National Institute of Statistics
Ministry of Planning

Summary Subject Matter Report

Cambodia
Socio-Economic Survey
2004

Phnom Penh, August 2005

The Cambodia Socio-Economic Survey 2004 has been carried out by the National Institute of Statistics, Cambodia, and with Technical Assistance provided by Statistics Sweden. The survey is funded by UNDP and in specific areas sponsored by The World Bank.

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FOREWORD

I have the pleasure to provide the foreword to the *Summary Subject Matter Report of the Cambodia Socio-Economic Survey (CSES) 2004*. The CSES 2004 is the fifth Cambodia Socio Economic Survey conducted by National Institute of Statistics, since the Socio Economic Surveys in the years 1993/94, 1996, 1997 and 1999.

The CSES 2004 survey was designed to be the most comprehensive survey of its kind in the country. The main objective of the survey is to collect accurate statistical information about living standards of the population and the extent of poverty as an essential instrument to assist the government in diagnosing the problems and designing effective policies for reducing poverty, and in evaluating the progress of poverty reduction which are the main priorities in the "Rectangular Strategy"of the Royal Government of Cambodia.

The survey was planned and designed by the staff of NIS with overall technical and management assistance provided by Statistics Sweden, and with UNDP funds. The World Bank has also been contributing in various ways. The CSES 2004 has filled data gaps in several subject matter areas which will continue to meet the data needs of many users.

The methodology and techniques that were applied in the survey to maintain the quality and timeliness of the results, and the arrangements made to ensure the cooperation of the respondents and field staff should be sustained to ensure the quality of future surveys. The survey methodology including sampling design, estimation procedures, survey planning and implementation arrangements, and the survey processing will be described in a separate report titled "*Technical Report on Survey Design and Implementation*".

On behalf of the Royal Government of Cambodia, I would like to highly appreciate the significant financial and technical assistance provided by various international and bilateral donars, in particular, the UNDP, The World Bank, Sida, and Statistics Sweden, making the survey a success and meeting the highest international standards.

Chhay Than
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Ministry of Planning
Phnom Penh, Cambodia
July 2005

PREFACE

The National Institute of Statistics (NIS) of the Ministry of Planning has conducted the fifth Cambodia Socio-Economic Survey in the period 2003-2004 (CSES 2004). Previous surveys were undertaken in 1993/94, 1996, 1997 and 1999. The United Nations Development Program (UNDP), The Word Bank and the Swedish International Development Agency (Sida) have been the main sponsors while Statistics Sweden has provided the Technical Assistance.

The main objective of the survey was to collect statistical information about living standards of the population and the extent of poverty. Essential areas as household production and cash income, household level and structure of consumption including poverty and nutrition, education and access to schooling, health and access to medical care, transport and communication, housing and amenities and family and social relations. For recording expenditure, consumption and income the *Diary Method* was applied for the first time. The survey also included a Time Use Form detailing activities of household members during a 24-hour period.

The CSES 2004 was carried out on a nationwide representative sample of 15,000 households within 900 Primary Sampling Units (PSU's). It was divided into 15 monthly samples of 1,000 households each in 60 PSU's from November-03 till January-05.

NIS decided to use statistical methods (calibration) to achieve better comparability between the different rounds of the CSES surveys by adjusting the samples to the population size and structure that was established by the national population census carried out in 1998. To mirror the rapid changes in the population, it proved necessary to project the population forwards to 2004 and backwards to 1993/94, taking into account fertility, mortality and internal migration rates.

Even if large efforts have been made to make comparisons possible between the survey rounds, and to produce statistical information, there is still much work left to be done in this area during the coming years.

The CSES 2004 is a very comprehensive survey that will provide a lot of statistical data to be used for various purposes. A set of eight selected subject matter reports have been produced and presented in a user workshop in June 2005. This Summary Subject Matter Report extracts the most important results frome these reports. The CSES publication plan outlines what will later be be produced in different subject matter areas. The primary data files will also be made available to analysts at other ministeries for further analysis, and to international organizations and university researchers according to the procedures specified in the 2005 Law on Statistics.

We thank UNDP, WB and Sida for sponsoring the survey, and Statistics Sweden for management assistance and technical support. Furthermore, we wish to place on record our deep appreciation of the work carried out by project experts and consultants, NIS staff, staff of provincial planning departments and the staff of the Ministry of Planning who worked with dedication and enthusiasm to make the the survey a success. We also extend our thanks to all the participating households and individuals.

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National Institute of Statistics,
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August 2005

THE STRUCTURE OF THE REPORT

This report should be seen as a joint product by NIS staff and Statistics Sweden subject matter specialists. All findings have previously been disseminated in NIS arranged workshops where stakeholders have been invited.

In the latest workshop in June eight summary subject matter reports were presented and discussed. All have been written by separate analysts and in cooperation with Swedish consultants.

It is these summary subject matter reports that have been edited and included in the present volume. Most of the editing has merely meant reducing the original text bodies to achieve a better balance between the subject matter areas. Many of the tables have also been omitted.

Hence the parts of the reports that have been included have mostly retained its formatting which may look somewhat disturbing. However, at the same time it is an indication that NIS analysts have made a great effort in the first assessment of the rich CSES data, and that foreign expert impact may be recognized in the overall report structures.

The original reports can be obtained from NIS for readers who are interested in the special areas.

The NIS staff who have contributed are:

H.E. San Sy Than	*Economically active population*
Mr. Heang Kanol	*Crop production*
Mr. Tith Vong	*Housing conditions*
Mr. Lay Chhan	*Purchase and possession of durable goods*
Mr. They Kheam	*Migration*
Mr. Hor Darith	*Education*
Mr. Pich Pothy	*Health and access to medical care*
Ms. Hang Lina and Ms. Uy Bossadine	*Time use in a gender perspective*

EXECUTIVE SUMMARY

Introduction

Living conditions in Cambodia have improved considerably between 1993 and 2004, the period covered by the Cambodia Socioeconomic Surveys (CSES). Life expectancy at birth increased from 52 to 60 years for men and from 56 to 65 years for women, mainly by rapidly declining infant and child mortality. Material living conditions improved substantially according to indicators on housing conditions and possession of durables. The differences in living conditions are large between urban and rural areas. The standard of living is better in Phnom Penh in almost all respects than in other urban areas, which in turn are better than the rural areas. The present report cover main aspects on selected important subject matter areas.

Separate reports on poverty will be available in the last quarter of 2005.

Population of Cambodia

The Cambodian people were devastated by war and genocide in the 1970's. After a 15-year period since 1980 with very high fertility and strong population increase there has been a 10-year period with rapidly declining fertility and mortality since 1995. The population increase has been sustained in both periods. New population estimates show that the population increased from close to 11 million in 1994 to 13.5 million in 2004. It is expected to pass 15 million by 2010 according to a revised population projection.

Population structure

With very high fertility from 1980, Cambodia had close to 5.2 million children below age 15 in 1994 constituting 47 percent of the total population. The child population size had fallen slightly to 5.1 million by 2004 because of declining fertility since 1995 but its share of the total population had fallen to 38 percent. This is because the big child population of 1994 by 2004 had reached ages 15-24. This age group of young adults entering the labour market increased from 1.75 million in 1994 to 3.15 million in 2004. They are now also entering and passing through the family formation age and will need own dwellings. These changes in the population structure have first affected the need for primary and secondary schools, then the need for jobs in the labor market, and now also the need for dwellings in the housing market.

The labour market

The special demographic phenomena of Cambodia since 1970 give its labor market unique characteristics. The very high birth rate after the Pol Pot years causes a rapid increase in the labor force – and in youth unemployment – twenty years later, from year 2000 and on. The unemployment rate according to international definitions is still very low (under one percent) but this does not describe the character of the Cambodian labor market. The vast supply of underemployed young adults in the low-productivity rural agricultural sector, ready to migrate to the urban areas to work in modern manufacturing or services is the dominant feature. The pool of young adults will continue to grow in the coming years. The first big cohort from 1980 will reach age 30 in 2010.

The labor force

Labor force age in Cambodian statistics includes all persons 10 years and older, of which 75 percent are economically active (79 percent of all men and 71 percent of all women). The activity rate peaks at around 95 percent for men in ages 25-49 and at 80-83 percent for women of the same ages. One third of the labor force has completed primary school (grade 6) or higher but the terrible depletion of higher educated people during the Pol Pot years can only

slowly be replenished. Only 4 percent of the labor force in 2004 has upper secondary or post-secondary education.

Industry and occupation

The share of the labor force in the primary sector, mainly agriculture, has decreased from 75 percent in 1999 to 55 percent in 2004 giving room for an increase of employment in higher productivity modern manufacturing, notably the garment industry, and in urban services. A majority of households still take part in crop production, 83 percent in the wet season and 34 percent in the dry season. The average yield per square meter measured in riels is about 1,200 (30 US cents) in the wet season and riels 800 (20 US cents) in the dry season. Paddy rice is by far the most common crop.

Educational attainment and enrolment

43 percent of women aged 25 and over have none or only some education (not completed first grade). The corresponding figure for men is 20 percent. Only 0.4 percent of women have post-secondary education, and 1.8 percent of men. Adult literacy rate, population aged 15 and over, is 60 percent for women and 80 percent for men. Some 3.7 million (55 percent) of the population aged 5-24 years were enrolled in the formal school system in 2004. The share has increased from 46 percent in 1999. Of the 20-29 year old in the labor market in 2004 some 17 percent have completed lower secondary school.

Educational expenses

Educational expenses per student for one school year include school fees, tuition, textbooks, other school supplies, gifts to teachers, and contribution to building funds. Households estimate educational expenses to below riels 50,000 (US $10) for pre-school and primary school students, for upper secondary to riels 393,000 (just below US $100), for technical/vocational riels 1.1 million (just above US $250), and for university riels 2.1 million (just above US $500).

Indicators of mortality

Infant mortality declined from 93 deaths per 1,000 births in 1998 to 66 in 2003. Child mortality declined from 31 deaths per 1,000 children 1-4 years old in 1998 to 17 deaths in 2003. Life expectance at birth increased from 52 to 60 years for men and from 56 to 65 years for women in as short a period as five years.

Indicators of morbidity

About 10 percent of Cambodians are in “bad” or “very bad” health condition according to layman health status evaluations done by household heads or spouses. About 4 percent or 538,000 of the non-institutionalized population have some disability as reported by the household heads. Seeing, moving and hearing difficulties at old age dominate. In an average month about 18 percent of the population have experienced some episode of illness, injury or other health related symptom. Illness rates are highest among children under age 5 (25 percent). They are lowest among teenagers. From age 20 the rates rise steadily to over 40 percent among the oldest (age 65 +), women’s rates slightly higher then men’s.

Access to medical care

Two out of three with an illness episode in the last month sought treatment. Average spending on medical care for persons with an illness episode in the last month was about riels 25,000 (US $6).

Prevention programs

Fully 97 percent of children below age 2 have been breastfed for some time but only 30 percent got breast milk as first food intake. 28 percent got breast milk only after the first day. Eight out of ten children are fully vaccinated and given vitamin A. However, 13 percent of children under 2 years of age have no vaccination.

As to other prevention measures, CSES 2004 reports that salt iodization is spreading rapidly so that 28 percent of households were using iodized salt in 2004.

Around 40 percent of Cambodian men over age 14 are daily smokers as compared to 4 percent of Cambodian women. Smoking prevalence is higher in rural than in urban areas. Almost 90 percent of the population know that smoking is harmful. Lowering the high prevalence rate of smoking among Cambodian men and keeping the rate low among women are very important health policy goals.

HIV/AIDS awareness is very high in Cambodia. 90 percent of the population aged 15 and over have heard of the illness and almost 88 percent mention condom use as one of the methods to avoid the illness.

About 94 percent of Cambodian households use mosquito nets but only four percent have impregnated nets.

Housing conditions

The number of occupied dwellings has increased from about 1.9 million in 1994 to 2.6 million in 2004 (37 percent), partly by population growth and partly by lower average household size. The growth of the stock of dwellings has been accompanied by a considerable improvement in the housing quality but from a very low level to a level that is still very low. Hard/permanent construction materials in roofs have increased from 43 percent of dwellings in 1994 to 71 percent in 2004 and from 34 percent to 55 percent in walls. Three out of four dwellings in 2004 have only one room. Average floor area of dwellings is 42 square meters, 8.5 square meters per person, and 3.7 persons per room.

The percent of households with sustainable access to safe drinking water has increased from 30 percent in 1997 to 48 percent in 1999. In 2004, 70 percent of households have access to safe water in the wet season and 48 percent in the dry season. 75 percent of households do not have any toilet facility in their dwellings. Only 20 percent have a modern toilet facility connected to sewerage or septic tank. Environmentally problematic is also the heavy fuel wood dependency for cooking at 93 percent, only marginally less than ten years ago.

An owner-occupied dwelling in Cambodia is worth about riels 13.6 million (US $3 400) as estimated by the owner. Only 34,000 households out of 2.6 million pay rent for their dwellings since almost all households own their dwellings. Average monthly rent paid by this group is riels 114,000 (US $29). 67 000 or 2.8 percent of all households invested in new construction or extension of their dwellings in 2004. Average expenditure was riels 4.8 million, close to US $1,200.

Durable goods

The increase of material resources in the households is most simply illustrated by possession of durable goods and the differences in living standards between Phnom Penh, other urban areas and the vast rural areas. Ownership of radios has reached 50 percent, of TV sets 46 percent, of cell phones 13 percent. Ownership of bikes has peaked at 64 percent and is higher in rural areas than in urban areas, where motorbikes have simply taken over. 73 percent of households in Phnom Penh have a motorbike but only 48 percent a bike, hence less than in rural areas.

Equipment for household work is still rare in the households. Only 3 percent enjoy a separate kitchen, 2 percent can store food in a refrigerator, 6 percent have a sewing machine, and 8 percent an electric iron. Most households have a harrow/rake, or 83 percent. Ownership of ploughs is down to 36 percent, water pump 8 percent, tractor/semi-tractor below 3 percent. This indicates the low degree of mechanization of Cambodian agriculture.

A small minority, or 1.4 percent of Cambodian households, have PCs at home, most of them in Phnom Penh. The rate in Phnom Penh is 13.4 percent but only 0.2 percent in rural areas where more than 80 percent of the population lives.

Finally, on some conveniences: 0.9 percent of households have air conditioning in their dwellings; 12 percent electric fans; 3 percent sofa sets; 30 percent bed sets; 7 percent dining sets. Owning musical instruments and sports equipment both count below 1 percent of households.

Migration

Over 70 percent of Cambodia's population in 2004 have always lived in the same village since birth. Around 11 percent of the population have moved at least once in the five-year period 1999-2003 compared to only 4 percent in 1989-1993. The Pol Pot years affect migration only of persons older than 30 years in 2004. The data show that Phnom Penh was emptied in those years and that the peak in migration is in 1979 when people could return to their homes.

Time use

The gender division of labor is rather conventional in Cambodia according to this first time use survey done in the country. Men do more market work and agricultural and related primary sector industries while women spend more of their time doing *housework* (cooking, washing/cleaning, care of children and elderly and shopping). *Household work* (handicraft, fetching water, collecting firewood, construction and similar) is more evenly distributed between the genders.

The value of the uncounted contribution of all the women of Cambodia in housework is estimated to be riels 10.7 billion per day compared to just more than 1 billion for men. The value of household work is much more alike, or riels 1.6 billion for men compared to 1.8 billion for women.

The average leisure time for the productive generation is 4 hours per day. The differences between urban and rural areas, and between work days are rather small. Men have slightly more leisure time than women.

The data sources

The main data source for the report is the 2004 Cambodia Socio-Economic Survey (CSES 2004), while the 2004 Cambodia Intercensal Population Survey (CIPS 2004) is used for the demographic estimates. The CSES 2004 sample of 15,000 households in 900 villages is drawn from the register of villages and enumeration areas based on the 1998 population census. A nationally representative sample of 1,000 households in 60 villages have been interviewed each month from November 2003 to January 2004. Two teams of 125 trained fieldworkers, of which 25 supervisers, alternated monthly to do the interviews which were spread over the month. The fieldwork teams lived in the villages to help households keep records of daily expenditures and incomes in a month-long diary.

The statistical reports produced by the National Institute of Statistics (NIS) in the Ministry of Planning, with technical assistance from Statistics Sweden, are not meant to be exhaustive reports on this rich data source. The primary data files will be made available for further

analysis to external analysts in other ministries, international organizations and university researchers according to the procedures specified in the 2005 Law on Statistics.

THE SURVEY

0.1 Background

The National Institute of Statistics (NIS) of the Ministry of Planning (MoP) conducted the Cambodia Socio-Economic Survey 2003-2004 (CSES 2004). The UNDP, The World Bank and the Swedish International Development Agency (Sida) sponsor the survey. Statistics Sweden has provided the overall technical assistance. This is the fifth Cambodia Socio- Economic Survey (CSES) conducted by the National Institute of Statistics, following the Socio Economic Surveys in 1993/94, 1996, 1997, and 1999.

0.2 Objectives and Scope of the Survey

The main objective of the survey is to collect accurate statistical information about living standards of the population and the extent of poverty as an essential instrument for identifying problems and designing effective policies for reducing poverty, and in evaluating the progress of poverty reduction.

Like the four previous survey rounds six main areas of social concern have been surveyed:

- Household level and the structure of consumption including poverty and nutrition
- Household production and cash income
- Education and access to schooling
- Health and access to medical care
- Housing and amenities
- Family and social relations

0.3 Design and Coverage

The CSES 2004 was carried out on a nationwide representative sample of 15,000 households within 900 *Primary Sampling Units* (PSU) corresponding to 867 villages. It was designed to provide information on social and economic conditions of households for policy studies on poverty, household production, final consumption for the National Accounts, and weights for the Consumer Price Index (CPI). It was divided into 15 monthly samples of 1,000 households each in 60 PSUs from November-03 till January-05.

