re-interviewed		Signature:	
Signature:		Date:	
Date:		Remarks:	

Computer Data Processing		
Description	Key Entry	Verification
1. Operator's name:		
2. Computer address:		
3. Name of data File:		
4. Date of creation:		
5. No of records:		
6. Signature of operator:		
Supervisor's Observation		
7.Supervisor's name:		
8.Date of data file checked:		
9. No of records identified:		
10. Diskette backup address:		
11. Supervisor's signature		

IV. HOUSEHOLD INFORMATION

PROVINCE		DISTRICT		COMMUNE		VILLAGE		ZONE	SECTOR	*NUMBER OF SAMPLE VILLAGE*					No. OF EAs	EA No. SELECTED

Interval = For Rural: No. of Households listed ÷ 20 = ÷ 20 = ***Random Start*** =

For Urban: No. of Households listed ÷ 10 = ÷ 10 = Random Start **=**

Line No.	Building Serial Number	Housing Unit Serial Number	Household Serial Number	Name of Household Head	Address	Number of Household Members			Principal Economic Activity of the Building/Premises/Household		*For Sample Selection*	Remarks *
						Total	Male	Female	Description	Code	Sample Reference Number	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
01												
02												
03												
04												
05												
16	Page Total			Total Household Population								

* Col. 13: Identify the households having any of the following persons with the code given to them below by recording the appropriate code in the remark column.

1 = Village leader, 2 = Health worker/Pharmacist, 3 = Headmaster/ Teacher, 4 = Retail shopkeeper/Market Vendor

IV. HOUSEHOLD INFORMATION (contd.)

Line No.	Building Serial Number	Housing Unit Serial Number	Household Serial Number	Name of Household Head	Address	Number of Household Members			Principal Economic Activity of the Building/Premises/Household		*For Sample Selection*	Remarks *
						Total	Male	Female	Description	Code	Sample Reference Number	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
01												
02												
03												
04												
05												
06												
07												
16	Page Total			Total Household Population								

* Col. 13: Identify the households having any of the following persons with the code given to them below by recording the appropriate code in the remark column.

1 = Village leader, 2 = Health worker/Pharmacist, 3 = Headmaster/ Teacher, 4 = Retail shopkeeper/Market Vendor

IV. HOUSEHOLD INFORMATION (contd.)

For more information

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