Using data for the 15 months, reliable estimates were produced for 11 individual provinces; Bantey Meanchy, Battambang, Kampong Cham, Kampong Speu, Kampong Thom, Kandal, Phnom Penh, Pery Veng, Siem Reap, Svay Rieng and Takeo. The other 13 provinces were grouped according to zone:

Tonle Sap provinces:	Kampong Chhnang and Pursat
Coastal provinces:	Kampot, Sihanouk Ville, Kaoh Kong and Krong Keb
Plateau/Mountain:	Kratie, Steung Treng, Rattanakiri, Mondol Kiri, Preah Vihear, Oddor Meanchey, and Krong Pailin

The 1998 Population Census, carried out by NIS, was used as sampling frame in the sampling design of the CSES 2004.
The survey covers private households with one or more persons. Nomadic households are included in principal. Excluded are:

- People living in institutions (such as long term hospitals, prisons, monasteries, military quarters)
- Diplomatic and UN households in the country
- Other foreigners in the country
- Armed forces residing in military bases

0.4 Confidentiality of Information

All information collected in CSES 2004 is strictly confidential and will be used for statistical purpose only, in accordance with the 2005 Cambodian Law on Statistics.

0.5 Questionnaires

Five different questionnaires or forms were used in the survey:

Form 1
Household listing sheets to be used in the sampling procedure in the enumeration areas.

Form 2
Village questionnaire answered by the village leader about economy and infrastructure, crop production, health, education, retail prices and sales prices of agriculture, employment and wages, and recruitment of children for work outside the village.

Form 3
Household questionnaire with questions for each household member, including modules on migration, education and literacy, housing conditions, crop production, household liabilities, durable goods, construction activities, nutrition, fertility and child care, child feeding and vaccination, health of children, mortality, current economic activity, health and illness, smoking, HIV/AIDS awareness, and victimization.

Form 4
Diary form on daily household expenditure and income

Form 5
Time use form detailing activities of household members during one 24-hour period.

0.6 Data collection and fieldwork

The fieldwork started in November 2003 and was scheduled to end in December 2004. However, some more basic data was needed for the analyses and the fieldwork was extended to include January 2005.

50 supervisors and 200 enumerators were recruited by NIS and trained for the fieldwork. The training took place in Phnom Penh and lasted three weeks for supervisors and two weeks for enumerators. Before the start of each fieldwork month there were briefing and retraining sessions.

Each fieldwork team included one supervisor and four enumerators. In urban areas one enumerator was responsible for one PSU and for interviewing 10 households, while in rural areas two enumerators were responsible for one PSU and for interviewing 20 households. In all 125 enumerators and supervisors, divided into 25 teams, were carrying out the fieldwork at the same time. Two such team groups were formed and each team group alternated monthly.

The supervisor was the leader of the team and was responsible for the coordination of the interviews, collaboration with local authorities, and checking for errors in the interviewed questionnaires. Enumerators were required to re-interview in case of errors found in the questionnaire. The supervisor then brought the final checked questionnaire to NIS. The supervisor was also responsible for the village questionnaire and the interviews of the village chief or representative.

In the early stages of survey planning a Survey Core Group of high-level NIS officers, chaired by the DG, was formed. After assigning supervisors and enumerators to the villages, five core group members had the task of monitoring fieldwork activities in the sampled villages. This supervision was done during two weeks a month. The major tasks were to check the presence

of supervisor and enumerators, the status of the fieldwork, and the cooperation between the authorities of the village and the fieldworkers. They also addressed the issue of non-response households and partially filled-out questionnaires. It was found that non-response overall was very low and that the cooperation with local authorities was good. All taken together, the fieldwork was completed in a very satisfying manner.

0.7 Data Processing

Data processing was done at the NIS using a CSPro[1] data management system that strictly controls the data entry operation. A team of editors took care of warnings and errors to ensure that entered data were consistent with questionnaire data.

0.8 Survey Results

The CSES 2004 enjoyed almost a 100 percent response rate. The high response rate together with close and systematic fieldwork supervision by the core group members were a major contribution for achieving high quality survey results.

0.9 Comparability with previous surveys

To make comparisons with previous surveys meaningful, a big effort has been made for calibrating survey weights to conform to the sex and age distributions in the 1998 Population Census. However, there remains more methodological work to be done to obtain reliable indicator comparability between the different surveys since unfortunately designs differ.

A big problem with previous surveys has been the inconsistent time trends on population size and structure that are exemplified in the table below. The erratic estimates affect trends in all social indicators that correlate with the population structure. The inconsistencies are caused by several different factors of which deficiencies in the sampling frames are primary.

Some of these problems are alleviated by adjusting the sampling weights of the different surveys to the population size and structure established by the 1998 Population Census. This method cannot fully solve all problems, particularly when one wants to go back to the first CSES done in 1993/94, because the sampling frame of that survey was believed to be lost. It was known that the poorer rural parts of the country were not covered by the sample for that survey, which causes an upward bias to estimates of all economic and social indicators for 1993/94 in comparisons with the later surveys.

Table 0.1. Data from previous surveys 1993-1999.

Indicators	1993/94 CSES	1996 CSES	1996 DS	1997 CSES	1998 Census	1999 CSES
Total population	9,900,000	10,340,300	10,702,000	10,368,000	11,437,656	11,561,000
Population change		1.044	1.035	0.969	1.103	1.011
Age 0-14	43.7	42.7	43.9	39.8	42.8	39.7
….of whom 0-4	*12.2*	*12.3*	*13.4*	*11.1*	*12.8*	*10.7*
Age dependency ratio	91.6	88.1	90.2	77.6	86.1	76.8
Urban	15.4	16.7	14.4	19.1	15.7	18.4
Number of households	1,760,500	1,961,800	2,011,000	2,098,000	2,188,663	2,165,000
Average size of households	5.6	5.3	5.3	4.9	5.2	5.3
Female headed households	21.2	22.3	25.8	23.5	25.7	19.6

[1] CSPro is a freeware developed by the US Census Bureau for data entry, editing, and tabulation

However, the 1993/94 sampling frame was recently discovered but not in time to be used for the estimates in this report. The discovery makes it possible to compare estimates for the areas of the country covered by the 1993/94 sample with the corresponding parts of the country in the later surveys. This should be done in the future analysis on the available data.

Table 0.2. Number of sampled households and persons in the different surveys and estimated population for the survey years.

Survey	Households In sample	Persons in whole sample	Estimated Total population	Estimated population < 5 years
1993/94	5,578	32,079	10,990,000	1,915,000
1996	8,998	46,811	11,669,000	2,019,000
1997	6,010	29,931	11,970,000	2,029,000
1999	6,000	32,348	12,373,000	1,827,000
2004	14,984	74,719	13,439,000	1,531,000

0.10 More data available

The contents of this report constitute a summary of findings for some of the subject matter areas covered by the survey. In addition detailed reports have been or will be presented for all the different subject matter areas. The CSES 2004 is a rich source of information and it is possible to study indicators more in detail. NIS will continue its efforts to analyze and disseminate this information. The primary data files will also be made available for further analysis to external analysts in other ministries, international organizations and university researchers according to the procedures specified in the 2005 Law on Statistics.

1 DEMOGRAPHY

1.1 Introduction

The Cambodian National Institute for Statistics (NIS) has decided to use statistical methods to achieve better coordination between the different rounds of the CSES surveys by adjusting all the samples to the population size and structure that was established by the national population census carried out in 1998. The big age groups from the 1980's are coming of age in the 1990's and after**.** To mirror the rapid changes in the population, it has been necessary to project the population forwards to 2004 and backwards to 1993/94, taking into account fertility, mortality, and internal migration. The NIS gave the task to carry out the population projections to Dr. Ricardo F. Neupert[2]. This chapter quotes some of his findings.

1.2 Demographic measures in the CSES 2004

The CSES 2004 is not designed to measure demographic characteristics of the population, but it contains several questions that can be used for that purpose. It is not suggested by Neupert that the CSES 2004, or future Socio-Economic surveys, should be a major source of demographic information. However, they can provide additional estimates to corroborate measures obtained with specialized demographic surveys.

1.3 The new projection

In March 2004 a new demographic survey was conducted: The 2004 Cambodian Intercensal Population Survey (CIPS 2004). Initial estimates of fertility and mortality suggested that these two demographic components are declining more rapidly than expected in earlier projections. These events suggested the need to update the *1993-2004 First Special Projection*. The new demographic trends are not likely to have a major effect on the size of the total population, but they will certainly affect the size of the infant and child populations, which are rather directly affected by fertility changes. These population groups are quite important for the purposes of re-weighting the CSES samples.

1.4 Summary of findings

According to the CIPS 2004 data, *fertility has declined* substantially during the past two decades. The total fertility rate declined from more than 6 children per woman in the early 1980's to 4.0 children in 1998 and to 3.3 in 2003.

After a period of erratic variations within a high level range, *infant and child mortality have experienced a substantial decline.* According to the CIPS 2004, from a rate of 93 deaths per 1,000 births in 1998, infant mortality declined to 66 in 2003. Child mortality declined from 31 deaths per 1,000 children 1 to 4 years old in 1998 to 17 in 2003

It seems that a major determinant of infant and child mortality has been the fertility decline. Socio-economic development and the expansion of the provision of health services have not been broad enough to explain such a rapid decline. The experiences of other countries suggest that further improvements will not be possible unless substantial improvements in the standard of living of the population take place and an efficient and extensive health infrastructure is developed.

Mainly as a result of early-age mortality decline, Cambodians have *gained several years of life expectancy*. From 1998 to 2003 it increased from 52 to 60 years among males and from 56

[2] R. F. Neupert. New Demographic Estimates and Updated Projections for Cambodia. UNDP 2005.

to 65 among females. In other words, life expectancy at birth has increased by 9 years in a period of only 5 years.

According to the population projection conducted with the variables estimated from the CIPS 2004, the population of Cambodia will surpass 13 millions during 2004. By the end of the decade, it will reach 15 millions.

The backward projection conducted in the study, based on the 1998 Population Census and the 2000 Cambodia Demographic and Health Survey (CDHS)**,** indicates a larger population than previous studies made before the 1998 census, when the present sources were not all available. In a study published in 1997[3], the population estimate for 1996 is 10.7 million while in the Neupert study it is 11.6 million. The value estimated here is 8.4% higher. The estimate obtained in the present study *seems more reliable* because it has been using conventional and more reliable demographic data sources.

In spite of the fertility decline, the rate of population growth during the second half of the present decade will be high with an average annual rate of 1.9%. The reason is the so called *population momentum*, which results when the large cohorts of women that were born during the period of high fertility rates (1980-1995) are reaching reproductive age.

The age pattern of mortality of the Cambodian population as identified from the construction of a life table using the CIPS 2004 data is different from the patterns corresponding to the life table models available. In spite of being similar to the *East Model* with respect to infant mortality and to the *North Model* regarding adult mortality (Coale-Demeny models), there are important divergences. The implication of this finding is that the use of model life tables to estimate mortality, especially adult mortality, will produce somewhat biased results. This fact makes it necessary to have a reliable lifetable for Cambodia based on empirical data.

Table 1.1. Population estimates for Cambodia 1994 and 2004 by sex and age. Numbers.

Age Group	Total 1994	Total 2004	Men 2004	Women 2004
0-4	1,915,000	1,531,000	777,000	754,000
5-9	1,762,000	1,779,000	902,000	877,000
10-14	1,500,000	1,818,000	925,000	893,000
15-19	855,000	1,705,000	876,000	830,000
20-24	899,000	1,443,000	717,000	726,000
25-29	851,000	815,000	388,000	427,000
30-34	759,000	852,000	407,000	445,000
35-39	560,000	802,000	379,000	423,000
40-44	458,000	710,000	334,000	376,000
45-49	354,000	520,000	214,000	306,000
50-54	290,000	417,000	171,000	245,000
55-59	238,000	313,000	131,000	182,000
60-64	202,000	245,000	103,000	141,000
65-69	153,000	186,000	77,000	108,000
70-74	92,000	138,000	57,000	81,000
75+	98,000	165,000	66,000	99,000
Total population	**10,990,000**	**13,439,000**	**6,526,000**	**6,914,000**

[3] J. H. Huguet, J. H. The Population of Cambodia, 1980-1996, and Projected to2020, National Institute of Statistics, Ministry of Planning,Phnom Penh, Cambodia, 1997. It was based mainly on the number of voters registered by the United Nations Transitional Authority in Cambodia (UNTAC) and a population count conducted in 1980 by the Government of the former People's Republic of Kampuchea

Table 1.2. Population estimates for Cambodia by sex, 1994 – 2010.
Numbers

Year	Estimated Total Popu-lation	Men	Women
1994	10,990,000	5,281,000	5,709,000
1996	11,669,000	5,624,000	6,044,000
1997	11,970,000	5,777,000	6,194,000
1999	12,373,000	5,980,000	6,393,000
2004	13,439,000	6,526,000	6,914,000
2005	13,661,000	6,640,000	7,022,000
2010	15,034,000	7,343,000	7,691,000

2 Economically Active Population

2.1 Introduction

The special demographic phenomena that Cambodia experienced in the seventies and the baby boom in the eighties give Cambodia a unique labor market in the 2000's. It seems like the very high rate of natality lasted for 5 to 7 years, starting from 1980 after the Pol Pot regime 1975-79. This was a longer compensatory period than was observed for countries in Europe after World War II, which was 3 to 5 years. This demographic phenomenon causes an increase in youth unemployment in the first decade of the 21 century.

The unemployment rate in Cambodia measured using international definitions is very low, but the problem is that it does not at all describe the problems of the labor market. The vast supply of and the low-income, low-productivity work in the rural sector with insufficient yields are not shown in the figures.

2.2 Labor Force, Employment, Unemployment

The labor force participation rate for Cambodia exceeds 70%. As usual, this rate is higher in the rural areas. It is worth noting that the labor force participation rates are lowest in Phnom Penh. Compared to the CSES 1999, the activity rates for both sexes increased by 8.5 percentage points.

The unemployment rate for the whole of Cambodia for both sexes is 0.8 percent, which is very low by international standards. The unemployment rate in rural Cambodia is even lower since there is predominantly agricultural work. This rate is increasing when we move to Phnom Penh. Compared to the CSES 1999, the unemployment rate is increasing but from a very low level. This is not surprising taking into account the specific circumstances of new entrants into the labor force of the baby boom cohorts from the 1980's. On the other hand, these new entrants into the labor force will push the economy of the country to achieve higher economic growth.

Table 2.1. Labor force participation, employment and unemployment by stratum. Population from the age of 10. Percent.

	Cambodia	Phnom Penh	Other Urban	Rural
Labor Force Participation Rates				
Both sexes	74.6	60.8	69.5	77.0
Male	78.9	65.1	73.1	81.4
Female	70.7	56.7	66.0	73.0
Employment rates				
Both sexes	99.2	96.7	98.7	99.5
Male	99.2	97.3	98.8	99.4
Female	99.1	96.2	98.6	99.5
Unemployment rates				
Both sexes	0.8	3.3	1.3	0.5
Male	0.8	2.7	1.2	0.6
Female	0.9	3.8	1.4	0.5

In developed countries the concept and the definition of unemployment work well both in an economic perspective and in a social perspective. In the economic perspective it measures the

unused labor supply available for immediate employment. In the social perspective unemployment is an indicator of a social ill. It is quite clear that these same concepts and definitions do not function equally well in a country at the economic level of Cambodia, except in the small modern sector of urban Phnom Penh. The unemployment rate that is measured for Cambodia with the international definition does not come close to representing the vast supply of labor that is available in Cambodia, and in the rural sector in particular. Nor can it be considered the prime social ill of the labor market in Cambodia. As such it ranks far behind other facturs e.g. the low-income, low-productivity work in agriculture with yields so insufficient that poverty and hunger cannot be escaped for millions of people in Cambodia.

The survey has recorded low unemployment rates for the whole country and for both sexes below 1 percent. Unemployment rates were low in both urban areas other than Phnom Penh and in rural areas for persons above 25 years of age. It is obvious that many of the unemployed persons are young belonging to the cohorts born in the 1980's and who in 2004 entered the youth population of 15-24 years (all the baby boomers included). This is particularly pronounced in Phnom Penh where the unemployment rate for the age group 15 to 19 years was around 6 percent for both sexes. The unemployment rate in Phnom Penh for the next age group of 25 to 29 years was 7.8 percent for both sexes (9.3 percent for men and 6.5 percent for women). This is probably also a result of migration into Phnom Penh of young people in search of work.

The UN defines young people as persons between the ages of 15 and 24 years and adults as persons of age 25 years and over. In Cambodia 2004, the youth share in the working-age population (15 years and above) is 37.9 percent. In 2000, the corresponding share for industrialized economies (incl. transition economies) and South-East Asia are 16.8 percent and 29.4 percent respectively. South-East Asia has witnessed growth in the total number of young people of 13.1 percent but employment has grown by only 0.3 percent. The overall youth population grew by 10.5 percent over the past ten years while youth employment grew by 0.2 percent. Youth employment is both an integral part of the Millennium Declaration and a key contribution to meeting other Millennium Goals, including those relating to poverty reduction. Youth unemployment in the world has increased since 1993 when the unemployment rate for young people was 11.7 percent. In 2003 it reached its historical high of 14.4 percent, leaving 88 million young people without work.

The total population in the employment age of 10 years and above is estimated at 10,128,000. Of these 7,557,600 or 74.6 percent are economically active. The economically active population is defined as labor force participation past week in percent of the total population (10 years and above). The activity rate increases with age to a peak of 89.1 percent in the age group 35-39. The rate is down to 77.3 percent in the age group 55-59 and to 66.7 percent among 60-64 year olds. In Cambodia, people must work into high ages. Among persons 65 and older the activity rate is 43.2 percent. The activity rate is lower among women than among men, 70.7 percent among women as against 78.9 among men. The rate for women is lower in all age groups except in the 15-19 group. This probably reflects the fact that the girls have not continued into upper secondary school to the same extent as boys.

Table 2.2. Total and economically active population by sex and age. Percent

Age Group	Total	Men	Women
10-14	48.1	49.1	47.1
15-19	72.8	72.5	73.1
20-24	83.6	87.1	80.1
25-29	87.0	94.8	79.8
30-34	88.4	95.6	81.8
35-39	89.1	95.6	83.2
40-44	88.7	96.1	82.4
45-49	87.8	94.8	82.6
50-54	83.5	91.7	77.9
55-59	77.3	88.5	69.1
60-64	66.7	78.5	58.2
65+	43.2	54.6	35.2
Total	**74.6**	**78.9**	**70.7**
Total population	**10,128,000**	**4,846,000**	**5,282,000**
Active population	*7,558,000*	*3,823,000*	*3,734,000*

2.3 Education level of the labor force

Around 900,000 of the economically active population have completed lower secondary school, upper secondary school, post secondary education or tertiary education, corresponding to 12 percent of the labor force.

Table 2.3. Economically active population by level of education and age. Percent

Age group	No or only some education	Primary		Lower secondary	Upper secondary	Post secondary	Total
		Not completed	Completed				
10-14	11.3	78.1	10.4	0.2	-	-	100
15-19	13.4	42.2	34.5	8.9	1.0	0.1	100
20-24	18.9	36.3	25.4	11.6	5.7	2.0	100
25-29	23.7	37.0	22.4	9.1	5.3	2.6	100
30-34	21.9	34.0	26.6	8.7	6.0	2.8	100
35-39	26.6	37.5	22.0	7.9	3.9	2.0	100
40-44	32.3	43.0	15.8	6.2	1.3	1.3	100
45-49	31.9	40.7	14.3	9.2	2.6	1.3	100
50-54	32.9	39.1	16.6	8.4	1.8	1.1	100
55-59	37.2	34.1	16.7	9.0	2.3	0.7	100
60-64	49.8	26.2	15.5	6.6	1.8	0.1	100
65+	64.0	22.8	8.2	4.3	0.4	0.2	100
Total	**23.7**	**42.4**	**21.8**	**7.8**	**3.0**	**1.3**	**100**
Total population	*1,773,000*	*3,177,000*	*1,635,000*	*586,000*	*226,000*	*99,000*	*7,496,000*

Note: Primary is class 1-6; lower secondary is 7-9; upper secondary is 10-12

2.4 Employment status

Four out of ten of the employed persons are unpaid family workers. This is particularly true for the females workers. This is observed also in previous surveys. The second highest share

of employed is own account workers or self-employed with the share of 34.4 percent. The third highest share is paid employees with the share of 20.0 percent. It is worth noting that the share of paid employees is highest in Phnom Penh (48.0 percent) partly explained by the big number of garment factory workers. In other urban areas this percentage is also high (26.3 percent). Compared to 1999 CSES, the share of paid employees has increased from 15.2 percent to 20.0 percent.

Table 2.4. Employed population (10 years and over) by employment status and sex. Percent

	Both sexes	Men	Women
Paid employee	20.0	23.3	16.6
Employer	0.1	0.1	0.1
Own account worker/Self-employed	34.4	39.7	28.8
Unpaid family worker	43.3	34.8	52.0
Other	0.5	0.6	0.3
NA	1.8	1.4	2.2
Total	**100.0**	**100.0**	**100.0**

Table 2.5. Employed population (10 years and over) by employment status and stratum. Percent

	Cambodia	Phnom Penh	Other Urban	Rural
Paid employee	20.0	48.0	26.3	16.7
Employer	0.1	0.1	0.2	0.1
Own account worker/Self-employed	34.4	27.1	34.5	35.0
Unpaid family worker	43.3	22.9	36.5	46.0
Other	0.5	0.7	0.2	0.5
NA	1.8	1.2	2.4	1.8
Total	**100.0**	**100.0**	**100.0**	**100.0**

2.5 Employment by Occupation and by Industry

Occupation

The agriculture, fisheries, forestry occupations provide employment to 61.7 percent of the economically active population, which is a decline of about 12 percentage points from the surveys from 1997 and 1999. These data are consistent with the classifications by branch of economic activities or by industry. The share of agriculture, fisheries and forestry sector in GDP at constant prices in national accounts has decreased by 12.3 percentage points from 1997 to 2004 (from 42.8 percent to 30.5 percent).

There are a relatively high percentage of about 12.4 percent who were employed as shop and market sales workers. This percentage became very high in Phnom Penh - 33.4 percent of the employed are in this occupation. Craft and related trade workers occupations provided employment to 5.7 percent of the total employed population while in Phnom Penh this percentage reached 9.2 percent.

The survey showed that about 0.9 percent of employed persons worked as legislators, senior officials and managers. In Phnom Penh, these occupations have provided employment to 4.2 percent of the total employed population in the capital city. A percentage of 2.8 percent of the employed population had occupations as professionals. In Phnom Penh, slightly more than one out of ten worked as a professional.

Industry

Cambodia is an agricultural country. Although some migration of youth employment to manufacturing, namely garment factories, the agricultural sector including fishing and forestry remains significant; 55.4 percent of the employed population of Cambodia are working in the agriculture, hunting and forestry sector and 4.8 percent in the fishery sub-sector. It is important to note that there is an increase in the fishery sub-sector due to government policy to liberate some fishery areas to the population for exploitation. However, there were significant decline in agriculture, hunting and forestry from 74.6 percent to 55.4 percent (about 19 percentage points) from 1999 to 2004.

The share of the employed population in manufacturing has increased significantly for the period 1999 to 2004 from 4.7 to 9.4 percent. Especially, we can observe the shift of female employed population in agriculture to Phnom Penh and other urban for garment factories (18.3 percent of the women in Phnom Penh work in the garment factories and 6.2 percent in other urban areas).

For wholesale and retail trade, the share in the total employment is 13.9 percent, thus about twice as high as in the previous surveys. Especially for Phnom Penh, this sector is large and accounted for 35.7 percent of total employment.

Public administration, defense and social security accounted for 2.4 percent for the whole Cambodia and particularly high proportion in Phnom Penh, or 12.5 percent.

The private households with employed persons havea significant share in total employment (2.5 percent) and this number is larger in Phnom Penh (7.8 percent). The education and health sector share in employment remain almost the same compared to 1999 (1.4 percent and 0.5 percent respectively) while construction has increased to 2.6 percent (from 1.5 percent in 1999).

3 Migration

3.1 Introduction

The CSES 2004 encompasses 15 survey months from November 2003 concluding with January 2005. For studying migration the full set of 15 months is used. Persons less than 5 years old are not included in the estimates. The non-response rate is very low and can be neglected.

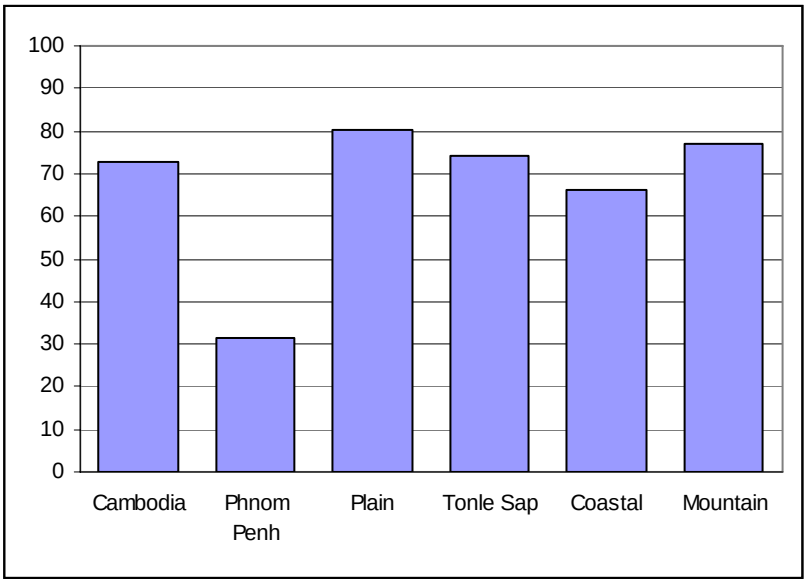
Households In sample	Persons in whole sample	Persons in sample >= 5 years old	Estimated population >= 5 years old)
15,000	74,719	67,453	11,908,000

A special age group has been formed; 5-17, 18-35, 36 -, and used in the tabulations. The somewhat unfamiliar groups mirror the working population in the garment industry.

3.2 Living in the same village since birth

For the whole country around 70 percent of the population have never left the current village and there are no real gender differences, at most 2 percent. There is a different pattern when comparing zones. 80 percent of the people living in the plains have been resident in the current village their whole lifespan, while the corresponding figure for Phnom Penh is 30 percent. The differences are bigger when comparing age groups. Only 3 percent of the population aged 55 and above have stayed their whole life in Phnom Penh.

Diagram 3.1. Always lived in current village by statistical region. Percent within region



Comparing the person's highest level of education there are significant gender differences. Among men, movers tend to have higher education than those who stay. Among women, there are no big difference between movers and those who stay.

Table 3.1. Educational differences between those who have always lived in the same village and movers by sex. Percent

	Men		Women	
	Always in same village	Moved	Always in same village	Moved
No or only some education	27.2	16.4	36.4	33.3
Primary school not completed	44.3	35.1	44.2	39.2
Primary school completed	18.9	24.9	14.3	16.1
Lower secondary completed	6.9	12.4	3.9	7.1
Upper secondary completed	2.3	8.1	1	3.3
Post-secondary education	0.4	3.1	0.2	1
Total	100.0	100.0	100.0	100.0

3.3 Five years ago and year of last move

The question "*Where was the person living exactly five years ago?*" is central and standard in censuses and sample surveys on household migration. It gives information on most recent movements of the population and is used to establish migration trends.

The result of the survey indicates that 72 percent of the population have never moved, while 12 percent were residing in a different village 5 years ago, in absolute numbers 10.6 million and 1.3 million respectively. About 16 percent were living in the same village 5 years ago but have made some movement earlier or within the 5-yearperiod. People living in Phnom Penh have both moved more than people living in other areas and have been moving several times.

Diagram 3.2. Place of living 5 years ago.
Percent

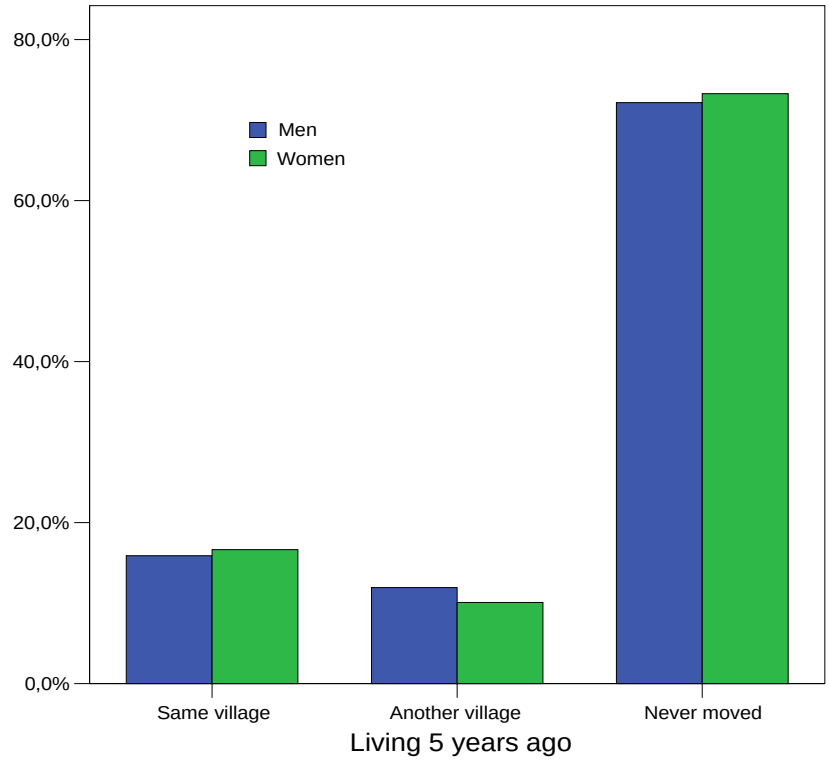
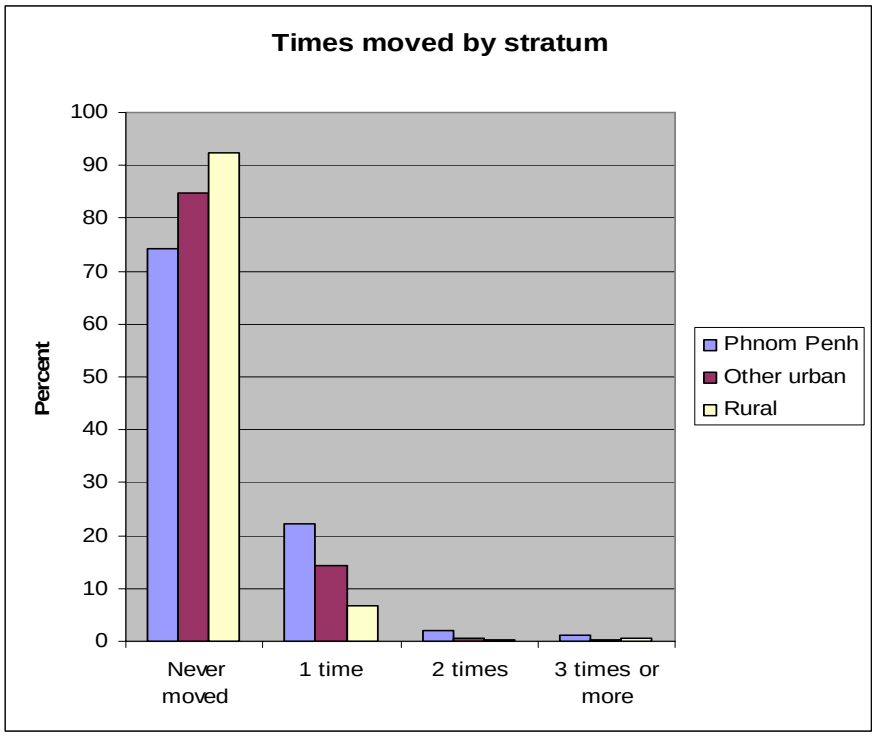


Diagram 3.3. Number of times moved in the last five years. Percent



The estimates for the year of moving to the present village are restricted to the period 1970-2004 since the number of observations is too small for estimating moves earlier than 1970. The spike in 1979 is remarkable where 23 percent of all moves took place, counting 740,000 people. Repatriation of women is higher than for men, or 27 percent and 19 percent respectively.

Diagram 3.4. Year when moved the present village. Numbers in thousands.

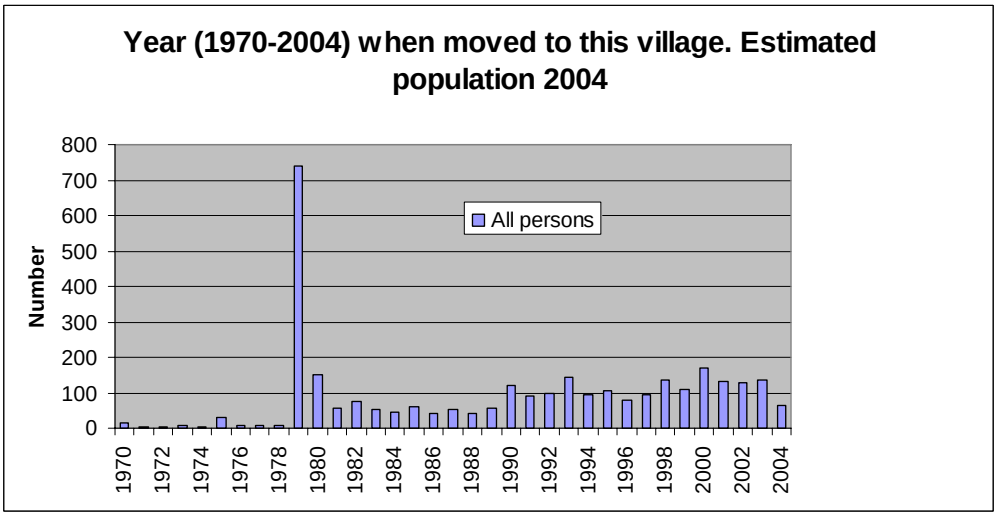
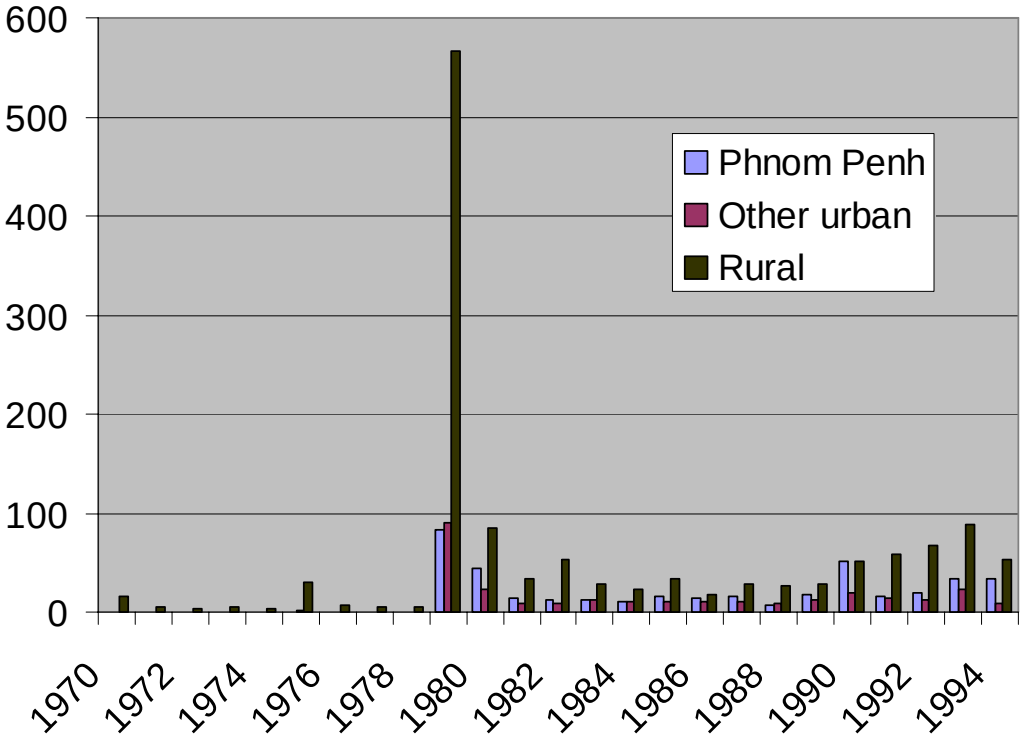


Diagram 3.5. Year (1970-2004) when the person moved to the present village by stratum. Numbers in thousands.



3.4 Reasons for moving

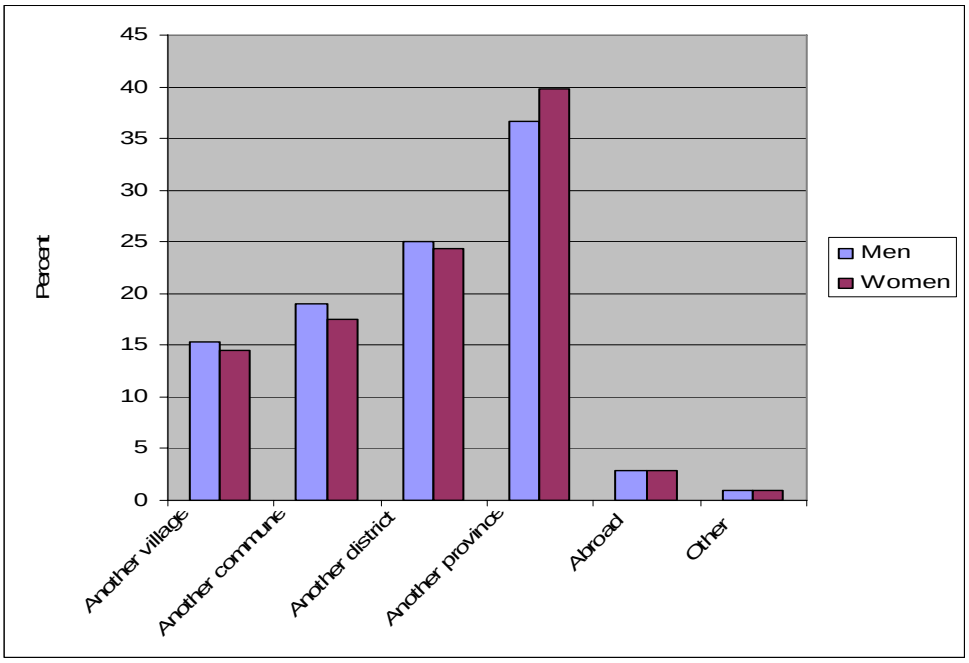
The survey indicates that most persons move when the family moves, which would be expected, although there are significant differences between the statistical regions. Repatriation is the most common reason for moving to Svay Rieng, almost 40 percent but as low as 4 percent for Phnom Penh. Marriage is the most important reason for moving to Kampong Thum, about 35 percent but nearly zero for Other Tonle Sap.

Table 3.2. Reasons for moving. Highest and lowest proportions among zones. Percent.

Reason	High	Percent	Low	Percent
Transfer of work place	Phnom Penh	4.0	Kampong Speu	0.6
In search of employment	B. Meanchey	26.1	Svay Rieang	3.5
Education	Phnom Penh	3.2	Other Tonle Sap	0.1
Marriage	Kampong Thum	34.6	Phnom Penh	7.7
Family moved	Phnom Penh	59.1	Svay Rieng	24.1
Insecurity	All coastal	22.1	Phnom Penh	0.9
Repatriation	Svay Rieng	38.7	Phnom Penh	4.3

There is also a gender difference. Women migration is largely connected to movement of the whole family, 50 percent compared to 30 percent for men, while men (surprisingly) move due to marriage, 25 percent compared to about 10 percent for women. Also, movements due to search of employment is higher for men. Moved from another province to present village is the most common for both sexes. The indicator refers to the lifespan of the respondent.

Diagram 3.6. Moved from where to present village by sex. Percent

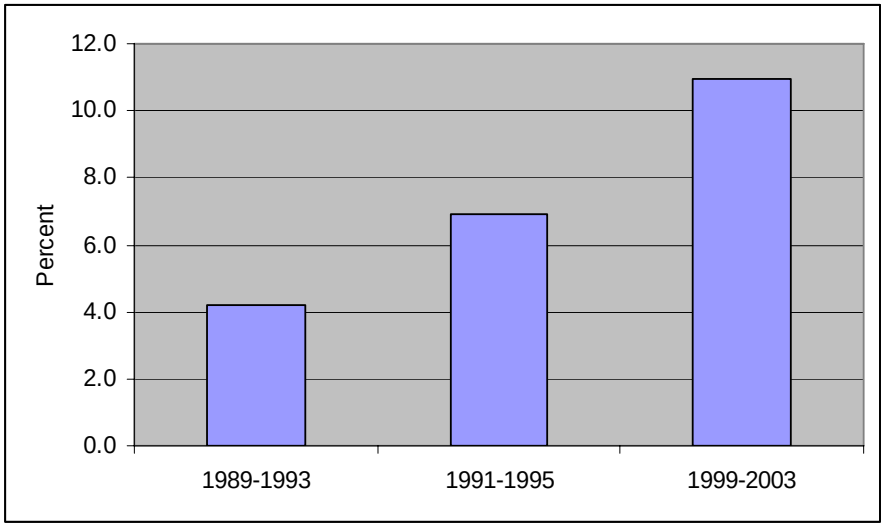


3.5 Trends

There are problems in establishing trends since there are gaps between the survey periods. However, it is possible to break down the estimates to single years for the surveys from 1994, 1996 and 2004 without too much effort while it will take more time to do the same for the 1997 and 1999 surveys. To make it even more correct you should adjust the estimates by the morbidity rates. However some trends are evident. Migration here means moving at least once during the last five years.

Migration has increased during the 25 years span, from 4 percent in the period 1989-1993 to 11 percent in 1999-2003. Gender differences are minor.

Diagram 3.7. Persons moving at least once during a five-year period. Percent



The number of persons that ever lived abroad for work is of importance since remittances from persons working abroad will have an impact on the Cambodian economy. The survey indicates that about 140,000 persons have lived abroad for work, some more men than women.

4 Crop Production

4.1 Introduction

Data for the calculation of crop production were collected through the household questionnaire using three sets of questions, one set for land, a second set for production of crops, and a third set for cost of crop cultivation. The households listed the plots and for each plot, which crop had been planted, how much was harvested, how much was lost after harvest, what was the sales price, what quantity was given as rent and the estimated value of output and of crop rent, separately for the wet season and the dry season.

The survey registered 137 different crops and they have been grouped into six main groups, namely:

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

4.2 Households in crop production

The total estimated number of households working in the crop production was 2,148,500 (about 82.6 percent of all households) in the wet season and 874,154 (about 33.6 percent of all households) in the dry season. Some households planted several crops and the main crop was identified. The group of cereals was the main group for 61.6 percent of the households and the second most important group was fruits and nuts or corresponding to 15.4 percent.

Table 4.1. Number of household by main group of crop production and season. Percent

Main group of crop production	Wet season	Dry season	Total
Cereal harvested for grain	71.3	37.7	61.6
Tubers and leguminous plants	3.4	6.0	4.1
Industrial temporary crops	4.7	6.9	5.3
Vegetables	5.7	12.3	7.6
Fruits and nuts	10.5	27.5	15.4
Industrial permanent crops	3.6	8.1	4.9
Other crop not classified elsewhere	0.8	1.4	0.9
Total	100.0	100.0	100.0
Total number of households	*2,148,500*	*874,000*	*3,023,000*

4.3 Crop production value

Gross output value of all crops in the wet season was about 1,436,615 Million riels (US$ 359 Millions) in 2004. Of this value, about 52,841 Million riels (US$ 13 Million) or 3.7 percent of gross output was the post harvest loss and the remaining 96.3 percent was the net output of crop production.

For the dry season, the value of gross output for all crops was 585,946 Million riels (US$ 146 Million) which is much lower than for the wet season. Cereals, industrial permanent crops and other crops contributed significantly to the lower gross output in the dry season. The percentage of post harvest loss and net output of all groups of crop production in the dry season was 3.4 percent and 96.6 percent respectively of their gross output, or about the same percent loss as in the wet season.

Table 4.2. Crop production in wet season by main group of crop production. Million riels

Main group of crop production	Gross output	Post-harvest loss		Net output	
		Number	%	Number	%
Cereal harvested for grain	1,217,601	42,696	3.5	1,174,905	96.5
Tubers and leguminous plants	31,980	1,671	5.2	30,309	94.8
Industrial temporary crops	84,619	3,789	4.5	80,829	95.5
Vegetables	31,281	1,122	3.6	30,159	96.4
Fruits and nuts	43,156	1,313	3.0	41,844	97.0
Industrial permanent crops	12,606	481	3.8	12,124	96.2
Other crop not classified elsewhere	15,373	1,769	11.5	13,603	88.5
Total	1,436,615	52,841	3.7	1,383,773	96.3

Table 4.3. Crop production in dry season by main group of crop production. Million riels

Main group of crop production	Gross output	Post-harvest loss		Net output	
		Number	%	Number	%
Cereal harvested for grain	345,030	14,012	4.1	331,018	95.9
Tubers and leguminous plants	47,924	771	1.6	47,153	98.4
Industrial temporary crops	55,757	1,744	3.1	54,013	96.9
Vegetables	57,894	1,532	2.6	56,362	97.4
Fruits and nuts	66,455	1,751	2.6	64,704	97.4
Industrial permanent crops	8,423	198	2.4	8,225	97.6
Other crop not classified elsewhere	4,463	7	0.2	4,456	99.8
Total	585,946	20,015	3.4	565,931	96.6

4.4 Costs for crop production

Data on costs for crop production in the CSES 2004 are adequate for measuring the agricultural consumption in terms of input cost. The questionnaire was designed to collect data on 16 item groups of cultivation costs during the last wet season and the last dry season. A reference period of the past twelve months was used for each group of production costs.

Nationally, the costs for crop production are estimated to 724,327 Million riels (US$ 181 Millions) for both seasons. However, there are pronounced differences in the amounts spent on cultivation in the two seasons. The costs for crop production in the wet season were estimated to 495,894 Million riels (US$ 124 Millions) or 34.5 percent of the gross output. The corresponding costs for crop production in the dry season were 228,433 Million riels (US$ 57 Millions) or 39 percent of the gross output. Input costs are lower in percent of gross output in the wet season. Thus, the costs for crop production in the wet season was twice that of crop production in the dry season.

The highest percentage of total costs in the wet season was for hired draft power (25.1 percent), followed by chemical fertilizers (24.6 percent) and planting materials (19.0 percent). In the dry season, the highest percentage of total costs related to chemical fertilizers (20 percent), followed by planting materials (18.6 percent), payment for hired draft power (16.5 percent), and electricity and oil for the farming (10.7 percent).

Table 4.4. Costs for crop production by season and group item. Percent

Item	Wet season	Dry season	Total
Planting material	19.0	18.6	18.9
Chemical fertilizers	24.6	20.0	23.2
Animal & plant manure	6.4	1.6	4.9
Pesticide, weedicide & fungicide	1.4	7.5	3.3
Electricity, oil, gas, diesel oil for the farming	1.9	10.7	4.7
Storage items	3.2	2.6	3.0
Payment for hired draft power	25.1	16.5	22.4
Other hired labor charges	7.4	7.2	7.3
Irrigation charges	1.9	8.5	4.0
Services/technical supports from govt. & others	0.0	0.1	0.1
Transportation of input materials & products	2.1	2.9	2.4
Repair & maintenance of farm house, animal shed	1.3	0.5	1.0
Repair & maintenance of farm equipment	2.4	1.4	2.1
Rental paid to owner for farm land (in cash)	2.1	1.5	1.9
Rental paid to owner for farm land (in kind)	1.1	0.3	0.9
Rental paid to owner for farm house, equipment etc.	0.2	0.2	0.2
Total	100.0	100.0	100.0
Total cost, Million riels	*495,894*	*228,433*	*724,327*

4.5 Average yield per square meter of crop production

Average yield per square meter by gross output for all crop production was 1,242 riels or approximately US$ 0.3 in the wet season and 787 riels or around US$ 0.2 in the dry season.

The survey shows that the average yield per square meter was different by crop production groups and season. For the wet season, the highest average yield per square meter was for fruits and nuts crops (1,833 riels or US$ 0.4), followed by cereals (1,313 riels or US$0.3). For the dry season, the group of cereals (1,282 riels or US$ 0.3) has the highest average yield per square meter.

Table 4.5. Average yield per square meter of crop production by season. Million riels

Main group of crop production	Wet season		Dry season	
	Gross output	Net output	Gross output	Net output
Cereal harvested for grain	1,313	1,286	1,282	1,242
Tubers and leguminous plants	158	152	305	300
Industrial temporary crops	589	577	689	677
Vegetables	906	873	296	288
Fruits and nuts	1,833	1,698	449	441
Industrial permanent crops	168	165	130	127
Other crop not classified elsewhere	310	288	212	211
Total	1,242	1,210	787	765

Paddy rice is by far the most common crop in the wet season as well as in the dry season. The high average yield per square meter of the group of cereals for both seasons was due to the large average yield of paddy rice.

For the other groups of crop production, there seem to be no significant differences between wet and dry seasons. Detailed data of average yield per square meter by specific crop in wet and dry seasons can be obtained at NIS.

5 Education

5.1 Introduction

The CSES 2004 includes a model, which makes it possible to produce the standard indicators on education: literacy, educational attainment, school attendance/enrolment, and education expenditure.

5.2 Literacy

Literacy is the ability to read and write a simple message in any language. The minimum age for going to school is 6 years, and there are children going to school late, particularly in rural areas. Because of that, it is meaningful to estimate the literacy rate for the population 7 years and over. To compare internationally, the estimation of the literacy rate for the population aged 15 years and over (adult literacy) has been prepared. In 2004, 67.1 percent of the population 7 years and over were literate. The general literacy rate is highest in Phnom Penh and much lower in rural areas. The literacy rate is higher for males than females in both urban and rural areas.

Table 5.1. Literacy rate, population 7 years and over by stratum and sex. Percent

	Stratum			
	Cambodia	Phnom Penh	Other Urban	Rural
Both Sexes	67.1	89.1	75.0	63.5
Male	74.4	93.9	80.5	71.3
Female	60.3	84.7	69.6	56.3

Adult literacy rate is the percentage of the population aged 15 years and over who can both read and write a simple message in any language. Adult literacy rate was nationally estimated to be 69.6 percent. The adult literacy rates are highest in Phnom Penh. The adult literacy rates were higher in urban areas than in rural areas.

Table 5.2. Adult literacy rate, population 15 years and over by stratum and sex. Percent

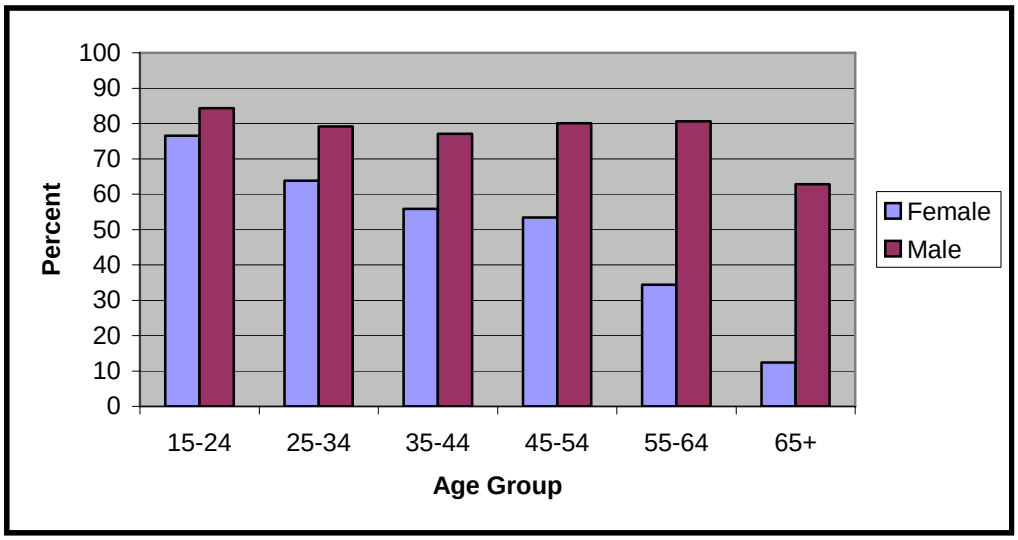
	Stratum			
	Cambodia	Phnom Penh	Other Urban	Rural
Both Sexes	69.6	90.7	77.2	65.9
Male	80.2	96.1	84.9	77.5
Female	60.1	85.7	70.0	55.6

The age specific literacy rates of men decline from 84.3 percent for age group 15-24 years to 80.6 percent in the age group 55-64 years. The women rates of the same group were 76.6 percent and 34.4 percent, respectively. In comparison, the age specific rates of women decline more rapidly than that of men from one age group to the next higher age group. There is a wide gap between the literacy rates of men and women for all age groups. Persons in the age group 35-44, especially men, have a lower literacy rate than others, most likely because they have been deprived of education during periods of armed conflicts and during the Khmer Rouge era (1970-1979).

Table 5.3. Age specific literacy rates by sex and age.
Percent

Age Group	Sex		
	Men	Women	Both Sexes
15-24	84.3	76.6	80.5
25-34	79.2	63.8	71.1
35-44	77.1	55.8	65.8
45-54	80.1	53.4	64.4
55-64	80.6	34.4	53.9
65+	62.8	12.4	33.3
15+	80.2	60.1	69.6

Diagram 5.1. Age specific literacy rates by sex and age.
Percent



The number of adult literate persons has increased from 3.8 million in 1994 to 5.8 million in 2004. However, the adult literacy rate is still somewhere close to 70 percent.

Comparability with previous surveys

In 1999, a functional literacy survey was carried out. This survey gives a more comprehensive picture of literacy because it is based on a scientifically designed test rather on a simple "Yes/No" questionnaire.

Table 5.4. Adult literacy rates, 1994-2004.
Percent

Survey	Adult literacy rate
CSES 1993/94	67.1
CSES 1996	66.4
Demographic Survey 1996	68.7
CSES 1997	67.2
Population Census 1998	67.3
CSES 1999	71.5
Inter-censal survey 2004	73.6
CSES 2004	69.6

It is obvious from the comparison between different surveys and the large share of semiliterate persons, that measuring literacy from a simple question in a household survey is difficult and the results should be regarded as uncertain. It should also be noted that the question on literacy was changed between 1999 and 2004. If you ask two questions (can read and can write) as in CSES 2004 instead of one (can read and write) as in earlier CSES you probably get a lower literacy rate.

5.3 School attendance

School attendance is defined as attendance at a kindergarten, primary, lower or upper secondary school, technical or professional school, college or university. Even when on holiday the person is considered as being in the school system.

Almost 25 percent of the population 5 years and above have never attended school. Only about 4 percent of the males in Phnom Penh have never attended school, while almost 33 percent of rural females have never attended. The reasons for not attending school are a little unclear. One third of all have other reasons than expected in the survey and one fourth of all say they do not want to. “Must help with household chores” and “Contribute to household income” are the third and fourth most important reasons for not attending school.

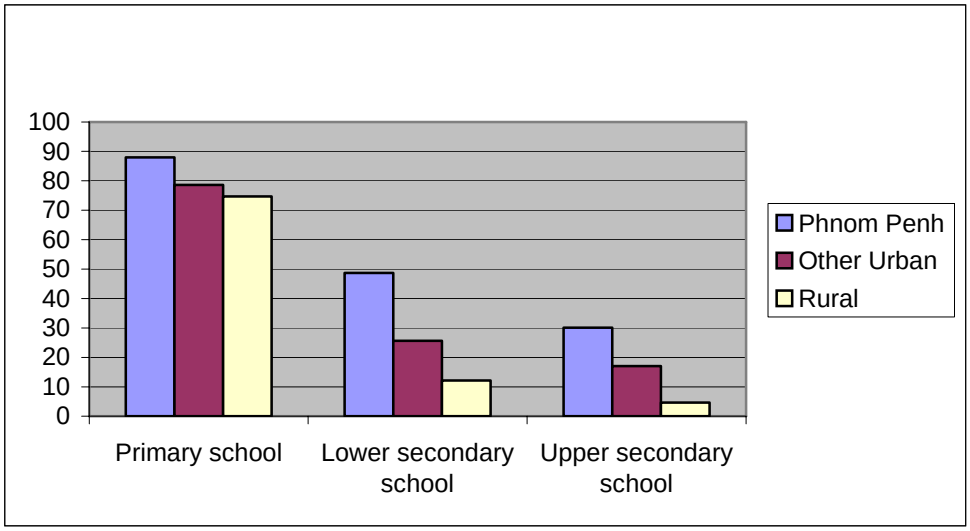
Some 3.7 million (55 percent) of the population aged 5-24 years, comprising 2 million males and 1.7 million females, were attending the formal school system in 2004 . Of this number 2.8 million or 75 percent were in primary schools. The number of persons in higher education is very low. The share of the population aged 5-24 years is considerably higher than in the survey from 1999, where 46 percent of the population (2.7 million) were attending the formal school system.

Table 5.5. Population 5-24 years currently attending school by level and sex. Percent

Level	Sex		
	Male	Female	Both Sexes
Pre-primary	1.2	1.3	1.3
Primary	73.3	77.0	75.0
Lower Secondary	16.1	14.7	15.5
High school	6.8	5.2	6.0
Technical/Vocational	0.6	0.4	0.5
Under Graduate/ Graduate	1.7	1.0	1.4
Other	0.3	0.4	0.3
Total	100.0	100.0	100.0

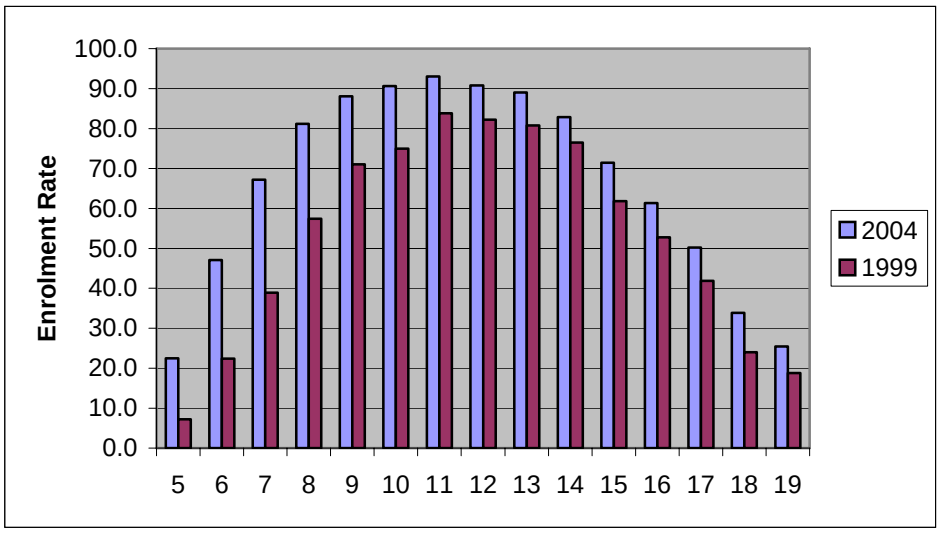
School attendance in lower secondary education was 23 percent in Phnom Penh but only 14 percent in rural areas. Attendance in “Undergraduate/Graduate” is very low except in Phnom Penh (10 percent).

Diagram 5.2. Net enrolment rates by level and stratum.



The enrolment rates increase until the age of 11 and then start to decline, indicating that although the minimum age for admission is 6 years, late admissions are common. Beyond the age of 14 years, the enrolment rates decline rapidly confirming that the drop out rates increase steadily with the transition from primary to secondary and tertiary level of education and training. Up to the age of 12, girls and boys have almost the same enrolment rates, then the girls' enrolment rates drop and are lower than the boys'. This is the same pattern as in the CSES 1999 even if the rates were much lower then.

Diagram 5.3. Age specific enrolment rates 1999 and 2004.



5.4 Private schools, private lessons and non-formal education

Besides the public schools there are also private schools. Only about 3 percent of the persons aged 5-24 attending school study at private schools. However, for students between 20 and 24 years there are one third who go to private school. Private schools are mostly located in Phnom Penh.

About 20 percent of the persons (5-24) attending school take private lessons after school. There are large differences by age, but the gender differences are small. The differences by stratum are striking. Almost 61 percent takes private lessons in Phnom Penh, 40 percent in other urban areas and only12 percent in rural areas.

The number of young (5-24) people attending non-formal classes is very low; about 90 000. That is about 1.3 percent of the population 5-24 years. Attending non-formal classes is most common in the age group 15-19 years (2.1 percent) and in Phnom Penh (8.4 percent). Non-formal education is important particularly in the attempt to increase literacy rates.

5.5 Educational attainment

Almost 33 percent of the population 25 years and above has no or only little education. There are large differences between the sexes. For women this figure is almost 43 percent and for men 20 percent. Just over 30 percent has at least completed primary school. The low proportion of persons completing primary school is a problem. For a child to be safe from lapsing back into illiteracy, the child must at least complete grade 4 or 5.

There are big differences in educational attainment between areas. Educational attainment is much higher in Phnom Penh than in the rural areas.

Table 5.6. Educational attainment for the population 25 and over by sex. Percent

Educational attainment	Sex		
	Male	Female	Both Sexes
No or only some (not completed any grade)	20.0	49.2	32.5
Primary not completed (grade 1-5)	34.8	36.7	35.8
Primary completed (grade 6-8)	25.0	12.4	18.1
Lower secondary completed (grade 9-11)	10.8	4.8	7.5
Upper secondary completed (completed grade 12)	6.0	1.7	3.6
Post-secondary education (higher)	108	0.4	1
Other	1.7	1.1	1.3
Total	100	100	100

Table 5.7. Educational attainment for the population 25 and over by stratum. Percent

Educational attainment	Stratum		
	Phnom Penh	Other Urban	Rural
No or only some (not completed any grade)	11.4	25.6	36.1
Primary not completed (grade 1-5)	25.9	31.8	37.6
Primary completed (grade 6-8)	23.3	22.4	16.9
Lower secondary completed (grade 9-11)	16.2	11.1	6
Upper secondary completed (completed grade 12)	13.9	7	1.9
Post-secondary education (higher)	8	1	0.2
Other	1.3	1.1	1.4
Total	100	100	100

5.6 Educational expenses

The average educational expenses[4] are estimated to about 130,000 riels per school year; 114,000 riels for female and 144,000 for male. In 1999 the corresponding figure was 66,000 riels. Note that inflation is not taken into account in these figures. There are large differences

[4] Educational expenses include school fees, tuition, text books, other school supplies, allowances for children studying away from home, transport cost, gift to teachers, building fund etc.

by educational level. The highest cost is for a student in “Undergraduate/Graduate”. Since the higher level schools are predominantly found in Phnom Penh the average annual expenses are consequently much higher there.

Table 5.8. Average annual expenses by education level.

Level	riels
Pre-school	47 000
Primary	42 000
Lower Secondary	168 000
High school	393 000
Technical/Vocational	1 141 000
Under Graduate/ Graduate	2 129 000
Total, all levels	130 000

Table 5.9. Average annual expenses by stratum.

Stratum	riels
Phnom Penh	633 000
Other Urban	170 000
Rural	54 000

6 Health

6.1 Introduction

The questions in the health module register data on (chronic) disabilities, (acute) illnesses, injuries or other health problems and the medical care used by all members of the households during the past four weeks. Respondent for all household members is normally the head of household or his spouse. This method of collecting data on individual's health was adopted for the 2004 survey mainly because it had been used in the previous surveys in 1999 and 1997.

The questions with subjective evaluations of health status are complemented with questions on disabilities and (acute) illnesses in the past four weeks.

Children's health status is measured by anthropometric measurements and their vaccination status is registered from the yellow cards. The results of the anthropometric measurements are not included in this report.

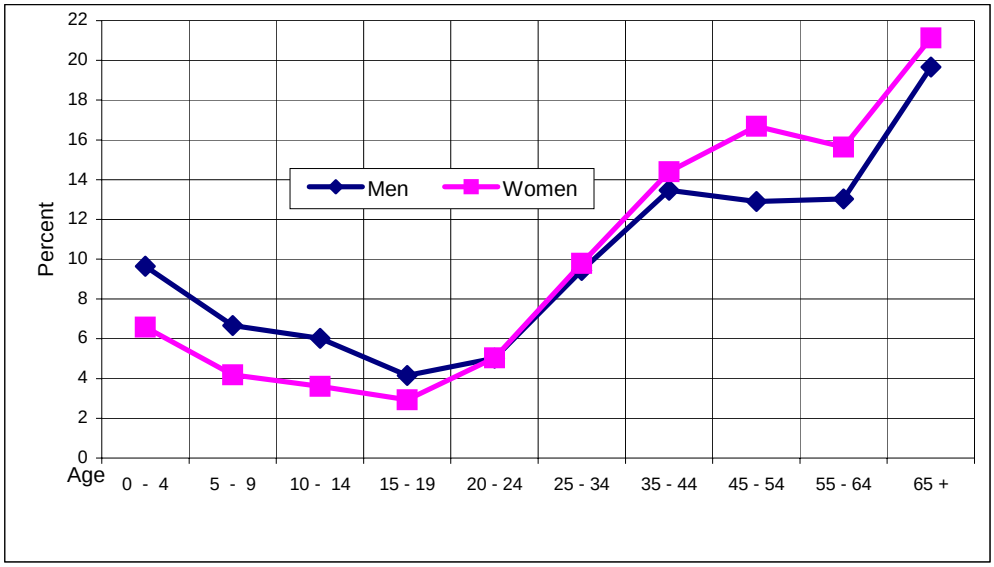
Medical care is registered by type of provider, length of hospitalisation and total expenditure on medical care during the month. Questions relating to prevention include smoking habits, use of mosquito nets, salt iodisation and HIV/aids awareness.

6.2 Profile of health and illness

Men are in somewhat better health than women, as evaluated by the household heads. For both sexes the proportion considering themselves and their spouse of average health is about 78 percent. The proportion with very good health or good health is 14 percent among men and 11 percent among women. The proportion with bad or very bad health is higher among women than among men, 11 percent compared with 8 percent for men. For the Cambodian population as a whole, 10 percent or 1.3 million people considered themselves or their spouse of being in bad or very bad health.

More than 10 percent of children under the age of 5 years are reported to be in bad health, boys more than girls. This is consistent with the high infant and child mortality rates in Cambodia, although the rates have been falling over the past ten years. Both men and women seem to have their best period from 10 to 25 years of age. Only about 5 percent are judged to be in bad or very bad health in those ages. After age 25 the proportion in bad health is about the same and increasing for women and men until age 45. After that age the proportion in bad health is clearly higher among women.

Diagram 6.1. Household members in bad or very bad health by sex evaluated by household head or spouse. Percent



6.3 Disabilities in the population

Four out of 100 persons in the population are disabled[5] with one or more types of disability. This does not include disabled living in institutional households. Almost 23 percent of the disabled have at least two different disabilities. The elderly constitute the major group among the disabled. Of the elderly with a disability, 50 percent have seeing difficulties, often together with hearing and moving problems, those three not surprisingly forming an old-age syndrome. People with seeing difficulties, including blindness, also constitute the largest group among all the disabled, 31 percent for men and 35 percent for women.

6.4 Illness during the past four weeks

Almost one out of five, or 16.8 percent of men and 20.1 percent of women, have been ill or have had an injury or some other health related symptom during the four survey weeks. The illness rate is higher in Phnom Penh than in other urban areas and rural areas, and the gender difference is also highest in Phnom Penh.

The result indicates a rather high rate of acute illness for the Cambodian population, especially when comparing with similar surveys from 1997 and 2000. However, there are two technical reasons why the difference might not be as striking as it first seems. The wording of the question has changed over time and the formulation in the 2004 survey is probably give higher reports of illness (for example the 1997 question asks ”any major illness”, while the 2004 question asks ”any illness”). Also, in the 2004 survey the interviewer stayed with the families for 3-4 weeks and there is reason to believe that the interviewer situation was more open than in the 1997 and 1999 surveys where the interviewer met the household only once. This might explain why the reported rate of illness in the last four weeks is as high as 18.5 percent in 2004 and almost doubling the 10.7 percentage rate reported from the CSES 1999.

[5] Any major problem with his/her body, mind or behavior that limits his/her participation in work, school or ordinary social life.

Table 6.1. Rate of illness, injury or other health problem during the last four weeks by sex. Percent

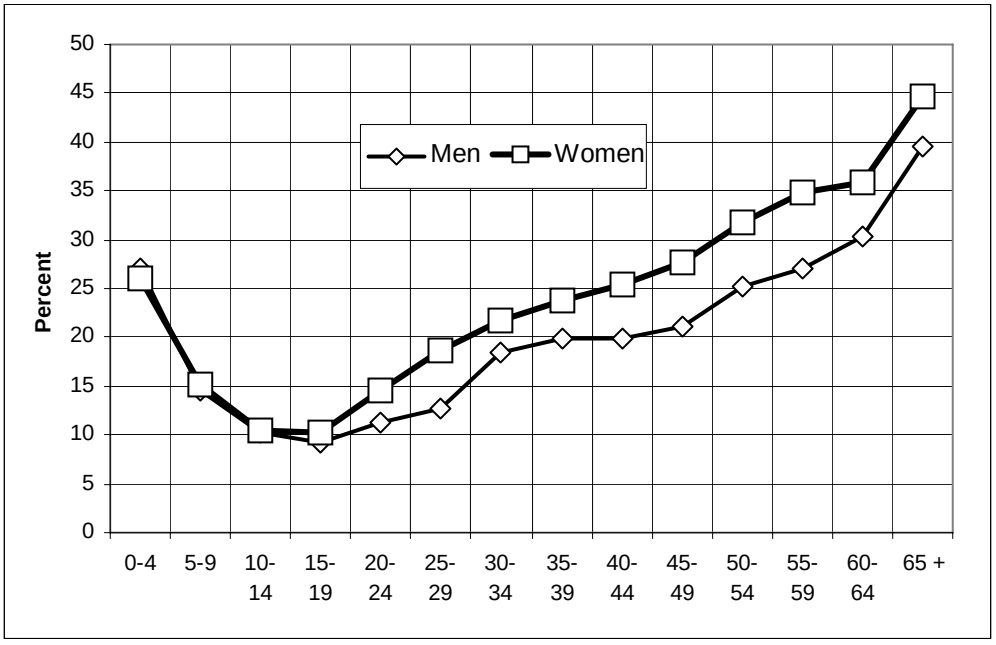
	1997	1999	2004
Men	13.8	10	16.8
Women	15.4	11.4	20.1
Both sexes	14.6	10.7	18.5

The age pattern of (presumably) acute illness or injury in the past four weeks is broadly similar to the age pattern of the general evaluation of the health status of household members: very high among small children, then lower among children surviving to adolescence and then again increasing for each cohort. However, the rate of acute illnesses is much higher than the result from the evaluation of general health status as "bad" or "very bad". One can note as an example that fully 25 percent of children under five have had an illness episode in the last four weeks but less than 10 percent are said to be in "bad" or "very bad" health by the household head or spouse.

The gender differences for acute illness/injury episodes in the last four weeks are different from the evaluations of members' general health status. There is no difference between boys and girls in the rate of illness episodes in the past four weeks while the general health status of girls is said to better – less frequently "bad" or "very bad" – than of boys. The age/sex pattern is different for acute illnesses also for young adults, ages 20-44, than for general health status. The rates of "bad" or "very bad" health are the same for young adults but rates for acute illness episodes are higher for women than for men.

The most frequently reported illness is the common cold. This might be medically trivial unless it develops into pneumonia, indicated by rapid or difficult breathing, which is life/threatening unless medicine is available.

Diagram 6.2. Illness, injury or other health related symptom during the last 4 weeks by sex. Percent



6.5 Utilization of health care facilities and expenditures

Two out of three who reported an illness, injury or other health problem had sought treatment. The percent of ill that sought the same kind of treatment was markedly higher in Phnom Penh

(about 85 percent) but mainly by a high proportion of self care, higher than in the rest of the country. In other urban areas the proportion of private medical care was highest. In rural areas traditional care is still important with a proportion of about 25 percent, but public care and private medical care count for almost 30 percent each.

Men and women are using health care to almost equal amount.

Comparison with 1997 and 1999 data shows that the proportion that sought treatment has increased in Phnom Penh where both public and private facilities have increased in numbers.

Among persons with an illness episode in the past four weeks, 12 percent have spent nothing or had no money to pay for care or medicine. The percentage with nothing spent is much lower in Phnom Penh than in other strata. Urban people are spending more on health care than rural people.

Average spending on medical care among persons with an illness episode in the month is 24,800 riels (about US $6), 25,800 riels among men and 24,100 riels among women.

6.6 Nutrition and prevention measures for child health

Breastfeeding

Breast milk is the primary source of nutrients for infants and also transfers immunities from mother to child. The WHO recommends exclusive breastfeeding during the first six months of life. As many as 97 percent of Cambodian children under age 2 have been breastfed during some period. However, only 30 percent of children were given breast milk as the first thing after birth. Almost two out of three children are first given water or sugar water. There is a difference between Phnom Penh and the rest of the country. In Phnom Penh more than 45 percent are given breast milk and only about 7 percent are given sugar water.

Vaccination

At least 81 percent of the children under age 2 were fully vaccinated 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. For 6 percent of the children their mothers could not show a health card but the child was said to be fully vaccinated. Vitamin A was given to 83 percent of the children. 3 percent of the Cambodian children under age 2 have suffered from night blindness.

6.7 Preventions for public health

The Royal Government of Cambodia has health policies including salt iodization, anti-smoking measures, HIV/AIDS awareness and the use of mosquito nets.

Iodized salt

Households using iodized salt have increased from 7 percent in 1997 to 28 percent in 2004. There are huge differences between the areas in Cambodia, ranging from only 19 percent in the rural areas to 86 percent in Phnom Penh.

Reducing smoking

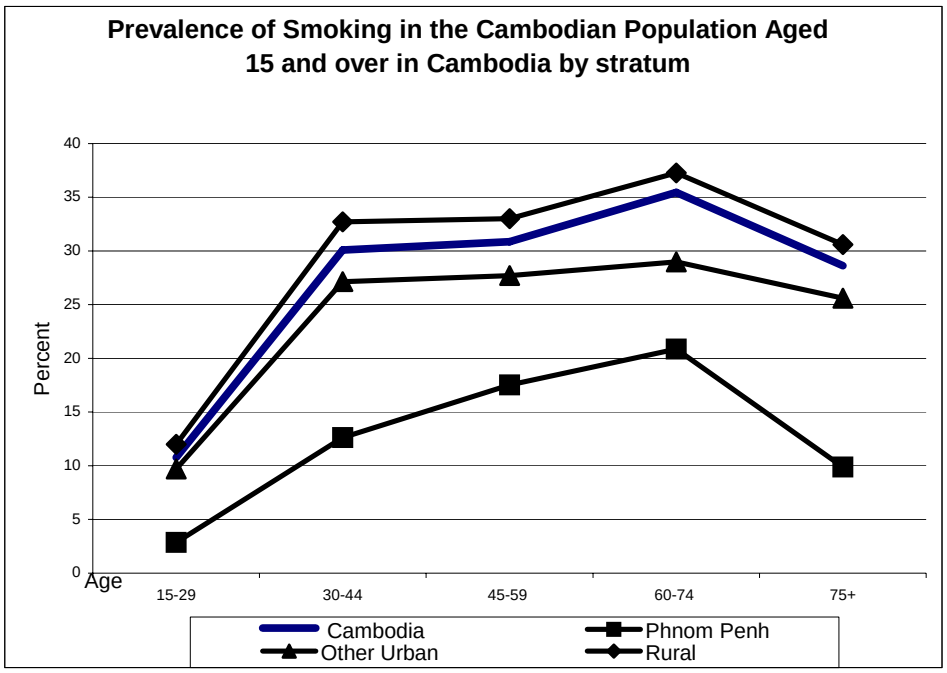
One out of five persons 15 years and over is smoking regularly. Smoking is a typically male habit with more than four out of ten men smoking. The daily smoking is more widespread in the rural than in the urban areas; smoking in the rural sector amounted to 23 percent as compared to 9 percent in Phnom Penh. The low rate for women smoking, or 4 percent, can partly depend on under-reporting. It is often more accepted that men smoke than that women do. Young people are smoking much less than old people.

Table 6.2. Daily smokers in the population 15 years and over by sex and stratum. Percent

	Cambodia	Phnom Pehn	Other Urban	Rural
Men	41	17	35	45
Women	4	1	4	4
Both sexes	21	9	19	23

A comparison with the results of CSES 1999 shows the current prevalence of smoking for both sexes in Cambodia have increased from 15 percent to 21 percent. Smoking is well correlated with education - the higher education the lower prevalence of smoking for both sexes. The average daily consumption of cigarettes is about 15 cigarettes per day for men and 10 for women. The number of cigarettes is almost the same for all education levels. Regardless their age, about 87 percent of the population in Cambodia reported that smoking tobacco could cause dangers to the smokers. Higher education level leads to higher awareness.

Diagram 6.3. Daily smokers in the population aged 15 and over by stratum. Percent



HIV/AIDS awareness

A very high percentage of Cambodian (90 percent) have heard of AIDS. They know someone personally who has AIDS or who has died from AIDS. Given the high levels of awareness of this syndrome, knowledge of HIV-related issues is also important in understanding how to prevent contracting HIV and in checking the spread of the disease in the population. People know that a healthy-looking person can bear the virus, and especially also recognize that the infection can be transmitted to another person by sexual activity, injection, blood transfusion, or from a mother to her child in a variety of ways. The awareness is lower for lower education levels. About 90 percent know at least one method to prevent AIDS. 73 percent report that use of condoms can prevent the disease. Limiting sexual activity to one partner and abstaining from sex is known by 7 percent.

Mosquito nets

Almost all households (94 percent) are using mosquito nets but only 4 percent of them are impregnated.

7 Housing Conditions

7.1 Introduction

In 2004 there were about 2.6 million households in Cambodia. The number of households has increased from about 1.9 million, or 37 percent, in 1994 partly by population growth and partly by a lower average household size. Since each household by definition occupies at least one dwelling, the number of occupied dwellings is also 2.6 million. There may also be vacant dwellings, which would add to the housing stock.

The number of dwellings will continue to increase rapidly because the number of households will increase from demographic reasons. The big birth cohorts born in the 80's are now passing age 25. Most of them will be married before they reach age 30. They have children and they will need and they will want to have their own dwellings.

The data collected on housing conditions include numbers of households residing in the same housing unit, floor and yard area, rooms used by households, materials used in the wall, floor and roof, source of lighting and drinking water, distance to drinking water source, time spent on fetching water by the household member(s) responsible for fetching water, collecting fuel for cooking, charges on water, light, fuel, sewage and garbage collection, rent paid by tenants, maintenance and minor repairs, treatment of drinking water, toilet facilities and legal status of the dwelling occupied by the households. In addition, the rent value of owner occupied housing has been estimated.

7.2 Stock and characteristics of dwellings

There are 89,000 dwellings in Cambodia and 97 percent of them are occupied. The vacancy rate is highest in Phnom Penh and lowest in the rural areas, where more than 80 percent of all Cambodians live. All results in the report are based on the occupied dwellings in Cambodia in 2004. One-family housing is by far the most common kind of dwelling. Only 7 percent live in houses with more than one household.

Table 7.1. Occupied and vacant dwellings.
Percent

	Cambodia	Phnom Penh	Other Urban	Rural
Occupied (%)	97.0	91.6	96.4	98.2
Vacant (%)	3.0	8.4	3.6	1.8
Number of dwellings	*89,100*	*11,100*	*22,000*	*56,000*

7.3 Building materials

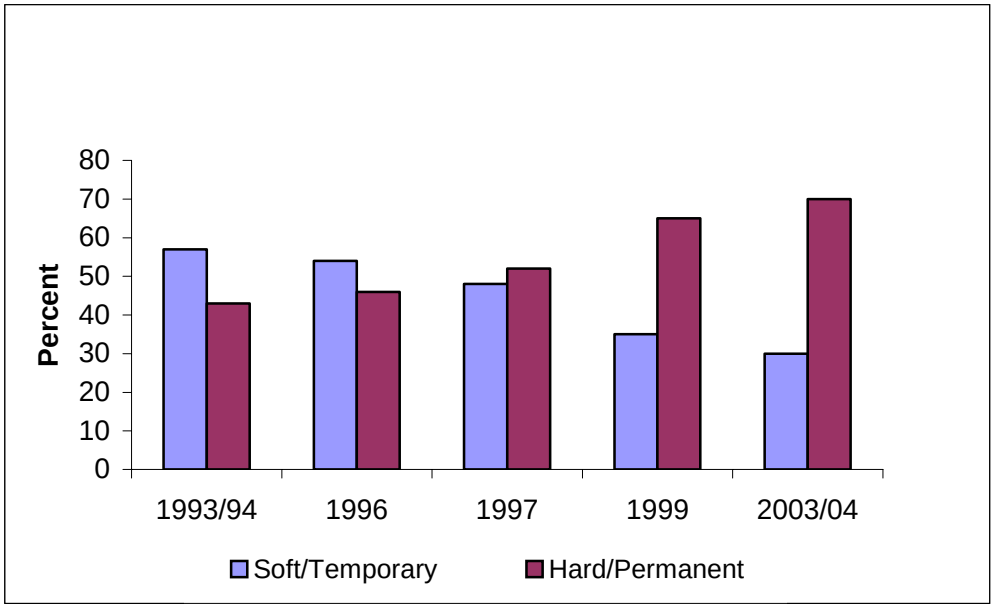
The materials used in roofs, walls and floors are important quality characteristics of a dwelling. They can be grouped as hard/permanent or soft/contemporary from their capacity to withstand wind and rain. The materials considered hard/permanent are tiles, asbestos, galvanized iron, aluminum, concrete, brick, stone, wood/plywood for the walls and polished stone and vinyl/asphalt strip for the floors. Wood planks or bamboo have been considered temporary materials for the floors.

The construction materials of dwellings have changed significantly from soft/temporary to hard/permanent materials over the last ten years throughout the country. The roof and wall materials have improved markedly, while the floor materials have not changed much.

Hard/permanent *roof materials* have increased from 43 percent in 1994 to 71 percent in 2004. Over 60 percent of the roofs are built by galvanized iron and tiles together (hard/permanent

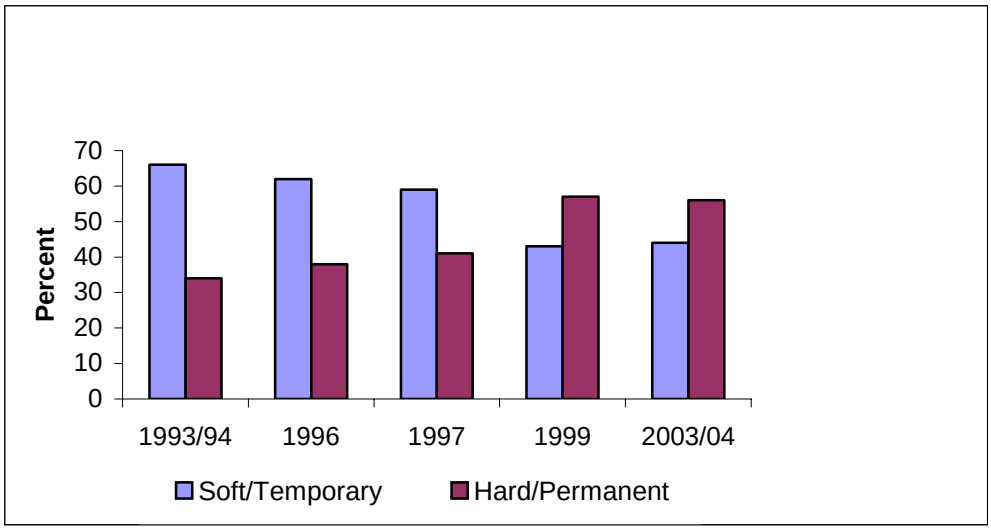
materials). Thatch (soft/temporary) is the roof material of 21 percent of the dwellings. In Phnom Penh 25% of the houses have roofs built by concrete.

Diagram 7.1. Changes in quality of roof of dwellings 1994-2004



Hard/permanent *wall materials* have increased from 34.3 percent to 54.6 percent over the last ten years. The improvement seems to have been most rapid between 1997 and 1999. In the rural areas however, soft/temporary materials are still the most used for walls. The most common materials in the outer walls of Cambodian dwellings, especially in the rural areas, are bamboo and thatch (soft/temporary). Wood or logs and plywood (both hard/permanent) are the wall materials in 45 percent of the dwellings. In Phnom Penh almost all walls of the dwellings are made out of hard/permanent materials. Concrete, brick and stone are the most common materials.

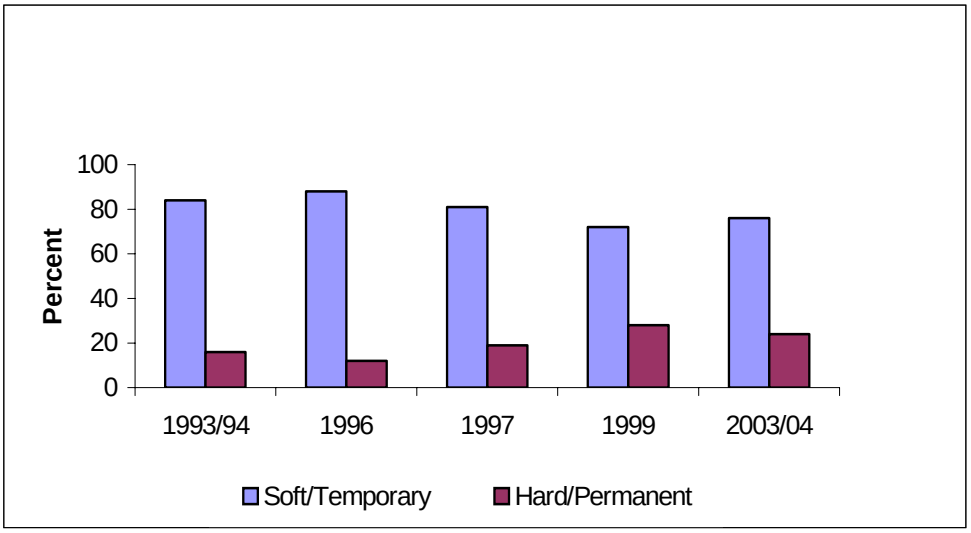
Diagram 7.2. Changes in quality of wall of dwellings 1994-2004



It is not the same regular trend for floor materials as for roof and wall materials. There is an upward trend over the whole period 1994-2004 from 15.9 percent to 19.2 percent, but the situation has not changed in the last five years. In overall Cambodia, 19.2 percent of the housing units have hard/permanent floor materials, and 80.8 percent have soft/temporary floor

materials. Wooden planks or bamboo strips (71.8 percent) are by far the most commonly used floor materials. Altogether, 14.5 percent of dwellings have the more luxurious types of floor material such as parquet, polished wood or ceramic tiles. There is a large difference between the areas. In urban Phnom Penh 78.1 percent of the dwellings have hard permanent floors, in other urban areas 30.3 percent and in rural areas only 12.1 percent.

Diagram 7.3. Changes in quality of floor of dwellings 1994-2004



7.4 Legal status, values, prices and costs of dwellings

94.8 percent of the households in Cambodia own their dwellings, while 3.6 percent do not own but at the same time do not have to pay rent. Only 1.3 percent rent their dwellings. Rented dwellings are more common in Phnom Penh, or 9.5 percent as compared to 0.3 percent in the rural areas.

Since only 1.3 percent of dwellings in Cambodia are rented, there is a housing market only in urban Phnom Penh where 9.5 percent of dwellings are actually rented in 2004. In urban Phnom Penh 8.4 percent of the dwellings are vacant. This would put a pressure on the dwelling rents in Phnom Penh, while not being representative for the country since the vacancy rate is much lower in other urban and in rural areas. To get the rental value of the dwelling one usually asks “How much would you have to pay per month to rent a building like this in this village?”

An owner-occupied dwelling in Cambodia is worth 13,6 million riels on average (US$ 3,400), as appreciated by the owner. There are very big differences between Phnom Penh and the rest of the country. The average value of dwelling in urban Phnom Penh was estimated to be 105,8 million riels (US$ 26,460), which is about seven times higher compared to values in other urban areas and about 18 times higher than in rural areas.

Only 34,000 households out of 2.4 million in the population pay rent for their dwellings. An average monthly rent paid in this group is 114,000 riels (US$ 29). The small sample size makes it impossible to present any detailed data for this group.

The total value of dwellings for construction and extension is higher than the cost for repair. If the expenditure values are compared, the construction of dwellings is likely to be more costly than extension or repair of the dwellings. In conclusion, more households have repaired their dwellings than households having constructed or extended their dwellings.

Table 7.2. Average expenditure on household construction activities.

	Construction and extension	Repair	Total
Average Expenditure (million riels)	4.8	0.8	5.6
Total Value (million riels)	325,158.4	99.1	325,257.5
Number of Households	67,000	124,000	191,000
Number of Households in Sample	384	711	1095
Percentage	*2.8*	*5.1*	*8,0*

7.5 Dwelling space by household

For all Cambodia, the average dwelling space per household is 42.0 square meters (sqm). The average floor area of dwellings ranged from 39.0 sqm per household in rural areas to 48.8 sqm in other urban areas, and to 64.3 sqm in urban Phnom Penh. The percentage of households occupied floor areas in excess of 100 sqm is 14.7 percent in urban Phnom Penh, 7.5 percent in other urban areas, and only 2.1 percent in the rural areas. The percentage of households that occupied floor areas less than 20 sqm is 9.3 percent in urban Phnom Penh, 11.1 percent in other urban areas, and 12.8 percent in the rural areas.

The average floor area of household dwellings in Cambodia has increased from 36.8 sqm in year 1996 to 42.0 sqm in year 2004. However, on average, about 62 percent of households in Cambodia occupy a floor area within 20-50 sqm**.** These percentages have not changed much over the last eight years.

The average floor area occupied by one person is 8.5 sqm. According to the survey results, 75.0 percent of dwellings in Cambodia have only one room in the dwelling, 19.0 percent have two rooms, 4.2 percent have three rooms, and 1.9 percent have four rooms or more. The proportion is lowest in urban Phnom Penh (44 percent) with other urban areas in between (61.8 percent).The rooms counted in the CSES included only sitting rooms and bedrooms, but not kitchen, toilet, bathroom or garage. The proportion of one-room occupied dwellings is highest in the rural areas (79.6 percent).

The average number of persons per room was estimated to be 3.7. It means that there are on average 3.7 persons per room in occupied dwellings. In urban Phnom Penh there are 2.6 persons living in one room as compared to 3.2 persons and 4.0 persons in other urban and rural areas respectively. As evidenced from the survey, there is still far from one person per room, even in urban Phnom Penh.

7.6 Drinking water

Among the Millennium Development Goals adopted by the Royal Government of Cambodia is *Target 14: Halve by year 2015 the proportion of people without sustainable access to safe drinking water*.

There are two sub-targets:

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.

There are considerable changes in sources of drinking water in Cambodia over the last ten years. In 2004, 70 percent of the households have a safe water source in the wet season and 56.3 percent in the dry season. To compare with previous years an average for both seasons of

63.4 percent has been computed. This means that the rapid increase from 1996 has continued, 29.1 percent had safe water in 1996, 29.9 percent in 1997, and 48.2 percent in 1999.

Table 7.3. Main source of drinking water by season and stratum. Percent

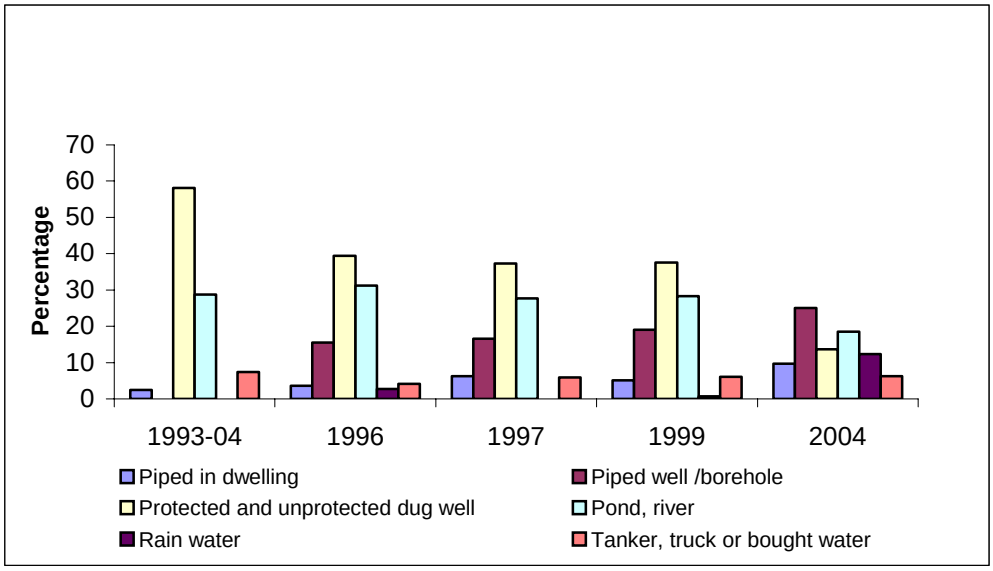
Water Source	Cambodia	Phnom Penh	Other Urban	Rural
WET SEASON				
Piped in dwelling	9.3	79.7	19.0	1.3
Public tap	0.2	-	0.2	0.2
Tube/piped well or borehole	22.7	5.1	24.2	24.2
Protected dug well	15.2	1.1	14.5	16.7
Rainwater	23.2	2.9	18.7	25.8
Unprotected dug well	10.2	0.6	5.6	11.7
Pond, river or stream	14.6	1.2	10.9	16.4
Tanker truck, vendor	4.0	9.2	6.8	3.2
Other	0.5	0.1	0.0	0.6
Total	100.0	100.0	100.0	100.0
DRY SEASON				
Piped in dwelling	10.0	81.3	21.2	1.7
Public tap	0.2	0.1	0.2	0.3
Tube/piped well or borehole	27.1	5.1	27.6	29.2
Protected dug well	17.7	1.0	16.2	19.5
Rainwater	1.3	0.6	1.2	1.4
Unprotected dug well	11.8	0.6	6.0	13.6
Pond, river or stream	22.5	1.2	13.6	25.7
Tanker truck, vendor	8.6	9.8	13.8	7.8
Other	0.8	0.4	0.2	0.9
Total	100.0	100.0	100.0	100.0

In urban Phnom Penh about 80 percent of households have piped water in the dwelling, 9.5 percent depend on water source from tanker truck or water vendors for both seasons. In other urban areas, about one fifth of households have piped water in the dwelling and one fourth of households rely on tube/piped well or borehole. In rural areas, only 1.5 percent of households have piped water in dwellings, 26.7 percent depend on tube/piped well or bore hole, 15.4 percent depend on protected and unprotected dug wells, and other 17.3 percent of households depend on pond, river or stream and rainwater in both seasons.

According to the five CSES surveys since 1994, the proportion of Cambodians who can rely on piped water in dwellings has increased from 2.5 percent in 1994 to 9.7 percent in 2004 for both seasons. A similar increase is also observed in tube/piped well or bore hole sources from 15 percent in 1994 to 25 percent in 2004.

Moreover the main source of drinking water from both protected and unprotected dug well has been declining sharply over the last 10 years, from 58 percent in 1994 to 13.7 percent in 2004. In addition to other drinking water sources, pond, river or stream has dropped from 28.7 percent in 1994 to 18.6 percent in 2004. For tanker truck, vendor or bought water, the percentage does not change much during the last 10 years.

Diagram 7.4. Changes in main sources of drinking water 1994-2004



More than half of the Cambodian households always treat their drinking water. Another 15 percent do it sometimes. Boiling the water is by far the most common method. Treating drinking water is mostly done in Phnom Penh.

2.3 percent of the households fetch drinking water from a distance of more than 5 km during both seasons. About 90 percent of the households have access to water from a distance of less than 0.25 km. In overall Cambodia, 91.1 percent of households spend less than 30 minutes per day to fetch drinking water in the wet season and 85.5 percent in the dry season. Most households, 79 percent, do not pay anything for water. Households in Phnom Penh and to some extent also households in other urban areas pay for their water. In Phnom Penh about half of the households pay 4,000-20,000 riels (US$ 1-5). I other urban areas two thirds pay less than 4,000 riels (US$ 1).

7.7 Sanitation Facilities

Among the Millennium Development Goals adopted by the Royal Government of Cambodia is *Target 15: Halve by year 2015 the proportion of people without sustainable access to improved sanitation*. There are two sub-targets formulated:

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.

Type of toilet facility is a measure of sanitary condition. There have been some changes in toilet facilities of dwellings in Cambodia over the last ten years. In 2004, still about 75 percent of all households do not have a toilet facility in their dwellings. About 20 percent of the households have a modern toilet facility connected to sewerage or septic tank. However, 84 percent of dwellings in the rural areas, and as much as 49 percent of dwellings in other urban areas, and 5.8 percent of dwellings in urban Phnom Penh do not have access to toilet facilities as they depend on "O*pen land*" or "*None*" (which are response categories).

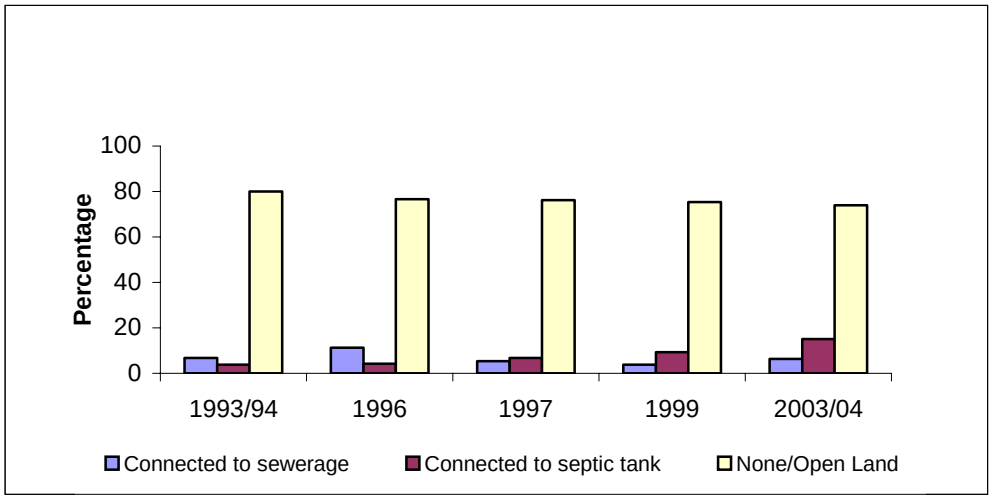
In urban Phnom Penh, 94 percent of all households have access to toilet facilities, while it is lower in other urban and rural areas.

Table 7.4. Sanitation by stratum and type of facility.
Percent

Type of Facility	Cambodia	Phnom Penh	Other Urban	Rural
Connected to sewerage	5.7	59.9	5.2	0.5
Septic tank	14.8	29.8	36.8	10.6
Pit latrine	2.3	0.8	3.4	2.3
Other without septic tank	1.7	0.8	1.9	1.8
Public toilet	0.3	0.5	0.4	0.3
Shared toilet	0.9	2.4	2.6	0.5
Open land	41.7	3.2	23	47.8
None	32.1	2.6	26.1	35.7
Other	0.4	0.1	0.6	0.4
Total	100.0	100.0	100.0	100.0

The percentage of households with access to toilet with septic tank has increased from 3.8 percent in 1994 to 14.8 percent in 2004. Households with access to toilet connected to sewerage compared to 6 percent in 2004, which is roughly the same as ten years earlier.

Diagram 7.5. Changes in toilet facilities 1994-2004.
Percent.



Less than a third of the households in Phnom Penh spend below 4,000 riels (US$ 1) on sewage or waste water disposal. Other than that, it is rare to give cash expenditure for sewage or waste water disposal. Also cash expenditure on garbage collection is not much used outside Phnom Penh. Among households in Phnom Penh, 60 percent have cash expenditure for garbage collection, usually less than 4,000 riels.

7.8 Energy Source for Lighting and Cooking

The kerosene lamp is still the most commonly used energy source for *lighting* in Cambodia but over the last ten years there has been a notable change. In 2004, kerosene lamps are used by more than 50 percent of the households. About 25 percent use batteries, probably also for powering TV sets. One fifth of the households have electricity as the main source. Electricity dominates in Phnom Penh, but in the rural areas six out of ten households use a kerosene lamp. In 1994, 90 percent of the households used kerosene lamps, compared to 55 percents in 2004. The use of batteries have increased during the same period, from 3 percent to 24 percent.

There is a Millennium Development Goal which can be adopted for cooking: "*Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources*". For cooking that means not being dependent on wood fuels, i.e. firewood, charcoal or a combination of the two. In 2004, around 93 percent of the households used firewood, charcoal, or firewood and charcoal. In Phnom Penh about half of the households use liquefied petroleum gas. Compared with the situation ten years ago, the number of households using firewood for cooking has decreased from 92 to 85 percent, while the use of charcoal and liquefied petroleum has increased marginally over the same period. In conclusion there are rather small improvements since 1994.

In all of Cambodia, 18.7 percent of households spend money on electricity and the rest spend nothing (batteries not included). The situation is different in Phnom Penh where 94 percent of the households have cash expenditure for electricity. Of them, 7 percent pay less than 4,000 riels (US$ 1), 26 percent pay from 4,000-20,000 riels (US $1-5), 27 percent paid 20,000-40,000 riels (US$ 5-10) and the remaining 41 percent paid monthly electricity from 40,000 riels (US$ 10) or more. In other urban and rural areas, only 50 percent and 7 percent of households respectively, have monthly expenditures on electricity.

On average, 32 percent of households spend one hour per week to fetch firewood/charcoal for cooking, 14 percent spend two hours, 11 percent spend three hours, 8 percent spend four hours, and the other 36 percent of households spend five hours or more per week to fetch firewood and charcoal for cooking. More than half of the household in Phnom Penh and other urban areas spend less than one hour, while 29 percent in the rural areas manage to fetch firewood/charcoal in an hour.

Over one third of the households spend more than five hours a week to fetch firewood and charcoal. Another third spend less than one hour a week, but that is mainly in Phnom Penh or 62 percent.

8 Possession of durable goods

8.1 Introduction

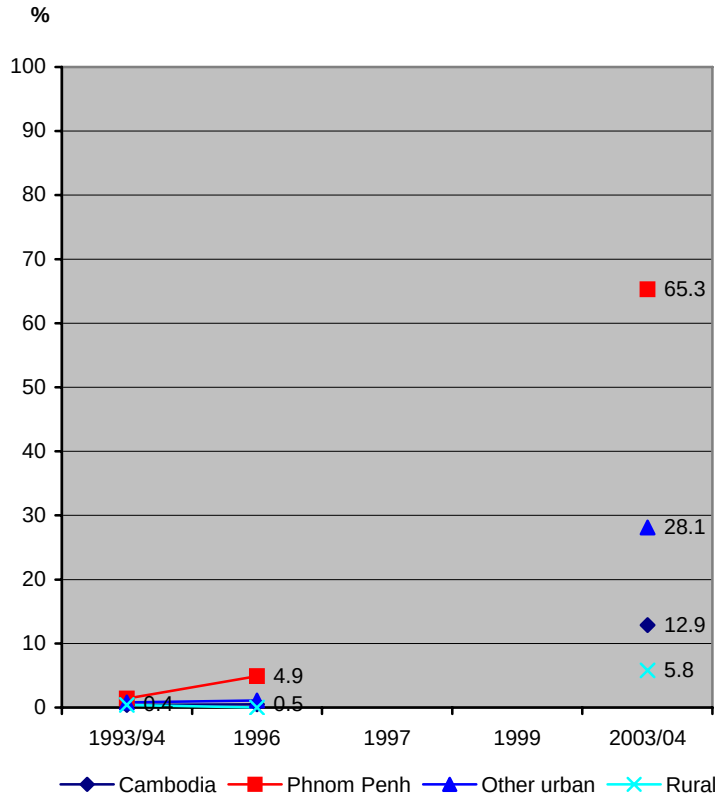
The survey collected information on durable goods owned by the households to ascertain the economic condition of the household. Information on totally 46 items was gathered, grouped under five headings: communication equipment, furniture, household equipment, computer and recreational equipment, and agriculture equipment.

Comparison with the data from 1994 has to be done carefully, since that survey was not carried out in the same way as the later ones.

8.2 Communication, computers and recreation

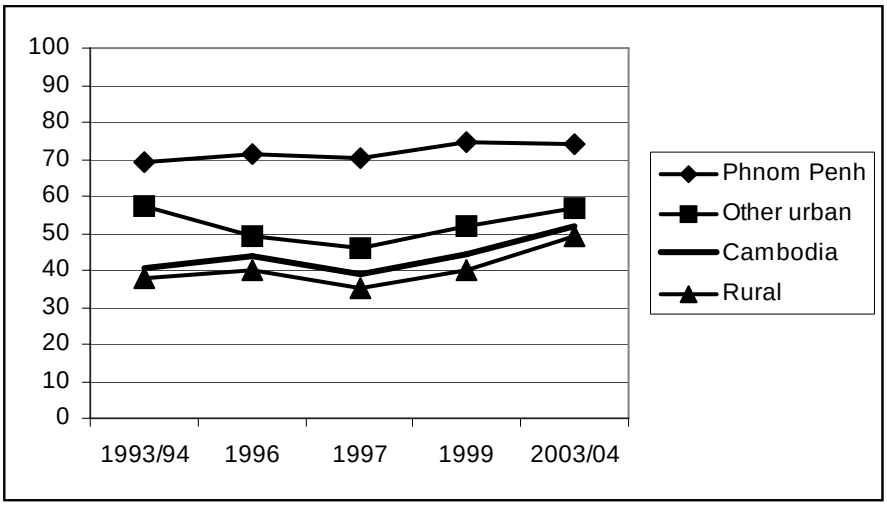
There has been a large increase in the number of households with access to *telephones*. This includes both cell phones and regular telephones. Ten years ago, less than 1 percent of the households had access to a telephone. In 2004 two thirds of the households in Phnom Penh had a telephone. In the rural areas telephones are still rare. The overall figure for Cambodia is 13 percent.

Diagram 8.1. Households having access to a telephone by stratum 1994-2004. Percent



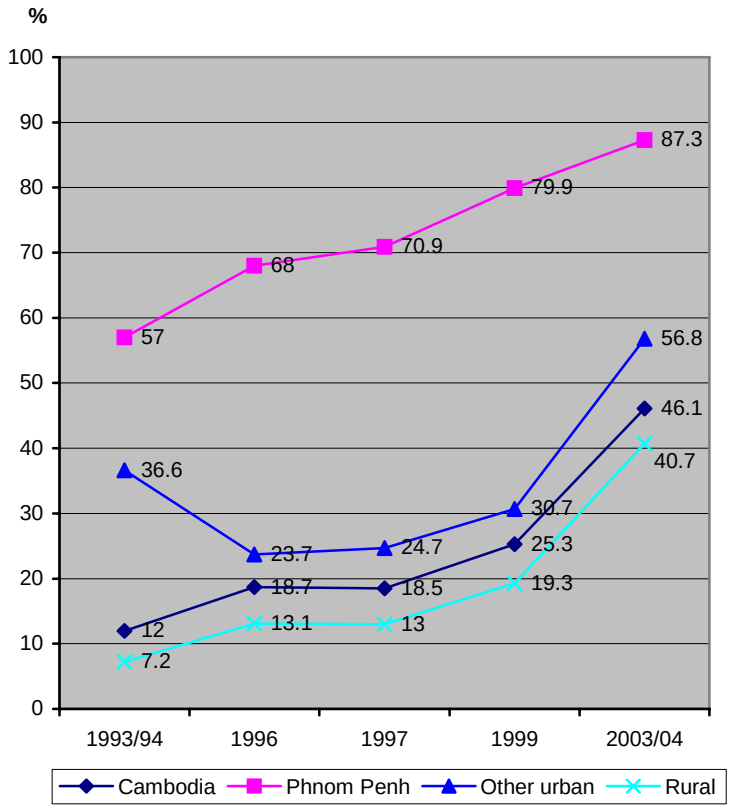
Every other household has a *radio* and this has been quite stable since the beginning of the 90's. Radios are more common in Phnom Penh than in the rest of the country; three out of four households in Phnom Penh have access to a radio.

Diagram 8.2. Households owning a radio by stratum 1994-2004. Percent



The number of *TV* sets has increased considerably, especially in the last five years. Almost half of the households had access to a TV in 2004, as compared to 12 percent in 1994. Again, Phnom Penh is different with 87 percent of the households having access to a TV. Ten years ago the rate was 57 percent.

Diagram 8.3. Households owning a TV by stratum 1994-2004 Percent



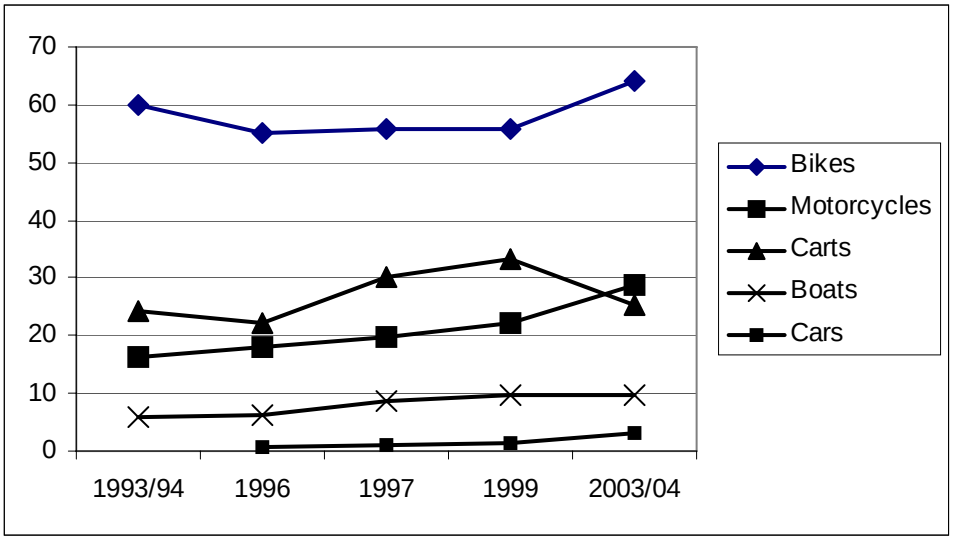
One quarter of the households in Phnom Penh own a *video recorder* or player (VCR) and one out of ten in other urban areas. *Cameras* are owned by 12 percent of the households in Phnom Penh. The overall share of the households with access to VCR is 6 percent and with access to cameras 2 percent.

Only about 1 percent of households in Cambodia possess *PCs* and *printers* are even more rare. Less than 1 percent own *musical instruments* or *sport equipment*. In Phnom Penh, the ratios of households possessing home computers and printers were 13 percent and 4 percent.

8.3 Transport equipment

During the last five years, the numbers of cars, bikes and motorcycles are increasing in all Cambodia, while the number of carts is decreasing rapidly.

Diagram 8.4. Ownership of transport equipment by stratum 1994-2004. Percent



Motorcycles are the most common transport equipment in *Phnom Penh*; almost three quarters of the households have a motorcycle. Cars are increasing rapidly in numbers and 17 percent of the households owned a car in 2004. In 1996, the figure was 6 percent. Also bikes have increased, from 41 percent in 1993/94 to 48 percent.

In *other urban areas*, motorcycles are increasing quickly and 42 percent of the household owned a motorcycle in 2004 as compared to 31 percent five years earlier. Bikes are also increasing and are still the most common transport equipment. Cars are still rare. One out of ten households in other urban areas possesses a boat. Carts are decreasing.

In the *rural areas*, bikes and motorcycles are increasing steadily. Cars are not very common, only 1 percent of the households own a car. Motorcycles increase slowly and one out of five households possesses a motorcycle. Boats are owned by some 10 percent. Carts have decreased from 38 percent of the households having carts in 1999 to 29 percent in 2003/04.

8.4 Household equipment, furniture and agricultural equipment

Phnom Penh has a larger proportion of households with a range of *modern conveniences* such as refrigerator, kitchen, washing machine and air conditioner. In other urban and rural areas, a lower proportion of households own such equipment. In Phnom Penh, large proportions of households own different types of electrical appliances such as electric fan (79 percent) and electric iron (59 percent). The highest proportion of households that own a sewing machine was 22 percent, found in Phnom Penh, and the largest proportion of households owning batteries was 66 percent and found in the rural areas.

The proportion of households possessing different types of *furniture* varies much between the areas. Most households in Phnom Penh own bed sets, or approximately 79 percent, followed by wardrobe/cabinets (68 percent), dining set (34 percent) and sofa set (20 percent). More than half (51 percent) of households in other urban areas own bed sets compared to 23 percent

in rural areas. Similar differences are found between the strata for owning sofa sets, dining sets and wardrobes/cabinets.

As for agriculture equipments, most households throughout Cambodia own harrows/rakes (83 percent), plow and carts pulled by animals (36 percent and 25 percent). One out of ten households has a water pump. Machines like tractors/semi-tractors, rice mills, threshing machines and bulldozer are rare.

Table 8.1. Households owning consumer durable goods
Percent

	Cambodia	Phnom Penh	Other urban areas	Rural areas
Radio/stereo	51.8	73.9	56.7	49.0
TV	46.1	87.3	56.8	40.7
Cell phone/telephone	12.9	65.3	28.1	5.8
VCR	6.1	26.0	13.1	3.3
Camera	2.2	12.4	4.1	1.0
PC	1.4	13.4	1.8	0.2
Printer	0.4	3.5	0.1	0.1
Musical instruments	0.6	1.0	0.4	0.5
Sport instruments	0.3	1.1	0.6	0.2
Satellite dish	0.5	0.7	0.6	0.4
Bike	64.1	48.0	56.9	66.6
Motorcycle	28.6	72.6	42.1	22.5
Car/jeep/van	3.0	17.3	6.8	1.1
Rowing boat/motor boat	9.7	0.1	9.9	10.6
Sewing machine	6.0	22.0	8.6	4.1
Refrigerator	1.9	17.8	3.4	0.1
Kitchen	2.9	26.0	5.9	0.3
Electric iron	8.2	58.6	22.3	1.4
Electric fan	12.4	78.6	32.7	3.3
Air conditioner	0.9	8.0	1.5	0.2
Suitcases	21.0	21.4	32.1	19.5
Generator	2.0	2.6	2.7	1.9
Batteries	57.3	5.8	31.6	65.7
Sofa set	3.2	20.3	6.9	1.0
Dining set	6.9	34.2	15.9	3.0
Bet sets	30.4	78.6	51.3	23.0
Wardrobe/cabinets	18.2	68.0	32.9	11.5
Harrow/rake	83.1	33.7	80.1	88.3
Plough	35.9	1.3	18.1	41.6
Cart	25.4	1.3	14.4	29.2
Water pump	8.3	0.9	5.7	9.3
Tractor/semi-tractor	2.6	0.0	2.5	2.8
Rice mill	2.0	0.1	1.3	2.3
Threshing machine	1.5	0.3	1.4	1.6
Bulldozer	0.3	0.0	0.4	0.4

9 Time Use

9.1 Introduction

The statistics on time use are based on data from February 2004 to January 2005 including all seasonal effects. All persons five years or older in the 1 000 sampled households each month were asked to complete a diary sheet for one sampled day.

Sleeping, eating and personal care is rather evenly distributed between different groups of the population but other activities differ more.

9.2 Personal care

More than half of the time is used for sleeping, eating and personal care, like dressing, bathing, etc. Sleeping is the same for most groups, about 10 hours per day. There are no significant differences between women and men and not even between the weekdays. People with electricity for lighting sleep less. The 10 percent with the highest income also sleep less (most people with high income have electricity). The youngest and the oldest sleep more, while the productive generation sleeps less. All groups are using the same time for eating and other personal care, about 2,5 hours per day.

9.3 Gender equality in time use

While sleeping, eating and personal care is rather evenly distributed among different population groups, the rest of the time is more uneven. Women have half an hour less leisure time in general and they are in school a little less than are the men.

The main difference between men and women is the work. Men are doing more market (employment or business) and agriculture work, while women are doing more housework. These differences are valid for young as well as for old.

Table 9.1. Time use by activities, sex, generations and weekdays. Hours per day

	Market work	Agricult.	Household work	House work	School	Leisure	Personal care	Total
All days								
Male 5+	2,3	2,0	0,5	0,3	1,3	5,0	12,6	24,0
Female 5+	1,8	1,2	0,5	2,4	1,0	4,5	12,7	24,0
Mondays-Saturdays								
Boys 5-17	0.5	1.3	0.3	0.3	2.6	5.9	13.0	24,0
Girls 5-17	0.7	0.9	0.4	0.9	2.6	5.7	13.0	24,0
Sundays								
Boys 5-17	0.6	1.6	0.4	0.3	1.4	6.5	13.2	24,0
Girls 5-17	0.7	1.0	0.4	1.1	1.3	6.2	13.2	24,0
Monday-Friday								
Men 18-60	3.8	2.4	0.6	0.3	0.5	4.2	12.2	24,0
Women 18-60	2.7	1.3	0.6	3.3	0.2	3.6	12.3	24,0
Saturday-Sunday								
Men 18-60	3.6	2.5	0.7	0.3	0.3	4.4	12.3	24,0
Women 18-60	2.4	1.4	0.6	3.3	0.2	3.7	12.4	24,0
All days								
Men 61+	1.5	2.3	0.4	0.5	0.0	6.0	13.2	24.0
Women 61+	1.1	0.9	0.4	2.7	0.0	5.4	13.5	24.0

9.4 Time used by the Productive Generation

The productive generation is here defined as all persons from the age of eighteen to the age of sixty. In average they are working 7,5 hours per day including Sundays and including house-work such as cooking, cleaning, caring, etc. Women are working almost one hour more than men each day. The main difference is what they do at work.

In economic statistics, work as employed, employer or self-employed in businesses is counted. Subsistence farming is also generally measured. Such work counts for five hours per day in average for the productive generation and is male dominant with six hours for men and four hours for women.

People are working less on Sundays compared to the other weekdays. December is the busiest month followed by August, while March and May are the least busy. Agriculture is the least busy during March to May. The total market and agriculture work is almost the same in different parts of Cambodia.

Table 9.2. Time used for enumerated work by the productive generation by sex, sector and zones. Hours per day

	Population	Market work	Agriculture work	Total
Men	2,976,000	3,7	2,4	6,1
Women	3,383,000	2,6	1,4	4,0
All	6,359,000	3,1	1,9	5,0
Urban	1,117,000	4,4	0,8	5,2
Rural	5,242,000	2,9	2,1	5,0
Phnom Penh	662,000	5,0	0,0	5,0
Plain	2,658,000	2,8	2,2	5,0
Tonle Sap	1,852,000	3,3	1,9	5,2
Coastal	502,000	2,9	2,1	5,0
Plateau/Mountains	685,000	2,3	2,1	4,4

People with higher education are working more in market-oriented work and less in agriculture.

Table 9.3. Time used for enumerated work by the productive generation by education. Hours per day

	Population	Market work	Agriculture work	Total
Not compl. Primary	2,355,000	3,0	2,1	5,1
Primary	1,384,000	3,6	1,8	5,4
Lower secondary	783,000	3,8	1,3	5,1
Upper secondary	121,000	3,9	0,4	4,3
Vocalional	59,000	4,1	0,5	4,6
Beyond secondary	68,000	5,3	0,3	5,6
No education, other	1,590,000	2,5	2,1	4,6

Household work, like handicraft, fetching water and collecting firewood should be measured in National Accounts but is often excluded. By definition, *Housework* (cooking, child care, etc.) is not excluded from production in National Accounts. It belongs to consumption. In this way economic statistics can be said to be gender biased, since women are working more in these areas. Their contribution to the total economy is not counted. Household work is rather

evenly distributed by sex, but women are using three hours more than men for house*work* per day. There is no difference between days. This work has to be done every day.

Table 9.4. Time used for non-enumerated work by the productive generation. Hours per day

Age	*Population*	Househ. work	House work	Total
Men	2,976,000	0,6	0,3	0,9
Women	3,383,000	0,6	3,3	3,9
All	6,359,000	0,6	1,9	2,5
Mon-Sat		0,6	1,9	2,5
Sunday		0,6	1,9	2,5
Urban	1,117,000	0,2	1,8	2,0
Rural	5,242,000	0,7	1,9	2,6

9.5 The value of uncounted work

According to the goals set at the Beijing Gender Summit, all economic activities should be covered in the statistics, not only male dominated paid work. The Time Use Survey makes it possible to calculate this by multiplying the time used with estimated values. Local wages for different kinds of work were collected in a village questionnaire. The wages differ very little between men and women. Here the mens' wages have been used.

Womens' uncounted contribution is 10,7 billion riels per day and mens' contribution is 2,7 billion riels. The contribution through handicraft, textile work, unskilled construction, collection of firewood and fetching water is 1,6 billion riels for men and 1,8 for women. The big gender difference is in housework (shopping, cooking, washing, cleaning and caring) with almost 9 billion riels per day for women compared to just more than 1 billion for men.

Table 9.5. Value of uncounted work by sex. Billion riels per day

Sex	Household work	Home work	Total
Men	1,6	1,1	2,7
Women	1,8	8,9	10,7

9.6 Free time

When income can be seen as an indicator for economic welfare or poverty in money terms, the time for leisure can be seen as an indicator for time welfare or poverty. The average leisure time for the productive generation is 4 hours per day. The differences between urban and rural as well as between weekdays are rather small. More income is combined with less leisure time. Men have more leisure time than women.

9.7 Time used by children and youth

Children and youth are here defined as all people seventeen years old or younger.

Children in family

This simplified Time Use Survey measured *care taking of children and elderly*. It is not possible to separate them. People 16 years or older are using 25 minutes a day to take care of others. Men are using only 6 minutes compared to 41 minutes for women.

Children have to be taken care of, but they are also able to support household activities. The average child (5-17 years old) helps almost one hour per day with *household work* (fetching

water, collecting firewood, handicraft and textile work) and *housework* (shopping, cooking, washing, cleaning, and care of other children and elderly).

Household work is evenly spread between boys and girls and over the weekdays. Older children do more household work than younger. Girls are helping much more with housework than boys and more housework is done during Sundays. Also housework increases with age. The oldest children help one and a half hour and the youngest less than half an hour.

Children in school

Each day 3,7 million children are going to school or are doing homework, with an average study time less than three hours. In primary and lower secondary school, the studying time for boys and girls are almost the same, but in upper secondary boys are studying more than girls. The averages are based on all children, whether going to school or not.

For those going to school, the average time spent for schoolwork is almost five hours per day with less for primary school and more for upper secondary. There are marginal gender differences in the time spent if going to school. The difference lies in the participating rate in upper secondary school, which is 4 percent lower for girls than for boys. There are many reasons for not participating in school during the measured day; holiday, Sunday, sickness or dropout.

Table 9.6. Average hours per day, Monday-Sunday, spent at school and for homework and share of children participating by sex.

School	Boys		Girls		Total	
Level	Part. Rate	Hours	Part.rate	Hours	Part.rate	Hours
Primary	54 %	4,4	55 %	4,4	54 %	4,4
Low sec.	63 %	4,7	62 %	4,7	62 %	4,7
Up. sec.	50 %	5,4	43 %	5,3	46 %	5,4
Total	55 %	4,7	54 %	4,7	55 %	4,7

Measuring only Mondays-Fridays during February 2004 (a “normal” school month) the total participation rate increase to 68 percent with an average school time of almost six hours per day. Boys in lower secondary have the highest participation rate (84 percent) and girls in upper secondary have the longest school day. Lower participation rate for girls in secondary school explains almost all gender bias.

Children and work

Children work for different reasons, from voluntary work during holidays to forced work of economic reasons. Younger children work much less than older and more in agriculture than in market work (as employee or own business).

Table 9.7. Child work by sex, weekdays and age. Hours per day

	Population	Market work	Agriculture work	Total
Boys	2,324,000	0,5	1,4	1,9
Girls	2,210,000	0,7	0,9	1,6
Mon-Sat		0,6	1,1	1,7
Sunday		0,6	1,3	1,9
5-7	992,000	0,1	0,2	0,3
8-9	747,000	0,1	0,7	0,8
10-14	1,791,000	0,6	1,4	2,0
15-17	1,004,000	1,5	1,9	3,4
Total	4,534,000	0,6	1,1	1,7

More than one of four children in the age 5-17 is not attending school. They are working less than one hour more than the average child.

Table 9.8. Average time use by children not attending school. Hours per day

Age	Population	Market work	Agriculture work	Househ. work	House work	School	Leisure
5-7	519,000	0,0	0,2	0,1	0,4	0,2	8,6
8-9	114,000	0,1	1,0	0,2	0,8	0,6	7,5
10-14	191,000	1,3	2,3	0,7	1,0	0,3	5,5
15-17	378,000	2,6	2,4	1,0	1,1	0,2	4,5
Total	1,203,000	1,0	1,3	0,5	0,7	0,3	6,7

Almost one third of those children does not attend school because of not doing well in school or do nott want to be in school. One of four is forced to stay away from school for economic reasons or must help at home. Two thirds of them are 15 years or more. The younger are fewer and work less per day. Even if those children are not currently in the school system, they are doing some schoolwork.

Table 9.9. Children "forced" not to attend school by age. Working time in hours per day

Age	Population	Market work	Agriculture work	Total
5-7	22,000	0,0	0,3	0,3
8-9	18,000	0,1	1,3	1,4
10-14	74,000	1,7	2,2	4,0
15-17	212,000	2,7	2,5	5,2
Total	326,000	2,1	2,2	4,4

9.8 Time used by the elderly

The elderly (61 years and older) are continuing working as employed, businessmen or farmers. They also continue doing housework, but have at the same time more leisure and sleeping. The oldest work less and rest more.

It is not possible to see who is taking care of the oldest from the survey. About 137,000 persons older than 70 years live alone. Of those, 92,000 are men and 45,000 are women.

Table 9.10. Average time use by elderly by age. Hours per day

	Market work	Agricult.	Household work	House work	School	Leisure	Sleep, personal care	Total
61-70	1,5	1,8	0,4	1,9	0,0	5,2	13,1	24.0
71+	0,7	1,0	0,3	1,7	0,0	6,3	13,9	24.0
61+	1,2	1,5	0,4	1,9	0,0	5,6	13,4	24.0

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